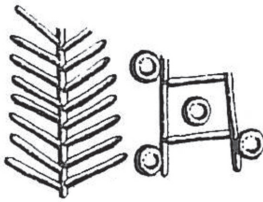


CHAPTER FOUR

Bodies and Encounters

Seeing Invisible Children in Archaeology



Joanna Sofaer

Abstract *The study of children in archaeology has frequently been framed in terms of their visibility or rather, in many cases, their invisibility. This chapter examines why the in/visibility of children remains such a persistent theme by scrutinizing some of the theoretical and methodological underpinnings of existing approaches to the study of children in archaeology. In particular, it explores the ways that investigating children in the past has become dependent upon the presence of child bodies in archaeological contexts. I argue that the archaeological need to have a visible body in order to “do” the archaeology of children creates significant and unnecessary restrictions to inquiry. As a response, I examine other possibilities for accessing children in the past by reconsidering the role of the child body and the perceived need for its visibility in archaeological contexts.*

THE VISIBILITY AND INVISIBILITY OF CHILDREN IN ARCHAEOLOGY

The study of children in archaeology has frequently been framed in terms of the visibility or rather, in many cases, the invisibility of children in the past. Despite a recent surge in scholarship, more than fifteen years since the first publications on children in archaeology, it seems to have been difficult for the discipline to move beyond this question of in/visibility. Although the contextually dependent natures of “children” and “childhood” now form key foci of investigation, and there has been welcome expansion of the range of periods and places in which children have been examined, much of this work constitutes case studies rather than a radical reappraisal of the ways that past children might be encountered. In this chapter, I want to explore why the in/visibility

1 of children remains such a persistent theme by scrutinizing some of the theoretical and
2 methodological underpinnings of existing approaches to the study of children in archae-
3 ology. My particular focus is the child body, since the absence or presence of child bodies
4 frequently forms the basis for archaeological assessments of in/visibility. I want to argue
5 that the archaeological need to have a visible body in order to “do” the archaeology of
6 children creates significant and unnecessary restrictions to enquiry. In response to the
7 limitations of current approaches, I want to examine what other possibilities there might
8 be for accessing children in the past by reconsidering what we mean by the child body
9 and the perceived need for its visibility in archaeological contexts.

11 SETTING THE IN/VISIBILITY AGENDA

13 Concern with the in/visibility of children in the archaeological record was first voiced
14 in the late 1980s and 1990s when children were identified as a distinct social category
15 worthy of study in archaeology (Crawford 1991; Lillehammer 1989; Moore and Scott
16 1997; Roveland 1997; Sofaer Derevenski 1994a). This work followed the precedent set
17 by early Gender Archaeology, which commented upon women as a hitherto archaeolog-
18 ically marginalized social group in order to generate more rounded interpretations of the
19 past (e.g., Classen 1992; Gero and Conkey 1991). Since children must have been part
20 of ancient societies, it was argued that archaeological interpretations also needed to “put
21 them back into the past” in order to create more authentic versions of human history.
22 Capturing the mood, publications were given titles such as “Where Are the Children?”
23 (Sofaer Derevenski 1994b), “Invisible People and Processes” (Moore and Scott 1997), or
24 “Where Have All the Children Gone” (Kamp 2001a).

25 To fulfill this brief, much of the early research on children concentrated on iden-
26 tifying the kinds of archaeological materials in which children could be recognized. This
27 also made the point that the omission of children from archaeological interpretation was
28 more a question of investigator bias than of the potential of archaeological contexts for
29 social interpretations. “Seeing” children sometimes involved the identification of specific
30 forms of child-associated material culture, most readily described as toys or childcare
31 paraphernalia (see Egan 1998; Kamp 2001a; Wileman 2005), and miniatures (e.g., Park
32 1998), but also including material interventions by children (e.g., Hammond and Ham-
33 mond 1981; Kamp 2001b; Wilkie 2000). More frequently, however, researchers turned to
34 settings in which children themselves were physically present, such as mortuary contexts
35 (e.g., Lucy 2005; Meskell 1994; Rega 1997; Scott 1991) or iconographic representations
36 and figurines (e.g., Janssen and Janssen 1990; Joyce 2000); whereas a specific material
37 culture of children often proved difficult to definitively identify, the body was perceived
38 as offering incontrovertible and ready opportunities to document children in the past.

39 More often than not, to date the identification of children has required investiga-
40 tors to identify child bodies. Scholars have investigated specific locations where children’s
41 bodies were found through mortuary studies (e.g., Borić and Stefanovic 2004; Mays
42 1993; McKerr et al. 2009; Scott 1993; Smith and Kahila 1992), asked how children
43 were depicted (e.g., Beaumont 2000; Golden 1990; Janssen and Janssen 1990), described
44

what children's bodies looked like in terms of their skeletal remains (e.g., Bogin 1999; Humphrey 2000; Lewis 2007; Lorentz 2008; Scheuer and Black 2000), or recorded imprints of child bodies as footprints, finger impressions, or paintings (Guthrie 2005; Kamp et al. 1999; Roveland 2000). This focus on the body has been extended in the theoretical development of life course perspectives and discussions of child identity. Here, associations between objects and bodies of different ages and sex have been used to characterize children in relation to others, rather than taking them to be a predefined or self-evident category (e.g., Gowland 2006; Joyce 2000; Sánchez-Romero 2008; Sofaer Derevenski 2000a).

An often tacit concern with the body has therefore come to dominate the archaeological study of children. Indeed, within the discipline the body has become almost a *sine qua non* for childhood studies. Nonetheless, a methodologically driven focus on the body also creates problems for archaeology. In particular, a focus on the body means that children become inaccessible in situations where there are no child bodies. This means that, for example, there are almost no studies of children in domestic contexts, the exceptions being historical settings with documentary evidence (e.g., Baxter 2005; Wilkie 2003). Yet these are contexts that one might expect children to have inhabited. Archaeological attitudes to the child body thus beg a series of questions: What do we stand to gain from a study of children if it is only to show what we already know: that children existed in the past? Is it possible to archaeologically access children in contexts where there are no child bodies? Furthermore, as it stands, the notion of in/visibility implies that children are passive—that they need to be “made visible”—but could it be possible to investigate child action? In order to answer these questions it is useful to take a step back to more closely examine the role of the child body in archaeology.

THE BODY IN THE ARCHAEOLOGY OF CHILDREN

The body is critical to understanding children as a category since it is body difference that makes a child a child as opposed to any other age-related category. In particular, intense and rapid whole body changes that occur during the early years of life are seen as characteristic of children (Prout 2000). Changes to the physical body, such as the development of secondary sex characteristics, are frequently understood in terms of a shift in social identity away from child to adult as the body is given symbolic and moral value (James 1993; Prendergast 2000). Understandings of the child body are therefore both material and social (Prout 2000). For archaeologists working with the physical remains of children the notion of body change is particularly powerful because of the sheer number of changes and their clarity in the human skeleton (Sofaer 2006).

Yet, as many researchers have pointed out it, it is not enough simply to identify immature bodies as children since cultural categorizations of children are variable. Who is a child in one society, is not in another (Welinder 1998). In taking this approach, archaeologists have been heavily influenced by anthropological and sociological insights pointing to variability in social perceptions and definitions of children and childhood (see Bluebond-Langer and Korbin 2007; Montgomery 2009). Many archaeological studies

1 have therefore attempted to identify children by locating culturally specific boundar-
 2 ies of childhood through associations between material culture and age categories (e.g.,
 3 Crawford 1991; Gowland 2001, 2006; Lucy 2005). On their own, however, statements
 4 regarding the culturally variable nature of the child category and the claim for children
 5 as illuminating cultural difference tend to be trite if they are not accompanied by a more
 6 penetrating analysis (Montgomery 2009:12).

7 Furthermore, the way that the child body is methodologically placed in such analy-
 8 ses means that archaeologists have found it difficult to move toward an understanding of
 9 archaeological children that links the materiality of the body and the social in a satisfying
 10 way (Sofaer 2006). In other words, standard archaeological method makes associations
 11 between bodies of designated chronological ages and forms of material culture, where
 12 age is determined through a combination of osteological and dental estimates. This kind
 13 of approach treats the child body as universal, inasmuch as stereotypes of the physio-
 14 logically “normal” child are used as templates for how children are expected to look at
 15 certain ages (Steedman 1995). Thus, while the method of artifact association allows for
 16 the investigation of the range of expression in what past people may have made of the
 17 body, there is little room for understanding variability and cultural contingency of the
 18 body itself, since the body is taken for granted (Sofaer 2006). Children thus continue
 19 to be interpreted within a naturalistic frame. In such analyses, material culture acts as
 20 symbolic capital that confers identity upon the user or owner (Budden and Sofaer 2009).
 21 This places children as passive recipients of identity overlaid on the body, which acts as
 22 a kind of substrate. This in turn means that the kinds of questions that can be asked of
 23 child bodies are somewhat reduced.

24 Although an understanding of categories is important, since people operate in the
 25 world by recognizing these (Sørensen 2000), the method of artifact association, as it is
 26 frequently deployed, clearly has drawbacks in relation to the study of children. In order
 27 to move beyond these, it may be useful to rethink the relationship between the child
 28 body and material culture and to consider what kinds of new questions or insights this
 29 might provoke.

31 MATERIAL CULTURE, THE BODY, AND AN ARCHAEOLOGY OF ONTOGENY

32
 33 The first step in such a reconsideration is to address the preconception that in order
 34 to “see” children in the archaeological record it is necessary to identify a child-specific
 35 material culture either by direct association with child bodies or independently of these.
 36 Children, as other social categories, live in a world of objects. From the moment they
 37 are born, they are surrounded by the material culture of their society. In order to exam-
 38 ine the relationship between children and material culture it is not therefore necessary
 39 to a priori posit or determine a suite of distinctive child objects (Wood 2009), even
 40 though these may exist in some settings in the form of toys, child care paraphernalia,
 41 or other kinds of objects. Having accepted this point, the issue then becomes how to
 42 understand and analyze the relationship between children and material culture if objects
 43
 44

are not exclusive to a particular social category, while acknowledging that objects may simultaneously have different meanings to different people (cf. Baxter 2005).

One way forward is to consider the effects of material culture on the people who live with it. It has long been understood that environmental conditions impact on human growth and nutrition (see Bogin 2001; Coleman 1995). Similarly, a range of studies have argued that the emotional and psychological development of children is affected in various ways by the social, emotional, and cultural contexts of their care (see Bretherton 1997; Butterworth and Harris 1994; Valsiner and Rosa 2007). Given that material culture also forms part of the environment in its broadest sense, it may be useful to think about material culture in relation to human development.

Material culture has a profound impact on human development through the process of ontogeny (Sofaer 2011; Toren 1999). Following Toren (1999, 2001, 2007) human ontogeny can be understood as a process of self-creation or autopoiesis of the “whole person.” It is an embodied and ongoing process grounded in active engagement with one’s surroundings in which cognitive development is a material phenomenon; learning how to behave in an appropriate manner involves changes to both mind and body as physical and inseparable entities (Ingold 2001; Sofaer 2006; Toren 1999). In this phenomenologically inspired perspective there is no need to posit a dialectical relationship between mind and body, biology and culture, or individual and society (Toren 2003). People are historical accumulations of experience whose contingency is linked to their relations to other people and to objects. In other words, people literally make themselves through learning in a social setting. They literally embody their histories and the histories of their relations with others and the material world (Toren 1999:2). Bodies will therefore develop differently under different material conditions.

This emphasis on the body differentiates the notion of ontogeny from the more frequently used concept of socialization (Sofaer 2011). It also foregrounds the ways that people are active in their own development through learning that they need to “belong” in a given social context, rather than implying a top-down view of culture imposed on passive individuals (Toren 2007). In terms of ontogeny, intersubjectivity is vital to human development since a person’s moment-to-moment encounters with the material world are always and inevitably mediated by relations with others. It is the differences and similarities in encounters with others and the material world that result both in unique experiential histories for each person, as well as shared experiences at a given historical moment (Toren 2003).

In this view people are not biological containers to be simply filled up with culture (Ingold 1998) but actively engage with the world in and through their bodies. Body actions and expressions therefore become key to understanding and investigating the contextually specific material circumstances of human development. For example, in her ethnographic study of child cognition and the learning of hierarchy in Fiji, Toren (1999) describes how the deportment and spatial disposition of the child body manifests the phenomenology of learning in Fijian longhouses. The embodiment of behavior is key to the process by which behaviors are understood over time and to the reproduction of

1 ritual and ritualized behavior (Toren 1999). This does not mean, however, that children
 2 necessarily act like mini-adults. Indeed, in Toren's example children have to accommodate
 3 adult concerns by sitting, crawling, walking, clapping, or taking food in the prescribed
 4 manner. Here the body is critical to simultaneously learning and expressing behavior
 5 appropriate to one's particular age and position in the social hierarchy.

6 Embodied engagement with the material world thus involves learning gestures, or
 7 "techniques of the body" (Mauss 1935), appropriate to one's society and place within it.
 8 These techniques are learned body actions, which are not just expressive of social values
 9 imposed on the body but are acquired skills that develop in specific settings in partic-
 10 ular ways depending on the surrounding environment in its broadest sense, including
 11 caregivers, objects, and the physical landscape (Ingold 1998). Techniques of the body are
 12 thus fundamental to the social and cultural context of daily life and it is not possible
 13 to separate learning to do things from learning to do things in the approved manner of
 14 one's society (Ingold 1998:26). Importantly for archaeology, techniques may be closely
 15 related to the form of material culture enabling a working back from object forms to the
 16 body actions, or rather range of potential body actions or postures, involved in their use.
 17 Thus, Leroi-Gourhan (1971 [1943]) famously presented different ways that individual
 18 objects belonging to a single class of artifact were used in culturally specific ways linked
 19 to their form. For example, contrasting basket forms could be carried with a tumpline,
 20 on the head, on the back, or in the hand. Likewise, objects with blades were classified
 21 into those involving different kinds of gestures including those that require the blade to
 22 be pushed, lanced with the point down, or pushed with a striker (Leroi-Gourhan 1971
 23 [1943]). This, then, is not just about what something is used for—the much vaunted
 24 relationship between form and function that underpins a great deal of archaeological
 25 interpretation—but is also about *how* it is used. It therefore offers insights into the nature
 26 of gestures that need to be learned.

27 Ethnoarchaeological studies in the French tradition have employed this approach to
 28 analyze in detail the gestures and skills required to learn crafts such as bead making or
 29 pottery manufacture (Roux 2000; Roux and Corbetta 1990). Ergonomic analyses have
 30 also been deployed to investigate the complexity of muscle actions involved in apparently
 31 simple tasks such as sitting or brushing teeth (Arcadio et al. 1973). More recently, some
 32 Scandinavian archaeologists have begun to document studies of movement in relation to
 33 the use of material culture. Using filming techniques to record and visualize the break-
 34 down of body movements into individual actions, and inspired by notations used in dance
 35 choreography to write down this movement choreography, they have moved from exper-
 36 imental work to the actions involved in making past objects (Bender Jørgensen 2006).
 37 Høgseth (2007), for example, has used this approach to study the actions involved in
 38 Medieval carpentry. He recorded axe and saw marks on timbers in buildings and through
 39 experimental work identified body actions that would be required to make those marks.
 40 Within Anglo-American archaeology however, despite some exceptions, investigations of
 41 body gestures have received relatively little attention (Ingold 2001; Sofaer 2006).

42 Body gestures need to be learned, but this process—through material encounters
 43 and intersubjectivity—is not confined to children. It takes place throughout the life course
 44

as people move through categories of age as well as of gender and status, and accumulate material and intersubjective experiences. There is, therefore, no fundamental ontological difference per se between children and other age categories (Sofaer Derevenski 2000b; Sofaer 2011). Instead, the difference between children and other social categories is one of degree; younger individuals are particularly plastic and, having less of a reservoir of experience, are exposed to a greater number of new experiences and therefore subject to more rapid development. Furthermore, while body difference defines children, this is also the case for other age categories such as the elderly (Appleby 2010); bodies are defined not only in their own terms but in relation to others.

The implications of the ontological similarity between children and other categories for archaeological method are profound since it means that the study of human ontogeny does not require us to predefine what a child *is* before we can explore human development. Nor does it deny the existence of culturally contingent social categories. Instead, it creates a new set of challenges about the nature of human experience in terms of the ways that meanings and interactions may alter as people's understandings change and accumulate with age. This perspective invites us to think about material culture in relation to the processes that underpin the creation of social categories, rather than the description of those categories alone. It offers analytical possibilities for exploring common developmental experiences in particular times and places in terms of what people needed to learn in order to "belong" to a particular society, as well as more detailed investigations of the ontogeny of people belonging to particular social groups/categories (Sofaer 2011). In other words, the former is about what the often used term *cultural difference* means in practice; the things that we all learn in our society that allow us to "fit in," but that also provide for culture shock when we go somewhere very different.

TRACING ONTOGENY IN THE ARCHAEOLOGICAL RECORD

Given my arguments above, exploring human ontogeny in the archaeological record requires tracing learned embodied interaction with material culture. Of course, not all interactions with material culture will be archaeologically accessible, but it is possible to suggest two general levels on which such interactions may be explored archaeologically. These can be briefly summarized as learning to *make* objects and learning to *use* objects. The distinction between making and using is to some extent artificial but provides clarity in the provision of examples and involves different pathways in order to investigate them. The first involves following the process of learning to make objects by identifying patterns of error (inappropriate body actions) fossilized in archaeological material. The second examines the ways that "finished" material culture creates body gestures (appropriate body actions), which have to be learned in order to use finished objects.

ONTOGENY 1: LEARNING TO MAKE THINGS

In recent years there has been increasing focus on identifying apprenticeship in the material record in ethnographic contexts and in the past (e.g., Crown 1999; Ferguson 2008;

Wendrich 2012). While apprentices need not necessarily be children (Ferguson 2008), since the learning of craft skills may require considerable training and practice, many ethnographic studies suggest that the learning of traditional craft skills (whether formally or informally) can begin early in life (Greenfield 2000; Grimm 2000). Furthermore, the development of craft skills is a very physical process that requires the craftsperson to engage bodily with his or her material and tools (Budden and Sofaer 2009). The production of different kinds of objects requires different suites of body actions from the maker, who has to engage with varying technical requirements and tools. It therefore constitutes the development of embodied knowledge (Sofaer and Budden 2012).

Research has examined apprenticeship in a range of materials including flint knapping (Grimm 2000; Pigeot 1990), pottery manufacture (Budden 2008; Crown 1999; Sofaer and Budden 2012), bead making (Roux 2000), and weaving (Greenfield 2000). Much of this work has typically focused on identifying the presence of novices by identifying technical errors in working toward an “ideal” object type at different stages of the manufacturing process or *chaîne opératoire*. For example, at the French Upper Palaeolithic site of Solvieux, a novice knapper was identified through his/her relative lack of control over basic technical principals (Grimm 2000). These technical errors in core reduction reflect body gestures that were inappropriate to the task.

Yet at Solvieux, the apprentice knapper was not alone. S/he appears to have been guided by a master (Grimm 2000). While research on apprenticeship in the archaeological record has typically been expressed in terms of identifying novices at work through the identification of technical error it can also be understood in ontogenetic terms. The development of craft skills is a product of the relationship between the learner and others in society whether by observation and imitation, informal instruction or formal guidance (Baxter 2005; Crown 2001, 2002; David 1990; Michelaki 2008; Sofaer and Budden 2012). Learning to make things is an intersubjective process in which learners join a community of practice (Lave and Wenger 1991). It implies a learning process in which less experienced makers of objects learn how to craft things from more experienced makers. In other words, the errors visible in archaeological material do not just represent the development of technical skill but represent the process of ontogeny itself; the “becoming” of a knapper, a potter, a weaver, or a smith.

Within communities of practice, learning takes place through different kinds of “participation frameworks” in which apprentices learn through participating in the practices of experts (Lave and Wenger 1991). Such frameworks offer a range of different social and pedagogical models for the nature of the master-apprentice relationship. It can involve scaffolded (highly structured) or unscaffolded (relatively independent trial and error) learning (Gosselain 1992, 1998; Greenfield 2000; Greenfield, Maynard, and Childs 2000; Wallaert-Pêtre 2001). In scaffolded learning, learners are guided by teachers who provide practical help and verbal direction in accordance with the developmental level of the learner (Greenfield 2000). Advice is freely available and learners observe and follow models presented by more skilled practitioners. In strongly scaffolded situations, teachers intervene before learners have the opportunity to make errors and learners have little chance to make mistakes, innovate, or experiment. Thus, the transmission of traditional

ways of doing things is ensured (Greenfield 2000). By contrast, in unscaffolded learning, learners are offered very little guidance. This leads to a much higher rate of errors but also encourages innovation and experimentation (Greenfield 2000; Greenfield, Maynard, and Childs 2000). By examining the patterns of error in objects it is possible to explore the nature of relationships at play between individual learners and more experienced craftspeople, and thus further explore the process of ontogeny.

In a recent study of ceramics from the Middle Bronze Age site of Százhalombatta in Hungary, Budden (2008) found a relatively high frequency of technical errors in simple vessel types such as cups, while complex fine wares with finer clays showed very few such errors. She argued that this showed the presence of apprentice potters practicing and making mistakes on simpler forms, while more proficient potters produced more complicated vessels using better quality resources where there may have been a lower tolerance for error (Budden 2008; Budden and Sofaer 2009). She also identified a number of “mixed message” pots that can be interpreted as the product of more than one hand with people of different skills and experience collaborating together (Budden 2007; Sofaer and Budden 2012), a feature also noted in other rather different ceramic assemblages (cf. Crown 2007). These vessels indicate that more experienced help was available to guide learner potters, either by being assisted through the input of more experienced helpers, or where learners were encouraged to add to their skills by working on pots made by more experienced potters.

The evidence from Százhalombatta therefore points to a range of competencies—a situation that might be expected when beginners or apprentice potters who have not yet acquired a full range of skills work alongside more experienced ones—although the existence of errors in less technically complex vessel forms suggests that potters were allowed to make their own mistakes (Sofaer and Budden 2012). Furthermore, synchronic and diachronic variation in vessel form suggest that innovation was possible, albeit within strict rules surrounding the “correct” culturally acceptable way to make a pot (Budden and Sofaer 2009). Learning at Százhalombatta may therefore have been lightly or moderately scaffolded; novice potters frequently worked on their own but acted within a wider environment where they were able to draw on the help and support of others (Sofaer and Budden 2012).

ONTOGENY 2: LEARNING TO USE THINGS

Just as learning to make things is an ontogenetic process, so too is learning to use objects in a culturally appropriate manner. The body is a prerequisite for the interaction between people and objects and it is through this interaction that bodies themselves develop. For example, learning to write involves not only a knowledge of letters and numbers but a learned bodily understanding of how to grip a pencil, press down on the page with just the right amount of weight, and how to move it in the correct way to draw the desired figure. Learning to write is therefore a collaboration between the body and the object that takes place in a social setting, through which the body develops as it becomes more practiced. Malafouris (2008:115) broadens this argument by suggesting that material

1 culture has the ability to change and shape bodies by transforming and extending the
 2 boundaries of “body schema”; the neuronal map associated with body positions that he
 3 places at the center of his understanding of embodied cognition.

4 Since the material world is critical to human development, an understanding of
 5 the ways that bodies and objects work together can be used to explore human ontog-
 6 eny. This may be particularly useful in exploring ontogenetic changes over time, since
 7 the acquisition of particular socially appropriate body movements in relation to new or
 8 different objects will result in contrasts in learning experiences. I have recently argued
 9 that changes in pottery forms and their distribution within houses at the Bronze Age tell
 10 at Százhalombatta had an impact on human ontogeny through altering social dynamics
 11 and body gestures in relation to changes in movement through domestic space (Sofaer
 12 2011). So-called typological changes thus, in fact, represent ontogenetic changes. To
 13 further illustrate what I mean, it is useful to give an additional example.

14 Bronze weaponry is a well-documented feature of the European Bronze Age. It is
 15 found in hoards, as single finds, and in graves. The sequence of development of European
 16 Bronze Age weaponry is well documented. In general, there is a move from small dag-
 17 gers to dirks and rapiers by the Middle Bronze Age, and to swords in the later Middle
 18 Bronze Age. This reflects changes in styles of combat. While daggers may have been “last
 19 chance” close-quarters weapons or used as pocket knives, rapiers are long thin thrusting
 20 weapons, which required greater precision than daggers and which would have required
 21 a degree of training in their use (Osgood et al. 2000). The swords take a range of forms
 22 with the general development of a leaf-shaped blade suited to a slashing or cut-and-thrust
 23 type of action (Harding 1999; Osgood 2000 et al.). Although not all swords were used
 24 in combat (some being symbolic objects), many display evidence of blade damage as a
 25 result of combat and subsequent resharpening (Bridgford 1997; Kristiansen 1984, 2002).

26 Each of these different types of weapons requires different skills, fighting techniques,
 27 and learned body movements. In particular, the development of the sword changed body
 28 action substantially. As Malafouris (2008:118) puts it in his discussion of Mycenaean
 29 swords as body parts, the sword “draws out of the . . . body a novel predisposition for
 30 action not previously available.” The development of defensive equipment, including
 31 shields, helmets, corselets, and greaves, which are known particularly from the Late
 32 Bronze Age, also speaks to distinct fighting styles in which the body moved in particular
 33 ways. To be a warrior it was not enough simply to hold a weapon. To be involved in
 34 combat—even if ritual or symbolic—meant that the warrior knew how to *use* a weapon
 35 and this must have been a learned skill. Training for combat involves learning how to
 36 hold, swing, and sheath a weapon, simultaneously developing endurance, musculature,
 37 and neuronal and motor pathways. For these skills to be effectively developed, and
 38 in order to capitalize on the plasticity and strength of youth, training may begin at a
 39 young age. Spartan boys famously began their military training at the age of seven years
 40 (Cartledge 2003). Similarly, the path to becoming a Medieval knight also began at about
 41 age seven or eight, when boys left the care of women to become pages or to be placed
 42 into the care of male tutors, with training as squires starting between ages 10 and 14
 43 (Orme 1984). Ethnographic examples from the Americas and Papua New Guinea reveal
 44

boys “playing” war from an early age (Vandkilde 2007). Becoming a warrior is therefore about developing the body knowledge that underpins being part of that category; it is gaining identity through doing. As such, the development of knowledge and age are inextricably linked together.

In mortuary contexts, Bronze Age weaponry is almost exclusively associated with males (Vandkilde 2007; Wilson 2007). This association between people and objects has led to widespread interpretations of an elite male warrior aristocracy (Kristinansen 1999; Treherne 1995; Vandkilde 2003, 2007). Discussions have also considered different institutional forms of warriorhood and the social structuring of martial identities, with particular focus on contextual differences in the ages of people buried with weapons (Vandkilde 2007; Wilson 2007). Irrespective of the age of person with whom weapons were deposited, what is important for an understanding of ontogeny is that being a warrior is an intersubjective experience on at least two levels. First, as Vandkilde (2007:80) points out, being a warrior is, like any other social identity, “individually felt and collectively shared.” Second, combat and learning to fight necessarily involves at least one, if not many, other people to fight against (cf. Vandkilde 2007).

Shifts in weapon types and combat techniques that we see in the archaeological record thus reveal diachronic shifts in human experience that are the consequence of material changes. Different ways of fighting will, in turn, lead to different ontogenies, resulting in physically different kinds of human bodies. Yet the relationship between objects and human ontogeny is not one way. Just as ontogeny is the product of intersubjectivity and experiences of the material world, so it is that experiences can also lead to changes in material culture (Sofaer 2011). Intriguingly, some Bronze Age rapiers appear to have been used in an unsuitable (and perhaps more natural) slashing movement shown by tears found on the rivet holes of the handles of such weapons and some iconographic depictions (Harding 1999; Osgood et al. 2000). The experience and consequences of using rapiers in this way may have led to the typological changes seen in the archaeological record and the development of the sword. New and different weapon types may therefore have been the product of previous accumulated understandings. As Toren (2007) puts it, “Children are born into a world in the making that was already rendered meaningful in all its material aspects, and with time they [make] these meanings anew.” This reconfiguration happens through interactions with others and the constant negotiation and assimilation of understandings. Such a process provides for a relationship between changes in social organization and material change where one need not precede the other. It may be this never-ending body-centered learning—rather than abstract processes of “typological development,” “evolution,” or “innovation”—that underpins material change (Sofaer 2011).

CONCLUSION

Rather than helping archaeologists to “do” an archaeology of children, a frequent focus on the in/visibility of children in the archaeological record has inadvertently created methodological barriers to understanding children in the past. The frequent requirement for a child body in order to evidence children in the past has not only made it impossible

1 to “see” them in contexts where bodies are not physically present, but has also detracted
2 from understanding *why* the study of children is a worthwhile endeavor.

3 In this chapter, I have argued that rethinking the methodological issues posed by
4 child bodies offers the possibility to access children in contexts where physical bodies
5 are not present. I have suggested that this may be done by widening archaeological
6 understandings of the relationship between bodies and objects. In addition to the ways
7 that material culture acts as a signifier of identity, it is useful to understand *how bodies*
8 *interact with the material world* in order to ask questions about human development.
9 Since different forms of material culture have the potential to produce qualitatively dif-
10 ferent kinds of bodies (Sofaer 2006, 2011; see also Malafouris 2008), understanding the
11 ways that people learn to make and use the material world allows us to ask one of the
12 fundamental questions of human life: “How do people become who they are?” (Toren
13 1999). Seen through this lens, a focus on children is important because it highlights
14 human ontogeny. For although ontogeny is a lifelong process, the plasticity and rapid-
15 ity of human development in the early years are particularly critical. Ontogeny is the
16 counterpart to the construction of social categories (Sofaer 2011).

17 An archaeology of ontogeny is challenging. It asks us to consider the body in ways
18 that focus on the implications of bodily difference in relation to the material world,
19 rather than the presence or absence of objects linked to the physical body per se. It
20 provokes ambitious questions about the material and social conditions under which
21 human development takes place. Furthermore, the reflexive and intersubjective nature of
22 human development also hints at a means by which active human experience can lead to
23 alteration of the material world. Yet, these same challenges also mean that encountering
24 the “invisible” body is also full of archaeological possibilities.

25 26 REFERENCES CITED

- 27
28 Appleby, J. 2010 Why We Need an Archaeology of Old Age, and a Suggested Approach. *Nor-*
29 *wegian Archaeological Review* 43(2):145–168.
30 Arcadio, E., A. Moulay, and P. Chauvinc 1973 *Gestes de la Vie Quotidienne*. Masson et Cie, Edi-
31 teurs, Lyon.
32 Baxter, J. E. 2005 *The Archaeology of Childhood. Children, Gender and Material Culture*. AltaMira
33 Press, Walnut Creek, California.
34 Beaumont, L. 2000 The Social Status and Artistic Representation of “Adolescence” in Fifth Cen-
35 tury Athens. In *Children and Material Culture*, edited by J. Sofaer Derevenski, pp. 39–50.
36 Routledge, London.
37 Bender Jørgensen, L. 2006 *Embodying Belief: Practice as a Form of Knowledge*. Paper presented at
38 the 12th Annual European Archaeological Association Meeting, Cracow.
39 Bluebond-Langner, M., and J. Korbin 2007 Challenges and Opportunities in the Anthropology of
40 Childhoods: An Introduction to “Children, Childhoods, and Childhood Studies.” *American*
41 *Anthropologist* 109:241–246.
42 Bogin, B. 1999 *Patterns of Human Growth*. Cambridge University Press, Cambridge.
43 Bogin, B. 2001 *The Growth of Humanity*. Wiley-Liss, New York.
44 Borić, D., and S. Stefanovic 2004 Birth and Death: Infant Burials from Vlasac and Lepenski
Vir. *Antiquity* 78:526–546.

- Bretherton, I. 1997 Bowlby's Legacy to Developmental Psychology. *Child Psychiatry and Human Development* 28(1):33–43.
- Bridgford, S. 1997 Mightier than the Pen? An Edgewise Look at Irish Bronze Age Swords. In *Material Harm: Archaeological Studies of War and Violence*, edited by J. Carman, pp. 95–115. Cruithne Press, Glasgow.
- Budden, S. 2007 Renewal and Reinvention: The Role of Learning Strategies in the Early to Late Middle Bronze Age of the Carpathian Basin. Unpublished PhD Dissertation, University of Southampton.
- Budden, S. 2008 Skill Amongst the Sherds: Understanding the Role of Skill in the Early to Late Middle Bronze Age in Hungary. In *Breaking the Mould: Challenging the Past through Pottery*, Proceedings of the 3rd International Conference on Prehistoric Ceramics. University of Manchester, 6–8 October 2006, edited by I. Berg, pp. 1–17. BAR International Series 1861, Oxford.
- Budden, S., and J. Sofaer 2009 Non-Discursive Knowledge and the Construction of Identity. Potters, Potting, and Performance at the Bronze Age Tell of Százhalombatta, Hungary. *Cambridge Archaeological Journal* 19(2):203–220.
- Butterworth, G., and M. Harris 1994 *Principles of Developmental Psychology: An Introduction*. Psychology Press, Hove.
- Cartledge, P. 2003 *The Spartans: The World of the Warrior-Heroes of Ancient Greece*. The Overlook Press, Woodstock.
- Classen, C. 1992 *Exploring Gender through Archaeology*. Prehistory Press, Madison.
- Coleman, D. 1995 Human Migration: Effects on People, Effects on Populations. In *Human Variability and Plasticity*, edited by C. G. Nicholas Mascie-Taylor and B. Bogin, pp. 115–145. Cambridge University Press, Cambridge.
- Crawford, S. 1991 When Do Anglo-Saxon Saxon Children Count? *Journal of Theoretical Archaeology* 2:17–24.
- Crown, P. 1999 Socialization in American Southwest Pottery Decoration. In *Pottery and People: A Dynamic Interaction*, edited by J. Skibo and G. Feinman, pp. 25–43. University of Utah Press, Salt Lake City.
- Crown, P. 2001 Learning to Make Pottery in the Prehispanic American Southwest. *Journal of Anthropological Research* 57:451–469.
- Crown, P. 2002 Learning and Teaching in the Pre-Hispanic American Southwest. In *Children in the Puebloan Southwest*, edited by K. Kamp, pp. 108–124. University of Utah Press, Salt Lake City.
- Crown, P. 2007 Life Histories of Pots and Potters: Situating the Individual in Archaeology. *American Antiquity* 72:677–690.
- David, N. 1990 *Vessels of The Spirit: Pots and People in North Cameroon* (Video). University of Calgary.
- Egan, G. 1998 Miniature Toys of Medieval Childhood. *British Archaeology* 35:10–11.
- Ferguson, J. 2008 The When, Where and How of Novices in Craft Production. *Journal of Archaeological Method and Theory* 15:51–67.
- Gero, J., and M. Conkey 1991 *Engendering Archaeology*. Blackwell, Oxford.
- Golden, Mark 1990 *Children and Childhood in Classical Athens*. Johns Hopkins University Press, Baltimore.
- Gosselain, O. 1992 Technology and Style: Potters and Pottery among the Bafia of Cameroon. *Man* 27:559–586.
- Gosselain, O. 1998 Social and Technical Identity in a Clay Crystal Ball. In *The Archaeology of Social Boundaries*, edited by M. Stark, pp. 78–106. Smithsonian Institution Press, Washington, D.C.

- 1 Gowland, R. 2001 Playing Dead: Implications of Mortuary Evidence for the Social Construction
2 of Childhood in Roman Britain. In *Tenth Annual Theoretical Roman Archaeology Conference*,
3 edited by G. Davies, A. Gardner, and K. Lockyear, pp. 152–168. Oxbow, Oxford.
- 4 Gowland, R. 2006 Ageing the Past: Examining Age Identity from Funerary Evidence. In *Social
5 Bioarchaeology of Funerary Remains*, edited by R. Gowland and C. Knüsel, pp. 143–154.
6 Oxbow, Oxford.
- 7 Greenfield, P. 2000 Children, Material Culture, and Weaving: Historical Change and Develop-
8 mental Change. In *Children and Material Culture*, edited by J. Sofaer Derevenski, pp.
9 72–86. Routledge, London.
- 10 Greenfield, P., A. Maynard, and C. Childs 2000 History, Culture, Learning, and Development.
11 *Cross Cultural Research* 34(4):351–374.
- 12 Grimm, L. 2000 Apprentice Flintknapping: Relating Material Culture and Social Practice in the
13 Upper Palaeolithic. In *Children and Material Culture*, edited by J. Sofaer Derevenski, pp.
14 53–71. Routledge, London.
- 15 Guthrie, R. D. 2005 *The Nature of Palaeolithic Art*. University of Chicago Press, Chicago.
- 16 Hammond, G., and N. Hammond 1981 Child's Play: A Distorting Factor in Archaeological
17 Distribution. *American Antiquity* 46:634–636.
- 18 Harding, A. 1999 Warfare: A Defining Characteristic of Bronze Age Europe? In *Ancient Warfare*,
19 edited by J. Carman and A. Harding, pp. 157–173. Sutton, Stroud.
- 20 Humphrey, L. 2000 Growth Studies of Past Populations: An Overview and an Example. In *Human
21 Osteology in Archaeology and Forensic Science*, edited by M. Cox and S. Mays, pp. 23–38.
22 Greenwich Medical Media, London.
- 23 Høgseth, H. 2007 The Craftsman's Toolbox. An Investigation of Embodied Knowledge as Reflected
24 in Archaeological Timbers Dated to the 11th Century AD. Unpublished PhD Dissertation,
25 Norwegian University of Science and Technology, Trondheim.
- 26 Ingold, T. 1998 From Complimentary to Obviation: on Dissolving the Boundaries Between
27 Social and Biological Anthropology, Archaeology, and Psychology. *Zeitschrift für Ethnologie*
28 123:21–52.
- 29 Ingold, T. 2001 Beyond Art and Technology: the Anthropology of Skill. In *Anthropological Per-
30 spectives on Technology*, edited by M. Schiffer pp. 17–31. University of New Mexico Press,
31 Albuquerque.
- 32 James, A. 1993 *Childhood Identities: Self and Social Relationships in the Experience of the Child*.
33 Edinburgh University Press, Edinburgh.
- 34 Janssen, R., and J. Janssen 1990 *Growing Up in Ancient Egypt*. The Rubicon Press, London.
- 35 Joyce, R. 2000 Girling the Girl and Boying the Boy: The Production of Adulthood in Ancient
36 Mesoamerica. *World Archaeology* 31(3):473–483.
- 37 Kamp, K. 2001a Where Have all the Children Gone? The Archaeology of Childhood. *Journal of
38 Archaeological Method and Theory* 8(1):1–29.
- 39 Kamp, K. 2001b Prehistoric Children Working and Playing: A Southwestern Case Study in
40 Learning Ceramics. *Journal of Anthropological Research* 57:427–450.
- 41 Kamp, K., N. Timmerman, G. Lind, J. Graybill, and I. Natowsky 1999 Discovering Childhood:
42 Using Fingerprints to Find Children in the Archaeological Record. *American Antiquity*
43 64(2):309–315.
- 44 Kristiansen, K. 1984 Krieger und Häuptlinge in der Bronzezeit Dänemarks. Ein Beitrag zur
Geschichte des bronzezeitlichen Schwertes. *Jahrbuch des Römisch-Germanisches Zentralmu-
seums* 31:187–208. Mainz.

- Kristiansen, K. 1999 The Emergence of Warrior Aristocracies in Later European Prehistory and Their Long-Term History. In *Ancient Warfare*, edited by J. Carman and A. Harding, pp. 175–189. Sutton, Stroud. 1
- Kristiansen, K. 2002 The Tale of the Sword—Swords and Swordfighters in Bronze Age Europe. *Oxford Journal of Archaeology* 21(4):319–332. 2
- Lave, J., and E. Wenger 1991 *Situated Learning: Legitimate Peripheral Participation*. Cambridge University Press, New York. 3
- Leroi-Gourhan, A. 1971 [1943]. *L'Homme et la Matière*. Editions Albin Michel, Paris. 4
- Lewis, M. 2007 *The Bioarchaeology of Children: Perspectives from Biological and Forensic Anthropology*. Cambridge University Press, Cambridge. 5
- Lillehammer, G. 1989 A Child Is Born: The Child's World in an Archaeological Perspective. *Norwegian Archaeological Review* 22(2):89–105. 6
- Lorentz, K. 2008 From Bodies to Bones and Back: Theory and Human Bioarchaeology. In *Between Biology and Culture*, edited by H. Schutkowski, pp. 273–303. Cambridge University Press, Cambridge. 7
- Lucy, S. 2005 The Archaeology of Age. In *The Archaeology of Identity: Approaches To Gender, Age, Status, Ethnicity, and Religion*, edited by M. Diaz-Andreu, S. Lucy, S. Babić, and D. Edwards, pp. 43–66. Routledge, London. 8
- Malafouris, L. 2008 Is it “Me” or is it “Mine”? The Mycenaean Sword as a Body-Part. In *Past Bodies. Body-Centred Research in Archaeology*, edited by D. Borić and J. Robb, pp. 115–123. Oxbow Books, Oxford. 9
- Mauss, M. 1935 Les Techniques du Corps. *Journal de Psychologie* 32:271–293. 10
- Mays, S. 1993 Infanticide in Roman Britain. *Antiquity* 67:883–888. 11
- McKerr, L., E. Murphy, and C. Donnelly 2009 I Am Not Dead, but Do Sleep Here: The Representation of Children in Early Modern Burial Grounds in the North of Ireland. *Childhood in the Past* 2(1):109–131. 12
- Meskel, Lynn 1994 Dying Young: The Experience of Death at Deir el Medina. *Archaeological Review from Cambridge* 13(2):35–45. 13
- Michelaki, K. 2008. Making Pots and Potters in the Bronze Age Maros Villages of Kiszombor-Új-Élet and Kláraflava-Hajdova. *Cambridge Archaeological Journal* 18(3):327–352. 14
- Montgomery, H. 2009. An Introduction to Childhood: Anthropological Perspectives on Children's Lives. Wiley-Blackwell, Oxford. 15
- Moore, J., and E. Scott (editors) 1997 *Invisible People and Processes. Writing Gender and Childhood into European Archaeology*. Leicester University Press, London. 16
- Orme, N. 1984 From Childhood to Chivalry: the Education of the English Kings and Aristocracy 1066–1530. Methuen, London. 17
- Osgood, R., S. Monks, and J. Toms 2000 *Bronze Age Warfare*. Sutton Publishing, Stroud. 18
- Park, R. 1998 Size Counts: The Miniature Archaeology of Childhood in Inuit Societies. *Antiquity* 72:269–281. 19
- Pigeot, N. 1990 Technical and Social Actors: Flintknapping Specialists at Magdalenian Etoilles. *Archaeological Review from Cambridge* 9(1):126–141. 20
- Prendergast, S. 2000 “To Become Dizzy in Our Turning”: Girls, Body-Maps and Gender as Childhood Ends. In *The Body, Childhood, and Society*, edited by A. Prout, pp. 101–24. Macmillan, Basingstoke. 21
- Prout, A. 2000 Childhood Bodies: Construction, Agency, and Hybridity. In *The Body, Childhood, and Society*, edited by A. Prout, pp. 1–18. Macmillan, Basingstoke. 22

- 1 Rega, E. 1997 Age, Gender, and Biological Reality in the Early Bronze Age Cemetery at Mokrin.
2 In *Invisible People and Processes*, edited by J. Moore and E. Scott, pp. 229–247. Leicester
3 University Press, London.
- 4 Roux, V. (editor) 2000 *Cornaline de l'Inde: Des Pratiques Techniques de Cambay aux Techno-systèmes
5 de l'Indus*. Editions de la Maison des Sciences de l'homme, Paris.
- 6 Roux, V., and D. Corbetta 1990 *Le Tour du Potier: Spécialisation Artisanale et Compétences
7 Techniques*. CNRS, Paris.
- 8 Roveland, B. 1997 Archaeology of Children. *Anthropology Newsletter* 38(4):14.
- 9 Roveland, B. 2000 Footprints in the Clay: Upper Palaeolithic Children in Ritual and Secular
10 Contexts. In *Children and Material Culture*, edited by J. Sofaer Derevenski, pp. 29–38.
11 Routledge, London.
- 12 Sánchez-Romero, M. 2008 Childhood and the Construction of Gender Identities through Material
13 Culture. *Childhood in the Past* 1:17–37.
- 14 Scheuer, L., and S. Black 2000 *Developmental Juvenile Osteology*. Academic Press, San Diego,
15 California.
- 16 Scott, E. 1991 Animal and Infant Burials in Romano-British Villas: A Revitalization Movement.
17 In *Sacred and Profane: Proceedings of a Conference on Archaeology, Religion, and Ritual,
18 Oxford, 1989*, edited by P. Garwood, D. Jennings, R. Skeates, and J. Toms, pp. 115–121.
19 Oxford Committee for Archaeology, Institute of Archaeology, Oxford.
- 20 Scott, E. 1993. Images and Contexts of Infants and Infant Burials: Some Thoughts on Cross-
21 Cultural Evidence. *Archaeological Review from Cambridge* 11:77–92.
- 22 Smith, P., and G. Kahila 1992 Identification of Infanticide in Archaeological Sites: a Case Study
23 from the Late Roman-Early Byzantine Periods at Ashkelon, Israel. *Journal of Archaeological
24 Science* 19:667–75.
- 25 Sofaer Derevenski, J. (editor) 1994a Perspectives on Children and Childhood. *Archaeological
26 Review from Cambridge* 13(2).
- 27 Sofaer Derevenski, J. 1994b Where Are the Children? Accessing Children in the Past. *Archaeological
28 Review from Cambridge* 13(2):7–20.
- 29 Sofaer Derevenski, J. 2000a Rings of Life: The Role of Early Metalwork in Mediating the Gen-
30 dered Life Course. *World Archaeology* 31(3):389–406.
- 31 Sofaer Derevenski, J. 2000b Material Culture Shock. Confronting Expectations in the Material
32 Culture of Children. In *Children and Material Culture*, edited by J. Sofaer Derevenski, pp.
33 3–16. Routledge, London.
- 34 Sofaer, J. 2006 *The Body as Material Culture. A Theoretical Osteoarchaeology*. Cambridge University
35 Press, Cambridge.
- 36 Sofaer, J. 2011 Human Ontogeny and Material Change at the Bronze Age Tell of Százhalombatta,
37 Hungary. *Cambridge Archaeological Journal* 21(2):217–27.
- 38 Sofaer, J., and S. Budden 2012 Many Hands Make Light Work: Embodied Knowledge at the
39 Bronze Age Tell at Százhalombatta, Hungary. In *Embodied Knowledge*, edited by M. L. S.
40 Sørensen and K. Rebay-Salisbury. Oxbow Press, Oxford.
- 41 Steedman, C. 1995 *Strange Dislocations: Childhood and the Idea of Human Interiority 1780–1930*.
42 Harvard University Press, Cambridge.
- 43 Sørensen, M. L. S. 2000 *Gender Archaeology*. Polity Press, Cambridge.
- 44 Toren, C. 1999 *Mind, Materiality and History: Essays in Fijian Ethnography*. Routledge, London.
- Toren, C. 2001 The Child in Mind. In *The Debated Mind. Evolutionary Psychology versus Ethnog-
raphy*, edited by H. Whitehouse, pp. 155–179. Berg, Oxford.

- Toren, C. 2003 Becoming a Christian in Fiji: An Ethnographic Study of Ontogeny. *Journal of the Royal Anthropological Institute* 9(4):709–727.
- Toren, C. 2007 Sunday Lunch in Fiji: Continuity and Transformation in Ideas of the Household. *American Anthropologist* 109(2):285–295.
- Treherne, P. 1995 The Warrior's Beauty: The Masculine Body and Self-Identity in Bronze Age Europe. *Journal of European Archaeology* 3(1):105–144.
- Valsiner, J., and A. Rosa (editors) 2007 *The Cambridge Handbook of Sociocultural Psychology*. Cambridge University Press, Cambridge.
- Vandkilde, H. 2003 Commemorative Tales: Archaeological Responses to Modern Myth, Politics, and War. *World Archaeology* 35(1):126–144.
- Vandkilde, H. 2007 *Culture and Change in Central European Prehistory*. Aarhus University Press, Aarhus.
- Wallaert-Petre, H. 2001. Learning How to Make the Right Pots: Apprenticeship Strategies and Material Culture, a Case Study in Handmade Pottery from Cameroon. *Journal of Anthropological Research* 57:471–492.
- Welinder, Stig 1998 The Cultural Construction of Childhood in Scandinavia, 3500 BC–1350 AD. *Current Swedish Archaeology* 6:185–204.
- Wendrich, W. (editor) 2012 *Archaeology and Apprenticeship: Acquiring Body Knowledge in the Ancient World*. University of Arizona Press, Tucson.
- Wileman, J. 2005 *Hide and Seek. The Archaeology of Childhood*. Tempus, Stroud.
- Wilkie, L. 2000 Not Merely Child's Play: Creating a Historical Archaeology of Children and Childhood. In *Children and Material Culture*, edited by J. Sofaer Derevenski, pp. 100–113. Routledge, London.
- Wilkie, L. 2003 *The Archaeology of Mothering: An African-American Midwife's Tale*. Routledge, New York.
- Wilson, J. 2007 *The Social Role of the Elderly in the Early Bronze Age of Central Europe*. Unpublished PhD Dissertation, University of Cambridge, Cambridge.
- Wood, E. 2009 Saving Childhood in Everyday Objects. *Childhood in the Past* 2(1):151–162.