

Reconceiving the Human Fetus in Reproductive Bioethics: Perspectives from Cultural Anthropology and Bioarchaeology



Sallie Han, Tracy K. Betsinger, Michaelyn Harle, and Amy B. Scott

Introduction

While individuals experience reproduction as a private, personal, and intimate matter, it is also always a public, social, and cultural concern. As such, not only is there a diversity of individual experiences but also of expectations across communities and histories. These are the starting points for an anthropological approach to reproduction and, especially, to the ethical questions and moral quandaries that the bearing, birthing, and raising of human children inevitably pose. The aim of this chapter is to suggest the contribution that anthropology might make to an emerging bioethics of reproduction that reflects, respects, and responds to what medical anthropologist Arthur Kleinman called “the local moral processes of everyday social life” (1999:78). Kleinman, among others, has discussed particularly the insights that bioethics might gain from cultural anthropology and, especially, ethnography (cf. Marshall 1992; Muller 1994; Turner 1998; Nelson 2000). Additionally, in this chapter, we argue for the relevance and necessity of a consideration of the practices and ideas of the past that bioarchaeology provides.

Our focus here is on the human fetus and the ascription of personhood. The moral status of the fetus is a central question of reproductive bioethics, haunting the real-life medical care decision-making of ordinary women and men, families,

S. Han (✉) · T. K. Betsinger
Department of Anthropology, SUNY College at Oneonta, Oneonta, NY, USA
e-mail: Sallie.Han@oneonta.edu; tracy.betsinger@oneonta.edu

M. Harle
Tennessee Valley Authority, Knoxville, TN, USA
e-mail: mharle@tva.gov

A. B. Scott
Department of Anthropology, University of New Brunswick,
Fredericton, New Brunswick, Canada
e-mail: amy.scott@unb.ca

physicians, and other healthcare practitioners in addition to the reasoning of policy- and lawmakers. In the USA today, abortion on demand is a protected right that is typically framed as a woman's right to choose and a private medical decision that is reached between a woman and her doctor. At the same time, there are also organized movements to curtail the availability and accessibility of abortion services and care; these are based around the assertion that the fetus has a right to life because it, too, is a person. Notwithstanding the efforts of some states to introduce legislation defining personhood at conception, a "person" is understood in US constitutional law as a *born* person¹ (Robertson 2015), and in both law and medicine, the concept of viability—the ability of a fetus to survive outside the uterus—is used and applied. Yet, personhood is far from a settled matter in US society, where the institutions of law and medicine provide answers far more restricted and narrower than what the question of personhood asks: Who or what is a *person*?

The question is broad and deep and so are the consequences of how it is answered. The "person" is a foundational identity on which all other identities—such as gender, sexuality, race, ethnicity, and class—become imbricated. Anthropologists can tell us that the answer is not the same, nor has it been, for all societies and cultures. The ethnographic literature points to both the cross-cultural variation in understandings of who or what is a person and the common feature that the status of a person is not a natural fact to be taken for granted, but a cultural artifact that is the result of social effort. Significantly, personhood is constructed, established, conferred, and enacted through the performance of rituals. Ethnographers have described the rites of passage that involve a community in the recognition of its newest members. Judy DeLoache and Alma Gottlieb's 2001 edited book, *A World of Babies*, presents detailed descriptions of the rituals and symbols surrounding newborn infants and young children in seven societies. These rites do not necessarily occur at birth, much less before it. In fact, they might be observed in the days, weeks, and even years afterward, and their effects can be seen as accruing or accumulating over time. They include practices related to feeding, bathing, and naming children, and folklore and ceremonies pertaining to the first tooth and the first haircut. These activities not only display and deliver care for children, but they also meaningfully signal the status and identity of a nascent person. In other cases, bioarchaeologists remind us that it is the apparent inclusion (or exclusion) of individuals in mortuary rituals and funerary rites from which we can infer their status.

By now, bioethics in the USA has been critiqued thoroughly on the grounds of what Kleinman (1999) succinctly describes as the three "isms" of ethnocentrism, medicocentrism, and psychocentrism. The first refers to the problems of assuming and applying Western (European) concepts and values as universally valid ones, especially in the context of plural societies, prioritizing the frameworks and understandings of medical professionals over those of patients and families, and the casting of moral concerns as individual psychological issues rather than as social embodied experiences. The call for incorporating into bioethics the study of

¹Legal scholar John A. Robertson (2015) writes: "In *Roe v. Wade* all nine justices agreed that the use of "person" in the Constitution always assumed a born person, and therefore that the 14th Amendment's mention of person did not confer constitutional rights until after a live birth.

humanity, with its foundations in comparative cross-cultural perspective and emphasis on holism, has been issued across the disciplines (cf. Hedgecoe 2004; Farrell et al. 2014). However, Leigh Turner (2009) has taken anthropology and sociology to task for their own limited and even reductionist readings of bioethics: “We are certainly well past the time when it was possible to simply nod in agreement at the claim that bioethics engaged in normative work whereas the social sciences provide ‘descriptive analysis’” (96). Anthropologists are not merely “descriptivists” nor are bioethicists merely “prescriptivists.” In addition, the call to bring in anthropology has been more or less limited to cultural anthropology (specifically, medical anthropology) and ethnography. In this chapter, we suggest the particular contributions that bioarchaeology can make to a discussion of reproductive bioethics and the question of personhood.

Building upon our own and other previous research and scholarship in the anthropology of the fetus (Han et al. 2017), we bring into a conversation about reproductive bioethics the approaches and perspectives of anthropology. We are interested in the particularities of social and cultural ideas and practices and grounded in comparative cross-cultural and historical (and prehistorical) study and field-based research. In the discussion that now follows, we consider personhood as a status that is ascribed and negotiated, subject to change and contestation, and cross-culturally and historically variable.

Cultural Anthropology: Persons and Pregnancy

Being and becoming a person are processes requiring active human effort and imagination. This is a critical insight of the anthropology of reproduction and drawn from the immersive, longitudinal, community-centered, participatory method of ethnography that defines the field of cultural anthropology. Over the course of the discipline’s history, cultural anthropologists have undertaken ethnographic research in the societies that they define as “abroad” and “at home” in support of the twin projects of making the strange familiar—and the familiar strange. In this section, we briefly consider pregnancy as an experience that is at once biological, social, and cultural. The focus is on what Han (2013) describes as the practices of “ordinary” pregnancy in the US that importantly and meaningfully accomplish the social and cultural work of person-making. These include practices of language, visual culture, and material culture.

It has long been asserted that language, and especially speech, distinguishes humans from all other living creatures. Not only has this been assumed in the myths and legends that various societies have told, but it is also built into the discipline of anthropology, which in the USA is organized into the four fields: archaeology, biological (or physical) anthropology, cultural anthropology, and linguistic anthropology. There is an understanding in the USA that certain exceptional animals can be engaged in conversation—in particular, household pets, especially dogs—but otherwise, the assumption is that other animals can communicate, but only people talk. In other cultures and societies, the concern is not necessarily that infants and small

children are like little animals (e.g., suckling and crawling) but that they are recently (re)embodied spirits or souls. As such, they are vulnerable to being taken or tempted away. In her thickly descriptive account of infant care among the Beng, an ethnic group in Ivory Coast, Alma Gottlieb (2004) tells us that what motivates Beng parenting is the responsibility and wish of convincing newborns to remain in this life and not return to the afterlife. They are liminal beings in the classic anthropological sense of being betwixt and between two worlds. The number of rituals of infancy and early childhood (and eventually, initiation into adulthood) not only recognizes milestones in development and growth, but culturally speaking, they mark the strengthening of ties to this life. The babble of infants and young children is interpreted as a version of the tongue spoken in the other world, which they gradually forget as they embrace the customs of this one. Ethnographic cases such as this one serve as needed reminders about the range of human possibilities in terms of what we see people do and hear what they say about it.

In the contemporary USA, it is not uncommon for pregnant women, their partners, and other family and friends to engage in “belly talk” with an expected child in utero. Indeed, a number of pregnancy and parenting experts now prescribe what they call prenatal stimulation for the child. It is also promoted as good parenting in the context of popular anxiety and public concern with the “word gap”—that is, the difference in the number of words spoken to young children in poor versus privileged households and the inequalities in the measures of academic achievement that have come to be associated with it. However, in ethnographic interviews, pregnant women themselves described the significant attachments and bonds that they felt and believed their talk to be establishing with the children they actively imagined. In Han 2013, one woman, then 19 weeks pregnant, described her belly talk as a deeply meaningful experience: “I think maybe that’s when I imagine it as a baby—a future baby. Because I can translate from whatever that experience is to talking to an actual baby” (59). Poignantly illustrated here is that US women talk to their bellies not because they already assume the status of their babies as person but because doing so enables them to enact an anticipated relationship that in turn enlivens a pregnancy as “an actual baby.” Belly talk presents a linguistic teleology: only persons participate in language, and participation in language makes a person.

The same might be said for visual culture and being seen. Sight and vision are taken for granted as natural senses that merely grant access to an already known material reality. Yet, as cultural anthropologists and social historians have documented, sensorial perceptions are significantly *trained* (Geurts 2002). Historian Constance Classen (1993) gave the example of the changing value of the rose. The flower had been bred and celebrated for its perfume in early modern Western Europe but became cultivated and prized for its visual beauty during and after the Enlightenment, indicating a shift in the privileging of the olfactory to the ocular. Additionally, the social history of the rose illustrates that the human senses do not simply enable the apprehension of what exists already; they act upon the world, creating and constituting it anew. Researchers and scholars of reproduction are most familiar with fetal ultrasound imaging as an example of seeing as not only believing but bringing into being. Although its actual medical necessity has been called into

question, the sonogram is both a routine practice of prenatal care in the USA and a ritual occasion for “seeing the baby.” The expected child is no longer only imagined, its body is imaged and in so doing, it acquires corporeality. The sensations experienced in women’s own bodies, including the first flutterings of fetal movements, were symptoms of the condition of pregnancy, but not necessarily reliable signs of a living, normal, healthy child. “It wasn’t really real until we saw it” succinctly expresses a commonly held sentiment (Han 2013: 83).

Persons are not reducible to their bodies, according to the beliefs and practices of Christianity, Judaism, Islam, and other religions followed in the USA. Yet, there is also an assumption that there is no real, complete person without a body. The expected child’s body becomes real and complete during the ultrasound scan as a sonographer narrates a tour of it and names its parts. Certain parts are attached with special importance and meaning for social and cultural as well as medical reasons—for example, the face, hands and feet, and heart. A child’s head in profile and facial expressions is scrutinized for familial resemblances. However, most important for many expectant parents is the identification of its girl and boy parts. From an anthropological perspective, the images reveal information about the biological sex of an expected child—and, it is the social and cultural effort of kin, kith, and community that constructs its anticipated gender or social and cultural status as female or male.

In the USA, this is significantly accomplished with material culture and consumption. Clothing in particular both presupposes and constructs gender identity with its stereotyped color schemas of pink for girls and blue for boys. Shopping for—that is, on behalf of—an expected child and provisioning it with personal items like clothing accord it with the status of a person. At baby showers for expectant mothers, the giving and receiving of gifts for an expected child’s enjoyment, like toys and books, involve the child in relationships not only with things but with people.

What these activities of ordinary pregnancy illuminate is that the question of personhood is not, in fact, an extraordinary one but a central concern around which social and cultural practices and ideas are organized. Reproductive bioethics are lived in everyday experiences.

Bioarchaeology: Personhood in the Past

Bioarchaeology, the investigation of human skeletal remains from archaeological contexts (Larsen 2015), is a biocultural specialty within the field of anthropology. Bioarchaeology is holistic in that it draws on biological (human remains), archaeological (the context in which the remains are recovered), and cultural (sociocultural information/context) components. As such, bioarchaeology, which has recently begun to examine issues of identity, has much to contribute to studies of identity and personhood in the past (Buikstra and Scott 2009). It can provide a unique degree of temporality and time depth, which may be lacking in contemporary studies of identity (Knudson and Stojanowski 2009). Granted, investigations of personhood and

identity in the past are difficult, as individuals can have multiple identities at any one time, and those can change over the life course (Knudson and Stojanowski 2009). Additionally, evidence of identity is itself complex, as multiple factors may influence or affect that which is used to assess identity. However, with new methodologies and multiple lines of evidence, more insight can be gained through various analyses involving the study of the physical remains and their mortuary context, biogeochemical analyses, biodistance studies, and ancient DNA analyses (Knudson and Stojanowski 2009). By combining what is learned from human remains with historical/archaeological contexts and social theory, bioarchaeology contributes much to the discussion on identity in the past (Buikstra and Scott 2009).

One area that has not been expressly investigated is that of fetal personhood and/or identity. As previously stated, personhood is one of the first types of identity that is ascribed to an individual; however, limited research has been conducted to investigate whether a society regards fetuses as persons or whether that changes over time. Archaeology and bioarchaeology have begun to focus on children and childhood as a separate area of research (Lillehammer 1989; Kamp 2001), and there has been some increase in bioarchaeological studies of social identity in childhood (Tocheri et al. 2005; Halcrow and Tayles 2011), but these tend not to specifically address fetal identity and personhood. Overall, studies of fetal² and perinatal remains have received less attention, although this, too, is changing (Scott 2001; Lewis 2007; Lewis and Gowland 2007; Kinaston et al. 2009; Mays and Evers 2011).

The lack of particular attention to fetal remains may in part be due to their absence from some communal cemeteries (Scott 1999, 2001; Lewis 2007; Saunders 2008), which may be explained by issues of preservation, excavation biases, misidentification, or lack of identification (Gordon and Buikstra 1971; Tocheri et al. 2005; Djurić et al. 2011). Moreover, their absence may be intentional, and the reasons for such selective burial practices are culture-specific. That is, issues of personhood, belief systems, infanticide, or other social policies may be influencing or determining whether fetal remains are buried in communal cemeteries (Gowing 1997; Sofaer Derevenski 1997a; Scott 1999; Orme 2001). The inclusion of fetuses in a cemetery, then, may be a function of the same factors, especially as it regards personhood (Scott and Betsinger 2017). It is not uncommon for different stages of childhood to be distinguished and identified in various cultural groups, including the recognition of the fetal period as separate from infancy or other stages (Scott 1999). In some situations, infants/fetuses were excluded from society and seen as “strangers” or “others” until recognition from the social group at certain ages or stages (Scott 1999, 2001). Ethnographic examples of incomplete personhood have outlined rites of passage that mark when a child becomes part of the community (e.g., DeLoache and Gottlieb 2000); these examples, of course, are far from

²In bioarchaeology, fetuses are subsumed in the category of “perinate,” which includes individuals aged between 28 weeks in utero and approximately 7 postnatal days. Bioarchaeologists are unable to determine whether perinatal remains represent a fetus who died in utero versus one which died shortly after birth, including preterm births. In this chapter, fetus and perinate are used interchangeably.

universal. In some cultures, infants are viewed as individuals with spirits and self-awareness or as spirits that must be cared for (Conklin 2001; Gottlieb 2004). In addition, other cultures would likely have viewed fetuses as simply human and full members of society despite their age (Scott and Betsinger 2017). In Christian societies, in which ensoulment is believed to be synonymous with conception, this may be especially true (Tocheri et al. 2005). The question, then, is whether fetuses in a particular society have personhood. To address this, mortuary context becomes paramount.

Study of mortuary context has been an integral part of archaeology for years, as human behavior is directly linked to mortuary treatment (Pearson 1999). The difficulty is, however, determining which aspects of mortuary treatment reflect the person being buried versus those doing the burial. It has been argued, however, that examining the treatment of the dead reflects, at least to some degree, the role of that individual in society (Rakita and Buikstra 2005). Aspects such as status, gender, age, and social role can influence mortuary treatment; however, since the mortuary context is the result of the actions of the living, the dead may be misrepresented (Pearson 1999). Mortuary practices may be “more reflective of the living than the dead and provide insight into their ideas and beliefs as it relates to the deceased” (Scott and Betsinger 2017:149). While Sofaer Derevenski (1997b) rightly argues that the burial of children is not just reflective of the parents’ wishes, but also the social role of the children themselves, the mortuary treatment of fetuses/perinates is distinct, as their roles in life (if they lived at all) would be limited (Scott and Betsinger 2017). Perinatal burials may be more reflective of fetal identity and personhood, as their treatments would more directly reflect the views of the family and community. As Pearson (1999) points out, the mortuary treatment of fetuses reflects how adults view them, how they come to terms with their early deaths, and/or how they ascribe meaning to their deaths (103). By investigating mortuary treatment, then, we may be able to determine whether personhood was ascribed to fetuses/perinates.

The aim of this section is to present two case studies from differing historic contexts and geographic locations to investigate whether fetuses in those communities had personhood based on their mortuary treatment, thus, providing some historical comparison with contemporary beliefs regarding fetal personhood. To do this, the mortuary context of perinates is compared to that of “postneonates” (aged 7 postnatal days to 1 year) and “young children” (aged 1–4 years). Mortuary data, such as burial location, body orientation, body position, artifact associations, and/or coffin use is utilized for the comparison. If perinatal remains have burial treatment that is comparable to that of postneonates and young children, it may be concluded that they have comparable personhood.

Case Study: Postmedieval Poland

In the seventeenth to eighteenth century rural farming village of Drawsko, located in the west-central portion of Poland, community members were Catholic and followed typical Christian protocols in their mortuary treatment, including an east-west body orientation, minimal funerary objects, the use of burial shrouds, and interment in consecrated ground (Davies 1999; Pearson 1999; Scott and Betsinger 2017). Because of the Christian nature of the society, it was expected that perinates would be viewed as having personhood and that this would be reflected in their mortuary treatment. The details of this study are presented elsewhere (Scott and Betsinger 2017), but the results are summarized here. The results found that there was no statistical difference between perinates, postneonates, and young children for coffin use, burial goods, body orientation, and burial location (Scott and Betsinger 2017). These results indicate that perinates were viewed synonymously with postneonates and young children and that they did have personhood. One caveat to the results is that it could not be determined if the perinates represented live births or stillbirths; therefore, there is no way of knowing whether stillborn infants were treated differently, including being buried in other locations, as the unbaptized typically cannot be interred in consecrated ground (Murphy 2011). It is not clear, though, whether this would have impacted the belief that fetuses had personhood. As Murphy (2011) has documented, stillbirths and the unbaptized may have been buried in a distinct cemetery but still received standard Christian mortuary treatment, suggesting that they had a different or separate identity of being “unfit” for inclusion in communal cemeteries. This does not, however, suggest that their personhood status was viewed differently.

Case Study: Prehistoric Tennessee

In East Tennessee, the Dallas site (7HA1/8HA1) dates to the late Mississippian period/Dallas Phase (AD 1300–1400) and is characterized by maize-intensive agriculturalists. Dallas Phase towns comprise public structures associated with large platform earthen mounds, a central plaza, and domestic dwellings. These domestic dwellings are often marked by multiple building episodes suggesting continuity over generations by what has been interpreted as corporate kin groups (Sullivan 1986, 1995, 2001; Schroedl 1998). Within Dallas Phase communities, there is a strong gendered component to the location of graves and funerary object inclusion. Males are more likely buried within platform mounds and public buildings than females. Female burials on the other hand are typically associated with residences (Hatch 1974; Schroedl 1986; Sullivan 1986). Likewise, males are more likely associated with hunting and warfare activities (triangular projectile points, ceremonial blades, cores, and/or flakes, bone awls, and utilitarian celts), while females were more likely associated with shell, pottery, and other “culinary” and domestic

implements (Hatch 1974; Sullivan 2001). Sullivan (2001) suggests the spatial dimensions of this mortuary patterning reflect “gender duality” rather than “gender hierarchy,” reflecting differential access to alternate sources of power (i.e., females in the context of households and heads of kin groups and males within the public sphere).³

In comparing perinates with postneonates and young children, there were no statistical differences in body position or the inclusion of funerary objects. The most common type of funerary object inclusion consists of shell ornamentations (beads, pins, and gorgets⁴) and pottery for all subadult age categories. In fact, for perinates and postneonates, other types of grave goods are rare. It is noteworthy to mention that while shell ornaments and pottery still represent the most common type of funerary inclusion for older children, there appears a wider variety of funerary objects types with increased age.

Subadult burials occur in conjunction with adults in both the domestic sphere (within residences) and public spaces (platform mounds), although they are more likely to occur within domestic spaces. The exception of this patterning is perinates who are exclusively buried within the residential sphere. The lack of perinates may be a function of the small number of perinatal remains recovered from the site or deferential preservation. However, it may be suggestive of slight differences in the view of perinatal/fetal identity within the context of their association with mothers and the female matrilineal line. Their physical association with the maternal body may have led to their preferential burial in residential areas. The greater variation of funerary objects types and burial location in both the domestic and public sphere in older infants and young children may reflect that those children had a greater ability to obtain various types of social roles because they have lived for a longer period of time.

Overall, the results indicate that perinates were treated similarly to postneonates and young children and likely had comparable personhood. The exclusion of perinates from the burial mound, if not related to preservation or sample size, may indicate that even though they were viewed as persons, they maintained an identity distinct from older infants and young children. This may underscore how personhood is a negotiated and continual process, rather than a onetime ascription. As children age, their personhood becomes more firmly established, and additional identities related to gender, kin group, etc., are added. This may be reflected in the wider variety of funeral objects found with postneonates and young children. Another possibility is that perinatal remains were strongly associated with their mothers as, indeed, they were either in utero at the time of their death or died shortly after being born. This association may have meant that perinates were to be buried where mothers (whether their mothers had died or not) and women in general were interred: in the residences.

³Additionally, Mississippian period communities have been interpreted as matrilineal societies based on ethnographic analogies of modern Southeastern tribes (cf. Knight 1990).

⁴A gorget is a polished circular shell pendant frequently engraved with similar recurring sets of themes, motifs, and iconography.

As with the Polish example, whether the perinatal burials represent stillbirths or live births remains undetermined. As a result, it is possible that the perinates at Dallas include both stillbirths and live births or only one category (presumably live births over stillbirths). Further research is needed to determine whether there may have been some variation in beliefs of personhood based on surviving birth.

Conclusion

The examples discussed here, drawn from ethnographic field research and from bioarchaeological studies, collectively illustrate how anthropology can contribute to the field of reproductive bioethics. These studies demonstrate that fetal personhood, which is a fundamental issue in reproductive bioethics, is something that is negotiated and ascribed and is an ongoing process. Ascription of personhood to fetuses is not a given and is time- and culture-specific. Cultural anthropology has an important role to play in providing insight to issues in reproductive bioethics, which has been noted by several scholars (Marshall 1992; Muller 1994; Turner 1998; Kleinman 1999; Nelson 2000; Hedgecoe 2004). Ethnography, in particular, offers broad cross-cultural comparisons that are essential for medical professionals as well as law and policy makers who interact with and represent an increasingly multicultural population. Bioarchaeology has only recently begun to explore issues of identity in the past (Knudson and Stojanowski 2009), and minimal attention has been paid to issues of personhood to date. Despite this, bioarchaeology can contribute to these issues as illustrated here, as the human skeletal record and the mortuary treatment of human remains may reflect, at least in part, the social identity of the individuals, including their ontology. Bioarchaeology can provide historical and prehistorical context and comparison that may not have previously been considered and is also a source of cross-cultural examples. Together, cultural anthropology and bioarchaeology are situated to make significant contributions to reproductive bioethics, as the research and studies discussed here demonstrate.

References

- Buikstra JE, Scott RE. Key concepts in identity studies. In: Knudson KJ, Stojanowski CM, editors. *Bioarchaeology and identity in the Americas*. Gainesville: University Press of Florida; 2009. p. 24–55.
- Classen C. *Worlds of sense: exploring the senses in history and across cultures*. New York: Routledge; 1993.
- Conklin B. *Consuming grief: compassionate cannibalism in an Amazonian society*. Austin: University of Texas Press; 2001.
- Davies J. *Death, burial, and rebirth in the religions of antiquity: religion in the first Christian centuries*. London: Routledge; 1999.

- DeLoache J, Gottlieb A, editors. *A world of babies: imagined child care guides for seven societies*. Cambridge: Cambridge University Press; 2000.
- Djurić M, Djukić K, Milovanović P, Janović A, Milenković P. Representing children in excavated cemeteries: the intrinsic preservation factors. *Antiquity*. 2011;85:250–62.
- Farrell RM, Metcalfe JS, McGowan ML, Weise KL, Agatisa PK, Berg J. Emerging ethical issues in reproductive medicine: are bioethics educators ready? *Hast Cent Rep*. 2014;44(5):21–9.
- Geurts K. *Culture and the senses: bodily ways of knowing in an African community*. Berkeley: University of California; 2002.
- Gordon C, Buikstra J. Soil pH, bone preservation and sampling bias in mortuary sites. *Am Antiq*. 1971;48:566–71.
- Gottlieb A. *The afterlife is where we come from*. Chicago: The University of Chicago; 2004.
- Gowing L. Secret births and infanticide in seventeenth-century England. *Past Present*. 1997;156:87–115.
- Halcrow S, Tayles N. The bioarchaeological investigation of children and childhood. In: Agarwal S, Glencross B, editors. *Social bioarchaeology*. Chichester: Wiley-Blackwell; 2011. p. 333–60.
- Han S. *Pregnancy in practice: expectation and experience in the contemporary U.S.* New York: Berghahn Books; 2013.
- Han S, Betsinger TK, Scott AB. Conceiving the anthropology of the fetus: an introduction. In: Han S, Betsinger TK, Scott AB, editors. *Anthropology of the fetus: biology, culture, and society*. New York: Berghahn Books; 2017. p. 1–12.
- Hatch JW. *Social dimension of Dallas mortuary practices*. Master's thesis, Pennsylvania State University; 1974.
- Hedgecoe AM. Critical bioethics: beyond the social science critique of applied ethics. *Bioethics*. 2004;18(2):120–43.
- Kamp K. Where have all the children gone? The archaeology of childhood. *J Archaeol Method Theory*. 2001;8:1–34.
- Kinaston R, Buckley H, Halcrow S, Spriggs M, Bedford S, Neal K, Gray A. Investigating foetal and perinatal mortality in prehistoric skeletal samples: a case study from a 3000-year-old Pacific Island cemetery site. *J Archaeol Sci*. 2009;36:2780–7.
- Kleinman A. Moral experience and ethical reflection: can ethnography reconcile them? A quandary for the new bioethics. *Daedalus*. 1999;128(4):69–97.
- Knight VT. Social organization and the evolution of hierarchy in Southeastern chiefdoms. *J Anthropol Res*. 1990;46(1):1–23.
- Knudson KJ, Stojanowski CM. The bioarchaeology of identity. In: Knudson KJ, Stojanowski CM, editors. *Bioarchaeology and identity in the Americas*. Gainesville: University Press of Florida; 2009. p. 1–23.
- Larsen CS. *Bioarchaeology: interpreting behavior from the human skeleton*. 2nd ed. Cambridge: Cambridge University Press; 2015.
- Lewis M. *The bioarchaeology of children: perspectives from biological and forensic anthropology*. Cambridge: Cambridge University Press; 2007.
- Lewis M, Gowland R. Brief and precarious lives: infant mortality in contrasting sites from medieval and post-medieval England (AD 850–1859). *Am J Phys Anthropol*. 2007;134:117–29.
- Lillehammer G. A child is born: the child's world in an archaeological perspective. *Nord Archaeol Rev*. 1989;22:89–105.
- Marshall P. Anthropology and bioethics. *Med Anthropol Q*. 1992;6(1):49–73.
- Mays S, Evers J. Perinatal infant death at the Roman villa site at Hambleden, Buckinghamshire, England. *J Archaeol Sci*. 2011;38:1931–8.
- Muller JH. Anthropology, bioethics, and medicine: a provocative trilogy. *Med Anthropol Q*. 1994;8(4):448–67.
- Murphy E. Children's burial grounds in Ireland (*Cillini*) and parental emotions toward infant death. *Int J Hist Archaeol*. 2011;15:409–28.
- Nelson JL. Moral teachings from unexpected quarters: lessons for bioethics from the social sciences and managed care. *Hast Cent Rep*. 2000;30(1):12–7.

- Orme N. *Medieval children*. New Haven: Yale University Press; 2001.
- Pearson M. *The archaeology of death and burial*. College Station: Texas A&M University Press; 1999.
- Rakita G, Buikstra J. Bodies and souls. In: Rakita G, Buikstra J, editors. *Interacting with the dead: perspectives on mortuary archaeology for the new millennium*. Gainesville: University Press of Florida; 2005. p. 93–5.
- Robertson JA. Fetal personhood and the constitution. In: *Bill of health*. August 20, 2015 [viewed Sept 14, 2017]. 2015. Available at: <http://blogs.harvard.edu/billofhealth/2015/08/20/fetal-personhood-and-the-constitution/>.
- Saunders S. Juvenile skeletons and growth-related studies. In: Katzenberg A, Saunders S, editors. *Biological anthropology of the human skeleton*. Hoboken: Wiley; 2008. p. 117–47.
- Schroedl GF. Toward an explanation of Cherokee origins in East Tennessee. In: Moore DG, editor. *The conference on Cherokee prehistory*. Swannanoa: Warren Wilson College; 1986. p. 122–38.
- Schroedl GF. Mississippian towns in the Eastern Tennessee Valley. In: Lewis B, Stout C, editors. *Mississippian towns and sacred spaces*. Tuscaloosa: University of Alabama Press; 1998. p. 64–92.
- Scott E. *The archaeology of infancy and infant death*, BAR international series 819. Oxford: Archaeopress; 1999.
- Scott E. Killing the female? Archaeological narratives of infanticide. In: Arnold B, Wicker N, editors. *Gender and the archaeology of death*. Walnut Creek: AltaMira Press; 2001. p. 3–21.
- Scott AB, Betsinger TK. Excavating identity: burial context and fetal identity in post-medieval Poland. In: Han S, Betsinger TK, Scott AB, editors. *The anthropology of the fetus: biology, culture, and society*. New York: Berghahn Books; 2017. p. 146–68.
- Sofaer Derevenski J. Age and gender at the site of Tiszapolgar-Basatanya, Hungary. *Antiquity*. 1997a;71:875–89.
- Sofaer Derevenski J. Engendering children, engendering archaeology. In: Moore J, Scott E, editors. *Invisible people and practices: writing gender and children into European archaeology*. London: Leicester University Press; 1997b. p. 192–202.
- Sullivan LP. *The late Mississippian village: community and society of the mouse creek phase in Southeastern Tennessee*. Dissertation, University of Wisconsin, Milwaukee; 1986.
- Sullivan LP. Mississippian household and community organization in Eastern Tennessee. In: Rogers JD, Smith BD, editors. *Mississippian communities and households*. Tuscaloosa: University of Alabama Press; 1995. p. 99–123.
- Sullivan LP. Those men in the mounds: gender, politics and mortuary practices in late prehistoric Eastern Tennessee. In: Eastman JM, Rodning CB, editors. *Archaeological studies of gender in the Southeastern United States*. Gainesville: University Press of Florida; 2001. p. 101–26.
- Tocheri M, Dupras T, Sheldrick P, Molto J. Roman period fetal skeletons from the East Cemetery (Kellis 2) of Kellis, Egypt. *Int J Osteoarchaeol*. 2005;15:326–41.
- Turner L. An anthropological exploration of contemporary bioethics: the varieties of common sense. *J Med Ethics*. 1998;24:127–33.
- Turner L. Anthropological and sociological critiques of bioethics. *Bioeth Inq*. 2009;6:83–98.