Chapter 7

Children in the territory of Western Hungary during the Early and Middle Bronze Age: the recognition of developmental stages in the past

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Introduction

The social and physical bodies under study here were in a constant state of change, and, although they share aspects of biological development with today's bodies, how such changes were characterized likely varied culturally. In our paper we focus on the stages of transition from infancy to adulthood on the basis of burial evidence from the Hungarian Early and Middle Bronze Age (*c.* 2200-1500 BC). The study of burial evidence has the potential to provide important insights into the agency of children and their relationship with adults in society (Lillehammer 1989, 102-103). Even though we may be dealing with the body of a child in a grave, those who conducted the funeral would most probably have been adults. The remains of deceased children were manipulated within an adult world and the evidence for funerary processes derives from their burials. This, in turn, sheds light on how adults came to terms with such premature deaths, although it should be kept in mind that other children could influence the funerary ceremonies of their dead siblings and friends on some level (Murphy and Le Roy 2017). In addition, we shall discuss whether the age when children turn into full members of society, the so-called 'middle childhood', can be identified in the Bronze Age cemeteries under study here (Bickle and Fibiger 2014).

The age distribution of altogether 507 individuals, out of which 185 were buried under the age of 20 years, from 14 sites in the western part of Hungary is being taken into consideration and analysed briefly here. We were also interested in exploring whether the ways children were buried at these sites showed any divergence from the normative mortuary treatment adults received (O'Shea 1996) and if so, how these divergences may be related to different age categories. Our third enquiry focuses on the examination of burial goods such as dress ornaments, weapons

and tools in the burials of children, which could shed further light on how gender roles and social status was conceptualized by Bronze Age communities.

Material and methods

Archaeological background

The Central European Early Bronze Age, which dates between 2200/2100 and 1600/1500 BC, corresponds to the terminal phase of the Hungarian Early Bronze Age and the entire period of the Hungarian Middle Bronze Age. At this time, the region of Western Hungary represented a meeting point between two burial traditions: in the west, the inhumation tradition of the Únětice and related cultures (e.g. Gáta-Wieselburg) dominated, while in the east, biritual mortuary practices including both inhumation and cremation prevailed (Nagyrév, Kisapostag/Earliest Transdanubian Encrusted Pottery cultures). In the eastern region, the tradition of uniform cremation burials later became dominant (e.g. in communities of the Transdanubian Encrusted Pottery and Vatya cultures, Fischl *et al.* 2015; Krenn-Leeb 2011; Melis 2014; 2015).

During the first phase of the Central European Early Bronze Age, towards the final period of the Hungarian Early Bronze Age (Reinecke Br A1), the region of Transdanubia confined by the flow of the Danube on the east, was occupied by the Nagyrév and Kisapostag/Earliest Transdanubian Encrusted Pottery cultures, whose mortuary traditions included both cremation and inhumation practices. The area neighbouring today's Austria and Slovakia was inhabited by groups of the Gáta-Wieselburg culture with inhumation traditions.

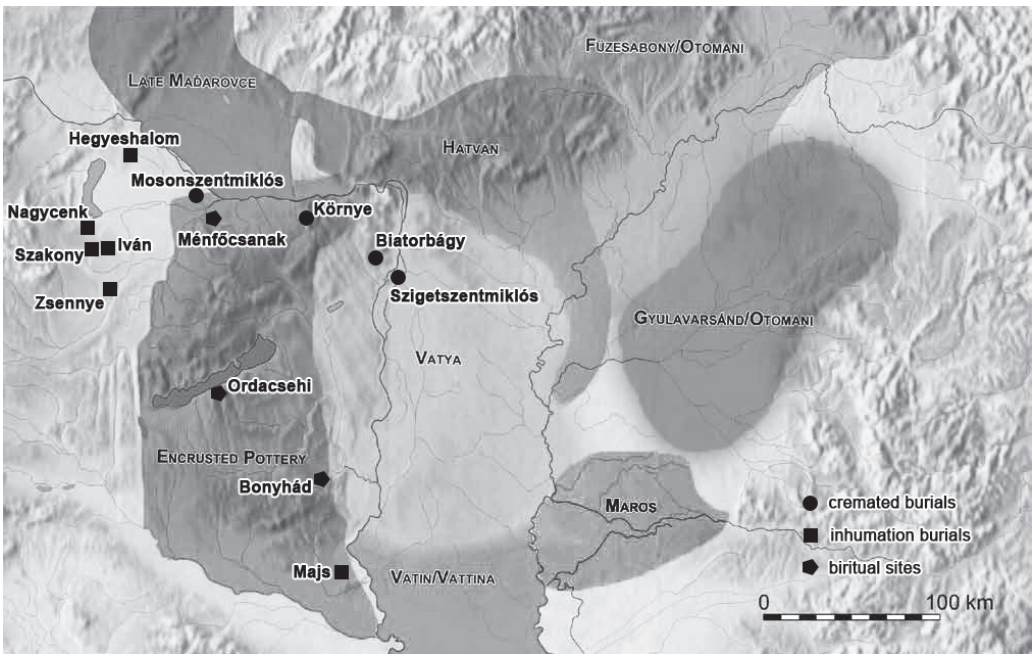

Figure 7.1. Location of the investigated sites and Middle Bronze Age cultures in the territory of Hungary (after Fischl *et al.* 2013).

At the beginning of the Hungarian Middle Bronze Age (R Br A2) the Vatya culture (Figure 7.1) emerged on Nagyrév and Kisapostag foundations in Central Hungary with the practice of cremation as normative mortuary treatment. The cemetery of Dunaújváros-Duna-dűlő, the largest Vatya urn burial ground documented in Hungary, is the best example; unfortunately, the human remains from the site are yet to be scientifically examined (Vicze 2011, 13-19). In this study, we therefore include two smaller, but anthropologically and archaeologically investigated cemeteries from the eastern regions of Transdanubia (Biatorbágy with 71 burials and Szigetszentmiklós with 70 burials, Kalicz-Schreiber 1995; Mali 2014). The continuous use of the Bonyhád cemetery (184 burials) by the Kisapostag/ Earliest Transdanubian Encrusted Pottery and later by the Transdanubian Encrusted Pottery culture indicates that the latter, which came to occupy the entire area of Transdanubia in the Middle Bronze Age, developed on robust Kisapostag roots (Szabó 2012). Another large, but chronologically later cemetery of the Encrusted Pottery culture was discovered at Mosonszentmiklós, which included 105 cremation burials (Kiss 2012; Uzsoki 1963). Furthermore, the burial ground of Környe represented by 18 cremation burials of the Encrusted Pottery culture was also considered for the study (Bándi and Nemeskéri 1971). ^{14}C dates yielded by inhumations documented at small burial sites of the Gáta-Wieselburg culture in northwest Hungary suggest that these cemeteries were used until at least 1600 BC (Gömöri *et al.* 2018; Melis 2017; Nagy 2013).

During the second half of the Hungarian Middle Bronze Age (Br A3- B1, 1800-1600/1500 BC) the percentage of burials with bronze grave goods indicating high social status decreased significantly from 10-40% to 2%, compared to the period between 2200 and 1900 BC (Dani *et al.* 2016). This phenomenon is also documented in multi-phased cremation cemeteries of the Transdanubian Encrusted Pottery (e.g. Bonyhád, Mosonszentmiklós) and the Vatya culture (e.g. Szigetszentmiklós).

Although our analysis focuses primarily on sites that have been archaeologically and anthropologically investigated and the cultures associated with them (Table 7.1), we also take into account and review relevant Hungarian anthropological literature for the interpretation and consider information published about neighbouring, better investigated cultures (e.g. Maros, Gyulavarsánd/Otomani, Füzesabony, Unterwölbing, Únětice) and their cemeteries (e.g. Mokrin, Békés 103, Polgár, Franzhausen, Gemeinlebarn, Unterhautzenthal).

Table 7.1. Summary of the analysed burials (normative treatment in bold).

Cultures	**Sites**	**Burial types**	**Analysed burials**	**Sub-adult individuals**
Late Nagyrév/Vatya	2	urn graves	141	65
Kisapostag/Encrusted Pottery	6	urn graves, scattered cremations, *in situ* cremations, inhumations	265	83
Gáta-Wieselburg	6	inhumations	101	37
Total	14		507	185

Anthropological background

The paper only includes anthropologically examined and identified burials. Although the anthropological examination of human remains is now becoming a norm of the post-excavation protocol, in several publications – even in the early 21st century – the identification of child burials was based mainly on excavation data (e.g. Thomas 2008). In the case of the most recently investigated burials, the age at death was estimated by methods based on the sequence of eruption and growth of milk and permanent teeth (Schour and Massler 1941; Ubelaker 1989), and the length of long bones (Bernert *et al.* 2007; Stloukal and Hanáková 1978). The age estimation for older children (above the age of 12-14) was based on the examination of the fusion of the epiphysis (Ferembach *et al.* 1979; Schinz *et al.* 1952).

Anthropological examinations generally distinguish between new-borns (aged 0-1 year), Infans I (aged 1-6 years) and Infans II (aged 7-14 years) and treat them as separate age categories (O'Shea 1996; Spannagl-Steiner *et al.* 2011, 27, Abb. 1, Abb. 2). However, some studies proposed the upper limit for the category of young childhood to be drawn at the age of nine or ten years (Mali 2014; Zoffmann 2015). The radical changes in child development that take place between the age of one and seven years of age cannot properly be described by the simplistic Infans I (often referred to as 'infant') category. Analyses that also consider the estimated age at death in years have the potential to identify and draw up more elaborate age-related categories.

Wherever possible, our age categorization of individuals took the most recently published archaeological methodologies into account (Bickle and Fibiger 2014; Rebay-Salisbury *et al.* 2018). Individuals under 20 years of age were categorized as sub-adults. Individuals under the age of eight were grouped as infants with the sub-categories of *babies* (under one year), *toddlers* (aged 1-4 years) and *young children* (aged 4-8 years). Children above the age of eight are referred to as *children during middle childhood*, and above the age of 12 as *adolescents,* as separate categories. Adults between the age of 20 and 40 years are distinguished from the category of mature adults (aged above 40 years). Unfortunately, the lack of common ground in the existing terminology presents a major issue for the bio-archaeological analysis of juveniles and makes our comparative study of populations a challenging task (see also Murphy and Le Roy 2017).

The distribution of individuals' age in the cemeteries under study

The availability of human remains presented a major challenge at the fully excavated Vatya cemetery of Biatorbágy: only 77% of the cremated urn burials (88 graves) contained anthropologically identifiable bone fragments. In addition, 19% of the remains proved to be unidentifiable. The analysis was therefore based on data derived from 71 burials that represented 62% of the cemetery's entire population. Within this partial dataset, the proportion of children was found to be 31%, dominated by individuals under the age of ten years of age (based on K. Köhler's anthropological examination, Mali 2014, 24, Fig. 1, 2). The partially excavated burial ground of Szigetszentmiklós was established in the late Nagyrév phase, but was still utilized during the Vatya period. Here, 70 of 100 burials (of both chronological phases) contained identifiable human remains, of which 59% were children. The ratio of child-burials was notably higher during the earlier Nagyrév phase, when the majority of graves represented burials of children (27 individuals, 69%, Zoffmann 1995). Within the category of child-burials, the age group of under eight-year-olds was the most represented (23 individuals, 61% of individuals under the age of 20 years) during both phases.

In order to assess the age distribution of individuals within the archaeological material of the Kisapostag/Earliest Transdanubian Encrusted Pottery and Transdanubian Encrusted Pottery culture, only the cemeteries of Bonyhád (184 burials) and Mosonszentmiklós (105 burials) can be taken into account. The percentage of individuals of undeterminable age (e.g. individuals above the age of eight but under 30 years) was relatively high (18%) at the cemetery of Bonyhád, due to the high occurrence of scattered cremation burials. The ratio of individuals under 20 years was 28%, and amongst these were many younger children. The proportion of under eight-year-olds amongst the sub-adults was 61%, similarly to the case documented at Szigetszentmiklós (Hajdu 2012a). At Mosonszentmiklós, age identification was possible for 96 individuals: 44 (46%) died under the age of 20 years. The number of individuals under the age of eight was significantly higher here (70% of under 20-year-olds, Zoffmann 1971). Child-burials, however, occurred in even higher numbers in smaller burial clusters or cemetery segments, such as the ones documented at Környe (Bándi and Nemeskéri 1971), Majs (Bándi and Kiss 1967), Ordacsehi (Somogyi 2004) and Győr-Ménfőcsanak (hereafter Ménfőcsanak; Dani *et al.* 2019; Melis 2013; Melis 2015; Tóth *et al.* 2016), where two-thirds of the burials were of infants (ten burials). In addition, the merely anthropologically examined cremations from Siófok, Tatabánya and Szederkény imply that the ratio of individuals under the age of 20 years ranged from 44% to 57%, and that the mortality rate among children under nine years old was quite high. The high child mortality rate was probably due to malnutrition, poor hygiene and epidemics (Zoffmann 2015).

Hegyeshalom is the largest known cemetery of the Gáta-Wieselburg culture in Hungary, where anthropological examinations identified 43 individuals (Zoffmann 1999), followed by the burial ground of Nagycenk with 29 individuals (Zoffmann 2008), and the cemetery of Zsennye, from where 24 graves with the remains of 13 individuals were recovered (Nagy 2013). Taking all 85 burials from these three cemeteries into account, only 31% of the deceased were children. Even more striking is the relatively low representation of children's burials under the age of eight, which account for 36% of the documented child-burials overall (Figure 7.2) Even in the largest Gáta-Wieselburg cemetery, Hainburg in Austria, hardly any infant burials of children under seven years were identified (8.3% of all burials), but here, the percentage of individuals under the age of 20 (43.4%) is probably closer to the expected ratio for prehistoric communities (Acsádi and Nemeskéri 1970; Spannagl-Steiner *et al.* 2011, 27, Abb. 1, Abb. 2). Studies carried out on the population represented by cemeteries of the Únětice culture, along with models describing female fertility and the sustainability of prehistoric communities in general, proposed that the proportion of children is likely to have been around 40-50% in cemeteries (Stroch 2001, 95-96). In the Únětice burial ground of Unterhautzenthal and the nearby settlement, 55% of the individuals were identified to be under the age of 20 years, 14 of which died before their fifth birthday (Lauermann 1995; Rebay-Salisbury *et al.* 2018, Fig. 1).

Similar to the 'missing child burials' of the Gáta-Wieselburg culture, few children are present in the cemeteries of the Maros and Füzesabony cultures. At the site of Kiszombor-Új Élet, the remains of a child aged between one and three years were discovered in a domestic refuse pit in the settlement associated with the Maros culture, which could serve as potential evidence for the alternative treatment of children in death (O'Shea 1996, 142-149). The larger number of individuals classified as Infans II (aged 7-14 years) and Juvenis (aged 14-23 years) in comparison to individuals classified as Infans I (aged 0-7 years) in the cemeteries of the Füzesabony culture in the vicinity of Polgár is usually explained by taphonomic reasons (Zoffmann 2006, 33). Young children are also underrepresented in the burials of the Austrian Unterwölbing culture, particularly at the sites of the Traisen valley (Teschler-Nicola and Prossinger 1997).

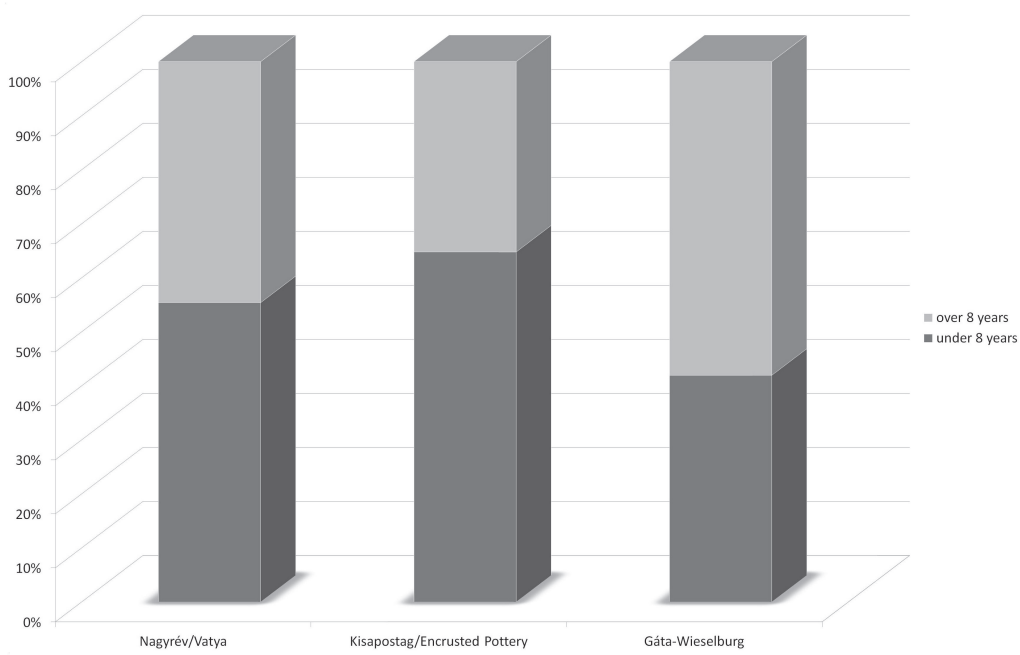

Figure 7.2. Proportion of buried children under eight years and children/adolescents from eight to twenty years in the analysed cultures.

There is no evidence so far for burials outside the boundaries of cemeteries at Gáta-Wieselburg sites located in Hungary, but the anthropological material discovered from here was in exceptionally poor condition. The absence of babies and toddlers in these cemeteries – whose mortality rate is expectedly higher – is possibly due to other factors, such as agricultural activities, earlier disturbances, methods of excavation, the shallowness of children's graves and the high fragmentation rate of infants' bones (Hajdu 2012b, 77-79). However, archaeologically invisible alternative funerary practices have to be considered to explain the 'missing child-burials', possibly similar to those documented in Southeast Asia, where infants were deposited inside tree trunks or among tree branches (Murphy and Le Roy 2017, 6).

Burial traditions

Inhumation vs. cremation

Large urn burial cemeteries associated with the late Nagyrév and Vatya cultures began to emerge around 2200/2100 BC along the Danube in Central Hungary. The burials generally contained an urn covered by a large bowl or bowls with smaller cup(s) placed next to it (Kalicz-Schreiber 1995; Sørensen and Rebay 2009; Vicze 2011). Examinations carried out on the anthropological material showed that the majority of burials followed the same scheme irrespective of the individuals' age (Zoffmann 1995; Mali 2014). Contemporary human remains were also documented at both Nagyrév and Vatya settlements. At Érd near Százhalombatta, remains of 37 individuals came to light as partial or complete skeletons from 26 different settlement features; the complete skeletons were flexed, similar to the inhumation burials, while the majority of

partial remains appear to have been thrown into disused domestic refuse pits. Preliminary anthropological examinations indicate that 41% of these inhumations were children (Pap *et al.* 2008), suggesting that this kind of non-normative mortuary treatment was not specific to a certain age group. Furthermore, current investigations propose that the human remains were deposited throughout a 500-year period (2000-1500 BC). Perimortem injuries were observed on two children's skulls from such features (Dani *et al.* 2016, 226; Szeverényi and Kiss 2018; Szeverényi *et al.* in prep.).

The site of Bonyhád plays an important role in understanding the transition from inhumation to cremation of the Kisapostag/Earliest Transdanubian Encrusted Pottery cultures. Two primary cremations that were carried out in the graves were found *in situ.* The two burials can be interpreted as an experimental phase towards the dominant cremation practice in the region (Cardarelli *et al.* in prep.; Hajdu *et al.* 2016; Köhler *et al.* in press). Burnt remains of an individual aged 14-16 were recovered in anatomical order from grave BBQ84, while the remains of another adolescent aged 10-13 years came to light from grave BBQ85. Both individuals buried in this 'transitional way' were in the transitional age of puberty; however, based purely on these exceptional cases, it cannot be determined whether this age-based selection was a deliberate act. Such *in situ* cremation processes are very rare, the only similar Bronze Age examples are known from Szőreg (cemetery of the Nagyrév culture) and Pitten (Tumulus Grave culture) in Austria (Hajdu *et al.* 2016). A total of 130 *in situ* cremations were documented at the cemetery of Pitten, but the age group Infans II (aged 8-14 years) is underrepresented and 68% of these children (17 individuals) received an inhumation burial (Sørensen and Rebay 2005). In contrast, among the 12 inhumations recovered at Bonyhád, only one was a child aged 11-13, the rest of the individuals were all over 20 years (Hajdu 2012a).

East of the Danube, in the partially excavated biritual cemeteries of Békés 103 (dating to the Middle Bronze Age) and Jobbágyi (dating to the beginning of the Late Bronze Age) nearly all inhumation burials were of children (Infans I and II, Duffy *et al.* 2019; Fülöp 2016; Paja *et al.* 2016). Pit-burials in domestic settings, which are generally considered alternative mortuary rites, have recently been identified from the territories of the Transdanubian Encrusted Pottery culture; some also contain remains of children (Kiss *et al.* 2015, 30).

Individuals accompanied by classic encrusted wares received a cremation burial almost without exception; the calcined bones were either swept into the burial-pit (scattered cremation) or were placed in a ceramic container (urn burial, Kiss 2012). At Bonyhád, 68% of the burials with identifiable rite were scattered cremations, where 61% of all child-burials were also scattered cremations (Szabó 2012). However, at Mosonszentmiklós, among burials associated with the Encrusted Pottery culture, urn burials occurred in higher numbers (55%) than scattered cremations (Kiss 2012; Uzsoki 1963). Here, a similar trend is reflected in the case of children's burials: 14 individuals were placed in urns, while ten individuals' remains were scattered. If multiple burials are taken into consideration as well, the number of children's urn burials (20 graves) is almost twice as high as the children who were cremated and their remains scattered in the burial-pit (Zoffmann 1971). The majority of multiple urn burials, where remains of individuals were identifiable, also contained burials of young children under the age of eight years (15 cases). At Mosonszentmiklós, two out of three multiple scattered cremation burials contained remains of adults, whereas remains of an adolescent individual (aged 13-22 years) and a young child were documented in burial No. 70 (Zoffmann 1971). In the 1970s, István Bóna proposed that the mortuary rite of children being buried in urns may have originated from the

pithos burial traditions of tell cultures, practiced widely in territories along the Danube and in Moravia during the period of the Hungarian Middle Bronze Age (Bóna 1975, 199-204). There are two documented examples for pithos burials in the settlement of Dunaalmás-Foktorok, dating to phase directly preceding the establishment of the Mosonszentmiklós cemetery associated with the Encrusted Pottery culture (Vadász 2001, 14-17). During the period of the Tumulus culture following the Hungarian Middle Bronze Age, pithos burials of children occur relatively frequently in the Carpathian Basin (Csányi 1980, 2016; Fojtík and Dočkalová 2007; Hajdu 2008; 2012b; Ilon 2014, 28-30). The placement of fragile remains of children into vessels can be observed among the burials of the Vatya, Füzesabony and Transdanubian Encrusted Pottery cultures, perhaps as an intention to protect or recreate the body of the young child (Sørensen and Rebay 2009). Some authors have suggested that the ceramic jar was intended to represent the female body or the womb and was perhaps linked to the hope that the dead infant would be reborn (McGeorge 2011).

This is in contrast to the situation for older members of the society, whose graves were often re-opened to facilitate the removal of grave-goods and parts of the skeleton. Perhaps the idea of the rebirth of an infant meant that its body should not be disturbed (Murphy and Le Roy 2017). Among the examined burials of the Gáta-Wieselburg culture, the deliberate re-opening of graves was documented in around 40% of the cases, whereas burials of children remained mostly undisturbed (71%). Apart from one exception, all individuals buried in re-opened child-graves were children over the age of ten years and adolescents. These burials were rich in bronze grave goods even after the partial removal of some of the burial assemblage (Melis 2017).

Multiple and consecutive burials

In the communities of the late Nagyrév/Vatya, Kisapostag/Encrusted Pottery and the Gáta-Wieselburg cultures, single burials represented the normative mortuary practice; the occurrence of multiple burials, in which two or more individuals were buried simultaneously, can be regarded as a deviation from the norm. Multiple burials were particularly rare among the inhumation graves of the Gáta-Wieselburg cemeteries. In these cases, multiple individuals were identified during anthropological examinations (Melis 2017; Rebay-Salisbury 2018, 37). The cemetery of Hainburg represents the largest burial ground of the Gáta-Wieselburg culture with 310-320 burials, among which eight multiple burials were documented (2.5% of the graves, Neugebauer 1994, 64). Consecutive burials, in which individuals were placed in the grave-pit at different times, on the other hand, occur in slightly higher numbers in Gáta-Wieselburg cemeteries (Aspöck and Banerjea 2016; Aspöck 2018). In a grave excavated at Iván, the remains of four individuals were discovered: at the bottom, the skull of a young child was placed under a ceramic vessel; the skeletal remains of an adult were placed next to it. The grave was then re-opened at least twice, in both cases to incorporate the remains of two female individuals (Melis 2017, Fig. 7; 2019). Only two males could be identified among the 18 individuals recorded in eight multiple or consecutive burials from the Gáta-Wieselburg culture in Hungary. The number of interred children within these burials was six, most of them under the age of 8-10 years (Table 7.2). Among the examined graves of the Gáta-Wieselburg culture, burials of individuals under the age of four years were identified only in four cases, out of which three (Hegyeshalom 43A-B, Szakony 2, Iván 4. grave) were part of multiple, and one of consecutive burials (Melis 2017; 2019).

Although the practice of cremation limits the differentiation between simultaneous and consecutive burials, multiple burials also occur in the late Nagyrév culture. At Szigetszentmiklós,

Table 7.2. Multiple and consecutive burials of the Gáta-Wieselburg culture in Hungary (for Austria, see Rebay-Salisbury 2018, Tab. 1-6).

Site	Grave	Individual I	Individual II, III	Description
Szakony	2	female, 22-25	child, 2.5-3.5	Individual II added following the anthropological analysis
Szakony	3, 8	male?, 20-x	adult, 18-40	Consecutive burials, the disturbed burial (Individual I) was found 0.67 m below the burial of Individual II
Szakony	6, 7	female, 45-60	Unidentified individual, 8-30	Consecutive burials, the burial of a female (Individual I) without grave goods was discovered 0.5 m below the burial of Individual II, of which only a couple of bone fragments and an amber bead remained
Iván	2, 3, 4	child, 2.5-3.5 + upper limb bones of an adult	female, 25-40; female? 25-55	Consecutive burials: the first deposition (Individual I, at the depth of 1.2 m) was a skull of a child placed under a vessel, the forearm bone and phalanges of an adult lay next to it; at the depth of 0.9 m: burial of a female (Individual II) with two mugs; at the depth of 0.5 m: burial of another female (?, Individual III) without grave goods in flexed position
Hegyeshalom	43A-B	child, 0-8	child, 5-8	Consecutive burials, 0.2 m thick undisturbed deposition layer between the two child-burials without grave goods (age determination by T. Hajdu)
Hegyeshalom	56	child, 4-10	unidentified individual, 8-30	Consecutive burials? The disturbed grave pit of a child (Individual I) contained the calcinated bones of another young individual (Individual II)
Nagycenk	65A-B	female, 23-29	male, 23-59	Double burial? The skeleton above was placed right on top of another inhumation
Nagycenk	66	female, 23-29	young child?	Double burial, the fragmented remains of Individual II were identified by anthropological re-analysis (K. Köhler)

six burials contained remains of multiple individuals, most of which were children (eight individuals, Kalicz-Schreiber 1995). Multiple burials in the Vatya and Kisapostag/ Earliest Transdanubian Encrusted Pottery culture are restricted to corpses in domestic refuse pits (Earle *et al.* 2014; Kiss *et al.* 2015; Szeverényi and Kiss 2018).

The highest number of multiple burials was documented in the cemeteries of the Transdanubian Encrusted Pottery culture. Analyses carried out on the burials of Bonyhád found only one multiple burial, where the cremated remains were kept separate (Hajdu *et al.* 2016; Szabó and Hajdu 2011, Fig. 2). Among the burials of Mosonszentmiklós 10% were identified as multiple burials: burials No. 19, 21, 38 and 50 contained the remains of two or three individuals in separate vessels (Kiss 2012, 245; Uzsoki 1963; Zoffmann 1971). In the so far unpublished Encrusted Pottery culture cemetery of Szederkény, 47 individuals were identified in 31 graves, which indicates

that almost a third of the burials were multiple burials (Zoffmann 2015). Examinations show that among the Encrusted Pottery culture's multiple burials, the combination of a child and an adult occurs most frequently (in 16 cases), and in most instances, where the sex of the adult was determinable, the remains belonged to women (in 7 cases) aged between 17 and 42-51 years (Zoffmann 2015, Tab. 4).

Our study of multiple inhumation and cremation burials from Western Hungary concluded that the most widespread form of multiple burials included the remains of an adult or mature adult, and a child under the age of eight years (20 cases). In 13 out of the 20 instances, the child interred was younger than four years old. In eight cases, children over the age of eight years were placed together with even younger children (Figure 7.3). Even in the cemeteries of the Encrusted Pottery culture, however, children under the age of four years were buried in separate graves (29), which suggests that multiple burials were carried out only in exceptional circumstances, for example if the death of a close family member occurred at the same time (Rebay-Salisbury 2017; 2018).

Multiple burials were uncommon in cemeteries of the Maros region during the Middle Bronze Age. In most cases, the burials contained the remains of a child and an adult, not necessarily women in their reproductive age, but also older women and men (O'Shea 1996, 171-172, Tab. 6. 20). In the biritual cemetery of Békés site No. 103, however, the ratio of multiple burials was as much as 10%, and the interment of adults or mature adults along with a single child under the age of six years was most common (Paja *et al.* 2016, 188). In communities which followed

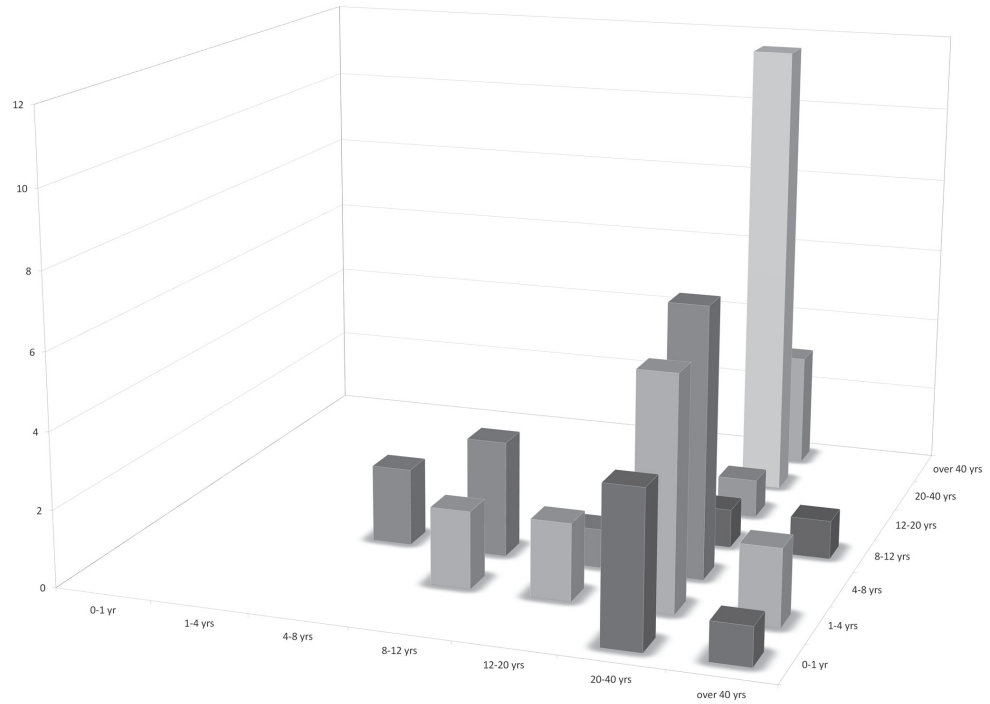

Figure 7.3. Age distribution of the co-buried individuals under study.

the mortuary practice of cremation in the Carpathian Basin (Encrusted Pottery culture – Mosonszentmiklós, Bonyhád; Nagyrév – Szigetszentmiklós; Gyulavarsánd/Otomani –Békés site 103, but not the Vatya culture), it is more likely for individuals to be interred in double or multiple burials (at least around 10% of cases). Burial 456 at Polgár-Kenderföldek could, in this regard, be considered a link between cremation and inhumation traditions. The burial was one out of three cremation burials in an inhumation cemetery including 105 burials associated with the classical phase of the Füzesabony culture; the burial contained the remains of a female, a male and a child (Dani and Szabó 2004, 98, Fig. 5.1). Reports from the Füzesabony cemeteries of Polgár, Tiszafüred, and Gelej note burials containing multiple individuals with a wider variety of age combinations (sub-adult-sub-adult, sub-adult-adult, and adult-adult combinations) and a diverse sex distribution (Dani and Szabó 2004; Hajdu 2012b; Zoffmann 2006). At the Tiszafüred cemetery in sector 'D' for example, the majority of double burials contained the remains of a male and a child under the age of 13 years (four cases; Hajdu 2012b, Tab. 2). Examinations carried out on contemporaneous inhumation cemeteries from Austria showed that burials of children interred together with adults, primarily with women, occur mainly in the region north of the Danube (Rebay-Salisbury 2018, 46).

The expression of gender roles and social status through the grave goods of children's burials

The variety of dress ornaments and other artefacts given to individuals based on their gender could be best observed in the inhumation cemeteries of the Gáta-Wieselburg culture. Bronze hair-rings, necklaces or pectorals consisting of small bronze, shell or bone elements were associated with female burials (Krenn-Leeb 2011; Melis 2017; Schumacher-Matthäus 1985, 27-28, plates 17, 18). In some rare cases, traces of a headdress made of bronze and leather were recorded in burials of a young and a mature adult female (Gömöri *et al.* 2018). Daggers, weapons and tools were buried mainly with adult and mature adult males, although the majority of precious metal hair-rings and neckrings with rolled ends are also known from male burials in Hungary. Bronze spiral armrings, pins and amber beads were associated with both genders. A dagger was discovered in the burial of a young child at Ménfőcsanak, although daggers are characteristic grave goods in male burials (Figure 7.5; Melis 2015; Tóth *et al.* 2016). Apart from this particular burial and a couple of precious metal hair-, and neckrings associated with burials of children aged between four and twelve, grave goods typical for men seem to appear only in burials of adults in the cemeteries of the Gáta-Wieselburg culture (Figure 7.4a). The handful of cremation burials from the Kisapostag, Transdanubian Encrusted Pottery, late Nagyrév and Vatya cultures that contained weapons were also linked to individuals over the age of 15 years (Bándi and Kiss 1967; Mali 2014; Szabó 2012; Szeverényi and Kiss 2018, 46). Apart from the daggers and axes, there are no typically male grave goods in cremation graves.

In the Mokrin inhumation cemetery of the Maros culture, weapons were also found only in the graves of adult males (O'Shea 1996, 276-281). Among the identifiable burials of the Únětice culture, the majority of daggers were given to males as grave goods from about the age of twelve years (Lorencová *et al.* 1987, 130, 241; Rebay-Salisbury *et al.* 2018). Examinations carried out on Early Bronze Age inhumation burials in Slovakia (Chłopice-Veselé, Nitra, Únětice, Mad'arovce cultures) showed that daggers and other status signifying objects appear first with burials of 14-20-year-olds (Bátora 2009; Danová 2012). In the Füzesabony cemeteries, gold ornaments sometimes occur in children's burials (Dani *et al.* 2016, 229). At the Gemeinlebarn cemetery of the Unterwölbing culture, weapons were exclusively associated with adult male burials,

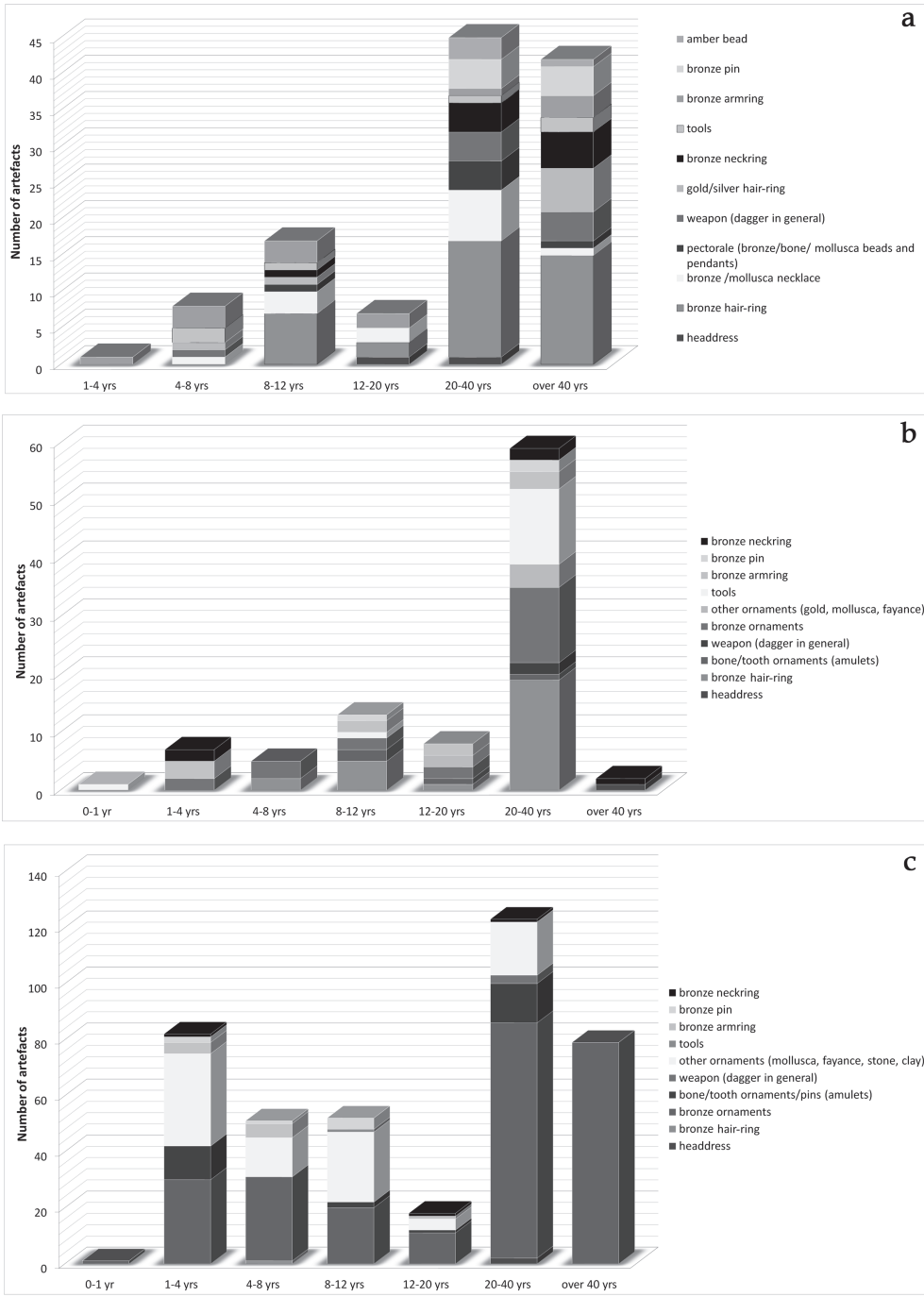

Figure 7.4. Distribution of the grave-good types among the age categories, a: Gáta-Wieselburg culture, b: Kisapostag/Transdanubian Encrusted Pottery culture, c: late Nagyrév/ Vatya culture.

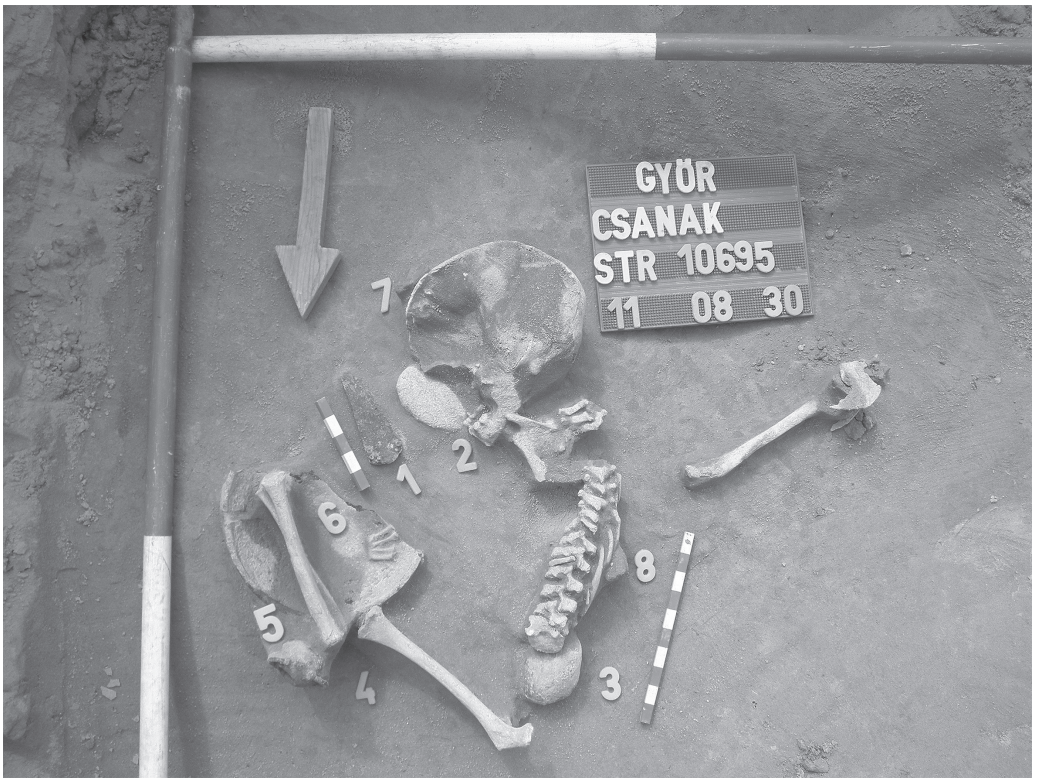

Figure 7.5. Burial of a child with dagger at Ménfőcsanak (photo: Ferenc Halász).

whereas daggers and stone axes were placed in graves from early childhood at the Franzhausen cemetery; bronze axes, however, seem to be the only object type specifically linked to adults (Appleby 2011, Tab. 4).

Dress ornaments were primarily associated with women of the Gáta-Wieselburg culture and were given to girls from the age of 8-12 years (Figure 7.4a). Similarly, in the Kisapostag and Transdanubian Encrusted Pottery cultures, women's ornaments such as bronze hair-rings, bronze dress elements, bone jewellery and animal teeth/tusks were placed in burials of children during middle childhood (Figure 7.4b). Furthermore, in the cemetery of Unterhautzenthal of the Únětice culture, the female gender in burials is referenced from the age of 8-12 (Rebay-Salisbury *et al.* 2018). Dress ornaments associated with women already appear in children's graves at Franzhausen, and the entire adult dress ornament repertoire appears already in sub-adult burials (except for diadems, the only object type associated exclusively with adult women). In the cemetery of Gemeinlebarn, there was little difference in the dress ornaments of infants, children and sub-adults; they all wore simple, ring-like accessories. Sheet bronze or wire ornaments, gold rings and bronze diadems, however, occurred only in burials of adolescents (Appleby 2011, Tab. 2, 3).

Burials of the late Nagyrév and Vatya culture, on the other hand, followed a different tradition: bronze ornaments, bone amulets and pins, which are generally interpreted as part of the

female attire, were included in burials from as early as toddler age (Figure 7.4c). Numerous small and often burnt fragments of bronze, bone, shell or faience were parts of composite necklaces, pectorals or headdresses. The exact way(s) that these pieces were worn on the body are still largely unknown, partly due to Vatya communities practicing cremation, and partly because delicate ornaments such as spiral tubes, sheet tubes, studs, bronze sheets with rolled sides, tutuli, or pendants could have been worn either as dress ornaments or as jewellery (Schumacher-Matthäus 1985, 61-74). Graves containing a combination of several pendants, bronze sheets and studs, which can be reconstructed as elements of an elaborate headdress, are associated with burials of adults (Mali 2014). In terms of female attire, a similar tendency was observed in the cemetery of Mokrin of the Maros culture: elements of headdresses were exclusive to adult women, while bone pins, necklaces and bronze ornaments were given to young children as well (O'Shea 1996, 281-283, Tab. 8.4, Fig. 8.1).

The non-gender specific elements of the attire, such as spiral armbands, were used in a similar way in the Gáta-Wieselburg, Kisapostag/Transdanubian Encrusted Pottery culture and late Nagyrév/Vatya culture burials. These types of artefacts occur in burials from toddler age onwards (Figure 7.4a, b, c). Examinations of the cemetery of Unterhautzenthal associated with the Únětice culture also identified spiral armbands as the object type given to the youngest of individuals (Rebay-Salisbury *et al.* 2018). Burials of the Gáta-Wieselburg culture had the largest number of neckrings (10 pieces), characteristically discovered in graves of adult and mature adult males. The neckrings discovered in Kisapostag and Vatya burials belonged to two toddlers around the age of three years, an adolescent, three adults and one mature adult (Figure 7.4b, c). In the Mokrin cemetery of the Maros culture, neckrings are known from burials of three adults and one sub-adult (O'Shea 1996, Tab. 8.3, Tab. 8.4). In the cemetery of Unterhautzenthal of the Únětice culture, cast neckrings were discovered in burials of adults, while a thinner, hammered variant came from a burial of a 7-8-year-old child (Lauermann 1995; Rebay-Salisbury *et al.* 2018).

Bronze pins occur only in burials of adults and mature adults at Gáta-Wieselburg cemeteries, whereas this object type is characteristic to children's burials from toddler age in Vatya cemeteries (Figure 7.4c; Mali 2014). In burials of the Maros culture, bronze pins are also known from burials of adult women (O'Shea 1996, 282). In the cemetery of Franzhausen, disc-headed pins were part of the female attire from birth to old age (Appleby 2011, Tab. 2). In addition to keeping dresses/capes in place, pins may have been used to secure the burial shroud and may have had different meanings in communities of diverse mortuary practices.

In contrast, burials of the Encrusted Pottery culture were not so well equipped with bronze ornaments, tools or weapons. At Mosonszentmiklós, small bronze ornaments came to light in burials of children under the age of ten and adults between the age of 20 and 40, although these burials date to the second half of the Middle Bronze Age (see above; Kiss 2012, Fig. 82-83). In the reconstruction of the attire worn by women of the Encrusted Pottery culture, clay human figurines and decorated ceramic vessels can also be taken into account (Schumacher-Matthäus 1985; Szabó and Hajdu 2011, Fig. 6). In the cemetery of Bonyhád the opportunity arose to contrast the anthropological identification of human remains with the designs of their grave good vessels. The examinations managed to outline certain groups of gender-specific motifs: the zig-zag or 'pearl necklace'-like designs may depict neck ornaments or pectorals, while vertical bundles of lines might have symbolised skirts on the urns associated with female burials (Hajdu *et al.* 2016; Kiss 2012, 76-78, Fig. 16, 17; Szabó and Hajdu 2011). For example, double burial No. 19 at Mosonszentmiklós contained the remains of two children aged 3-5 and

5-7 years, accompanied by a vessel of unique shape and decoration depicting swallow-tail and comb-shaped pendants on its exterior (Kiss 2012, Fig. 33; Uzsoki 1963, 18.t. 6). Stone tools and implements were almost exclusively discovered in burials of adults of the Encrusted Pottery culture. Therefore, the single case of a new-born's burial with a loom-weight among its grave goods documented at Környe can be considered unusual (Bándi and Nemeskéri 1971).

Miniature vessels occur relatively frequently in graves of children associated with the Encrusted Pottery culture and are generally interpreted as toys. Some of the burials at Bonyhád (such as BBQ38, BBQ46, BBQ75 and BBQ240) contained entire sets of miniature vessels. Examinations have also shown that small drinking horns (rhytons) were consistently buried with 1-3-year-old children. This further suggests that these objects might have served as feeding bottles for young infants (Figure 7.6; Hajdu *et al.* 2016, 362, Fig. 5; Rebay-Salisbury 2017; Szabó and Hajdu 2011, 96-97; Fig. 1). However, the execution of miniature vessels can vary a great deal even within one burial assemblage, which implies several different crafters (Sofaer 2015, 157-158). The less well-executed pieces could have been produced by less experienced apprentice potters or perhaps children (Gucsi and Szabó 2018, 223-226). The analysis of miniature vessels from the Tumulus culture cemetery of Jobbágyi outlined the different levels of knowledge of producers of such vessels (Fülöp 2016, Fig. 5). However, there seems to be no connection between the age of the deceased individual and the execution of vessels. These objects may have therefore been made by siblings or other children of the community, which further suggests the active participation of children in crafting processes and mortuary traditions during the Bronze Age (Fülöp 2016). A small, uneven bowl and a cup were placed with remains of a 51-57-year-old woman in a Gáta-Wieselburg grave at Nagycenk, which may have been made by a child (Gömöri *et al.* 2018, Fig. 11.10, 14).

Figure 7.6. Drinking horns from Bonyhád in the burials BBQ75 and BBQ240 (after Szabó 2012).

Tools and other implements occur sporadically both in adult and children's inhumations of the Gáta-Wieselburg culture, without showing any obvious patterns (Figure 7.4a). In Maros culture assemblages, objects characteristic for male burials are associated with adults, whereas artefacts linked strongly to women appear already in the graves of infants and young children (O'Shea 1996, Fig. 8.1).

Based on the composition of grave good assemblages, it appears that middle childhood was the age when gender and social status was first expressed through mortuary rites in the Gáta-Wieselburg culture. Although there are fewer objects signifying status and gender in burials of the Kisapostag and the Transdanubian Encrusted Pottery culture, the number and variety of such artefacts are higher in burials of children during middle childhood (Figure 4b).

Due to the practice of cremation at Vatya cemeteries, bronze objects were generally found in very poor condition if they survived. In the cemetery of Biatorbágy, burials of three men, three women and eight children represented the elite. While the number of children's burials containing bronze objects was higher than those of adults, some adults were interred with bronze artefacts of higher value or heavier weight (e.g. neckrings, daggers, headdresses). In this particular cemetery, the proportion of children's burials without bronze grave goods was noticeably low; children of lower social status might not have been buried within the boundaries of the communal burial grounds (Mali 2014). At the cemetery of Budapest-Növény utca of the Vatya culture, it appears that the location of the resting places was tied to social status; burials with metal and amber artefacts clustered in the centre of the burial ground (Reményi 2002, 86, Fig. 2). At Szigetszentmiklós, the eight burials of older children were the richest in dress ornaments, and bone or bronze pins were found in burials of toddlers. Dress ornaments made of bronze, bone, faience and shell were documented in fairly large numbers in graves of children from the age of 1-2 years in late Nagyrév/Vatya cemeteries, while such objects were scarce in burials of young adolescents (Figure 7.4c). These bronze ornaments could be considered expressions of economic power by the infants' kinship relations (Dani *et al.* 2016, 219). Specifically status signifying objects such as headdresses and weapons appear primarily in graves of adults or mature adults, as in the Maros culture (O'Shea 1996, 276-283).

Conclusions

In this study we attempted to go beyond the definition and comparison of age categories and outline how stages of social development were understood by Bronze Age societies through mortuary data (Sofaer 2004, 175). The condition of the archaeological material and human remains varied significantly, primarily due to different burial traditions. Perhaps this could explain the absence of young children, particularly babies and toddlers in the inhumation cemeteries of the Gáta-Wieselburg culture. However, since the absence of young children is also documented in cemeteries with better preserved inhumation burials (such as Maros and Unterwölbing cultures), it may be assumed that young children were buried elsewhere or received non-normative mortuary treatment. Only new excavations of well-documented inhumation cemeteries with well-preserved human remains will clarify this issue. The frequent occurrence of young children under the age of four years in multiple burials suggests that infants were not yet considered as independent persons, but as human beings in need of special protection provided by their adult close relatives. Small rhytons and miniature vessels in burials of young children appear to be expressions of such attitudes. Although the length of breastfeeding could have varied by community, it is likely that children were fully weaned

by the age of four years in the Bronze Age (Rebay-Salisbury 2017). The high number of rich infant burials furnished with bronze grave goods from two late Nagyrév/Vatya cemeteries indicates some form of selection based on social status: only the infant members of high prestige families were placed to rest at these locations (Mali 2014). Sentiments linked to the fragility of infants are further expressed at Mosonszentmiklós of the Encrusted Pottery culture, where the cremated remains of children under the age of four years were placed in urns in most instances. In conclusion, the mortuary treatment of babies and toddlers reflects that they received special care and protection even in their deaths, and it further implies that infants were not yet considered full-fledged members of the community.

Burials of young children aged between four and eight years occur in similar rates across cemeteries. In all examined cemeteries, children's burials were furnished with bronze implements and dress ornaments indicating that these young individuals were regarded as full members of the society. In rare cases, some burials were accompanied by status-signifying objects, such as the burial of a 4-6-year-old child interred with a dagger at Ménfőcsanak (Figure 7.5). Objects signifying status, such as heavy bronze neckrings, occur in burials of children transitioning from toddler age to young childhood, around the age of three years (e.g. Ménfőcsanak, Szigetszentmiklós). These exceptional burials might represent the offspring of the ruling class interred with the necessary material attributes of political power. The passing down of such status signifying objects, taking them out of circulation, could be interpreted as a sign of institutionalized power (Dani *et al.* 2016, 224; Earle and Kristiansen 2010; Sosna 2009, 140-142).

Grave goods linked to gender were detected in the Gáta-Wieselburg inhumation cemeteries, where gender specific objects were given to children from the age of eight to twelve years. Girls of this age received hair-rings and necklaces or pectorals similarly to adult women, implying that children had become noticed during middle childhood and active members in the eye of their communities. The grave goods may have come into their possession through transition rituals following the biological changes their bodies had undergone (Sofaer 2004, 166).

Cremation burials of women and children of the late Nagyrév/Vatya and Encrusted Pottery culture contained similar, but very fragmented dress ornaments. The unusually rich burials of toddlers and young children may reflect the social standing or prestige of their families. In the Maros culture, some burials of infants under six years of age were also outstandingly well-equipped with bronze ornaments, suggesting that possessions were redistributed according to kinship ties (O'Shea 1996, 281). Older men might have passed on their ornaments to their young descendants when still alive, or might have given them away as gifts at the funeral, which could explain the low number of such objects in the graves of mature adult males. Similarly, the number and variation of bronze ornaments decreases in burials of individuals over the age of 40 in the late Nagyrév/Vatya cemeteries (Figure 7.4c). In the Mosonszentmiklós cemetery of the Encrusted Pottery culture, there were also indications of objects being passed down to the next generation, as reflected by burials of children under ten with numerous bronze fragments in their graves. Fewer bronze objects were included with individuals over the age of 40 in cemeteries of the Kisapostag and Transdanubian Encrusted Pottery cultures (Figure 7.4b). At Mosonszentmiklós, bronze artefacts were consistently included in burials of adults between the age of 20 and 40 years (Kiss 2012). The highest number and the largest variation of bronze objects were found in burials of older children of the Kisapostag and Transdanubian Encrusted Pottery cultures; it is therefore possible that these artefacts were linked to some level of maturity or social acknowledgement. However, objects interpreted as material

attributes of power were only placed in burials of young children in exceptional cases; the youngest recipients of weapons and headdresses as grave goods were adolescents from the age of 14 years. Although material indicators of wealth frequently appear in young children's burial assemblages, inherited social status is rarely expressed in this manner. It is thus likely that social rank was earned through personal achievement rather than through inherited advantages in the Bronze Age societies examined here (2200-1600/1500 BC).

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