

Roman Cemeteries in Gazzo Veronese (VR) along the *via Claudia Augusta*

Patrizia Basso - Valeria Grazioli - Sabrina Masotti - Jessica Mongillo -
Marcella Giulia Pavoni - Marina Scalzeri - Elisa Zentilini

The paper presents the results of archaeological research carried out during 2014 and 2018 by the University of Verona in Gazzo Veronese, a small town on the plains south of Verona. In a previous issue of this journal we presented the Roman road brought to light in the same territory and interpreted as the Claudia Augusta (see FOLDER 2016, 370). In this article we are presenting the data for two cemeteries, dated between the first century BCE and the middle of the second CE, discovered along this road, addressing the questions that the archaeological findings raise for the historical analysis from the point of view of settlement and demography.

Introduction

Gazzo Veronese is a small town on the southernmost limit of the province of Verona (fig. 1). Given its favourable position, where the River Tione flows into the Tartaro, close by the River Po, the area has been inhabited uninterruptedly since Neolithic times. Between 2014 and 2018 the University of Verona carried out five excavation campaigns in close collaboration with Rome's "La Sapienza" University and the Soprintendenza archeologia, belle arti e paesaggio per le province di Verona, Rovigo, Vicenza, within the framework of the "GaVe" Project¹. Already in the 1980s-1990s the scholar Mauro Calzolari carried out a field walking survey, in the same area and identified evidence of a scattered, rural occupation of the countryside as well as a road².

During the first two campaigns (2014-2015), the University of Verona conducted excavation and a survey along the same road, in order to date it and uncover its construction technique. The result of this research gave evidence that the road dates back to the end of first century BCE: it was probably the *via publica* running from

We thank Jim Manning-Press and Giacomo Sartor for helping in translation.

¹The excavations were directed by Patrizia Basso. Many Verona University students took part along with some students from the Legnago's Liceo Cotta as part of a school/work apprenticeship. We wish to thank the SAP (Società Archeologica Padana), in particular Alberto Manicardi, who offered fundamental logistics support, and all those who have contributed to the project in various ways: Verallia Saint-Gobain SPA, the Consorzio di Bonifica Veronese, the Gazzo Veronese council administration, the local archaeological association and the owners of the fields, amongst whom it is a pleasure to remember Maurizio Zuliani and his wife with whom over the years a cordial friendship has been born.

² CALZOLARI 1986; CALZOLARI 1989.

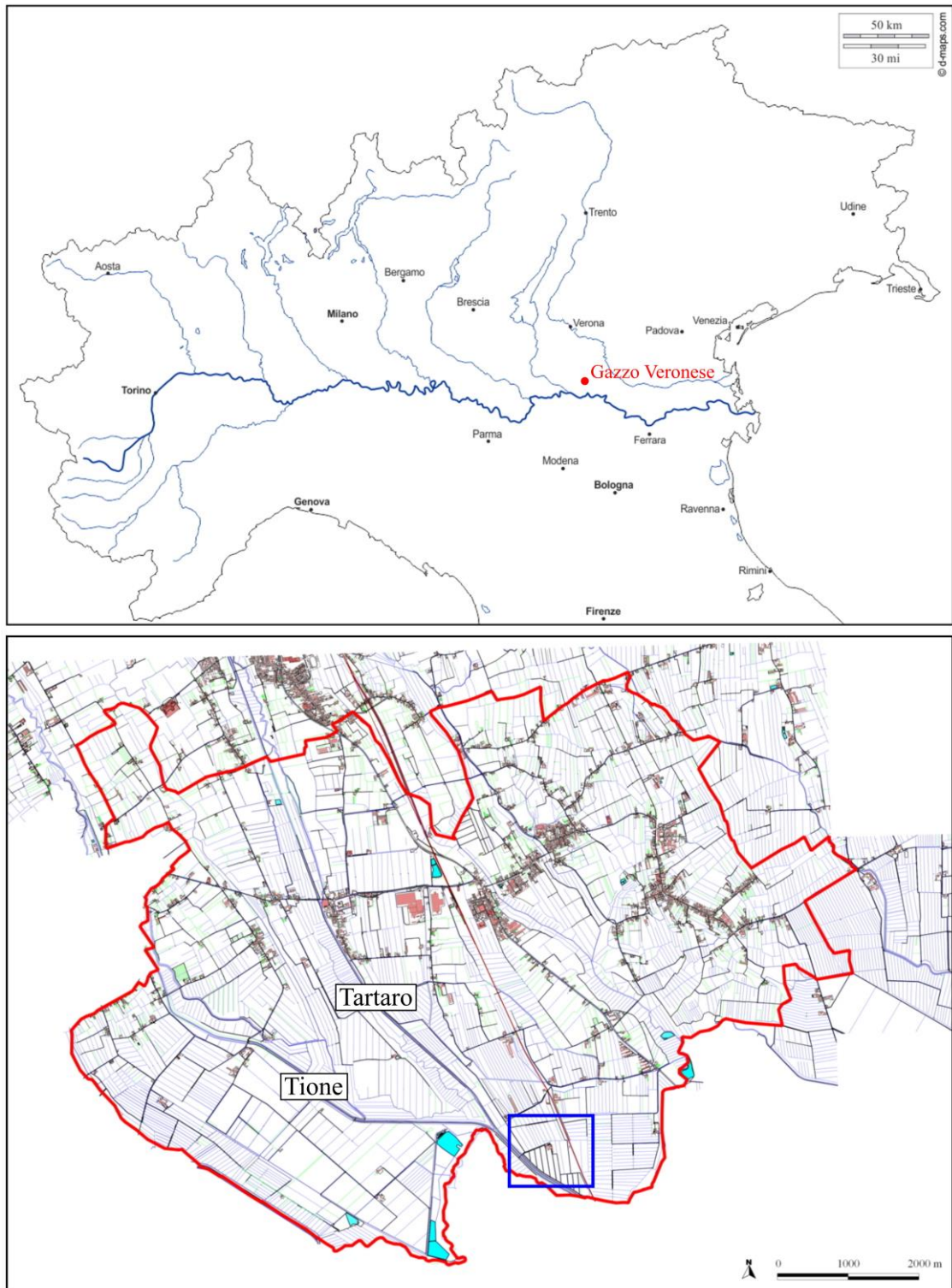


Fig. 1. Gazzo Veronese (VR): the position of the site in northern Italy (from d-maps.com) and the boundaries of the municipality of Gazzo Veronese (from the Carta Tecnica Regionale 1:5000). In blue square: the Ronchettrin area, where we conducted our research (illustration V. Grazioli).

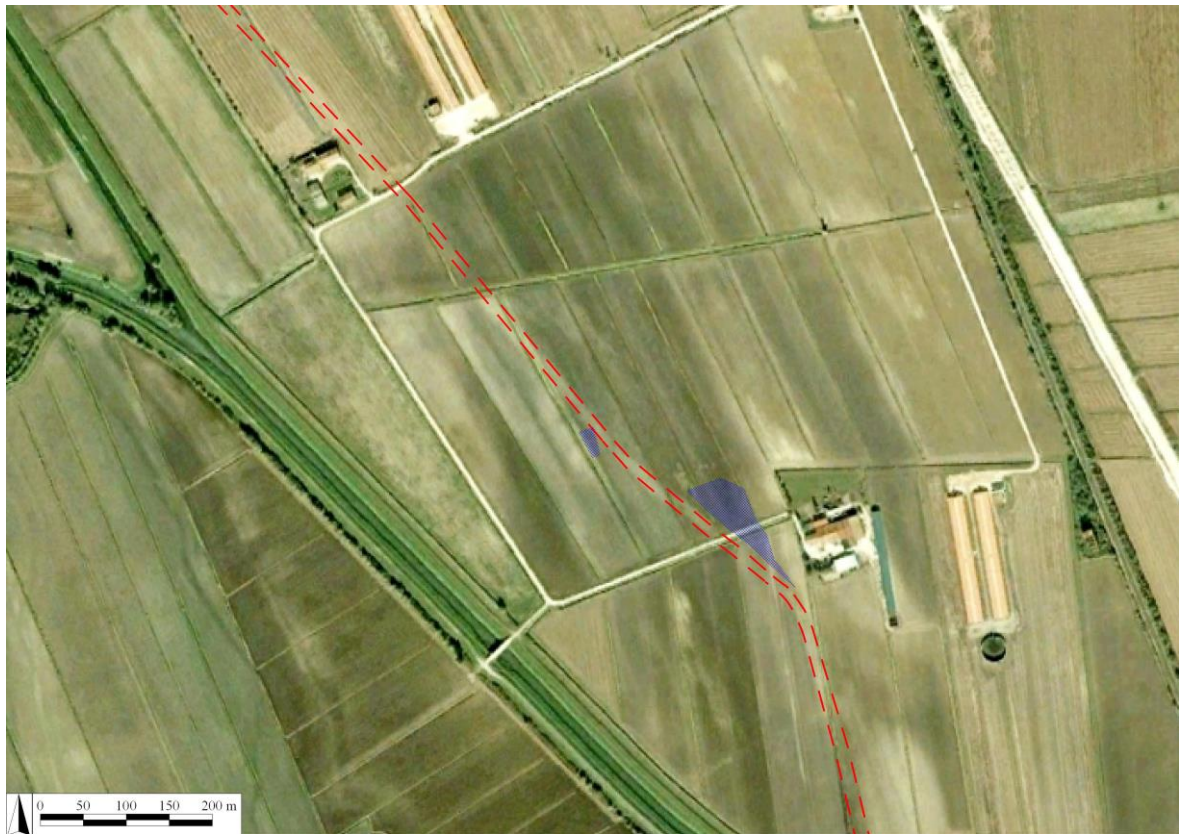


Fig. 2. Aerial photograph of the road course (in red) and the two cemeteries (in blue). The vertical dark brown band in the center of the image represents a lowland area between two sandbanks (illustration V. Grazioli).

Hostilia, on the Po River, to the Danube, known as the *Claudia Augusta*³ (fig. 2). The same excavations brought to light also two funerary areas alongside the road.

We have already published interpretation papers about the road's context but only preliminary reports on the funerary areas⁴. The importance of the discovery and its uniqueness to the area around Verona, especially considering the results from the 2018 excavation, has encouraged us to summarise and publish the data on hand, even if the project is still ongoing.

Recapping the course of the fieldwork, the first graves came to light in 2014 to the west of the road, along with of several fragments of a rich funeral monument⁵. A further sixty or so graves came to light between 2015 and 2017 on the opposite side of the road where we found the southernmost limit of the cemetery, which corresponds to a small bridge built across the roadside ditch. In an attempt to understand the extension of both this and the funerary area on the other side of the road, in 2018 a new approach was taken. From concentrating on small-scale excavations, a series of long trial trenches were opened up leading off from the cemetery (fig. 3). Chapter 1 describes how the trial trenches brought to light over one thousand graves. The deceased had been buried in a period of little more than 150 years, between the end of the first century BCE and the middle of the second century CE. Such a high number of burials, when compared to other known cemeteries around Verona, has raised new questions over the settlement of the area. These will be discussed following the presentation of the excavation results and the first batch of analyses.

Patrizia Basso

³ There is no intention to go over the argument of the road again, as it is already been amply discussed in this same review (BASSO, GRAZIOLI, PAVONI, ZENTILINI 2016).

⁴ Apart from the text cited in note 3, see BASSO, GRAZIOLI 2015; BASSO 2017; BASSO 2019a; BASSO, GRAZIOLI 2019.

⁵ This will be touched on below: see Chapt. 1.

The excavation

Over the five excavation campaigns mentioned above, the area in question gradually expanded. An area 110 x 65 metres to the west of the road was uncovered, the equivalent of 480 square metres. On the opposite side of the road 2270 square metres were exposed, 350 x 90 metres. Within this exposed area there were 135 square metres of burials to the west and 840 to the east (fig. 3).



Fig. 3. Detail of the Ronchetrin area (see fig. 1, in blue) with the overall plan of the cemeteries (in yellow) on either side of the road (in gray). The red rectangle indicates the small bridge over the ditch along the road (in brown). The excavation areas are inside different colour lines: 2014, in orange; 2015, in blue, with the extension 2016, in black; 2017, in red; 2018, in green (from the *Carta Tecnica Regionale 1:5000*) (illustration V. Grazioli).

The topsoil was removed mechanically and the archaeological layers below were excavated manually. Each grave was recorded, and the grave goods and human remains carefully positioned. The cremated remains of the deceased were floated on-site to recover the smaller human bone and flora for later analysis.

The archaeology had been badly disturbed by farm machinery. One machine, a subsoiler or chisel plough, used to loosen and drain soil in depth, had been particularly damaging. It had cut through several graves, leaving only the deeper ones untouched. As a result, the state of preservation varies from grave to grave, depending on their position on what had been an ancient natural embankment. The farm machinery had also erased any trace of the original ground level. This has made it impossible to understand the layout of the access points and pathways within the cemeteries, as well as any possible grave markers. Apart from the farm machinery, some graves had also been ransacked by grave robbers. These had a different type of layered mixed backfill (fig. 4). Despite of this many preserved contexts and useful data have come down to us.

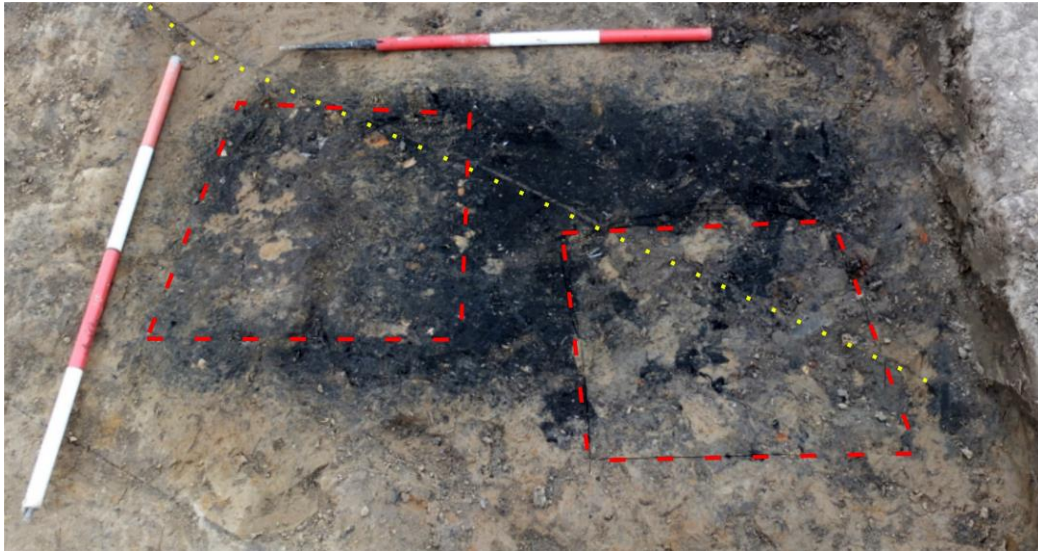


Fig. 4. An example of pit burial (206) with signs of disturbance: damage from the subsoiler or chisel plough (dotted yellow line) and from grave robbers (red squares) (photo and elaboration V. Grazioli).



Fig. 5. Photo of the small bridge (for its location, see fig. 3) (photo and elaboration V. Grazioli).

As anticipated above, during the excavation campaigns 2015-2017 the “eastern” funerary area was originally excavated in extension. In 2018 there was a change of tactic and several trial trenches were opened up on both sides of the road. These ran parallel to each other and had the aim of seeing just how far the cemetery stretched (see fig. 3). The trenches uncovered the limits of the eastern funerary area: to the north there was a lowland and boggy area (see fig. 2), to the west the roadside ditch, to the south the small bridge over said ditch (fig. 5), whilst to the east the natural embankment continued, probably for agricultural use. The triangular shape of the area is striking (see fig. 3). The broad, 35 metres wide strip of at least sixteen lines of graves to the north

narrows to just one by the bridge to the south (figs. 3, 6). The idea of a natural sandy embankment in the middle of a boggy lowland comes to mind, isolated and unusable for any other purpose.

In all the area covers at most 165 x 50 metres, covering some four thousand square metres. Two hundred and thirteen graves have been identified, nearly all cremations. In 2014-2016 all the graves were excavated. In 2017 and 2018 a selection was made, concentrating on those laid out in a uniform pattern and as typologically different as possible, focussing on those around the edge of the cemetery⁶. The aim was to date the funerary area and hopefully distinguish differences in the distribution and typology of the graves⁷. In the area excavated in extension there was one grave per 3.5 square metres. If this were the case for the whole of the funerary area there could be about 1000 or 1100 graves in all. Though just an estimation, this would be an im-

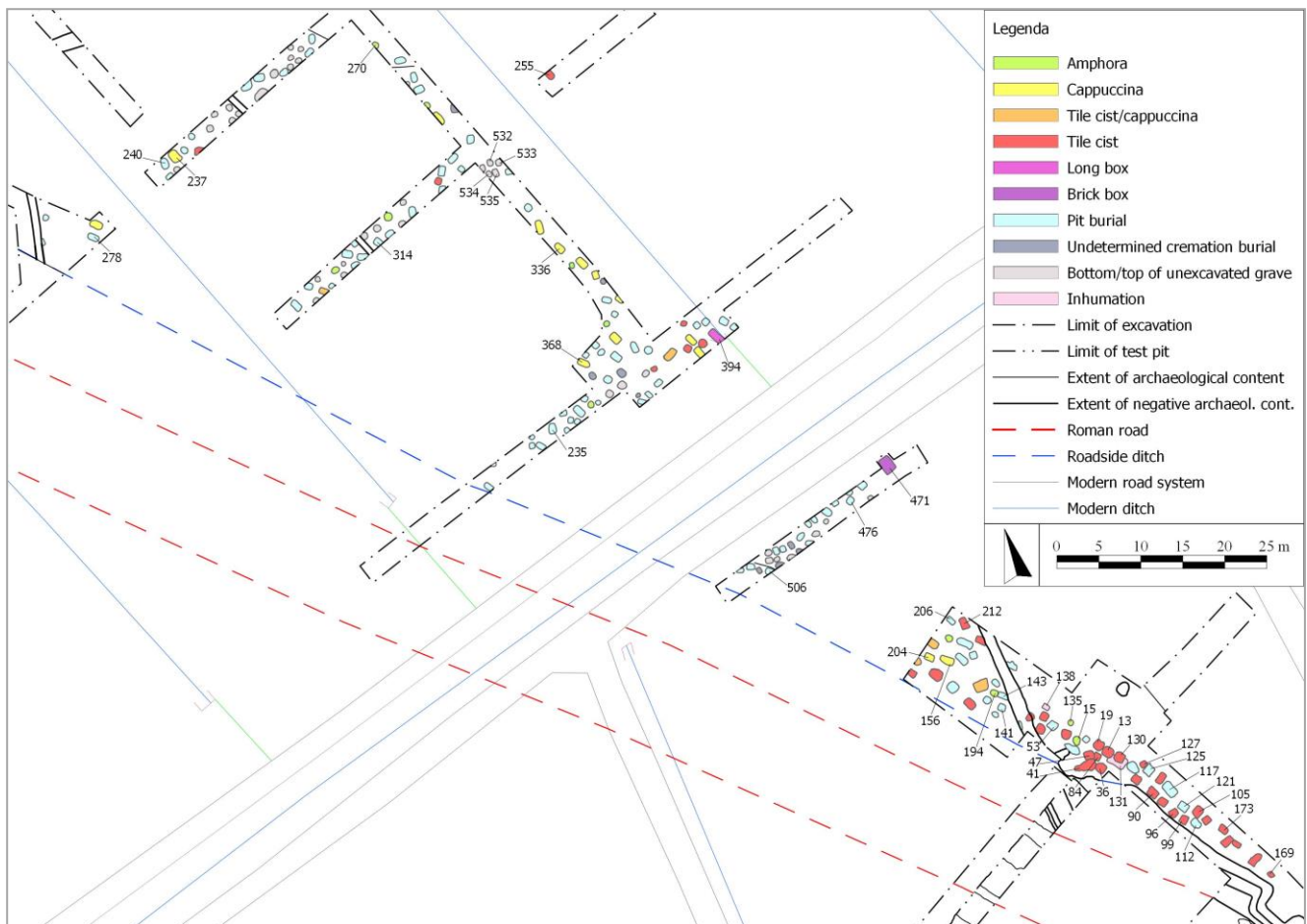


Fig. 6. Overall plan of the eastern funerary area and the different types of graves (plan and illustration V. Grazioli).

⁶ 73 graves were excavated on the eastern funerary area. The remaining 140 were cleaned by hand and documented. Any finds visible on the surface were removed, but the grave was not fully excavated.

⁷ On a chronology for the graves, see Chapt. 5.

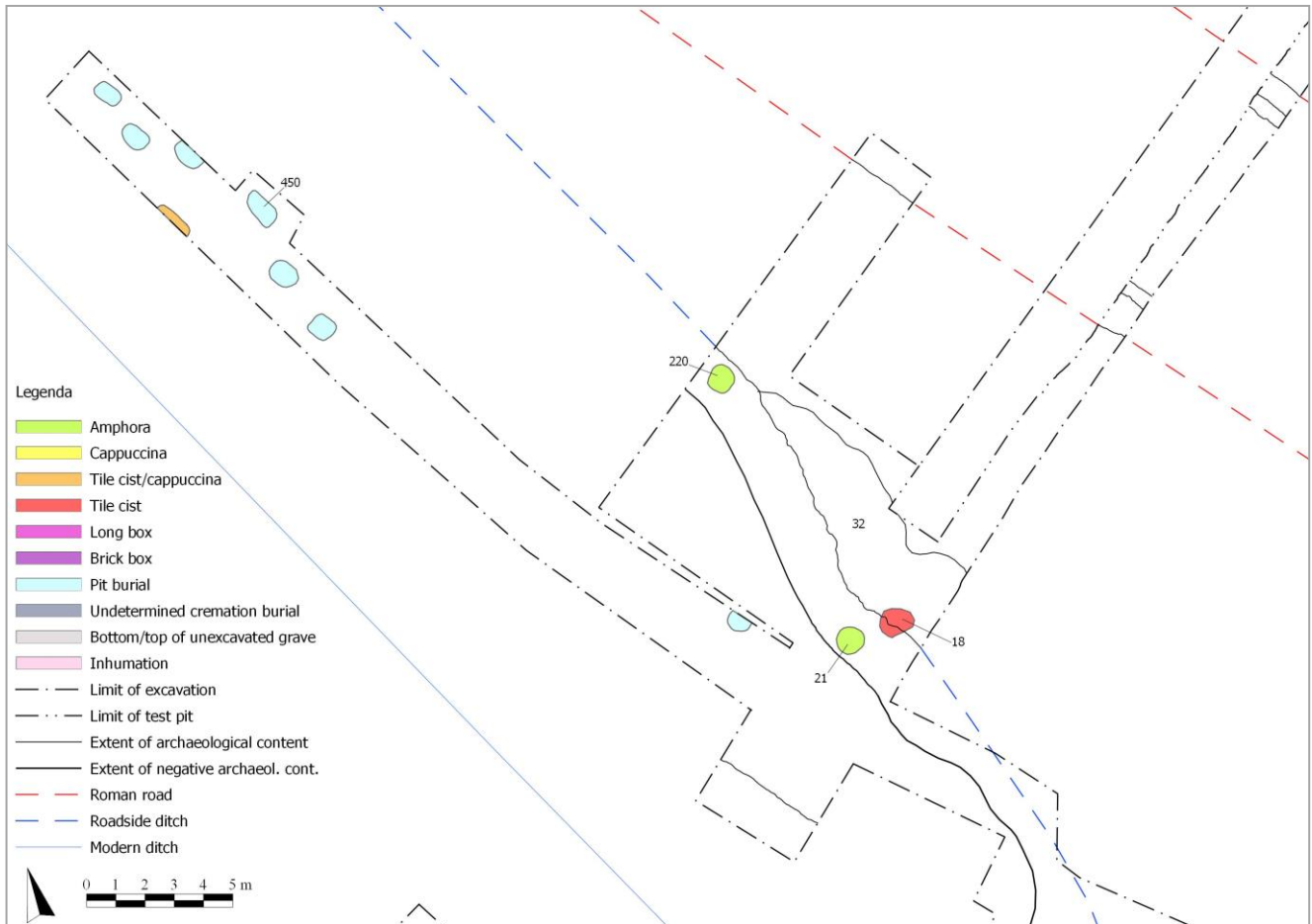


Fig. 7. Overall plan of the western funerary area and the different types of graves (plan and illustration V. Grazioli).

pressively high number. The graves lie more or less parallel to the road. There are no distinguishable groups of graves. Nor are there open spaces between them that could be interpreted as graveyard pathways. Given that the cemetery has only been partially excavated in extension, and the original ground surface has been lost, any further conjectures are limited.

As for the depth to which the graves were cut, two were a good half metre deeper than the overlying ones. Their grave goods don't date them to an earlier phase of the cemetery, leaving the possibility that there may have been a desire to group these graves, possibly as part of the same family nucleus⁸.

In all eleven graves have been identified on the "western" funerary area. Two were amphora burials, running parallel to the road, on the edge of the roadside ditch (fig. 7). Further to the west, the original natural embankment would have been higher, meaning that only the bottoms of a few graves have survived, along with some very faint traces of others that had been completely razed by the farm activity. The contemporary ground level of the cemetery was several dozens of centimetres higher than today. No graves were found in the trial trenches opened up to the west⁹ which seems to imply that the cemetery didn't stretch much further in that direction. There is the possibility that the farm activity may have completely razed any trace of it, given that the original ground surface of the natural embankment was that much higher. The lowland to the south provided a limit to the graves in that direction. To the north, after a gap of some fifteen metres, a further seven cremation burials came to light. The northern limit of the funerary area is uncertain, and as a result, there is no way of

⁸ Inhumation 131, the top of its fill lay 0.25 m below the cremation 130, and the tile-cist grave 84, 0.5 m below the nearby 41 and 47.

⁹ There are 7 trenches about 4 x 2.5 m.



Fig. 8. Land reclamation using fragments of the funeral monument (photo V. Grazioli).

estimating the total number of graves. However, it is clear that the density of graves is far less than that of the “eastern” cemetery. The graves appear to be laid out in the same way as in the cemetery across the road, in lines running vaguely parallel to the road¹⁰.

The archaeological record for this part of the site reveals that the road gradually fell into disuse, as did the cemetery. There is evidence of at least one tile-cist grave (18) being uprooted (fig. 7), and hundreds of fragments of Veronese ammonitic limestone¹¹ (32) were found in the upper part of the roadside ditch’s backfill (figs. 7, 8). These would have been from a funeral monument that had been violently destroyed. This was probably part of a process of land reclamation, though difficult to date. Carbon 14 dating of vegetal remains typical of a

humid environment shows that between the eighth and ninth century CE the area became a boggy swamp¹². It seems that by then the area had been abandoned and the surrounding land was no longer inhabited.

Hundreds of stone finds came to light, with dozens of architectural and decorative elements (fig. 9). There are fragments of an inscription and parts of a sphinx¹³. It seems possible that these may have been part of a large-scale funeral monument. Unfortunately, the high fragmentation and the type of fragments, mostly related to the moulded cornices of the pediment, do not allow for a clear reconstruction of the rest of the monument. The only identifiable part is the large crowning pediment, decorated with elaborate mouldings and surmounted by two acroterial sphinxes. It is only possible to assume the presence of a basement decorated with mouldings, while the central part and the presence of columns (as in aedicula monuments on podiums) remain unknown.

An analysis of the engravings, the type of architectural elements that have come to light and the large size of the sphinxes, date the structure to the between the end of the first century BCE and the early first century CE. The sphinxes are amongst the first of that type of funerary decoration from Cisalpine Gaul. Whoever commissioned the tomb must have been of high standing, given its size and the type of decoration, as well as one of the inscriptions referring to a *quattuorvir* or *sevir* (fig. 10, part of a numeral is visible on the fragment at top right). These fit in with the ranks of wealthy notables from Verona, who chose the countryside around Gazzo Veronese, where they had their farmsteads, as a place to be buried. More evidence of their existence can be found in numerous fragments reused as building material in local churches. These too probably came from nearby cemeteries¹⁴.

Valeria Grazioli

Types of graves

Nearly all the graves were cremations. The only exceptions were two inhumations on the eastern site. One of them (131) had a double row of roof tiles running down one side (figs. 6,11). The other had two curved tiles, placed face to face and sealed at one end by the bottom of a fine ware pot (138, fig. 6).

¹⁰ Four of the eleven graves on the western funerary area have been excavated (fig. 7): two in amphora (21 and 220), one near the northern limit (450) and one found as part of the backfill of the roadside ditch (18, see below).

¹¹ We thank the geologist Roberto Zorzin (Natural History Museum of Verona) for the stone analysis. This particular subtype of stone, known for its resistance and high quality, was extracted in the local quarries of Valpolicella near Verona and has been used until today in the building field. About this kind of stone, see BARBIERI, CANDESSO 2007: 47-51 and 104-105; regarding extraction, processing, use and trade in the whole Eastern Cisalpine in the Roman Age see BASSI 1996-1997.

¹² Archaeobotanical analysis by Marco Marchesini.

¹³ The writer’s doctorate at Venice University was based on funerary sphinxes in Cisalpine Gaul: GRAZIOLI 2020.

¹⁴ Regarding these inscriptions, see BASSO 2016.



Fig. 9. Fragments of the funerary monument (illustration V. Grazioli).



Fig. 10. Fragments of the funerary inscription of the monument (Illustration V. Grazioli).



Fig. 11. Inhumation (131) (photo V. Grazioli).



Fig. 12. Different types of burial: A. pit burial, B. in amphora, C. tile-cist burial, D. a particular tile-cist, E. "alla cappuccina", F. brick box (photo V. Grazioli).



Fig. 13. Fused soil on the pit edge, a sign of the high temperature reached by the overlying funeral pyre (314) (photo V. Grazioli).

There are three types of cremations, in a simple pit (240, fig. 12, a), in an amphora (15, fig. 12, b) and a tile-lined cist (36, fig. 12, c). From the archaeological record, once the choice of cremated bone and the grave goods had been deposited, the rest of the grave was backfilled with the burnt remains of the funeral pyre. This included charcoal, ash and small burnt bone fragments, also known as cremains. In the tile-lined cists the cremains could be spread all over the bottom of the grave, or, more rarely, along just one or two sides. In some cases, the side of the pit burial have signs of scorching, thanks to the heat from the overlying funeral pyre (fig.

13), indicating that the burial took place on the spot where the deceased was cremated (*bustum*). In those cases where the pit was not covered and isolated from the pyre, the sides reached such high temperatures that at times the fused soil became detached from the side, falling into the tomb's fill (e.g. **240**, **314** and **476**). There are less amphora burials than the other two types. All the amphoras were inserted, the right way up, vertically into the soil. The mouth tends to have been sawn off at the height of the shoulder. Once filled, the opening was then covered by a flat roof tile, sealing the cremains and grave goods inside (e.g. **15**, **135**, **270**).

The most common type of tile-lined cists tends to be square, with one flat roof tile per side, one on the bottom, and one to seal its contents (e.g. **13**, **19**, **36**, **84**, **99**). Some do not fit the rule: for example, one had six vertical tiles and none on the bottom, with no trace of grave goods or cremains (**90**). It may have housed a wooden coffin, or of some other material, which was removed at some point. In one unusual case, two sides of the cist were lengthened and made from two roof tiles, as well as the cover (**394**, fig. 12, d). The other two sides were made from a curved roof tile and there was no floor. A couple of curved roof tiles had been placed vertically, resting on the bottom. They may well have been a kind of spout, into which libations could be poured. Amongst the other graves constructed with tiles there are several "*alla cappuccina*" (**336**, fig. 12, e), with two pairs of flat roof tiles propped against each other to form the "roof" and one at each end to seal it (see also **156**, **204**, **368**). A final variant of tile cist is built from both whole and fragmentary bricks (with a recess for handling), used to line the sides and bottom of the grave (1.3 x 1.8 m). Only three courses remain (**471**, fig. 6 and fig. 12, f)¹⁵.

The damage caused by farm activity has left some graves impossible to classify (see fig. 6). This is also the case where it was decided not to fully excavate all the evidence on hand, in the 2018 trenches. In some cases, it wasn't even possible to distinguish between one or more contexts once the topsoil had been removed by machine. This was true when more than one context was found very close to one another (e.g. fig. 6: **532-533** and **534-535**). It wasn't even possible to establish whether the finding was the bottom of a razed grave or the lid of one yet to be excavated.

Among the less identifiable structures, there are two anomalous ones. The first may be a tile-cist grave (**255**) on the northeast edge of the eastern funerary area. It is very badly preserved. The fact that there is no trace of the cremated remains suggests that- it hadn't been robbed but opens up the possibility that it may have been a marker of some kind at the limit of the cemetery (fig. 6). The second unusual structure is lined with four bricks and sealed by a roof tile. Inside there were several cremated bone fragments, but with no trace of the residue from the funeral pyre, or grave goods (**127**).

Thanks to the fact that the eastern cemetery is far more extensive, we can make some observations about the graves' layout. This is bearing in mind that not all of the graves have been fully excavated, especially in the central and northern zones. Here it has been impossible to classify many of the graves. 43 graves at the southern limit have been fully excavated. Here there is a clear majority of tile-cist graves (23 definite ones, along with the above-mentioned anomaly **90**, the particular brick box **127** and the probable cist **169**: see fig. 6) as opposed to simple pit graves (13) or in amphora (3). There are also the two very rare inhumations. The eleven amphora graves are to be found scattered all over the area. Five have been excavated; two remain to be positively identified. The pit graves are also spread throughout the cemetery, though there is a higher percentage to the north. The tile cist graves are concentrated to the south, gradually diminishing to the north as "*alla cappuccina*" graves take their place. The first "*alla cappuccina*" graves appear at the centre of the site, and to the north they are virtually the only tile structure present.

Valeria Grazioli

¹⁵ Various examples of this type of grave have been well documented, see, for example, the Roman cemetery in Pleba di Casteggio (Pavia) (BOLLA 2011: 106-107).

1. Grave goods: a brief analysis



Fig. 14. A bronze ring on the bottom of the tile-cist (90) (photo V. Grazioli).



Fig. 15. Possible pottery urn in grave (173) (photo V. Grazioli).

Work is still in progress on the finds from the site, but enough data has come to light to give a brief analysis¹⁶.

The first consideration concerns the containers for the cremated remains. In only one of the graves was a pot used as an urn. The fact that the remains of the deceased tend to be in a concentrated area, and that iron or bronze rings are to be found in their midst (fig. 14), suggests that perhaps a biodegradable material was used, such as cloth, wood or wicker. In one tile cist grave a coarseware *dolium* had been used to contain the grave goods and the cremated remains of the deceased¹⁷ (173, figs. 6, 15). The *dolium* was probably manufactured locally. The practice of using it as an urn is not uncommon in other sites in the Veneto during the Roman period. However, the use of a *dolium* inside a tile cist grave is for the moment unique. There is a possibility that this particular grave mirrors a very conservative rural adaption to new trends in burial customs (the tile-cist), while maintaining the old¹⁸.

A second consideration concerns the grave goods. Before starting it should be pointed out that very few graves have survived intact. Only two graves were still sealed (13 and 36, figs. 6, 16). The rest had been damaged in some way, some more than others, by ploughing in particular. These damaged grave goods make it hard to decide whether the vessels had been broken on purpose, as part of the burial ritual, or by accident. Many of the graves have been so badly damaged by ploughing that it is impossible to distinguish between what was buried inside or outside the structure. As such, it is

often difficult to decide if an object is in a primary position, placed on the funeral pyre, or secondary, placed in the grave with the deceased. The only finds that had been placed on the pyre were the balsamaria and coins, when they show obvious signs of having been exposed to the flame.

Grave goods were found in 71 of the 77 fully excavated graves. On the eastern funerary area 73 were excavated and just four across the road. The finds include vessels for containing liquids, balsamaria, containers for foodstuffs, tools, games, lamps, coins, necklaces and other jewellery (fig. 17). There is a particularly high number of vessels for containing liquids. 84% were part of the secondary grave goods, placed with the deceased in the grave. The commonest form is the *olpe*, a pear-shaped jug with a handle, nearly all

¹⁶ For now, concerning all categories it has been chosen to express the data in percentages.

¹⁷ Ploughing had left the container and the grave itself in a very bad condition. It was impossible to find any trace of the lid of the urn. It may have been in terracotta, or even some biodegradable material. Similar examples have been found on other cemeteries. For one in Padua see ROSSI 2011: 140.

¹⁸ For example, a case in Padua, ROSSI 2011: 137.



Fig. 16. Sealed graves (13 and 36) (photo V. Grazioli).



Fig. 17. Grave goods (illustration M. Scalzeri)



Fig. 18. The small jar decorated with a human face from grave 143 (photo V. Grazioli).

ways coarse ware. These are followed by small thin-walled cups, cups (over half of which are in *terra sigillata*) and amphorae. The less common objects are small thin-walled or coarse ware jars, small coarse ware amphorae, beakers (all of which are thin-walled) and bottles (mostly glass). There are very few lids for the liquid containers, in coarse ware. A certain amount of caution is called for in the identification of the finds, given that only 21% were found intact, or at least in attachable parts. The others are fragmentary, some very much so. Most are standard forms. One jar, depicting a human face, stands out. It was found intact and the representation of a face must have had talismanic properties¹⁹ (143, figs. 6, 18).

The second most representative type of find is the balsamaria. Some 93% are glass, the rest in coarse ware. The latter are chronologically earlier. It is interesting to note that 26% of the balsamaria show signs of being exposed to the flame. As mentioned above, they were probably used during the cremation to sprinkle perfumed oil on the funeral pyre. Some of them may have been used as *sparsiones* as the deceased was being buried, or during later ceremonies, given that 25% were found in the fill outside the grave itself. However, 64% of the unscorched balsamaria were part of the secondary grave goods, indicating a broad spectrum of uses for such objects.

¹⁹ TASSINARI 1998: 42.

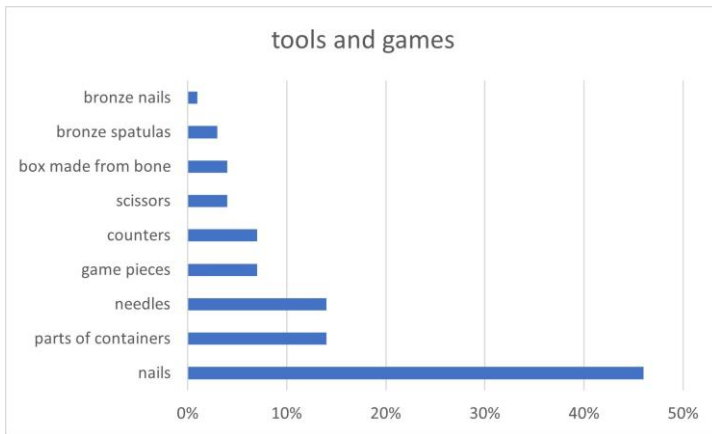


Fig. 19. Tools and games (illustration M. Scalzeri).

The containers for foodstuffs may also have had a ritual purpose, given that 36% come from external fills. But here once again, the majority are part of the secondary grave goods. Most are plates, 72%. Of these 97% are in *terra sigillata*. Only a very few are black glaze ware. Courseware jars make up most of the rest, 24%. The lids and *dolia* make up 2% each.

Most of the tools and games (fig. 19) are part of the secondary grave goods, 66% of them placed within the grave. They include containers, or parts of containers, needles, game pieces and counters made of bone, iron scissors and bronze spatulas. The most common find is iron nails. These are found both inside and out of the grave structure. This sug-

gests that they may have been part of a container in biodegradable material, or possibly part of the structure for the funeral pyre, of which no other trace remains. The same could be said for the bronze hinges and large bronze rings, which could be cautiously interpreted as part of a container for the deceased's remains. In only one tile cist grave (47, fig. 6) was a bronze nail found inside the structure. This may suggest that it was placed there for its talismanic properties. The interesting selection of tools could shed light on the deceased's everyday activities. There are both bronze and bone sewing needles, often found together (e.g. fig. 6: in the fill of 156 and 237), along with the two bone counters in 156 and the scissors in the external debris (195) of the grave 194. Two finds in particular catch the eye. One is a rectangular box made from bone, found as part of the secondary grave goods, in fragments, in 135. It may have been a personal possession of the deceased. The other is two bone gaming pieces found in the outer fills of 105 and 112.

Nearly all, 85%, of the lamps were found in the inner fill of the graves, as part of the grave goods placed in the deceased's final resting place. They would have been to protect and illuminate the deceased's journey into the afterlife²⁰. Only a tiny proportion of these were used during the funeral ritual. Many of them had never been used²¹, though some were slightly blackened around the mouth of the nozzle. Some graves contained more than one (e.g. 13, fig. 6). Only a few, 13%, are miniaturised. Apparently in this cemetery, ordinary lamps were more popular.

Most of the coins were also found inside the graves²². However, in 60% of the cases they had been burnt, probably on the funeral pyre, as Charon's obol. This was a coin placed in the mouth of the deceased before cremation. The damage to the remaining coins is due to corrosion over time.

The necklaces and other adornments were probably worn by the deceased at the time of the cremation. Three cases in particular are evidence of this: thirty shoe nails found in a simple pit grave (141, fig. 6); a pair of gold earrings, one found inside the grave (84) and the other in the external debris from the funeral pyre (85); and a bronze fibula, possibly ruined by the heat, found in the pyre debris outside the grave (121) of someone probably buried inside a biodegradable container. Other finds include necklace beads, glass pendants, finger rings, clothing hoops, hairpins and buttons (fig. 20).

Marina Scalzeri

²⁰ BOLLA 2011: 117.

²¹ As Cecilia Rossi suggests, in this case, their use may be strictly symbolic, see ROSSI 2011: 149.

²² See Chapt. 4.

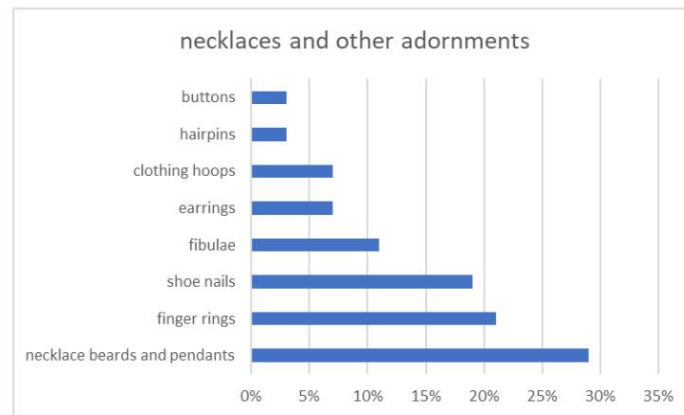


Fig. 20. Necklaces and other jewellery (illustration M. Scalzeri).

2. Coin finds

Thirty-five coins were found in the area. Most come from stratigraphic contexts and can be dated to between the early Augustan period and the second half of the first century CE. The rest, sporadic finds, are later, between the second and fourth century CE. There are far less of them.

Only a third of the graves include a coin, only one has two. The favoured material is bronze, preferably an *as*. Most of them date to the time of Augustus and Tiberius, through to the middle of the first century CE²³. The earliest example is an *as* from the time of the *triumviri monetales* of Augustan period, between 18 and 5 BCE. It was found in grave **18** (see fig. 7)²⁴. There are three more coins from the Augustan period, two from **506** (see fig. 6). From the time of Tiberius there are three *asses*, one in honour of Augustus and a *dupondius*. They were found in **117**, **130** and **125** (see fig. 6).

A further three *asses*, badly corroded, can be dated generically to the first century. Eleven of them show signs of having been exposed to flame. Only six of them were found inside a grave, as part of the grave goods (**13**, **47**, **96**, **141**, **156** and **212**, fig. 6). The others are out of context, but from within the boundaries of the cemetery.

Coins from the first century CE include four *asses* from the reign of Vespasian, one from grave **53** (see fig. 6). There are also three coins from the reign of Domitian: an *as* in **235** (see fig. 6); and two corroded and badly preserved *denarii*, out of context. As of yet, these last two are the only non-bronze coins to have been found in the cemetery. Presumably they wouldn't have been a part of the funeral rite, which has been well documented as preferring the use of bronze coins during Roman-period burials²⁵.

Some second-century CE coins have also come to light, including at least one *as* from the reign of Faustina I, minted in 148 CE, from **471** (see fig. 6).

Marcella Giulia Pavoni

3. Grave goods: the chronology

From a preliminary chronological analysis, it is clear that the cemetery was inaugurated at the end of the first century BCE. Grave **18** (see fig. 7) provides a *terminus post quem* as the last twenty years of the first century BCE for the western funerary area. The black glaze Morel 2277 in **169** (see fig. 6) is the earliest find from the eastern one. The cemetery was used intensively throughout the first century CE. Already by the end of the

²³ See Chapt. 5, Phases a and b.

²⁴ A similar case was found during a field walking survey along the road: for these coins, found in the 2015 campaign, see BASSO, GRAZIOLI, PAVONI, ZENTILINI 2016.

²⁵ On "Charon's obol", *Trouvailles monétaires* 1999; *Culto dei morti* 2001.

first and the early second century CE the number of burials contracted, and by the second half of the second century CE the area was abandoned. The latest finds include an *as* of Domitian²⁶ and lamps stamped with *Fortis*, *Vetillii* and *Fronto* (I-II CE)²⁷.

With the evidence in hand, three phases of activity have come to light on the funerary areas. This does not include eleven graves which were either impossible to classify or had too few grave goods to date. The phases are: a) the Augustan-Tiberian period; b) first half of the first century CE; and c) second half of the first to the middle of the second century CE.

Ten graves belong to the a-phase, two in the west (**18** and **21**, fig. 7)²⁸, eight in the east. Most are tile-cist graves, with two simple pit graves and one in an amphora. The grave goods are made up of pottery balsamaria, later replaced by *Isings*²⁹ 6 and 8 glass versions; coarse ware “spinning top” *olpai*³⁰; black glaze ware, *Morel* 2277 - *Lamboglia* 7/16³¹; volute nozzle lamps; and thin-walled vessels. In grave **36** (see fig. 6) two thin-walled “tulip” beakers, similar to Ricci 1/186, were found. The body is globular and the bottom flat with a much-splayed rim, indistinct and sunken. This form is a guiding light within Augustan contexts and provides evidence for the survival of certain Celtic traditions. It is typical of finds from the Po Plain.

Seventeen graves belong to the b-phase, only one in the western funerary area (in amphora: **220**, fig. 7). On the east there are ten tile-cist graves, two simple pit graves, two in a trench, and another three amphora burials. This phase sees the appearance of *terra sigillata italica*³² (*Consp.* 4, 18 e 27) among the grave goods, alongside the *Loescke* / volute nozzle lamps, *Isings* 8 glass balsamaria and coarse ware *olpai*. The thin-walled beakers make way for small thin walled greyware cups with a variety of decorations (Ricci 2/231 cup)³³.

Twenty-one graves belong to the c-phase, seven tile-cist graves, nine simple pit burials, one in an amphora, one in a wooden coffin and the first three “*alla cappuccina*” graves. Alongside *Isings* 8 and *Isings* 28 glass balsamaria, the volute nozzle lamps have been replaced by *firmalampen*, factory lamps, stamped with *Fortis*, *Optati*, *Strobili*, *Tanais*, *Fronto*, *Phoetaspis* and *Vetillii*. There are less *terra sigillata* vessels. Pottery manufactured in northern Italy in this later period makes an appearance, such as the filleted *Consp. 34* cups. The same small thin-walled greyware cups (Ricci 2/231 cup) are still present. At this early stage in the pottery analysis, there’s already significant data available to date the cemeteries. Looking at the numbers alone, it is clear that the twenty-seven graves dated to between the end of the first century BCE and the first half of the first century CE is pretty much equivalent in number to the twenty-one from the middle of the first to the middle of the second century CE. This goes to show that the cemetery was in use uninterruptedly for close on 150 years. The graves date for the most part to the decades in the middle of the first century CE, with only ten as early as the age of Augustus and Tiberius. The same is true of those from the first half of the second century CE.

Though both “come to life” at the end of the first century BCE, as they continue to be used, differences can be noted between the western and eastern funerary areas. It appears that the one to the west had already been abandoned by the first half of the first century CE. Across the road, the cemetery remained in use for at least a century.

Some considerations on the type of grave concerning the chronology can also be made. In the earliest phase, most of the burials are in tile-cist graves, with a lesser number in a simple pit, ditch or amphora. “*Alla cappuccina*” graves start to appear in the second half of the first century CE. There is a sharp drop in the number of tile cist graves and an increase in those in a simple pit or ditch. Over time the funeral ritual does not change, with all but two of the deceased being cremated. Of the two inhumations, **138** is generically dated, given the lack of grave goods, to the first century CE and **131** to the second half of the first century CE (see fig. 6).

The average selection of grave goods placed in the grave varies little over the years as far as the form, but the typology does, as seen above.

Elisa Zentilini

²⁶ See Chapt. 4.

²⁷ ZENTILINI 2018: 459-466.

²⁸ BASSO, GRAZIOLI, PAVONI, ZENTILINI 2016: 13-16.

²⁹ For the glass see MONACO c.s.

³⁰ DELLA PORTA, SFREDDA, TASSINARI 1998: 134-135.

³¹ SFREDDA 1998: 25.

³² *Consp. 34* 1990.

³³ RICCI 1985: 284-285.

4. Anthropological analysis

Anthropological analysis of the cremated remains was carried out in the archaeo-anthropological and forensics laboratory of Ferrara University³⁴. The aim was the definition of a biological profile of the deceased. From that it was hoped to identify the way of life of the inhabitants of the area around today's Gazzo Veronese, in Roman times.

The bone remains are in a similar state of preservation, following diagenetic and taphonomic processes. In some cases, only a few grams of bone were found in the grave. This, and the high degree of fragmentation, made it difficult to identify the various bones present. The state of preservation of the bone can vary for different reasons: the oxygen level present in the flame; the quantity and quality of the firewood used; and the atmospheric conditions at the time. The position of the corpse and its body weight also play a part in which bones are better preserved³⁵.

The anthropological analysis started with the bone being washed and cleaned, to remove any soil and funeral pyre debris. Following this, where possible, any fragments that could be were pieced together. Once the various parts of the body had been identified it was possible to determine the minimum number of individuals present, and their sex and age. In conclusion, any bone anomalies or possible pathologies were analysed³⁶. The temperature reached on the funeral pyre was also identified from the colour of the bone. Any animal bone found mixed with the human was also studied. This was all aimed at establishing what funeral ritual had been practised³⁷.

So far, twenty-three cremation graves from the 2015-16³⁸ campaign and twenty-one from 2018 have been analysed, along with the two inhumations from 2017. The data confirms that there is an elevated number of single graves, 90.9%, leaving just over nine per cent of double ones³⁹.

In the forty-six graves, at least forty-eight people were buried. The sex distribution can be seen in fig. 21. For 37.5% of the individuals sex identification was impossible, either because they were sub-adults or infants, or just because of the poor quality of preserved remains⁴⁰.

Only the age was determined for the two inhumations. The one buried within *imbreces* was carefully excavated in the laboratory, given the extremely fragmentary nature of the bones, sealed within the sediment. Only a few grams of bone were recovered, but there was enough to reconstruct the deceased's femur. It provided the data to be able to estimate the age at death at about 32 weeks⁴¹. The age at death of the other inhumation, **131** (see fig. 6 and fig. 11), is about 12 years \pm 30 months. The individual's sex characteristics were not yet developed given the young age⁴². The bones were extremely fragmentary due to an intense taphonomic process.

Further interesting information could be learned from an isotopic analysis of the human bone, something we hope to do in the near future.

The age distribution of the cremated individuals is shown in fig. 22. There is a preponderance of individuals aged 20-40 years, some 41.7%. This higher death rate for this age group has been seen on other cemeteries from the same period⁴³.

³⁴ Dipartimento di scienze Biomediche e Chirurgico Specialistiche.

³⁵ CANCI, MINOZZI 2015.

³⁶ Sex identification of cremated individuals is difficult thanks to the deformation and fragmentation of the bone during combustion. There are three methods to determine sex: morphological analysis; osteometric analysis; weight of the bone. The same method to determine age is used for both cremations and inhumations. (GEJVALL 1963; ACSADI, NEMESKERI 1970; VAN VARK 1975; LOVEJOY *et al.* 1985; UBELAKER 1989²; BORGOGNINI TARLI, PACCIANI 1993; HOLK 1997; BURNS 1999; CATTANEO, GRANDI 2004).

³⁷ MASOTTI, GUALDI-RUSSO 2014.

³⁸ GUALDI-RUSSO *et al.* 2019.

³⁹ The presence of more than one individual in the same grave, usually for family ties.

⁴⁰ Difficult to identify the sex in the absence of evident sexual dimorphic characteristics.

⁴¹ SCHEUER *et al.* 1980.

⁴² Age at death was determined from the state of the fusion between various bones, the length of each single intact bone and the degree of tooth eruption (BLACK, SCHEUER 1996; UBELAKER 1989; BROTHWELL 1981).

⁴³ MASOTTI *et al.* 2020.

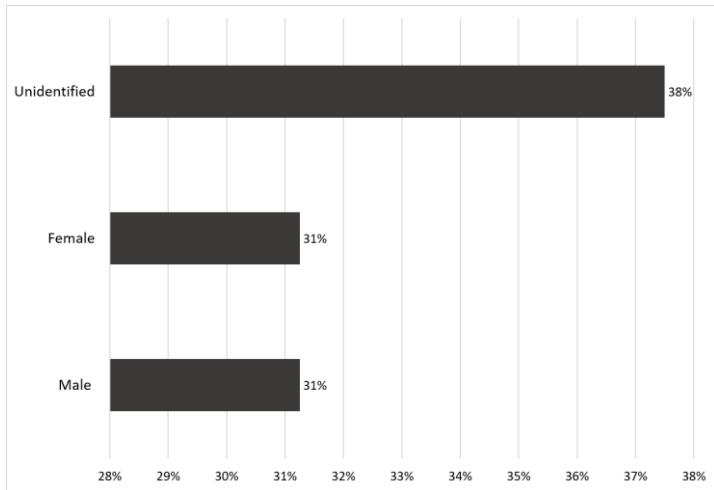


Fig. 21. Sex distribution (illustration J. Mongillo).

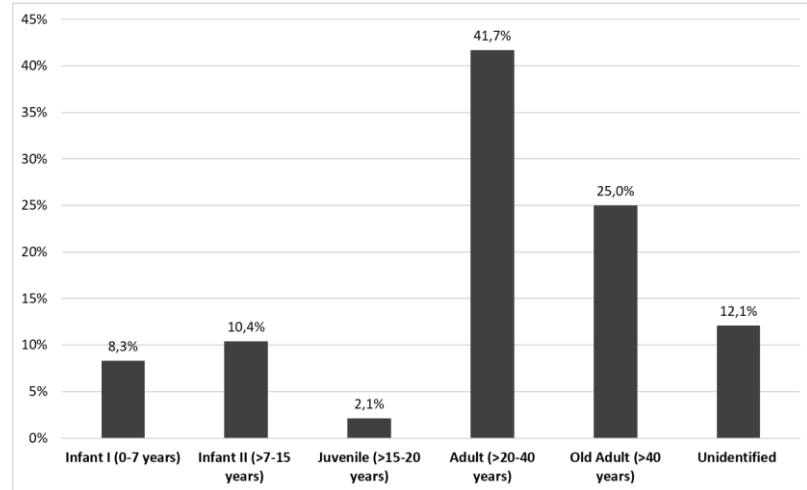


Fig. 22. Age at death distribution (illustration J. Mongillo).

From the cremated bone colour, it was discovered that the heat on the funeral pyre could reach 900°C. All the range of colours is present, from reddish-brown, 400°C, to light and dark blue, as far as white. The latter indicates a temperature of 900° or more. On the whole, the bone colour within the same grave is fairly homogenous. This is not the case for grave **336** (fig. 6 and fig. 23), where the diaphysis of the left radius and ulna are darker, probably due to the position of the corpse on the funeral pyre.

The analysis brought to light the following list of bone anomalies and possible pathologies:

- Intervertebral disc herniation: 6,3%
- Arthrosis of the spine: 10,4%
- Porotic hyperostosis: 31,3% (fig. 24. A)
- Periostitis: 6,3%
- Osteolysis of the patella: 6,3% (fig. 24. B)
- Dental attrition: 4,2%
- Enthesopathy: 20,8%

There is a high number of cases of porotic hyperostosis. Some are light, others are more severely affected. This could be due to a poor diet, leading to low protein intake, especially animal proteins⁴⁴. Porotic hyperostosis can be caused by pathological conditions such as chronic anaemia, whether acquired or genetic⁴⁵. Schmörl nodes, indicating spinal disc herniation, emerged, along with other anomalies associated with everyday life.

Intense physical activity can lead to elevated muscle development, especially along the *linea aspera* of the femur, the radioulnar joint and in some cases where the masseter muscle sits on the mandible. These overdeveloped muscles can be caused by the older age of an individual, and also the intense activity undertaken. A developed masseter muscle could be a sign, not of chewing, but of the jaw being used while spinning yarn, trapping the thread between the teeth.

⁴⁴ FORNACIARI 1989.

⁴⁵ RINALDO *et al.* 2019.



Fig. 23. **US 336**: Fragments of left radius and left ulna with different colours (photo J. Mongillo).



Fig. 24. A. **US 336**: patellar osteolysis. B. **US 278**: cranial fragments with porosity (photo J. Mongillo).

Animal bone is present in 75% of the graves (fig. 25). This suggests that the funeral banquet was an important part of the ritual. In several cases, graves contained burned animal remains belonging to species of genus *Sus* (*S. scrofa*, *S. scrofa domesticus*) and in some graves were identified burnt and no-burnt bones of the *Caprinae* subfamily. In all cases the bones belonged to young individuals. Burned and unburned animal remains may derive respectively from the funeral banquet consumed in honor of the deceased or laid as offering⁴⁶.

In conclusion, the data shows that in the choice of cremation there was no distinction as to sex or age. The average age of death mirrors that of society as a whole at the time, even if there is a significant number of individuals aged over forty⁴⁷. The animal bone is often unburnt and was probably instead part of the offerings placed in the grave to accompany the deceased into the afterlife. The fact that cremated human and animal bone has been found mixed implies that foodstuffs may have been thrown on to the funeral pyre. There are fewer double graves than single, a fact common to other cemeteries in the Po Valley⁴⁸. The colour of the cremated bone indicates a temperature on the pyre of between 400 and 900°C. A variety of colours of cremated bone in the same individual, as opposed to a uniform colour, suggests different temperatures within the same pyre. This may have been caused by a lack of attention to detail in its construction, or possibly depends on the corpse's position. The bone anomalies and pathologies suggest that a lower-middle-class community used the cemetery. The deceased were probably farmworkers, involved in a variety of activity, some harder than others. Their diet would have had a low intake of proteins.

Sabrina Masotti, Jessica Mongillo



Fig. 25. An unburned animal remains; B *Suidae* burnt tooth (photo J. Mongillo).

⁴⁶ MASOTTI *et. al.* 2020.

⁴⁷ There is a comparison with the Roman cemetery in Bologna's Central Station and Padua, Via Montona (COZZA, RUTA SERAFINI 2007).

⁴⁸ Roman cemetery in Altino (VE) (ONISTO, DRUSINI 1999); Roman cemetery in Padua (COZZA, RUTA SERAFINI 2007).

Considerations

In addition to the two funerary areas we excavated, other known necropolies in the territory of Gazzo Veronese dated between the end of the first century BC and the middle of the second century CE. Some of these cemeteries are highlighted in the survey we conducted and one other excavated by the Soprintendenza archeologica in 1986 in the vicinity of Bosco⁴⁹ (fig. 26).

The numerous funerary monuments repurposed as building material in the local medieval churches – S. Maria Maggiore in Gazzo, S. Pietro in S. Pietro in Valle and S. Giovanni Battista in Correzzo – can also be referred to the same period⁵⁰. These are artifacts largely produced in Veronese workshops: in particular the typological comparisons (such as the twisted columns, widely diffused in the private architecture of the Verona area under the influence of monumental architecture, which in the Julio-Claudian age saw the use of similar elements in the urban area in Porta Borsari and Porta dei Leoni and the Giove Ammone's Arch) in the case of two more monumental steles that were reused in the church of S. Maria Maggiore refer to a single workshop operating in Valpolicella⁵¹. Three fragments of Proconnesian marble sarcophagi were probably made in Ravenna workshops and arrived here thanks to the waterways of the Po and Tartaro⁵². Therefore, it is evident that the owners of the tombs to which the artifacts belonged enjoyed a certain economic availability. In fact, at least for the two large steles and for the sarcophagi we can hypothesize a high commission, also confirmed by the epigraphic texts: the steles actually mention two *seviri* from the illustrious Veronese *Licinii* family and the sarcophagi belong to two characters from the *Attii* family, where one is a *quattorvir* and the other could be his son. It should also be taken into consideration that other repurposed artifacts refer to characters engaged in the political and military life of Verona: *decuriones*, *seviri*, a *primipilus*, etc. So, it is possible to hypothesize that various Veronese families owned farms in the area, attracted by the resources of this land which is very suitable for agriculture and farming animals, but also rich in other raw materials, such as clay for furnaces or wood. More importantly the territory is well connected through wa-

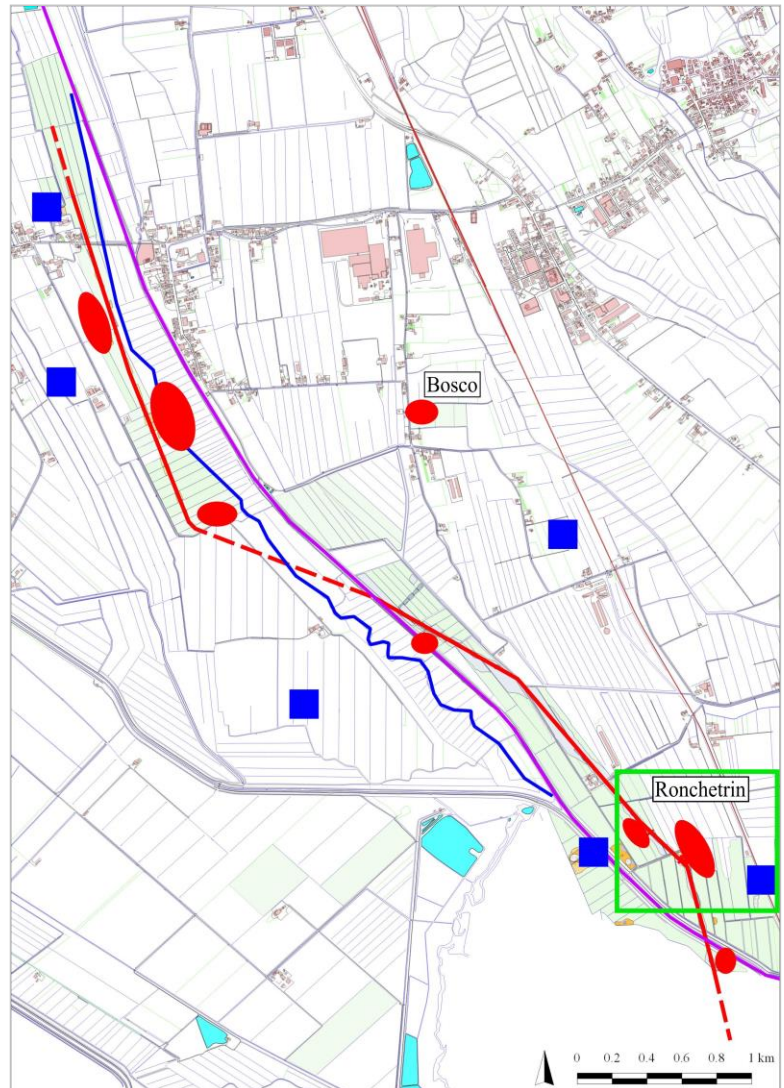


Fig. 26. The main villae (blue squares) and cemeteries (red ovals) discovered along the road (in red) during Calzolari's field walk survey (1980-90) and during our investigation. In green square: the Ronchetrin area with the western and eastern cemeteries and the villa, which are the only archaeological sites that have been excavated and not just surveyed (illustration V. Grazioli).

⁴⁹ Analysis of the Bosco cemetery was part of Verona University degree and MA courses, with the permission of the Soprintendenza Archeologia, belle arti e paesaggio delle province di Verona, Rovigo e Vicenza. We take this opportunity to very much thank Brunella Bruno and Gianni De Zuccato, who over the years have followed our work as local inspectors of the Soprintendenza.

⁵⁰ Regarding these monuments, see BASSO 2016.

⁵¹ BASSI 1996-97: 23-45.

⁵² BASSO 2019b.

terways and land with the main urban centers nearby, as well as on the one side with the Adriatic Sea and the East and on the other side with the Alps. In these agricultural properties, the rich exponents of the Veronese elites would have themselves buried, placing the tombs along the *via Hostilia-Verona* so that they would be widely visible to passers-by and celebrate the glory of the *gentes*, as it happened along the Gräberstrassen in the *suburbia* of urban centers.

After the mid-late second century CE the area has not yet returned any evidence or any inscriptions of funerary nature. So, in light of the overall funerary data collected in the territory, it seems possible that between the last decades of the first century BC and the middle of the second century CE the country was densely populated, but already in the second half of the second century it experienced a phase of habitational contraction. The problem is to understand the type of settlement in the area.

Until the 2017 excavations we thought there were scattered settlements, characterized by plots of medium-large properties, but also by other smaller ones, with funerary areas located at the borders of the *fundi* themselves (fig. 26), which mostly featured medium-low level tombs (pertaining to *familiae* of slaves and some small owners) together with some isolated monuments of high commission, such as the one with the sphinxes we have found (figs. 9-10). We believed that the two funerary areas we brought to light were also attributable to two of these rural settlements. In particular, for the eastern one we hypothesized a connection with the *villa* highlighted by the Soprintendenza archeologica in a few hundred meters beeline from our excavation⁵³. The southern limit of the funerary area was in fact located in correspondence with a small bridge built over the ditch of the road itself (see figs. 3 and 5) and functional to a path that, deviating from the public road, went right towards the *villa*. The depositions would have been placed at the borders of the *fundus*, according to a rather constant norm, discussed in the recent studies of Denis Francisci, which analyze the tombs as topographical indicators⁵⁴.

Even the analyses of the grave goods (Chapt. 3-5) and those on the bones (Chapt. 6), which refer to men and women with work-related stress pathologies, linked to agricultural-pastoral activities, seemed to refer to a population of medium-low social rank, entirely compatible with a *familia servilis*.

But the 2018 campaign has led to hypothesize, as mentioned, the presence of 1000-1100 tombs in this necropolis, a unique case in the Veronese area as far as funerary finds⁵⁵. The depositions are distributed over a period of only about 150 years, that is more or less five generations⁵⁶. Dividing the number of tombs by the hypothesized generations, a population of 200-220 people per generation is obtained, which is too high for the *familia servilis* even of a large farm. Think for example of Settefinestre, where on the basis of Cato's text and archaeological analysis, a workforce of 52 individuals was hypothesized for the first phase between the first century BC and the Flavian age, and a maximum of one hundred for the second phase (expansion and economic production conversion)⁵⁷. It is therefore believed that the funerary evidence brought to light by us could point to the possibility of a different settlement model of the area, one with the presence of an aggregate settlement nucleus (maybe a *vicus*?); the eastern necropolis would be reserved for the population of this settlement, as well as perhaps some others among those found in the area along the *via publica*⁵⁸. Perhaps this *vicus* lay where, in Medieval times, the Church of Santa Maria Maggiore was built, and where there is evidence of the area being continuously occupied for the longest time. For the moment the question is open, prior to further anticipated exploration in the area nearby: either to the north of today's Gazzo Veronese, or to the south, nearby *Hostilia*, there was an important *vicus* in the *ager Veronensis* as attested by Tacitus and Pliny⁵⁹.

Another question emerges thanks to our excavations. As noted, the tombs found in our excavations and also those in the remaining municipal land are concentrated within the 150 years, before the middle of the second century CE. The road, on the other hand, appears to have been a busy thoroughfare right up to the fourth century. There appears to have been a decrease in the population in the second century CE, something that

⁵³ About the *villa*, which is still being studied, the Soprintendenza recognized a rich phase in the mid-first century BC and a restructuring phase in the early imperial age.

⁵⁴ FRANCISCI 2017.

⁵⁵ Through a series of graduation papers, we carried out a census of the funeral data published for the Veronese area.

⁵⁶ To calculate the average lifespan in Roman times is problematic, since it is affected by various environmental, socio-economic and gender factors: in a recent work on Roman demography it is defined at around 30 years (HIN 2013, with extensive previous bibliography).

⁵⁷ CARANDINI 1985: 159 and 177.

⁵⁸ Regarding the possible existence of a Roman settlement center in today's Gazzo Veronese, see CALZOLARI 1989: 112.

⁵⁹ Tac., *Hist* 3, 9 and Plin., *NH* 21,43, 73.

still needs to be understood. Was there a change in climate on a widespread basis? Or was the contraction in occupation caused by some historical event, such as the invasion of the Quadi and Marcomanni between 167 and 170 CE? Or was it a health event, like the “Antonine or Aurelian plague”, probably a smallpox pandemic which spread throughout Italy at the end of the Roman-Parthian wars, claiming many victims, especially among the military?⁶⁰ The data needs to be looked at from a larger perspective, instead of just concentrating on single sites. However, this is another chapter of the story, that we hope to tell in the future, as we continue our research.

Patrizia Basso

Patrizia Basso, Valeria Grazioli, Marcella Giulia Pavoni, Marina Scalzeri, Elisa Zentilini

Dipartimento di Culture e Civiltà, Università di Verona

E-mail: patrizia.basso@univr.it

Sabrina Masotti, Jessica Mongillo

Dipartimento di Neuroscienze e Riabilitazione, Università di Ferrara

E-mail: jessica.mongillo@unife.it

BIBLIOGRAFIA

- ACSADI G., NEMESKERI J., 1970, *History of Human Life, Span and Mortality*, Budapest.
- BARBIERI G., GRANDESSO P., 2007, *Asiago: note illustrative della carta geologica d'Italia alla scala 1:50.000. Foglio 82*, Firenze.
- BASSI C., 1996-1997, “Osservazioni sulla produzione di stele a pseudoedicola nella Valpolicella: tre esempi dall'agro veronese”, in *Annuario Storico della Valpolicella* 13: 23-45.
- BASSO P., 2016, “Monumenti funerari romani a Gazzo Veronese”, in J. BONETTO, M.S. BUSANA, A.R. GHIOTTO, M. SALVADORI, P. ZANOVELLO (a cura di), *I mille volti del passato. Scritti in onore di Francesca Ghedini*, Roma: 627-641.
- Basso P., 2017, *Recherches récentes sur la voie Claudia Augusta*, in S. Zanni (ed.) *La route antique et médiévale: nouvelles approches, nouveaux outils*, Actes de la Table ronde internationale (Bordeaux 15.11.2016), Bordeaux: 91-108.
- BASSO P., 2019a, “Excavations in the North of Italy along the via Claudia Augusta”, in A. KOLB (ed.), *Roman Roads. New Evidence – new Perspectives*, Berlin: 404-422.
- Basso P., 2019b, “Adriatico ed entroterra: un caso di studio”, in C.S. FIORIELLO, F. TASSAUX (a cura di), *I paesaggi costieri dell'Adriatico fra Antichità e Altomedioevo*, Atti della Tavola Rotonda (Bari 22-23.5.2017), Bordeaux 2019: 245-260.
- BASSO P., GRAZIOLI V., 2015, “Indagini archeologiche a Gazzo Veronese lungo la strada romana nota come Claudia Augusta padana”, in *Archeologia Veneta XXXVIII*: 62-79.
- BASSO P., GRAZIOLI V., 2019, “La via Claudia Augusta a Gazzo Veronese”, in P. BASSO, B. BRUNO, C. CENCI, P. GROSSI (a cura di), *Verona e le sue strade. Archeologia e valorizzazione*, Sommacampagna: 89-102.
- BASSO P., GRAZIOLI V., PAVONI M.G., ZENTILINI E., 2016, “La via Claudia Augusta: recenti indagini archeologiche dell'Università di Verona a Gazzo Veronese (Verona)”, in *FOLDER 370* (www.fastionline.org/docs/FOLDER-it-2016-370.pdf).
- BLACK S.M., SCHEUER J.L., 1996, “Age Changes in the Clavicle: from the Early Neonatal Period to Skeletal Maturity”, in *International Journal of Osteoarchaeology* 6: 425-434.
- BOLLA M., 2011, “Tipologie tombali e riti funerari”, in R. INVERNIZZI (a cura di), *...Et in memoria eorum. La necropoli romana dell'area Pleba di Casteggio*, Casteggio: 105-129.
- BORGOGNINI TARLI S., PACCIANI E., 1993, *I resti umani nello scavo archeologico*, Roma.

⁶⁰ For a medical interpretation of the epidemic, SABBATANI, FIORINO 2009. The subject was largely discussed in a recent Venetian convention, organized by F. Chausson, G. Cresci Marrone, M. Tirelli: *Altino 169 d.C. Intorno alla morte dell'imperatore Lucio Vero*, Venezia 15.11.2019.

- BROTHWELL D.R., 1981, *Digging up Bones. The Excavation, Treatment, and Study of Human Skeletal Remains*, Ithaca, New York.
- BURNS K.R., 1999, *Forensic Anthropology Training Manual*, Upper Saddle River.
- CALZOLARI M., 1986, *Territorio e insediamenti nella bassa pianura padana del Po in età romana*, Verona.
- CALZOLARI M., 1989, *Padania romana. Ricerche ambientali e paleoambientali nella pianura tra il Mincio e il Tartaro*, Mantova.
- CANCI A., MINOZZI S., 2015, *Archeologia dei resti umani – Dallo scavo al laboratorio*, Roma.
- CARANDINI A., 1985, “Racconto di una villa”, in A. CARANDINI (a cura di), *Settefinestre. Una villa schiavistica nell’Etruria romana. La villa nel suo insieme*, vol. 1, Modena: 138-185.
- CATTANEO C., GRANDI M., 2004, *Antropologia e Odontologia Forense – Guida allo studio dei resti umani*, Bologna.
- Conspectus = Conspectus formarum terrae sigillatae italico modo confectae*, Bonn 1990.
- COZZA A.F., RUTA SERAFINI A., 2007 (a cura di), *I colori della terra. Storia stratificata dell’area urbana del Collegio Ravenna a Padova*, *Archeologia Veneta XXVII/XXVIII* (numero monografico).
- Culto dei morti* = M. HEINZELMANN, J. ORTALLI, P. FASOLD, M. WITTEYER (a cura di), *Culto dei morti e costumi funerari romani, Roma, Italia settentrionale e province nord-occidentali dalla tarda Repubblica all’età imperiale*, Atti del Colloquio Internazionale (Roma 1-3.4.1998), Wiesbaden 2001.
- DELLA PORTA C., SFREDDA N., TASSINARI G., 1998, “Ceramiche comuni”, in G. OLCESE (a cura di), *Ceramiche in Lombardia tra il II secolo a.C. e VII secolo d.C. Raccolta dei dati editi*, Mantova: 133-138.
- FORNACIARI G., 1989, “Indagini paleonutrizionali su serie scheletriche antiche del bacino del Mediterraneo: un tentativo di interpretazione”, in O. LONGO, P. SCARPI (a cura di), *Homo Edens: Regimi, miti e pratiche dell’alimentazione nella civiltà del Mediterraneo*, Verona: 265-274.
- FRANCISCI D., 2017, *Locus sepulturae. Il valore topografico delle evidenze funerarie nella ricostruzione del paesaggio rurale di età romana: teoria, metodi e casi di studio dal Trentino-Alto Adige/Südtirol*, Padova.
- GEJVALL N.G., 1963, “Cremation”, in D.R. BROTHWELL., E. HIGGS, G. CLARK (eds.), *Science in Archaeology*, London: 379-390.
- GRAZIOLI V., 2020, *La sfinge funeraria: diffusione del modello nella Cisalpina romana*, tesi di dottorato, Università Ca’ Foscari Venezia, a.a. 2019/20.
- GUALDI-RUSSO E., MONGILLO J., MASOTTI S., 2019, “Anthropological Analysis of Roman Cremations from a Northeastern Italian Site (Gazzo Veronese, Verona)”, in *Padusa IV*: 213-223.
- HIN S., 2013, *The Demography of Roman Italy*, Cambridge.
- HOLCK P., 1997, *Cremated Bones: a Medical-anthropological Study of an Archaeological Material on Cremations Burials*, Oslo.
- LOVEJOY C.O., MEINDL R.S., PRYZBECK T.R., MENSFORTH R.P., 1985, “Chronological Metamorphosis of the Auricular Surface of the Ilium: a New Method for Determination of Adult Skeletal Age at Death”, in *American Journal of Physical Anthropology* 68: 15-28.
- MASOTTI S., GUALDI-RUSSO E., 2014, “Metodologie di identificazione da resti umani combusti”, in *Annali dell’Università degli studi di Ferrara, Museologia Scientifica e Naturalistica* 10/2: 354-358.
- MASOTTI S., MONGILLO J., GUALDI-RUSSO E., 2020, “Burned Human Remains: Diachronic Analysis of Cremation Rituals in Necropolises of Northern Italy”, in *Archaeological and Anthropological Sciences* 12: 74.
- MCKINLEY J.I., BOND J.M., 2001, *Cremated Bone*, Handbook of Archeological Sciences Wiley, Chichester: 281-292
- MONACO L., c.s., “Necropoli romane a Gazzo Veronese: studio e analisi archeometriche del materiale vitreo”, in *Archeologia Veneta* c.s.
- ONISTO N., DRUSINI A.G., 1999, “Analisi morfologica, diffrattometrica e termica di resti ossei dalle necropoli a incinerazione di età romana di Altino, (Venezia)”, in *Quaderni di Archeologia del Veneto* 15: 160-167.
- PORTULANO B., RAGAZZI L., 2010, *Fuoco, cenere, terra. La necropoli romana di Cascina Trebeschi a Manerbio*, Rodengo Saiano.
- RICCI A., 1985, “Ceramica a pareti sottili”, in *Atlante delle forme ceramiche II*, Roma: 231-365.

- RINALDO N., ZEDDA N., BRAMANTI B., ROSA I., GUALDI-RUSSO E., 2019, "How Reliable is the Assessment of Porotic Hyperostosis and Cribra Orbitalia in Skeletal Human Remains? A Methodological Approach for Quantitative Verification by Means of a New Evaluation Form", in *Archaeological and Anthropological Sciences* 11: 3549-3559.
- ROSSI C., 2011, *Necropoli urbane di Padova Romana*, Padova.
- SABBATANI S., FIORINO S., 2009, "La peste antonina e il declino dell'Impero romano. Ruolo della guerra partica e della guerra marcomannica fra il 164 e il 182 d.C. nella diffusione del contagio", in *Le infezioni in medicina* 4: 261-275.
- SCHEUER J.L., MUSGRAVE J.H., EVANS S.P., 1980, "The Estimation of Late Fetal and Perinatal Age from Limb Bone Length by Linear and Logarithmic Regression", in *Annals of Human Biology* 7(3): 257-265.
- SFREDDA N., 1998, "Ceramica a vernice nera", in G. OLCESE (a cura di), *Ceramiche in Lombardia tra il II secolo a.C. e VII secolo d.C. Raccolta dei dati editi*, Mantova: 21-27.
- TASSINARI G., 1998, "Ceramica a pareti sottili", in G. OLCESE (a cura di), *Ceramiche in Lombardia tra il II secolo a.C. e il VII secolo d.C. Raccolta dei dati editi*, Mantova: 37-65.
- Trouvailles monétaires = Trouvailles monétaires de tombes*, Actes du deuxième colloque international du Groupe suisse pour l'étude des trouvailles monétaires (Neuchâtel, 3-4.3.1995), Prahins 1999.
- UBELAKER D.H., 1989, *Human Skeletal Remains*, Washington 1989².
- VAN VARK G.N., 1975, "The Investigation of Human Cremated Skeletal Material by Multivariate Statistical Methods, II. Measures", in *Ossa* 1: 47-68.
- ZENTILINI E., 2018, "*Instrumenta inscripta* dal territorio di Gazzo Veronese (Verona)", in *Rei Cretariae Romanae Fautorum Acta* 45: 459-466.