The Practice of Cremation in the Western Necropolis (7th – 5th Cent. BC) of the Greek Colony of Himera (Sicily, Italy)

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Introduction

The Greek colony of Himera was founded in 648 BC on the Northern coast of Sicily, near the mouth of the river Imera, by Greek people from the colonies of Zancle (Messina), Syracuse and probably the island of Euboea. The colony flourished, as attested by archaeological research. The town had an extension of ca. 120 ha and was structured on two different levels: the lower city on the coastal plain and the upper on the hills above. Three necropolises have been identified at Himera, outside the city and along the routes connecting the colony to the surrounding territory, specifically: the Eastern (necropolis of Pestavecchia) and Western necropolis (necropolis of Buonfornello) on the coastal plain, and the Southern necropolis (necropolis of Cozzo Scacciapidocchi) on the route towards the hinterland¹. Two battles with a significant impact in Sicily's history were fought below the city's walls: in 480 BC a coalition of Himerans, Acragantines and Syracusans were victorious against the Carthaginian forces; in 409 BC the Carthaginians conquered and destroyed the city, massacring its population².

Over 13 000 burials have been currently investigated from the necropolises. Among these, there are the skeletal remains from Himera's mass graves (labelled FC1+2, FC3, FC4, FC5, FC6, FC7, FC8+FC9) related to the two battles³. As in other Greek colonies on Sicily,

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both funeral practices are found at Himera⁴: simple burials, cappuccina tile burials, pot burials, sarcophagi inhumations and both *in situ* and secondary cremations, but the rite of inhumation is more attested. The burials cover the complete period of the colony's life (648–409 BC)⁵. Both funeral rites are found: the inhumations are the great majority (88% in the W necropolis; and 90% in the E necropolis) whereas the cremation rite (12% in the W necropolis; and 10% in the E necropolis) presents much lower percentages⁶. Regardless of the burial type, single burials are the vast majority of the sample, conforming to what is commonly attested in Greek funerary customs⁷.

Cremation is the treatment of the deceased's body with fire. It is a process of oxidation and dehydration, influenced by several related factors: enough fuel, temperature, oxygen and time⁸. The degrees of combustion not only depend on temperature but reflect a complex interaction of factors: pre-combustion state of the remains, position of the body in relation to the heat source, bone composition and presence of "insulating" material that preserves some parts of the body⁹. Bone alterations due to heat can be observed: coloration, fracture patterns and structural changes¹⁰.

Cremation was a common burial custom in Greece from prehistory through the Roman

8 Holck 1997; McKinley 1994; Bohnert 2004; DeHaan 2008.

¹ Vassallo – Valentino 2010; Vassallo 2017.

² Vassallo 2010.

³ Vassallo 2010; Lonoce et al. 2018; Viva et al. 2020a.

M. A. Guggisberg, M. Billo-Imbach (eds.), Burial Taphonomy and Post-Funeral Practices in Pre-Roman Italy. Problems and Perspectives (Heidelberg 2023) 129–142.

⁴ Holloway 1991; Shepherd 2005; Sulosky Weaver 2015.

⁵ Vassallo 2009; Vassallo – Valentino 2012; Vassallo 2017.

⁶ Fabbri et al. 2006; Fabbri et al. 2012; Vassallo 2005; Vassallo 2009; Vassallo - Valentino 2012; Vassallo 2017.

⁷ Kurtz – Boardman 1971.

⁹ Herrmann 1977; Shipman et al. 1984; Brain 1993; Holck 1997.

¹⁰ Krogman 1943; Baby 1954; Binford 1963; Thurman – Willmore 1982; Buikstra – Swegle 1989; Mayne Correia 1996; Mays 1998; Symes et al. 2008; Walker et al. 2008; Gonçalves et al. 2011; Gonçalves et al. 2015.

age¹¹. It is currently not documented in Sicily in prehistoric times. Only in the last phases of the 2nd millennium BC, in the Final Bronze Age, are incinerations attested in Milazzo and Lipari, where Sicilian cinerary urns from the Ausonio I and II phase have been found, probably influenced by contacts and exchanges with the Italian peninsula¹².

Cremation and inhumation coexisted. Funeral practice of cremation is attested all over the Greek world, although methodology and frequency varied considerably¹³. An important factor in the use of cremation was its costs because of the use of wood for fuel. Its quality is an important feature, depending on the available environmental resources. The choice to cremate or not, had to be personal or taken by the family, depending on the meaning of death or to the wealth, but it could also depend on practical reason: for example, when someone died abroad, he could more easily be taken home¹⁴. It is assumed that the children's cremation was rare in ancient Greece¹⁵, as it is only referenced in later sources. Pliny the Elder (23-79 AD) wrote that children could be cremated after they had developed their first teeth (Nat. Hist. VII 72). Juvenal (50/60-127 AD) mentioned the custom of burying children who were too young to be cremated (Sat. XV 139/140). Fulgentius (5th-6th cent. AD) wrote that children who had not reached forty days of age could not be cremated because of the lacking of the bones to be burnt and the volume of the corpse was not enough to make a mound in situ (Expositio Sermonum Antiquorum, 7).

The aim of the present work is to study the funerary ritual of cremation in Himera, highlighting the variations and peculiarities of this ritual that have never before been classified. Furthermore, some demographic aspects are examined.

- 12 Mannino 1997, 309.
- 13 Robinson 1942; Childe 1945; Kurtz Boardman 1971; Popham et al. 1980; Garland 1985; Morris 1987; Ubelaker – Rife 2007.
- 14 Robinson 1942; Irion 1968; Ubelaker Rife 2007.
- 15 Kurtz Boardman 1971; Garland 1985.

Materials and methods

This paper will examine the cremations found in the Western necropolis of Himera, where a total of 9 547 burials were excavated from 2008 to 2010. The cremations found in the site are 1 126 (11.79%), of which 51 reveal no data, thus only 1 075 cremations will be analyzed. More in-depth analyses were carried out on a sample of 213 cremations.

According to rather schematic and partly outdated definitions, two types of cremations are known in archaeological contexts: the primary and the secondary one, often defined with simplifying descriptions¹⁶, for this reason, we have avoided interpretative categories, such as primary and secondary cremation, preferring descriptive types, as noted in previous articles¹⁷.

We discarded the hypothesis that the empty cinerary urns could contain inhumated bones of children by observing the position of the urn (lying or standing), calcareous deposits in the inner side of the vase and traces of cutting on the body of the vase¹⁸.

Six descriptive types were observed (Tab. 1).

Out of 1 075 cremations analyzed, 1 035 were on pyres (types 1 to 4). The distinction between types 1 and 2 was made on the basis of the number of anatomical regions preserved, with eight being considered: skull, spine, thoracic region, right and left upper and lower limbs and the pelvis. Only 189 pyres (types 1 and 2) had enough osteological remains preserved to make taphonomic observations. In 784 cases (type 3), however, the pyres contained very few fragments of burnt bones (621) or contained none at all (163). In 62 cases the pyre also contained the cinerary urn (type 4), which in 53.2% cases (33) contained all the bones, while in the remaining 46.8% (29), a part of the bones was in the cinerary urn and a part still on the pyre.

In Himera the base of the pyre was usually built inside a pit which is on average ca. 1.8-

¹¹ Kurtz – Boardman 1971; Morris 1987; Ubelaker – Rife 2007.

¹⁶ Duday 2006; Bel et al. 2008.

¹⁷ Herrmann et al. 2014; Le Goff 2002; Le Goff et al. 2007; Konsa 2013; Duffy – MacGregor 2008 ; Pankowská et al. 2016.

¹⁸ Duday et al. 2013.

				Total sample St			Studie	udied sample		
Туре	Description	Subtype	Description	n	n	%	n	n	%	
1	Pyre with skeleton <i>in situ</i> (all or almost all anatomical re- gions are represented, 5 to 8)	1a	Skeletal remains in anatomically coherent position	42	38	3.53	- 1	1	0.47	
		1b	Skeletal remains grouped in an area on the pyre		4	0.37		0	0.00	
2	Pyre with skeleton partially present in an anatomically coherent position (up to 4 anatomical regions present)				147	13.67		11	5.16	
3	Pyre without bone remains or with very few fragments	3a	Few bone fragments	784	621	57.77	- 163	104	48.83	
		3b	Without bone remains		163	15.16		59	27.70	
4	Pyre with cinerary urn inside	4a	Bones only in cinerary	62	33	3.07	- 23	11	5.16	
		4b	Bones in cinerary and on pyre		29	2.70		12	5.63	
5	Cinerary not on pyre				31	2.88		13	6.10	
6	Burnt bones in small pit				9	0.84		2	0.94	
	Total				1 075	100.00		213	100.00	

Table 1 - Total and studied samples classified into descriptive types.

2 m long and ca. 1 m wide. The degree of conservation of the pyres is mostly influenced by the depth of the pit and disturbance by subsequent burials, deeper pits are well defined by the presence of charred logs, grave goods and bones. The most commonly used type of wood was cork oak (Quercus suber)¹⁹, a species very common around Himera. Shallower pits are in a very poor state of conservation: traces of charcoal are not particularly evident and there are often very few bone remains²⁰. From the analysis of the deeper pits we have observed the size and construction method of the pyre. Stratification of pits appears clear: first the bone remains, then the fragmentary grave goods, finally charcoal fragments and ash on the charred logs. For this reason, we suppose the use of a "funeral bed" placed over the grave goods, testified also by the presence in several burials of long iron nails²¹.

In 31 cases the cinerary urns were not on pyres and in 9 cases the remains were contained in small pits. Among different types of cinerary urns, generally deposited vertically in the soil, the kraters are the most frequent²².

The choice of osteological material for the anthropological study was not selective, but progressive according to the time of excavation. Thus, the first 213 cremations excavated were studied, divided into the different types as shown in table 1.

The sample studied and the total number of cremations in Himera are similarly distributed in the various types of cremation, (Graph 1, test U Mann-Whitney p>0.05).

Considering that the sample studied relates to the area investigated at the beginning of the excavations, we can therefore assume that the spatial distribution of the various types is homogeneous throughout the necropolis and that

¹⁹ Di Pasquale personal communication.

²⁰ Vassallo et al. 2018.

²¹ Ibidem



Graph 1 - Distribution of the various types of cremation (see table 1) in the total and studied sample.

the sample itself is indeed representative of the total number of cremations found.

Each burnt bone was washed and identified, if it was possible. This is necessary to determine the NMI, i.e. to establish how many individuals are present by identifying supernumerary bones or skeletal elements differing in size or age. Determining the sex and age of the burnt remains is difficult because cremation affects morphology and bone size: there are many limitations but in the majority of cases it should be possible to at least distinguish between "juvenile" and "adult"23. Due to the poor state of preservation it was not possible to determine the sex from the pelvis or by considering some diagnostic measurements of the cranial and postcranial skeleton²⁴, while the aged skeletons are very few. Age estimation was based on dental development²⁵, the degree of fusion of the epiphysis of long bones²⁶ and the comparison with juvenile aged skeletal remains. When

25 Ubelaker 1978.

none of the methods could be used we considered the general dimensions of the bones and the fusion of the epiphysis to produce a generic definition of an adult (20+ years old). It was possible to perform the stratigraphic micro-excavation for 18 out of 36 cinerary urns.

Results

Burnt human remains found in cremations show a high degree of fragmentation, have undergone morphological alteration, volumetric reduction and show transverse, longitudinal and curved transverse fractures (conchoidal pattern)²⁷.

As already seen, out of 973 excavated burning sites of 1 075, only in 189 cases were burnt skeletal remains found *in situ* (types 1 and 2) at the site where the deceased was cremated. Conservation is not homogeneous: in more than 60% of cases (117/189; 61.9%) the pyre was cut by graves that had removed part of it, or it was disturbed by erosion phenomena, often with consequent damage to the skeleton,

²³ McKinley 2013.

²⁴ Gejvall 1969; Nugent 2010; Kurila 2015; Cavazzuti et al. 2019; Masotti et al. 2019.

²⁶ Ferembach et al. 1980.

²⁷ Walker et al. 2008; Symes et al. 2008; Gonçalves et al. 2015.



Fig. 1 – Pyre with skeletal remains in an anatomically coherent position. A: type 1a (W7610); B e C: type 2 (W3584, W8508). Images author: Soprintendenza BB.CC.AA. di Palermo. All images subject to copyright.

limiting taphonomic observations. The preservation of skeletal remains also depends on the degree of combustion resulting from the temperatures reached by the pyre and its duration. In most cases (168/189), often even when the pyre was not intact, it was possible to identify the bone remains in order to determine the orientation of the body during cremation. This was possible even in cases of poor conservation conditions, sometimes due to the position of skull fragments in relation to those of other skeletal parts in an anatomically coherent position, or to the presence of only the lower limbs in a certain area of the pyre. In all cases the pyre was oriented along the E-W axis: in 73.2% cases (123/168) the bodies were oriented W-E, i.e. with the skull to the west, in the remaining 26.8% (45/168) they were E-W (these percentages also include slight variations in WSW-ENE or ENE-WSW). Instead, the prevailing orientation of inhumation burials is E-W, i.e. with the skull to the east $(67.1\%)^{28}$.

28 Viva et al. 2020a.

Only in 38 cases (38/189; 20.1%) were the skeletal regions almost completely represented (type 1a), so that a lying position could be clearly observed, in which the skeleton occupied the entire length of the pyre in anatomical order, with the lower limbs lying down. Among these, in 20 cases, thanks to the observation of the laterality of some bones, it is possible to identify the dorsal decubitus (Fig. 1A).

In four cases (4/189; 2.1%) it is not possible to determine the orientation because there was a group of bones in one area of the pyre, without the apparent displacement of parts outside the pyre, in fact all anatomical regions were well represented.

In most cases (147/189; 77.8%) skeletons with few preserved anatomical regions (1 to 3) are observed (Fig. 1B/C). Taking into account only those cases in which the pyre was intact (72/189), we assume that, in at least 21 of them (21/72; 29.2%), partial bone harvesting took place, which would have left out only some parts of the skeleton.

The demographic data shown refer to 153 of the 213 cremations analyzed. In all cremations

Years	n	%		
0	1	0.65		
1-9	4	2.58		
10-19	0	0.00		
20+	47	30.32		
Unknown age	103	66.45		
Total	155	100.00		

Table 2 – Distribution of age in the cremated human sample from the Western necropolis of Himera. The age group 1–9 includes four individuals aged 3, 6, 8 and 8.5 years ca.

the remains can be traced back to one individual, except for the double cremation. W4062. We know the quantitative age of 5 juvenile individuals and the qualitative age of 47 adults (20+ years). For 103 individuals we have no indication of their age-at-death (Tab. 2).

The five juvenile individuals came from two cinerary urns on a pyre (W1104, W6204, type 4), a cinerary urn not on a pyre (W8335, type 5), a pyre cremation (W1359, type 3a) and a double cremation in a small pit (type 6) (W4062) (Fig. 4). Individual W1104 was an infant, whose remains were poorly burnt (natural and black coloring).

Table 3 shows the total weight of the bone fragments found in 31 cremations in cinerary urns (type 4a, 4b, 5). The average weight of the bones contained in the urns, 1 155.9 g, is greater than that obtained in all other types. In the sample of cremations, excluding the 31 in cinerary, the average weight is 179.0 g (n=115), most likely due to the protection offered by the urns themselves.

Compared to cremations in cinerary urns, the average weight of modern cremations, between 1 842 g and 3 379 g for males and between 1 271 g and 2 350 g for female individuums, is higher, as is the rule in archaeological samples²⁹. Dividing the weights in the various types considered, we see that the highest average weight, 1 492.7 g, is found in type 4a, a pyre with a cinerary urn inside (bones only in



Fig. 2 – Pyre with cinerary urn inside. A: type 4a, bones only in cinerary urn (W2732); B: type 4b, bones in cinerary urn and on pyre (W7640).

cinerary) (Fig. 2A), where the weight of the fragments found never falls below 741.0 g. In the other two types (4b and 5) the average weights are lower and there are cases with very few fragments found (Graph. 2): 3 out of 10 in type 4b (pyre with cinerary urn inside - bones in cinerary and on pyre; Fig. 2B) and 3 out of 12 in type 5 (cinerary not on pyre; Fig. 3) are urns with less than 500 g of fragments.

For comparison with other contemporary sites, we have considered only single cremations. The average weight of the cremations from Pithecusa (n 100) is 284.4 g (min 2.0 g – max 1 988.0 g)³⁰, in the sample from the Buchner excavations 1965–1967 (n 10) it is 281.4 g (min 53.0 g – max 432.0 g)³¹. At Megara Hyblaea the average weight of a sample of 8 cremations is 257.4 g (min g 42.0 – max 512.0 g)³². The comparison cases are not pyre cremations and are comparable with HIM-W types 5 and 6 (n 13) (mean 1 101.8 g – min 8.0 g –

32 Bérard 2017.

³⁰ Becker 1995.

³¹ Gigante et al. 2012–2013.

Table 3 – Average weight of bone fragments in cinerary urns. In type 4b we weighed the bones in the cinerary and those left on the pyre together.

Туре	Description	n	min	max	mean	sd
4a	Pyre with cinerary urn inside (bones only in cinerary)	9	741.0	2704.0	1492.7	614.09
4b	Pyre with cinerary urn inside (bones in cinerary and on pyre)	10	30.0	1336.0	822.4	517.50
5	Cinerary not on pyre	12	8,0	2610.0	1181.3	853.26
	Total	31	8.0	2704.0	1155.9	720.56



Fig. 3 – Cinerary urn not on pyre, type 5 (W7124).



Graph 2 – Weight of bone fragments found in the three analyzed types of incineration.

max 2 610.0 g). A considerable difference between the mean of the Himera sample and the comparison sites is evident, which could be explained by a different cremation method or by a more accurate harvest of the burnt remains from the pyre.

18 cremations in cinerary urns were excavated in the laboratory: 11 on a pyre (type 4), and 7 not on a pyre (type 5). In two cremations (W6829 and W7850) the bones of the skull, torso and upper limbs were in the upper levels and the bones of the lower limbs in the lower levels. W7124 seems to have the same arrangement, but in this case portions of the diaphysis of the lower limbs were laid vertically in the urn. In W5807 we observed the inverse anatomical order, with the bones of the lower limbs on top and the skull on the bottom: the peculiarity of this cremation is that it is the only cinerary urn laid upside down, with the mouth on the ground and the bottom on top. In the remaining 14 cremations the skeletal districts are mixed as if the burnt bones at the end of the cremation were first grouped in the center from the sides and then collected and stored in the urn in several stages. The different case histories suggest variability in the collection of the remains, a choice made by those attending the cremation, although the most common ritual is to store the remains in no anatomical order.

Discussion and conclusion

In a previous contribution analyzing a smaller sample of cremations³³, the same evaluations emerged on the variability of the quantity of burnt remains on the pyre. This study made it possible to extend the analyses, thanks to the larger number of cremations on pyres taken into account. Thanks to taphonomic observations, it can be stated that the orientation of the body during cremation was predominantly W-E and in one out of four cases it was oriented E-W, which is opposite to inhumation burials, where most skeletons have an E-W orientation³⁴. If we add to this observation that, on average, all cremations returned a richer trousseau, in terms of the number of objects deposited during the rite, it seems likely that this differentiation could be attributable either to particular groups within the Himeran population, or to individuals of different social or economic levels. It is certainly important to note that Himera was a mixed foundation, with Doric and Chalcidic elements from Zankle and probably from the Chalcidic peninsula, two groups that in many ways maintained, during the 240 years of the colony's life, a coexistence that was not without tension, as in the first thirty years of the 5th cent. BC, but mainly peaceful³⁵. It can be hypothesised that one of the two groups, specifically the Chalcidian one, may have predominantly chosen the rite of cremation for adults, which appears to be prevalent, both as primary and secondary cremation, in Euboea, the area of origin of the first Himeran settlers, together with the Chalcidians of Zankle³⁶. To our knowledge, there is a lack of studies on the orientation of the deceased's body on pyres for the Archaic and Classical Greek world.

Cremations with the best preserved cremated remains on a pyre (type 1a) show skeletons lying in a dorsal decubitus position, indicating a cremation method in which the pyre serves as

³⁴ Viva et al. 2020a. About problems related to the orientation of the body in the Greek world from the motherland and Sicily see: H. J. Rose, Orientation of the Dead in Greece and Italy, in: The Classical Review, 34, 7/8, 1920, 141–146 and G. Nenci, Qualche considerazione sulla necropoli come fonte storica nell'Antichità, in: J. de La Genière (ed.), Nécropoles et sociétés antiques, Actes du Colloque International du Centre de Recherches Archéologiques de l'Université de Lille III, Lille, 2–3 décembre 1991, Cahiers du Centre Jean Bérard 18 (Naples 1994) 9–14.

³⁵ About the sources related to Himera's foundation and composition of the first groups of settlers, see S. Vassallo, La colonia dorico-calcidese di Himera. Dai dati storici di Tucidide e di Diodoro Siculo all'archeologica, in: M. Congiu – C. Micchiché – S. Modena, Dal mito alla storia. La Sicilia *nell'archaiologhia* di Tucidide (Caltanissetta 2012) 149–151, 158.

³⁶ There aren't general works about 5th cent. BC archaic rituals for Greek Sicily yet: even if dated, they are still current and a lot of the observations are made by Paola Pelagatti and Georges Vallet in: P. Pelagatti – G. Vallet, Le necropoli, in: E. Gabba – G. Vallet (eds.), La Sicilia antica, I, 2 (Naples 1980), 355–396, in particular 365–374.



Fig. 4 – Detail of the double cremation, type 6 (W4062), in the yellow circle some of the juvenile bones.

a tomb, i.e. as a final preservation structure³⁷. In some, we assume that the removal of the bones was partial, having observed only some skeletal parts in primary storage on the pyre (type 4b); this means that these cremations underwent further treatment, a secondary burial probably in a cinerary urn, but that the harvest was not complete. A not always complete skeletal harvest may have several reasons, one of which may be the visibility of the skeletal remains at the time of removal from the pyre. Finally, in a very few cases (type 1b), bones were collected in a limited area of the pyre. It is remarkable that we find 784 pyres without skeletal remains (type 3) or with very few fragments, but in contrast only 31 cinerary urns not on pyres and 9 burnt bones in small pits (type 6). The absence of bones in many of the pyres may be partly due to poor preservation, but we cannot exclude that cremations were carried out to transport the deceased remains elsewhere³⁸.

As for the cinerary urns, in some cases they were found on the pyre (type 4), in others in the ground (type 5), not directly related to a place

38 Bel et al. 2008.

of combustion. The reasons for this distinction may be different, one being certainly the poor preservation of the combustion layer, in cases where the pit was missing, due to the small thickness of the covering mound, or because of other graves being made, etc. Less likely is the hypothesis of burning in another place and burial in the necropolis. An area dedicated only to burning has never been found, identified by substantial burnt traces, without bone and pottery fragments³⁹. The study of cremations from these points of view is currently very poor for the Classical Greek world, more widespread are the studies for earlier and later periods.

It seems that cremation in Himera was not a rite reserved exclusively for adults, in fact remains of adults and sub-adults have been found, in one case even in the same double cremation (W4062). Cremation of infants and young children was probably an acceptable, but not usual, practice. Children appear to have been normally inhumed rather than cremated, even in communities that preferred cremation⁴⁰. At Himera we have a qualitative or quantitative age determination for 52 individuals, table 3, of which just under 10% (n=5) are juvenile, a percentage that cannot be considered negligible, even taking into account the fact that children's bones, especially very young ones, are very easily destroyed. This has been verified for the children inhumations in pots⁴¹ and even higher will be the degree of destruction of burnt remains which are more fragile and less recognizable than non-combusted ones.

At Pithecusa, 3 of the 110 cremations found contained the remains of children (8, 10 and 14 years old)⁴², while in Buchner excavations 1965–1967 11 cremations with only adult individuals of both sexes were found⁴³. At Megara Hyblaea of the 35 cremated individuals 4 were juvenile (aged between 5 and 15 years)⁴⁴. That the cremation of children was not customary

- **39** Valentino 2020.
- 40 Kurtz Boardman 1971; Bérard 2017.
- 41 Unpublished data.
- 42 Becker 1995.
- **43** Gigante et al. 2012–2013.
- 44 Bérard 2017.

³⁷ Witteyer 1993; Blaizot – Tranoy 2004; Bel et al. 2008.

and widespread in the ancient Greek world is currently an archaeologically undeniable fact⁴⁵. Considering the problems of preservation and recognisability of the burnt remains of children and the presence of about 10% of cremations of juveniles at Himera and Megara Hyblea, we propose that the cremation of nonadults was not as unusual as is believed.

At Himera there is an interesting case of a double cremation in a small pit (W4062), the remains of which are of an adult male and a juvenile (Fig. 4). The bones of both were white in colour, suggesting that they were burnt at the same time or in different pyres at similar temperatures. The percentage of double cremations in the Western necropolis of Himera is 1.17% (1/85) if we consider cremations with burnt remains weighing more than 100 g. In the case of inhumations, the percentage of double burials is also low (0.77%; 12/1554)⁴⁶. In the Greek colony of Pithecusa, 2 double cremations out of 110 cremations in cinerary vessels are attested (1.81%), although one is uncertain, one of a young woman and an older adult man and one of two women⁴⁷, while one double cremation out of 11 (probably a man and a woman) are found in the Buchner excavations 1965-196748. Of the 22 secondary cremations found at Megara Hyblaea two are bisected (9.09%): in both cases the remains are of a male and a female⁴⁹.

In conclusion, in the archaeological literature the most frequent evidences are just two: cremation in which the human remains were left in place on the pyre together with the grave goods, and the secondary rite in which the bones of the cremated individual were grouped together and collected in a container. At Himera, instead, thanks to taphonomic and anthropological analysis it has been possible to identify many variables linked to the way in which the remains were collected from the pyre and the dislocation of the urns, up to the very order of the burnt bones within them. This is why we believe it was essential to overcome the

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- **46** Viva et al. 2020b.
- 47 Becker 1995.
- **48** Gigante et al. 2012–2013.
- 49 Duday Gras 2018, Bérard 2017.

clear-cut categorisation between primary and secondary cremations, and interpretative categories in general, preferring a descriptive approach capable of highlighting all the possible variables, ritual acts and intermediate aspects linked to the funerary practice of cremation. All these observations testify to the great diversification of human actions, of which we can only see a small part, sometimes dictated by subjective choices, sometimes by contingent events, indicating that cremation in Himera was not a highly standardized ritual.

⁴⁵ Bérard 2017.

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