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**A late Roman infant cemetery in the Villa Poggio Gramignano
near Lugnano-in-Teverina, Italy**

Busby, Kimberly Sue, M.A.

The University of Arizona, 1992

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A LATE ROMAN INFANT CEMETERY IN THE VILLA POGGIO
GRAMIGNANO NEAR LUGNANO-IN-TEVERINA, ITALY

by

Kimberly Sue Busby

A Thesis Submitted to the Faculty of the
DEPARTMENT OF CLASSICS
In Partial Fulfillment of the Requirements
For the Degree of
MASTER OF ARTS

In the Graduate College
THE UNIVERSITY OF ARIZONA

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APPROVAL BY THESIS DIRECTOR

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David Soren
Dr. David Soren
Professor of Classical Archaeology

8-17-82

Date

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ABSTRACT

The Villa Poggio Gramignano is a Roman villa site located in southwestern Umbria. Its original date of construction is attributable to the second half of the first century B.C. but the "life" of the villa continued through a number of phases until the late fifth to early sixth century A.D. when habitation of the surrounding area ceased. By the fourth century A.D., the villa was in a state of ruin, however, the southwestern area of the villa, particularly rooms 10, 11, 12, 15 and 17 were being reused as infant sepulchres. This thesis represents the preliminary findings of three seasons of excavation work, 1989-1991, by the University of Arizona, in the area of the villa occupied by the infant cemetery. In effect, it is a discussion of late Roman burial rite in a specific context.

This preliminary report on the excavations provides a detailed description of each of the forty seven burials as well as an analysis of these burials and the finds associated with them. In addition, a tentative relative chronology for the burials is given as well as a description of the organization of the cemetery as a whole. Possible factors contributing to its exclusive nature are also explored, as are other examples of infant cemeteries in the Roman world. Lastly, the discussion turns to the possible causes for the numerous infant burials in the Poggio Gramignano cemetery.

IV. THE EXCAVATION

Circumstances of The Excavation

The University of Arizona began its excavations at the Villa Poggio Gramignano in June of 1988 under the auspices of the Associazione Pro Loco. Earlier reconnaissance and excavation of the site, which lies near the village of Lugnano-in-Teverina in southwestern Umbria, consisted mainly of surface surveys and a number of trial trenches dug by Dr. Daniela Monacchi in 1983 and 1984. At that time, it was ascertained the site represented an approximately 2000 square meter villa of the Roman period, for which the region is well known.¹

Reports of clandestini robbing the site, prompted the local Italian archaeological service to initiate a full-scale investigation. An excavation team, directed by Dr. David Soren of The University of Arizona, was brought in to excavate and restore the villa. In the course of excavation, a chance discovery was made of a cemetery thus far containing the remains of forty-seven infants, with an undetermined number, yet to be recovered, from an unexcavated area. It is this infant cemetery, which provides us with an example of late Roman burial rite in a specific context, that serves as the basis for the

¹Umbrian Villas: E. Feruglio (ed.) Ville e Insediamenti Rustici di etta Romana in Umbria (Perugia, 1983).

following thesis.

Archaeological Background

History of the Site

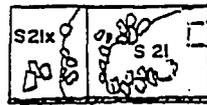
The villa lies on a hill known as Poggio Gramignano, two and a half kilometers directly east of the Tiber River in the region of Terni, Umbria and five kilometers south of the village of Lugnano-in-Teverina. For the past four excavation seasons, the site has served as an archaeological training ground for both graduate and undergraduate Classics majors at the University of Arizona. It has also proven to be the source of inspiration for a number of research projects, of which this thesis is one. To date all or portions of seventeen rooms in the villa have been excavated, most down to their original floor level (see plan 1.1). That portion of the villa which has thus far been excavated, lies along the villa's southwest extent. Both the construction techniques, although provincial in character, and the black and white tessellated mosaics of the villa, place its original construction in the second half of the first century B.C.²

²The mosaic pavements including an all over mini-cross pattern, an imbrication or fish scale pattern, and a six petalled rosette within a circle, all in black and white, suggest a date of the late Republican period to the Early Empire, most likely the last quarter of the first century B.C. (see illustrations 1.2 and 1.3). For a discussion of black and white, all over patterns, in mosaics, see chapter on Mosaics by David Smith in Martin Henig (ed.) A Handbook of Roman Art (Ithaca, 1983). Also, Marion E. Blake, "The

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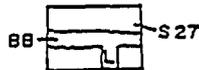


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 FOR
 1991 FIELD SEASON
 UNIVERSITY OF ARIZONA

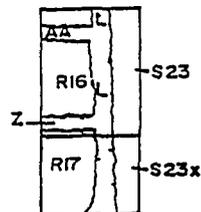
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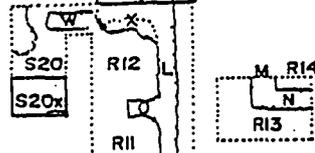
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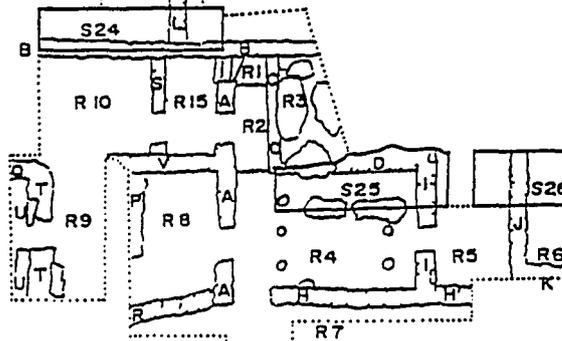
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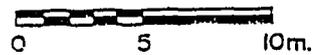
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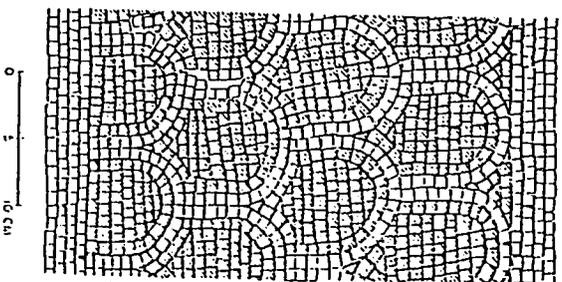
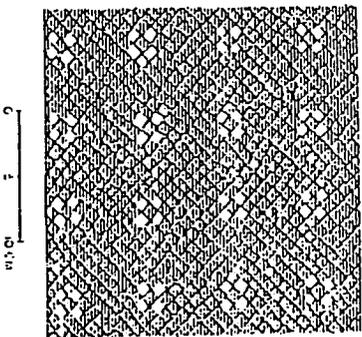
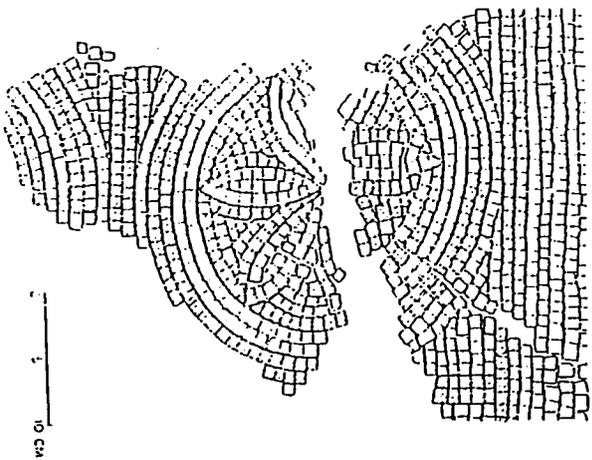


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The Site in its Roman Setting

The villa appears to have been in continuous use for a period of about two hundred years after its original date of construction. By the late second or early third century A.D., the villa had been abandoned and allowed to fall into ruin, a scenario which was being played out over vast regions of Italy during the second century A.D. This apparent phenomenon, which witnessed the desertion of Roman villa estates during the course of the Empire, was lamented in antiquity and is debated by modern scholars.³ A. Carandini outlines the problem as evidenced by the villas in the area of the Ager Cosanus. "These villas continued in existence until some time in the second century A.D. and were then abandoned and allowed to fall into ruin. Evidence from Sette Finestre suggests that they were already in decline early in the second century A.D. and that at the latest they were completely deserted by the time of Marcus Aurelius. This possibly indicates that a vast latifundium

Pavement of the Roman Buildings of the Republic and Early Empire" Memoirs of the American Academy in Rome. 8 (1930), pp. 7-160. And, Ashar Ovadiah, Geometric and Floral Patterns in Ancient Mosaics. (Rome, 1980).

³Arthur E. R. Boak, Manpower Shortage and the Fall of the Roman Empire in the West (Ann Arbor, 1955) argues there is a case for this historical pattern due to a manpower shortage. Contra C.R. Whittaker, "Agri Deserti" in M.I. Finley (editor), Studies in Roman Property (Cambridge, 1976), pp. 137-165. Also, A. Carandini, Schiavi in Italia (Rome, 1988).

had taken over."⁴ The villa at Poggio Gramignano appears to fall into this historical pattern of the so-called "agri deserti," while certainly attesting to its existence outside the region of the Ager Cosanus.

At some point during the third century A.D., the villa area was reinhabited, perhaps by squatters. Certainly by the mid-fifth century A.D. if not by the fourth century A.D., the ruins of the former villa, specifically those rooms along its southwest extent, were being reused as sepulchres for an infant cemetery. These rooms included a series of barrel vaulted rooms, 11, 12 and 17, which had previously served to buttress the hilltop villa, as well as rooms 10 and 15, whose placement downslope made them ideal as burial chambers. The area just to the southwest of these latter two rooms proved to be a dump site for the inhabitants of the area. Over time, dump and cemetery became mixed in rooms 10 and 15.⁵

The villa ruins functioned as an infant cemetery for a

⁴A. Carandini and T. Tatten-Brown, "Excavations at the Roman Villa of "Sette Finestre" in Etruria, 1975-9. First Interim Report" in Kenneth Painter (editor), Roman Villas in Italy Recent Excavations and Research (British Museum Occasional Paper No. 24, 1980) p. 11.

⁵"Pits full of the normal detritus of the Roman household do sometimes contain the skeletons of infants, as at Radwinter, Essex, where six infants were found in a rubbish pit." Barry Cunliffe, Excavations at Portchester Castle Vol. I (Roman Reports of the Research Committee of the Society of Antiquaries of London XXXII, 1975), p. 376.

relatively short period of time with the majority of the burials occurring in the middle of the fifth century A.D. Two Theodosian coins, A.D. 388-392, found in an upper level of the cemetery give us a terminus post quem of A.D. 388 for the very latest burials in the cemetery. Surface sherds datable to the later fifth century A.D. suggest that occupation or use of the site ceased at this time; however, a few medieval pieces have been recorded. The cemetery's inception, however, is not so clear. Amphorae from the lowest level of the cemetery include forms that may date to as early as the third century A.D.; however, their period of manufacture may cover a period of several centuries. Thus their presence cannot provide us with an absolute date. There is also the question as to how long after their original date of manufacture, these amphorae were put into use as infant coffins. Leaving that question aside, it would seem plausible that the first burial postulated for the cemetery, burial 38, was followed closely by burials 33, 35 and 32, which, in fact, derive their placement from the siting of burial 38. These three burials, in turn, lie at a level contiguous with the majority of burials in the cemetery. It is precisely at this level that a number of amphorae forms appear which cannot date prior to the mid-fourth century A.D. but may be as late as the late fifth century A.D.

Analysis of the ceramic forms found at the level where the majority of burials are deposited, indicates a date in the fifth century A.D., possibly at its midway point. In all likelihood, then, this clustering of burials dates to the period around A.D. 450. Approximately half of the forty-seven burials are attributable to this time period, which may require an explanation beyond the normally high infant death rate experienced in antiquity. It is hoped that the following discussion will serve as the foundation for further research into the character of late Roman societies, particularly those in the less affluent provincial areas of the Empire, and what effect, if any, their particular societal conditions and pressures had upon their mortuary ritual.

Limitations of the Data

The scope of the present study is limited by the nature of the site itself, an infant only cemetery, removed from the communal burial ground for the adult population. It is also limited to the extent that it remains a work in progress. The exact limits for some portions of the infant cemetery have yet to be determined. In addition, a specialist report with a full skeletal analysis of the burials will be presented in a separate publication. As a result, what follows is merely a preliminary report of the findings for the 1989-1991 excavation seasons.

It appears at present the infant cemetery is confined to an area bounded by wall V to the southwest, walls L, A and that portion of wall B, which lies between them, to the southeast and wall Z to the northeast (see plan 1.1). The northwest extent of the cemetery, that area northwest of the excavated portions of the barrel vaulted rooms 11, 12 and 17 and room 10, is unknown. Additionally, the portion of room 17 which was excavated last season has yet to be excavated down to its original floor level. To date, forty three burials have been discovered as well as the remains of four other infants, which were disturbed by clandestini. It has been postulated by the principal excavator that as many as sixty to sixty-five burials will be uncovered once all the limits of the cemetery have been determined.

Other factors seriously limit the conclusions which can be drawn from the available evidence. At the present time, it is impossible to determine the infant mortality rate for the site with any certainty based on the burials so far recovered.⁶ Our lack of knowledge concerning the size of the adult population, living in the vicinity and using the ruins of the former villa as an infant cemetery, precludes

⁶The concept of infant mortality rates as used by demographers refers to the numbers of deaths in the first year of life proportionate to live births. Peter Garnsey, "Child Rearing in Italy" in The Family in Italy from Antiquity to the Present (New Haven, 1991), p. 52. See also Thomas Wiedemann, Adults and Children in the Roman Empire (London, 1989), p. 11.

our establishing an infant mortality rate for the population as a whole. The problems faced when trying to establish an infant mortality rate for an ancient population are outlined by Humphreys and King. "It is difficult to determine infant mortality rates for several reasons. The dead child was often not buried in the community cemetery but rather under the floor of the dwelling as at Frilford, in a nearby ditch as at Owlesbury, or to the side of the main cemetery. The bodies of infants can easily be missed during incomplete excavation of a site, especially in those cases where children, dying before they could toddle or talk, were buried in another part of the cemetery. Or, being fragile, they may be destroyed by erosion in the soil."⁷

Certainly, the infant cemetery in the villa Poggio Gramignano lies outside the community cemetery, which may be located approximately 500 meters north of the villa. In addition, the infant remains have been placed within the confines of a dwelling, albeit one that was no longer being used for that purpose. It is difficult to say conclusively, whether or not, those infant burials thus far recovered, reflect the normal infant mortality rate for the local population during the fourth and fifth centuries A.D., but it seems highly unlikely that as many as eight infants would

⁷S.C. Humphreys and Helen King, Mortality and Immortality: The Anthropology and Archaeology of Death (London, 1981), p. 21.

be buried at one time. Once excavation for the infant cemetery and the corresponding adult cemetery has been completed, a reasonable estimate of the infant mortality rate for the local population can then be inferred.

Although ancient demography is far from precise, population studies for the Roman period demonstrate that there was a high percentage of infant deaths. "There are many fewer tombstone inscriptions to infants and young children than we should expect. Demographic expectations, based on comparative evidence, indicate that more than a quarter (28%) of all live-born Roman babies died within their first year of life (assuming a life expectancy of 25 years from birth)."⁸

In difficult times, especially where extreme poverty, disease and famine were factors, we would expect that percentage to increase. As John Collis has shown at Owlesbury Farm in England, the percentage of infant deaths can be as high as 60%. In this particular instance, Collis attributes the high percentage of infant deaths at Owlesbury Farm to the practice of infanticide.⁹ A similar conclusion was drawn by the excavator of the Hambledon villa in the

⁸Keith Hopkins, "Death and Renewal: Sociological Studies in Roman History (Cambridge, 1983), p. 225.

⁹John Collis, "Owlesbury (Harts.) and the Problem of Burials on Rural Settlements" in Burial in the Roman World (The Council for British Archaeology Research Report 22 (1977), pp. 26-34.

middle Thames valley where 97 infant burials were found.¹⁰ It would appear, due to the range in age at death of the infants and the numerous examples where burial preparation did play a role, that the burials in the Poggio Gramignano cemetery were not, on the whole, the result of the practice of infanticide. Individual instances of death as a result of infanticide or abortion should not, however, be ruled out altogether.

The Burials: A Description

Burials in Amphorae

Burial 1

Context: grid M49d, locus 468

Preparation for Burial: Burial 1 is a fetus which rests in an amphora not wholly preserved, only the neck and a portion of the body were found intact. It appears the amphora had been deliberately broken in order that the fetus could be placed inside.

Orientation: Burial 1 lies on a line which is diagonal to wall O and touches wall O at a point just below the shoulder area of the amphora. The neck of the amphora is oriented to the northeast while the body of the amphora points to the southwest. The head of the fetus is oriented towards the neck of the amphora, northeast to southwest. Burial 1 lies

¹⁰A. H. Cocks, "A Romano-British Homestead in the Hambledon Valley, Bucks," Archeologia 71 (1921), pp. 141-198.

in an upper level of the cemetery and may represent one of the latest burials.

Age: 10 L.M.

Burial 2

Context: grid M49d, locus 464

Preparation for Burial: Burial 2 uses a complete amphora to hold the remains of a 4-6 month old infant. A pan tile fragment from the ruins of the former villa was used as a stopper for the amphora. Similarly, a fragment of a cover tile was used to hold on the shoulder of the amphora, which had been cut out in order that the infant could be deposited within.¹¹

Orientation: Burial 2 lies on the same axis as wall O. It may, in fact, lie in an area that was once a doorway connecting barrel vaulted rooms, 11 and 12. The toe of the amphora points toward the end of barrel vaulted wall O. The head of the infant is oriented towards the mouth of the vessel which points to the northwest. Burial 2 lies just above burials 27 and 6.

Age: 4 - 6 months.

Burial 3

¹¹This deliberate placing of tiles and/or stones is called "packing" and it recurs throughout the Roman period. Giles Clarke, The Roman Cemetery at Lankhills. Winchester Studies 3. Pre-Roman and Roman Winchester, (Oxford, 1979), p. 355. A number of the Poggio Gramignano burials exhibit characteristics of this practice.

Context: grid M49d, locus 851

Preparation for Burial: A complete amphora is used to hold the fetal remains of burial 3. The center of the amphora shows signs of deliberate breakage, presumably to allow the remains to be placed inside. The amphora was further prepared for the burial by the placement of a dolium fragment under the northeast shoulder of the vessel for support. A triangular shaped tile fragment was used as a stopper and another similarly shaped fragment with a stamp impression lay directly on the body of the amphora.

Orientation: The mouth of the vessel is oriented slightly northwest of true north, while the toe points to the southeast at a 25% downward gradient. Once again the head of the fetus is oriented towards the mouth of the amphora. The placement of the vessel itself is parallel to wall O, but not adjacent to it. The vessel's placement may lie in or along a doorway that has been postulated for the barrel vaulted wall O. Burial 3 may be contemporary with burials 2, 6, 12 and 27 which are all adjacent to it.

Age: 8 - 8.5 L.M.

Burial 4

Context: grid M49b, locus 950

Preparation for Burial: Amphora 4333 is a complete vessel. The body of an infant was found inside the amphora which had its center cut out for the placement of the remains. Two

overlapping cover tiles had been placed over the central portion of the amphora. A pan tile fragment had been placed on the northeast side of the cover tiles to keep them in position. Additionally, two pan tile fragments flanked the neck portion of the amphora.

Orientation: Amphora 4333 appears to be aligned along the wall of barrel vault X but not directly adjacent to it. The mouth of the amphora points to the southeast, and the head of the infant is oriented towards the mouth of the amphora. This burial lies above two copper alloy vessels, presumably funerary offerings. The two copper alloy cauldrons, one placed just inside the other, do not appear to be associated with this particular burial or any other burial. Perhaps, they were meant as a general offering to all the infants placed in the cemetery. The placement of burial 4 in locus 950 occurred at a date late in the cemetery's existence which can be securely dated. A coin of the emperor Theodosius found by the author in locus 950 is datable to A.D. 388-392. Therefore the burial dates to the period after A.D. 388 and probably no later than the late fifth century A.D.

Age: 4.5 - 5.5 months

Burial 5

Context: grid M49b/d, locus 954

Preparation for Burial: The neck of torpedo amphora, 4705,

had been removed in antiquity. Otherwise the vessel was complete. The body of a neonate had been placed within and two stoppers, a piece of travertine stone and a chunk of mortar, reused from the villa itself, were placed over the opening of the vessel, just touching the infant's skull.

Orientation: The length of the amphora was placed against wall L with the mouth of the vessel pointing northeast.

Burial 5 may be contemporary with burials 19, 30 and 29.

Age: neonate

Burial 19

Context: grid M48b/d, locus 467/1954

Preparation for Burial: Burial 19 is of a 4-5 month old infant placed in the lower portion of an amphora. Like burial 5, this burial has a stone stopper covering the mouth of the amphora. The amphora had been deliberately cut in antiquity to insert the baby in the bottom portion. The toe of the amphora was used for burial 9 which would suggest that these two burials 19 and 9, were buried at the same time. It is probable that burials 29, 30, and 31 are also contemporaneous with these two.

Orientation: Amphora 3242 (burial 19) was placed at a right angle to amphora 4705 (burial 5), perpendicular to wall L and on the same alignment as the barrel vaulted walls but not directly adjacent to any of them. The orientation of the infant is northeast, to southwest, head to toe.

Age: 4 - 5 months.

Burial 25

Context: grid M49a, locus 1153

Preparation for Burial: Burial 25 is unusual in that it utilizes both the upper portion of an amphora and a round ceramic jar, rim not preserved. The body portion of the amphora was placed just inside the mouth of the round ceramic jar prior to interment.

Orientation: This burial is aligned with its length following the line of wall W. The body of the infant is contained within the amphora portion of the burial. It had been placed on its left side in the fetal position with its head towards the mouth of the amphora. The mouth of the amphora was oriented to the northwest. Burial 25 lies on the same line as double burial 14 and 24 which are also aligned with wall W but at a lower level.

Age: Neonate - 1 week

Burial in Partial Amphorae

Burial 9

Context: grid M49d, locus 467

Preparation for Burial: Burials 9, 30 and 31 were found in association with one another in what was originally thought to be one complete amphora. Upon further excavation, it became clear there were three distinct bodies which had been interred at the same time, using a number of different

amphorae fragments (see below for burials 30 and 31).

Burial 9 used the toe of amphora 4198 as a burial vessel.

Orientation: The amphora toe, 4198, was positioned with the toe end pointing due south at the point where wall L is intersected by barrel vault wall O. Burial 9 is adjacent to burials 30 and 31 and had been placed directly below burial 12 in the soil. It is representative of a number of burials interred at the same time in the northeast corner of room 11 of the villa.

Age: neonate to two weeks

Burial 30

Context: grid M49d, locus 467/954

Preparation for Burial: Burial 30 is part of the aforementioned cluster grouping uncovered in the northeast quadrant of trench M49d. The fetal remains of burial 30 were covered by a number of amphorae fragments after being placed in the soil.

Orientation: Burial 30 lies at the northeast extent of burials 9, 30 and 31 which were found together. It lies between burials 31 and 19 and just above burial 5. The exact orientation of the fetus is not known.

Age: 9-5 - 10.5 L. M.

Burial 31

Context: M49d, locus 467

Preparation for Burial: Burial 31, like burial 30, was

interred beneath two amphora fragments. Burials 9, 30 and 31 were interred simultaneously.

Orientation: The amphora fragments of burial 31 were prone against the northwest face of wall L due to the force of weight bearing down from the accumulation of dirt and debris from above. Burial 31 lies between burials 9 and 30, and it lies below burial 29. The infant remains were so disarticulated that the body's orientation is not known.

Age: neonate - 2 weeks

Burial 38

Context: grid M49b/d, locus 1361

Preparation for Burial: This burial is a simple inhumation with the addition of an amphora fragment covering the fetal remains.

Orientation: The bones of burial 38 at some point were disturbed, most likely by rodents, but the body is believed to have been buried in the fetal position on its right side. This burial is aligned with its length flush against wall L, 20 cm below burial 335. The alignment of the fetus is northeast to southwest (head to toe).

Age: 6 - 6.5 L.M.

Simple Inhumation

Burial 6

Context: grid M49b/d, locus 464

Preparation for burial: The body of a 5-6 month old infant

was laid out in an extended position on its left side. Rocks were found propping up the back and legs of the infant.

Orientation: Burial 6 lies perpendicular to wall O and may lie in a doorway which has been postulated for barrel vaulted wall O. It lies between burials 12, 27 and 2. As stated above, the body was placed on its left side with legs extended and the head was oriented to the northwest.

Age: 5 - 6 months.

Burial 7

Context: M50 a/b, locus 708

Preparation for Burial: No preparation for burial was noted.

Orientation: The skeleton was too disarticulated to determine its orientation. Burial 7 may have been buried at the same time as burial 26.

Age: 9.5 - 10 L.M.

Burial 8, a and b

Context: grid M489d, locus 470/472

Preparation for Burial: A concentration of bones found in the west quadrant of grid M49d during the 1989 excavation season resulted in two burials, 8a and 8b.

Orientation: The exact orientation for these two burials is unknown due to their state of disarticulation. Both bodies appear to have been interred at the same time and may

represent the burial of twins. Although no other burials are directly adjacent to these two burials, they are buried at a level where a number of burials appear to cluster.

Age: 9.5 - 10 L.M. (a and b)

Burial 10

Context: grid M50b, locus 801

Preparation for Burial: The fetal remains of burial 10, although inhumed, were laid out on a small mound of sherds, rubble stones, pan tile fragments (some nearly whole) and cubilia.

Associated Finds: An egg shell was found among the remains of burial 10.¹²

Orientation: The fetal remains are aligned along wall A of the villa, with the head pointing to the northeast. The body was found in a supine position, left leg slightly flexed. The left arm was drawn across the chest. Burial 18 lies approximately 8 cm to the northeast of burial 10.

Age: 10 L.M.

Burial 11

Context: grid M50b, locus 802

Preparation for Burial: The fetal remains of burial 11 seem to have been carelessly thrown or placed against wall S. No

¹²Eggs in a funerary context could represent the remains of a funerary meal or, perhaps, the egg, thus its shell, could have been considered the chthonic symbol of rebirth. Clarke (1979), p. 410.

significant associated finds or burial markers were found. Orientation: Burial 11 is aligned along wall S in the southwest corner of room 15. The fetus was placed on its left side in a supine position. This burial appears to be contemporaneous with burial 16 to the south.

Age: 9 - 10 L.M.

Burial 12

Context: grid M49b/d, locus 464

Preparation for Burial: Burial 12 is a simple inhumation of a fetus buried in an extended position. The extended legs end at wall O and a small piece of pottery appears to have been deliberately placed between the legs.

Orientation: Burial 12 is located 10 cm southeast of burial 6. It is also adjacent to burial 29 and lies just above burial 9. The head of the fetus was oriented to the northwest, with the body in a supine position, legs extended.

Age: 9 - 9.5 L.m.

Burial 13

Context: grid M49b/d, locus 852

Preparation for Burial: Burial 13 is an incomplete skeleton of a neonate, whose bones had been scattered, possibly due to rodents. The lower left arm and head, a hip bone, femur and left tibia were the only bones recovered. These bones may be associated with a number of disarticulated amphorae

fragments.

Orientation: The exact orientation is unknown. The burial is adjacent to burial 5 and it follows the line of wall L.

Age: 10 L.M. - neonate

Burial 16

Context: grid M50b, locus 802

Preparation for Burial: The body was simply inhumed at the point where wall S intersects wall V.

Associated Finds: Two bone hairpins and a brickstamp were found in association with burial 16.

Orientation: The body lies perpendicular to wall S and parallel to wall V. The body had been placed on its back with the legs extended and the arms down at its sides. The orientation of the body is southeast (head) to northwest (toe).

Age: Neonate

Burial 17

Context: grid M50a/b, locus 1005

Preparation for Burial: Burial 17 shares some affinities with burial 15 which is in the same locus. Both are inhumations, and both are surrounded by a ring of stones.

Burial 17, however, does not include a cover tile as part of the burial preparation (see burial 15 below)

Associated Finds: A skeleton, possibly of a cat, was found southwest of burial 17 in the south corner of room 10.

Orientation: Burial 17 was placed flush against wall S and extended into a doorway area. Burials 7 and 26 in the same room, room 10, are similarly aligned with wall S.

Age: Neonate - 1 week.

Burial 18

Context: grid M50b, locus 801

Preparation for Burial: Burial 18 is a disarticulated inhumation burial which may have been disturbed by earlier excavations in the area.

Orientation: Burial 18 lies northeast of burial 10 and follows the line of wall A of the villa. The head appears to have been oriented to the southeast, the feet to the northwest. The body was placed on its right side in the fetal position with the left arm at the side, the right arm out to the right and slightly flexed.

Age: 9 - 9.5 L.M.

Burial 21

Context: grid M48a, locus 1052

Preparation for Burial: Burial 21 is a simple inhumation, the body having been buried in the fetal position upon a sizable ceramic fragment.

Orientation: The orientation of burial 21 is on a line parallel to wall W, at a point just beyond where wall W ends in trench M49a. The body was placed in the fetal position on a large piece of ceramic ware, with the head pointing to the

northwest, the feet to the southeast.

Age: 8 - 8.5 L.M.

Burial 22

Context: grid M49a (northeast baulk), locus 1650

Preparation for Burial: Burial 22 was originally discovered by the author during the 1990 excavation season while trimming back the northeast baulk of M49a. The leg bones were removed but the rest of the fetus was left in situ until the 1991 excavation season.

Associated Finds: A copper alloy ring was discovered 5 cm to the northwest of burial 22.

Orientation: The body appears to have been inhumed on its right side in the fetal position with its head oriented just slightly northeast of true north and its legs pointing to the southwest.

Age: 8.5 - 9.5 L.M.

Burial 23

Context: grid M50b, locus 801

Preparation for Burial: Burial 23 rests on an earthen platform which had been built up and held in place by a retaining wall using a number of cubilia, tile fragments, and column wedges reused from the former villa.

Associated Finds: A brick fragment with an imprint of a dog's paw was found in association with this burial. An amphora toe set vertically on the platform next to wall B

may have served as a funerary marker.¹³

Orientation: The placement of this burial is at the northwest corner of trench M50b, where wall S intersects wall B. The length of the burial is aligned with wall B. The infant was found in a supine position. Its head was oriented to the northwest.

Age: 10 L.M. - neonate

Burial 26

Context: grid M50a/b, locus 703

Preparation for Burial: No preparation was noted.

Orientation: Burial 26 was aligned along wall S in the east corner of room 10. Its exact orientation is not known.

Age: Neonate - 2 weeks

Burial 27

Context: grid M49b/d, locus 464

¹³"Poor Romans were sometimes buried in giant wine jars (amphorae) split in half to form a cheap container and cover for the corpse, smaller wine jars were also used as receptacles for the ashes, their necks projecting above ground, both to mark the grave and to serve as a funnel, down which the bereaved could pour libations to the dead." Keith Hopkins (1983), p. 211. For amphorae burials in the Isola Sacra cemetery at Ostia, see Jocelyn Toynbee, Death and Burial in the Roman World (Ithaca, 1971) p. 102. For 6 amphorae with neonate burials in Early Christian Sicily, see Laura Bonomi, "Cimiteri paleocristiani di Sofiana," Rivista di Archeologia Cristiana Vol. XL Nos. 3-4 (1964), p. 202. Also Christopher Green, "The Significance of Plaster Burials for the Recognition of Christian Cemeteries," in Richard Reece (editor), Burial in the Roman World (The Council for British Archaeology Research Report No. 22, 1977), p. 47. These articles inform us that burial in amphorae was not exclusively a Christian burial rite nor was it confined to late antiquity although it appears more prevalent in the late empire.

Preparation for Burial: The fetal remains of burial 27 were disarticulated and had been further crushed by a rock which had fallen on the body.

Orientation: The orientation of the body had the head pointing to the southeast, the legs to the northwest. The burial lies perpendicular to wall 0 and next to burial 6, but below burial 2. It lies just above and to the north of burial 3. It appears burials 2, 3, 6 and 27 are contemporaneous. The fetal remains were in the supine position with the legs extended.

Age: 6 - 6.5 L.M.

Burial 29

Context: grid M49d, locus 467

Preparation for Burial: The fetal remains were simply inhumed.

Orientation: Burial 29, a simple inhumation, was uncovered in the 1989 excavation season in the northeast quadrant of grid M49d. This burial is positioned directly above burial 31 and next to burial 12. The head orientation is unknown.

Age: 7 - 8 L.M.

Burial 32

Context: grid M49b/d, locus 1351

Preparation for Burial: Burial 32 is a simple inhumation, perhaps part of what appears to be a cluster burial (32, 33, and 35). All seem to have been deposited in the same pit,

dug for their placement, and the pit was later filled in with a loose, sandy soil. The only other preparation for burial was the placement of a stone over the body.

Orientation: This burial is not aligned with any of the villa walls. It is, however, perpendicular to burial 35, which was most likely deposited at the same time in a position perpendicular to wall L, nearly touching it. The fetus was in a supine position with the head oriented due east.

Age: 9 - 9.5 L.M.

Burial 33

Context: M49c/d, locus 1401

Preparation for Burial: Burial 33, like burial 32 which lies just above it, is a simple inhumation. It appears that these two burials along with burial 35 were interred at the same time.

Orientation: The body had been placed in the fetal position on its right side with an orientation of east to west (head to toe). Both arms were extended out to the left slightly flexed. The feet were not recovered. Although this burial is not aligned with any of the villa walls, its placement in the soil may be as a result of the placement of burials 32 and 35.

Age: 10 L.M. - 22 weeks

Burial 34

Context: grid M49c/d, locus 1411

Preparation for Burial: The fetal remains of burial 34 were simply inhumed in the soil at the point where walls L and B of the villa meet. They were uncovered in a bad state of preservation.

Orientation: The fetus had been placed on its left side in the fetal position facing the corner where walls L and B intersect, with an east to west orientation, head to toe.

Age: 9.5 - 10 L.M.

Burial 35

Context: grid M49b/d, locus 1360

Preparation for Burial: The skeleton of burial 35 is incomplete from the waist down. The burial is a simple inhumation which appears to have been deposited at the same time as burials 32 and 33.

Orientation: The body was placed on its left side perpendicular to wall L and 20 cm directly above burial 38. The head was oriented towards the east and was found touching wall L.

Age: 10 L.M. - neonate

Burial 36

Context: grid M48d/M49b, locus 1609

Preparation for burial: The body was inhumed on a bed of stones and bricks in a supine position, the legs slightly flexed. The hands of the infant had been placed underneath

the pelvis, while the feet rested under a brick.

Orientation: The body is oriented southeast to northwest (head to toe), and lies approximately 7 cm to the northeast of burial 37, which may be contemporary.

Age: 2-3 years. The infant suffers from a condition known as cribia orbitalia.¹⁴

Burial a Coppo

Burial 15

Context: grid M50alb, locus 1005

Preparation for Burial: Burial 15 consists of numerous stones placed in a ring formation around the fetal remains. A ridge tile had been placed over the skull of the fetus.

Associated Finds: Two amphora fragments were uncovered between burial 15 and wall V and may have originally been set vertically in the soil to act as a grave marker.

Orientation: This burial lies parallel to wall V but not directly next to it. As with burial 17 (see above), it lies at the same distance from wall V, but at a slightly lower level. The head of the fetus is oriented due east.

Age: 9.5 - 10 L.M.

Burial 37

Context: grid M48d/M49b, locus 1610

¹⁴Cribia Orbitalia is a condition characterized by expanded spongy tissue in the frontal bone, cranial base and marrow cavity of the long bones. See Peter Garnsey (1991), p. 65 for a brief discussion of cumulative deficiency disease in children including cribia orbitalia.

Preparation for Burial: Burial 37 consisted of a ridge tile placed over the fetal remains which had been placed on a cover tile. Stones served as stoppers at either end. The remains were supine with the knees drawn up and slightly turned to the right. The right arm was down at the side while the left arm was placed across the pelvis.

Orientation: This burial exhibits a similar degree of orientation as burial 36 which was placed only 7 cm away, southeast to northwest. It is likely the two burials were contemporary and derive their placement from one another and their proximity to burial 40 which is aligned with wall Z of the villa.

Age: 9.5 - 10 L.M.

Triple Burial

Burial 20, a and b

Context: grid M50b, locus 801

Preparation for Burial: Burial 20, a and b, were simply inhumed at the same time as burial 28 in soil that was filled in shortly after the earthen platform of burial 23 was made. It is possible that the vertically set amphora toe on the platform may have served as a communal burial marker for burials 20, a and b, 23 and 28.

Associated Finds: A copper alloy finger ring was found in conjunction with burial 20, a and b.

Orientation: The fetus of burial 20a had been placed on its

right side in the fetal position with the head oriented to the southeast. The exact orientation of burial 20b is unknown. Unlike the other burials from trench M50b, burial 20, a and b and burial 28 are not aligned with any of the villa walls. Their placement may be related to the placement of burial 23 which is aligned with villa wall B. Age: 9.5 - 10 L. M. (both a and b).

Burial 28

Context: grid M50b, locus 801

Preparation for Burial: Burial 28 is a simple inhumation buried at the same time as burial 20, a and b (see above).

Orientation: The body of this neonate had been buried on its right side with its legs in the fetal position. The left arm was unflexed and projected down along the left side of the body while the right arm was slightly flexed and brought against the right knee. The head of the infant was oriented to the southeast. Burial 28 lies directly below burials 20a and 20b. This triple burial (20, a and b, 28) was uncovered in the soil layer between the bottom of the vertically set amphora toe and the bottom of the earthen platform.

Age: Neonate - 2 weeks

Double Burial in Amphorae

Burial 14

Context: grid M49a (southeast baulk), locus 1051

Preparation for Burial: Amphora 5252 rested inside amphora 5280 (burial 24), and was a complete vessel.

Orientation: Both amphorae were aligned along wall W of the villa. The toe of amphora 5252 points to the southeast, the mouth to the northwest. The fetus had been placed on its right side in the fetal position with its head oriented towards the mouth of the amphora (northwest).

Age: 9 - 9.5 L.M.

Burial 24

Context: M49a (southeast baulk), locus 1051

Preparation for Burial: Amphora 5280 was uncovered in the southeast baulk of trench M49a. The amphora was mostly complete from the shoulder to the toe, however, the portion of the amphora from the neck to the mouth had been removed in antiquity in order that a smaller amphora, 5252, could be placed within. Two stones, one on either side of the vessel underneath the shoulder area, were used to prop up the vessel(s).

Orientation: Both burials 24 and 14 were placed parallel to wall W. The toe of the amphora pointed to the southeast, the shoulder to the northwest.

Age: Neonate - 1 month

Capuchin burial

Burial 39

Context: grid M48d/M49b, locus 1611

Preparation for Burial: The body of the infant was placed in a supine position with the legs partially flexed. A capuchin type tomb, with tiles placed to form a gabled roof, was placed over the burial while a pan tile was placed under the infant. The southeast end of the tomb was covered by a tile, the northwest end, by a pottery sherd.

Orientation: The infant's head was oriented to the northwest, aligned with wall X of the villa.

Age: 4 - 6 months

Burial 40, a and b

Context: grid M48d/M49b, locus 1612

Preparation for Burial: Burial 40 represents another capuchin burial, however, it was more carefully prepared than burial 39, and contained the burials of two infants. In addition to the four pan tiles and one ridge tile which made up the capuchin tomb itself, there were also six cubilia, seven pan tile fragments, fourteen stones and one cover tile fragment used for support. The bodies were found in a supine position on either side of two vertically set tiles.

Associated Finds: The bodies had been covered with a layer of fine ash, presumably spread over them at the time of burial. In addition, a cooking pot with its base missing, charcoal, and fragments from a glass jar were found in association with these burials.

Orientation: Burial 40, a and b, is aligned with villa wall Z and thus is oriented northeast to northwest, Burial 40, a and b, may be contemporaneous or slightly earlier than burials 36 and 37, thus affecting their placement.

Age: 4-6 months, 40a

Neonate - 2 months, 40b

Table 4.1 The Burials: A List

Burial #	Locus	Grid	Vessel	Date	Age	Head Orientation
1	464	M49d	2965	1989	10 L.M.	NE
2	464	M49d	2988	1989	4 - 6 months	NW
3	851	M49d	4132	1990	8 - 8.5 L.M.	NW
4	950	M49d	4333	1990	4.5 - 5.5 L.M.	SE
5	954	M49b/d	4705	1990	Neonate	NE
6	464	M49b/d	---	1989-90	5 - 6 months	NW
7	708	M50a/b	---	1989	9.5 - 10 L.M.	unknown
8 a/b	470/472	M49d	---	1989	9.5 - 10 L.M.	unknown
9	467	M49d	4198	1989-90	Neonate - 2 weeks	unknown
10	801	M50b	---	1990	10 L.M.	NE
11	802	M50b	---	1990	9 - 10 L.M.	unknown
12	464	M49b/d	---	1990	9 - 9.5 L.M.	NW
13	852	M49b/d	4955	1990	10 L.M. - birth	unknown
14	1051	M49a	5252	1990	9 - 9.5 L.M.	NW
15	1005	M50a/b	5178, 5169	1990	9.5 - 10 L.M.	East
16	802	M50b	---	1990	Neonate	SE

17	1005	M50a/b	---	1990	Neonate - 1 week	unknown
18	801	M50b	---	1990	9 - 9.5 L.M.	SE
19	467/954	M49b/d	3242	1990	4 - 5 months	NE
20a/b	801	M50b	---	1990	9.5 - 10 L.M.	SE, unknown
21	1052	M49a	---	1990	8 - 8.5 L.M.	NW
22	1051	M49a	---	1990-91	8.5 - 9.5 L.M.	North
23	801	M50b	---	1990	10 L.M. - Neonate	NW
24	1051	M49a	5280	1990	Neonate - 1 month	NW
25	1153	M49a	5916,5917	1990	Neonate - 1 week	NW
26	703	M50a/b	---	1989	neonate - 2 weeks	unknown
27	464	M49b/d	---	1990	6 - 6.5 L.M.	SE
28	806	M50b	---	1990	Neonate - 2 weeks	SE
29	467	M49d	---	1989	7. 8 L.M.	unknown
30	467/954	M49d	---	1990	9.5 - 10 L.M.	unknown
31	467	M49d	3221	1990	Neonate - 2 weeks	unknown
32	1351	M49b/d	---	1991	9 - 9.5 L.M.	East

33	1401	M49c/d	---	1991	10 L.M. - 2 weeks	East
34	1411	M49c/d	---	1991	9.5 - 10 L.M.	East
35	1360	M49b/d	---	1991	10 L.M. - neonate	East
36	1609	M48d/M49 b	---	1991	2-3 years	SE
37	1610	M48d/M49 d	---	1991	9.5 - 10 L.M.	SE
38	1361	M49b/d	---	1991	6 - 6.5 L.M.	NE
39	1611	M48d/M49 b	---	1991	4 - 6 months	NW
40a/b	1612	M48d/M49 b	---	1991	4 - 6 months, Neonate - 2 months	unknown

V. ANALYSIS

Discussion of Burial Rite

A series of tables (5.1, 5.2, 5.3 and 5.4), plotting the distribution of burial rite within the villa, of burial rite according to age at death, of location of burial rite within the villa according to age at death and of burial orientation according to location within the villa, can be instructive. An examination of the type of burial rites evidenced in rooms 10, 11, 12, 15 and 17 of the villa reveals a patterning of burial rite relative to the age at death, which, in turn, appears to have affected the placement of the burials within the cemetery. This placement, in one of five rooms in the villa, appears to have been the determining factor in the orientation of the head of each of the burials. Of those burials whose orientation is known, a pattern emerges, whereby a particular directional alignment or alignments, is uniform for a particular room or is uniform for a number of burials clustered together in a portion of a room (see discussion below). With a room by room analysis, the following patterns were noted.

Starting at the southwest extent of the cemetery in room 10, burials 7, 17 and 26 are all simple inhumations. Burial 15 is a burial a coppo, a simple inhumation with the addition of a cover tile placed over the skull. Burials 15

and 17 have a common feature. They both include a ring of stones placed around the fetal remains, a feature that has not been noted anywhere else in the cemetery. Room 15, like the adjacent room 10, contains only simple inhumation burials. Burial 10 lies on a mound of sherds, stones and tile fragments. Another burial, 11, was carelessly interred and contained no grave offerings. Similarly, burial 18 was a simple inhumation with no grave offerings. Burial 16, although a simple inhumation, did include two bone hairpins, presumably as funerary offerings. The only triple burial uncovered in the cemetery comes from room 15, burials 20 a/b and 28. A crude earthen platform had been constructed for burial 23 which was further marked by a vertically set amphora toe. This particular feature of vertically set amphora fragments is peculiar to room 15. Five other vertically set amphora pieces were found in room 15, although none were associated with any particular burial.

Moving further up the slope to rooms 11 and 12, both simple inhumation and burials in amphorae or parts of amphorae are represented. Of the twelve burials in amphorae or parts of amphorae, all are found in these two rooms with the exception of double burial 14, 24 and burial 25, which were uncovered in sounding 20(b), a continuation of room

17.¹⁵ Rooms 11 and 12 also contain the greatest concentration of burials, just over 50% of the total (22 burials out of 43).¹⁶ A number of these burials cluster together in the southeast quadrant of room 12. Seven burials including 9, 30, 31, 5, 13, 19 and 29 were interred at the same level. These two rooms also bear the distinction of having the only two double simple inhumation burials found in the cemetery, 8 a/b, and 32, 33.

The most sophisticated burials uncovered to date lie at the extreme northwest extent of the excavated portion of the villa in room 17. It is room 17 which also exhibits the greatest variety of burial rite. Two of its burials, 39 and 40 a/b, were of the capuchin type. This form of burial rite requires the placement of the body in a gabled or boxlike structure made up of cover, pan and ridge tiles. The only examples of this type of burial rite are represented by the two found in room 17. Cover tiles were also used in burial 37, one placed below the body, one above it. Our only example of a double burial in amphorae, one placed inside

¹⁵Sounding 20 a/b represents a trench opened by the author during the 1990 excavation season. Sounding 20a refers to that portion of the villa which is southeast of wall W and is actually a portion of barrel vaulted room 12. Sounding 20b is that area of the villa on the opposite side (to the northeast) of wall W which is a portion of barrel vaulted room 17.

¹⁶In this analysis, I have chosen to regard rooms 11 and 12 as one due to the number of burials which lie in the area just west of wall O, a wall which separates the two rooms, in order to facilitate the discussion.

Table 5.1. Distribution of Burial Rite Within Villa

Location	Burial Rite							
	Burials in Amphorae	Burials in Partial Amphorae	Simple Inhumation	Burial a Coppo	Capuchin	Double Burial (Inhum.)	Double Burial (Amph.)	Triple Burial (Inhum.)
Room 10			XXX (7, 17, 26)	X (15)		XX (8a/b, 32, 33)		
Rooms 11 & 12	XXXXXX (1, 2, 3, 4, 5, 19)	XXXX (9, 30, 31, 38)	XXXXXXXX (6, 12, 13, 27, 29, 34, 35)					X (20 a/b, 28)
Room 15			XXXXX (10, 11, 16, 18, 23)					
Room 17			X (36)	X (37)	XX (39, 40 a/b)			
Sounding 20 a/b	X (25)		XX (21, 22)			X (14, 24)		

the other (14, 24) was also found in room 17. Burial 25 in room 17 was unusual in that it consisted of a partial amphora placed just inside a rimless ceramic jug. Simple inhumation in room 17 is represented by burials 22 and 36.

The southwest extent of the cemetery, Rooms 10 and 15, contain the simplest of burials requiring, in some cases little, if any, preparation for burial. The age of death for these burials covers a range of 9 L.M. to 2 weeks of age. Of the twelve burials in these two rooms, seven were fetuses and five were newborn. Rooms 11 and 12, which display a mixture of burial rite, also display a wider range of age at time of death. The youngest, those between the age of 6-8 L.M. were all simply inhumed. Between 8 L.M. to neonate, three out of a total of twelve burials were burials in amphorae. The rest were simple inhumations. Those deaths which occurred between the ages of 1 week to 6 months were all given burials in amphorae with the exception of burial 6.¹⁷ Room 17, including sounding 20(b), contained the burials of mostly older infants and one 2-3 year old child. Of the three fetuses recovered from this room, one was simply inhumed (22), another was buried a coppo (37), and the third (14) was buried in an amphora which had been placed inside a larger amphora that contained the remains of

¹⁷The remains of this infant exhibit evidence of a blood disorder, possibly Mediterranean iron deficiency or aplastic anemia, which may have contributed to the death of the infant.

a newborn (24). Another newborn (25) was buried with an amphora/jug assemblage. Those infants who died between the ages of 1 to 6 months (39, 40 a/b) were all placed in a capuchin tomb. Burial 40 a/b is a double burial in a capuchin arrangement. The child found buried in the area of room 17 (burial 36) had been simply inhumed. Like burial 6 in rooms 11 and 12, burial 36 was of a diseased child.

It appears then that of the twenty burials of fetuses, ranging in age from 6 - 10 L.M., just over half, eleven, were simply inhumed. Six of these were found in rooms 10 and 15. The two a coppo burials were the same age at death, 9 - 10 L.M. One was located in room 10, the other in room 17. Three of four burials (8 a/b, 32) which were interred as double inhumation burials were the same age at death, 9 - 10 L. M. and were recovered in rooms 1 and 23 of the villa. Burial 33, a newborn, was the only exception. Burial 14, one half of the double burial in amphorae, is a fetus while burial 20 a/b, two thirds of a triple inhumation burial recovered from room 15, were also 9 - 10 L.M. at their time of death.

Thirteen of the forty three burials were of newborns. Of these, five were burial in amphorae spread over rooms 11, 12, and 17. The other eight were all simple inhumations, two in room 10, three in room 15 and three in rooms 11 and 12. Seven burials fall in the age range from 1 to 6 months at

Table 5.2 Distribution of Burial Rite According to Age at Death

Burial Rite	Age								
	6-7 L.H.	7-8 L.H.	8-9 L.H.	9-10 L.H.	10 L.H. - neonate	neo. - 1 month	1-6 months	6-12 months	12+ months
Amphorae			X		X	X	XXX		
Simple Inhumation	X	X	XX	XXXXXX	XXXX	X	X		X 2-3 years
Burial a Coppo				XX					
Capuchin Burial							XX		
Double Burial (Inhumation)				XX					
Double Burial (Amphorae)				X		X			
Triple Burial (Inhumation)				XX		X			
Partial Amphorae	X			X		XX			

death. Three of these burials were in amphorae and had been placed in rooms 11 and 12. Three more were capuchin burials located in room 17. Two of these burials (40 a/b) were placed in one capuchin construction. Only one burial, 6, was an inhumation placed in rooms 11-12. The oldest child found, burial 36, a 2-3 year old, was inhumed in room 17.

A general pattern of burial rite which emerges is that fetuses were simply inhumed but on occasion would be given a more elaborate burial in an amphora and placed in either room 11, 12, or 17. The same holds true for newborns. Older infants, 1 to 6 months old, would be given an amphora, a coppo or capuchin burial in the area of rooms 11, 12, and 17. Rooms 10 and 15 were exclusively fetuses or newborns which were simply inhumed, while room 17, was almost exclusively used for the burial of older infants and a child. Rooms 11 and 12, which lie in between rooms 10, 15 and room 17 contained a mixture of burial rite and varying ages at death.

Disturbed Burials

Four other disturbed burials were recovered from a site robbers trench in the area of room 15, under the archway leading from room 15 to room 2. Most likely the burials were simple inhumations as are all the burials from room 15. Any accompanying finds or markers have been lost, however, the burials were recovered in pairs, suggesting perhaps, the

Table 5.3 Distribution of Burials Within the Villa According to Age at Death

Location	Age								
	6-7 L.H.	7-8 L.H.	8-9 L.H.	9-10 L.H.	10 L.H. - neonate	neo. - 1 month	1-6 months	6-12 months	12+ months
Room 10				XX		XX			
Rooms 11 & 12	XX	X	X	XXXXXXXX	XXX	XXX	XXXX		X 2-3 years
Room 15				XXXXX	XX	X			
Room 17				X			XXX		X
Sounding 20			XX	X		XX			

burial of two sets of twins. The pertinent information regarding each burial is listed below:

Burial 41

Context: grid M50b, locus 1306

Age: Neonate - 2 weeks

Burial 42

Context: grid M50b, locus 1306

Age: Neonate - 2 weeks

Burial 43

Context: grid M50b, locus 1305

Age: 9.5 - 10 L.M.

Burial 44

Context: grid M50b, locus 1305

Age: 9.5 - 10 L.M.

Missing Segment of Infant Population

Following a detailed analysis of the burials in the Poggio Gramignano cemetery, it immediately becomes apparent that a noticeable segment of the infant population is missing from the cemetery, those infants or young children between the ages of 6 months to 3 years. Presumably we should expect to see a number of examples of deaths among this age group.¹⁸ Perhaps the answer lies in the

¹⁸"Infant deaths are often due to such infections as dysentery and enteritis, as a result of drinking contaminated cow's milk when maternal lactation fails. Deaths from these diseases occur very commonly, at least throughout the first five or six years of childhood." Collis (1977), p. 29. See

unexcavated portion of the cemetery which lies in an area where older infants and a child have been found. This anomaly also begs the question at what age was an infant no longer considered an infant and, thus in death, would no longer be segregated from the adult population. The burial of the 2-3 year old child, burial 36, stands out here as it is the oldest of the burials recovered from the cemetery. Can we infer, then, that beyond the age of three, a child would be accorded "adult" status in the placement of its burial within the community cemetery? Or is it possible burial 36 is an exception? It is possible that this child, found among the remains of forty six fetuses and infants, was buried alongside them due to its diseased condition, rather than its age at the time of death. Collis has pointed out that children who die before the age of toddling and talking, around 18 months old, tend to be buried apart from the adult population.¹⁹ Should we then infer that around 18 months old, an "infant/child" would be accorded full status within the burial community once it began to take on certain characteristics associated with the adult population, namely walking and talking? Perhaps, but the evidence we possess from the Poggio Gramignano cemetery does

also Humphreys and King (1981), p. 22. Also Keith Manchester, Archaeology of Disease (Bradford, 1983), p. 9.

¹⁹Collis (1977), p. 29.

not allow us to draw any certain conclusions regarding this matter. In strict accordance with late Roman law, however, any child under one year old was not to be formally mourned, and any child who died between the ages of one and three was to be half-mourned.²⁰ This apparent differential treatment of infants and young children, in all likelihood, would require them to be buried apart from the adult population who would be afforded full ritual mourning as opposed to "none" or "half." It is equally possible that a young child of three years of age would still be accorded infant status regardless of its physical condition at the time of its death. As has been noted in the early Anglo-Saxon cemetery at Westgarth Gardens, which dates to the fifth century A.D., a three year old can be treated as an infant by means of burial rite. Grave 33 at Westgarth Gardens contained the remains of a three year old child, whose only funerary offering was a number of beads. This inclusion in the grave of a number of beads is a burial rite exclusively associated with infants at Westgarth Gardens. "If in conjunction with the other non-adult characteristics mentioned, a small number of beads as the sole grave goods is symbolic of the infant category, then perhaps in terms of that society

²⁰Frag. Vat. 321

infanthood did extend beyond three years old."²¹ Only with the completion of excavation at the Poggio Gramignano cemetery can we make this distinction.

Distribution of Burial Orientation

As the burials themselves exhibit a particular patterning, so do the orientations of these burials, most notably the orientation of the heads of those burials within close proximity to one another. Table 5.4 clearly shows that clusters of burials in a particular area or room of the villa exhibit the same head orientation. For example, burials 32, 33, 34 and 35 in room 11 of the villa are all oriented due east. In sounding 20b, burials 18, 24, and 25 are alike in that all three are oriented to the northwest. The same is true of burials 2, 3, 6 and 12 in rooms 11 and 12. The burials in room 15 tend to be oriented to the southeast as evidenced by burials 16, 18, 20a and 28. Unfortunately, not all of the burial orientations are known. Therefore, only the most basic assumptions can be made based on those orientations which are known. This apparent patterning of burial orientation might further support the notion that the majority of these burials were buried in clusters or groupings, assuming those interred at the same time might also be interred in a like manner. It would also

²¹Ellen Jane Pader, "Symbolism, Social Relations and the Interpretation of Mortuary Remains" (BAR International Series 130, 1982), p. 150.

Table 5.4 Distribution of Burial Orientation According to Location Within Villa

Location	Orientation								
	North	South	East	West	Northwest	Northeast	Southwest	Southeast	Indeterminate
Room 10			X 15						XXX 7, 17, 26
Rooms 11 & 12			XXXX 32, 33, 34, 35		XXXXX 2, 3, 6, 17, 21	XXXX 1, 5, 19, 38		XX 4, 27	XXXXXXXX 9, 30, 31, 8 a/b, 13, 29
Room 15					X 23	X 10		XXXX 16, 18, 20a, 28	XX 11, 20b
Room 17					X 39			XX 36, 37	XX 40 a/b
Sounding 20 a/b	X 22				XXX 14, 24, 25				

appear, although we have few known examples from which to make an assumption, that whether a particular body was interred on its right or left side or on its back, was uniform over certain areas of the cemetery. Of the amphorae burials, all exhibited the same orientation, that is, the remains were interred with the head oriented towards the mouth of the amphora. It appears that all of the amphorae were deliberately broken, usually towards the middle of the vessel, or sometimes at the neck, in order that the remains could be placed inside.

Chronology

A tentative outline of the relative chronology for the burials in the Villa Poggio Gramignano can be made at the present time. Although it is just that, "tentative," and based solely on preliminary findings. This discussion of the chronology of the cemetery will be largely based on the vertical as well as horizontal stratigraphy or the sequencing of burials within the cemetery. In addition, two preliminary reports by David Williams, on the amphorae and African Red Slip Ware recovered from the site, have proven useful for dating purposes. Lastly, two Theodosian coins, A.D. 388-392, found in an upper level of the cemetery round out the chronological framework for the cemetery as a whole.

The Amphorae Burials

According to the preliminary report on the amphorae

recovered from the site, David Williams has stated that the majority of amphorae forms from the site are North African cylindrical types.²² Chronologically speaking, these North African cylindrical amphorae were common in Italy between the third and the sixth centuries A.D. Those examples recovered from the Villa Poggio Gramignano span the third, fourth and fifth centuries A.D. Since the production of these amphorae occurred over a number of centuries, they alone cannot give us any absolute dates. This is where the vertical stratigraphy of the site becomes critical. At a level contiguous with the majority of burials in the cemetery, there are a number of amphorae forms, most notably the amphorae from burials 2, 14 and 24, whose date of manufacture is most likely not prior to the mid-fourth century A.D. Using A.D. 350 as a terminus post-quem for the majority of burials in this "middle" level of the cemetery, we should be able to extrapolate from this a relative date for the earlier and later burials by means of vertical stratigraphy.

The Amphorae and Inhumation Burials

We have already noted that the deposition of the majority of burials occurred over a relatively short period of time and in clusters. Based on the analysis of pottery

²²David Williams, "An Interim Report on Amphorae from Recent Excavations at the Roman Villa at Poggio Gramignano Lugnano in Teverina [Terni], Umbria," forthcoming.

sherds from the loci of these burials, a terminus post quem of A.D. 350 can be established for the burials, however, no absolute dates can be given. At the present time, it can only be said that the majority of burials in the cemetery were deposited sometime between A.D. 350 and A.D. 500. The numerous fifth century A.D. ceramic forms found in these strata may indicate a date in the middle of that century for the deposition of these burials. The earliest burials, 32, 33, 35 and 38 in room 11, have a terminus post quem of A.D. 300 and most likely date prior to A.D. 375, based on the pottery evidence. Therefore, it can be said with some assurance that at some point during the course of the fourth century A.D., the site began to be used as an infant cemetery. Then, some time appears to have lapsed between the deposition of the very first burials and the deposition of the majority of burials which occurred during the course of the fifth century A.D. The very latest burials appear to date to the fifth century A.D. as well. This allows us to develop a chronological framework for the cemetery that begins in the fourth century A.D., but appears to span most of the fifth century A.D. A more secure and fixed chronology awaits future analysis.

Cemetery Organization

Order in the Cemetery

"One of the first requirements (of any cemetery study)

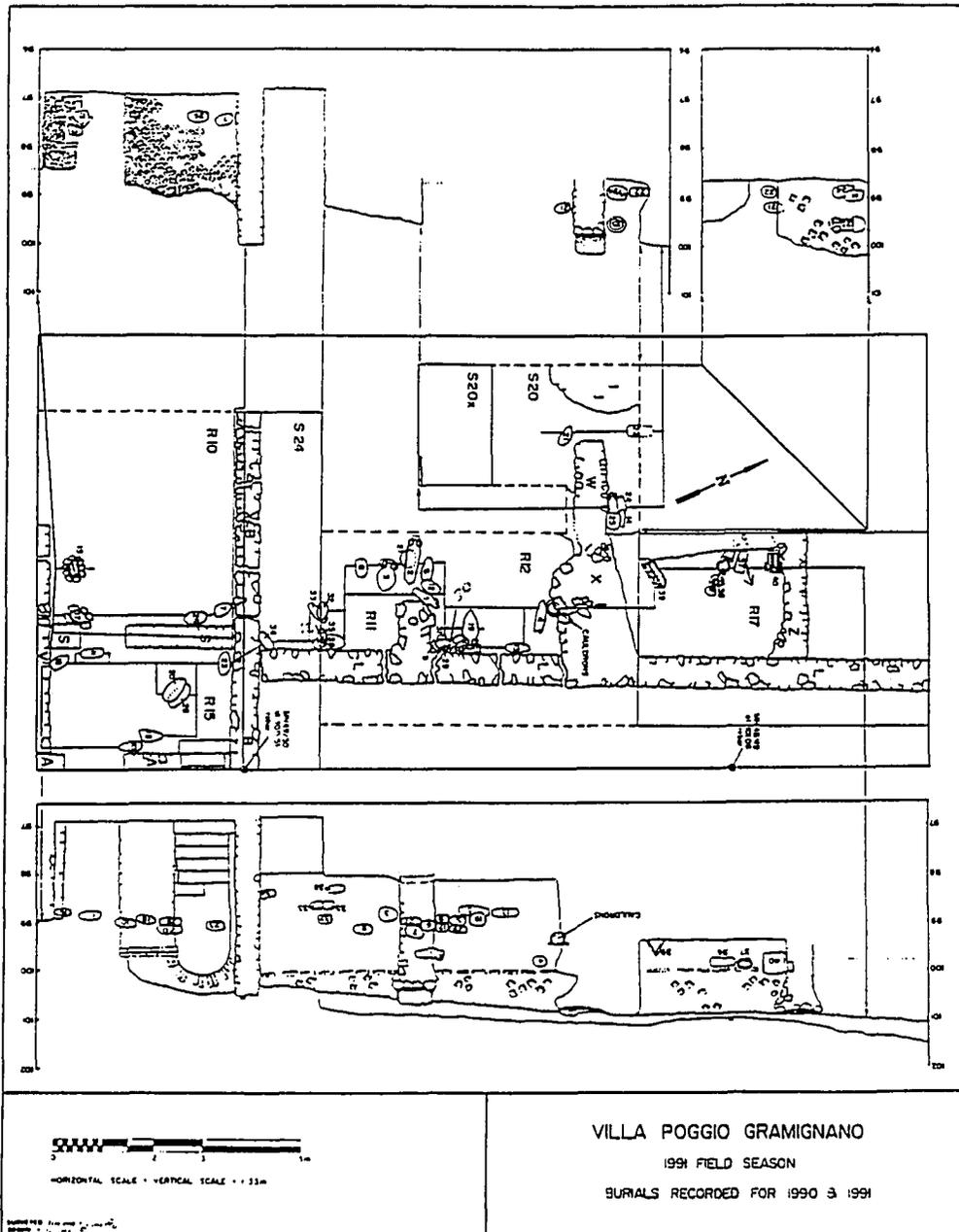
is a chronological view of the development of the cemetery ... A cemetery must have a beginning, it must grow, and, eventually it must become disused ... It is rare for a large area to be marked out, for a grave to be dug in one extreme corner, and for the cemetery to develop according to a prearranged plan away from that point. Much more common is a first grave which acts as a focus so that later graves cluster around it."²³

Such a chronological view of the development of a cemetery, while basic to any cemetery study, must be regarded as purely hypothetical in the case of the infant cemetery at Lugnano, as excavation is not yet complete. The following description of the possible evolution of the Lugnano cemetery is only a postulation and should not be seen as being conclusive. As has been mentioned previously, the "first" grave in the Villa Poggio Gramignano cemetery is burial 38. Its deposition in the central portion of the cemetery, room 11, and along the cemetery's main northeast to southeast boundary line, wall L, suggests later burials may have fanned out from that focal point, using the villa walls as a point of reference for their placement. In addition, burial 38 specifically acted as a focal point for the clustering of burials 32, 33 and 35. All three of these

²³Richard Reece, "Bones, Bodies, and Dis-ease" (Oxford Journal of Archaeology I., 1982), p. 350.

burials were deposited contemporaneously in a pit dug for that purpose. Burial 35 lies 20 cm directly above burial 38, but lies perpendicular to wall L, not parallel to it. Burials 32 and 33, then, were interred in relation to burials 35 and 38. Burial 33 was placed just adjacent to burial 35, while burial 32 was placed on the same perpendicular line to wall L as burial 35 but above it in the soil.

Wall L in room 11 appears to have served as the original focal point of the cemetery. Once that area had become crowded with burials, the focal point then may have shifted to wall L in room 12. Again the first burials in the area were aligned along its length, as evidenced by burials 5 and 13. At this point, burials began to be placed along wall O which separates rooms 11 and 12. Expansion of the cemetery began to occur in adjoining rooms, possibly simultaneously. A plan of the vertical stratigraphy of the burials (see illustration 1.4) clearly shows clusters of burials in adjoining rooms, 10 and 15, whose deposition occurred over a short period of time about 2 1/2 meters below top soil level. It may be that wall V, the furthest point downslope in rooms 10 and 15, became the next focal point for burial placement. If that is true, then, it is probable that over a short period of time, burials were placed in these two rooms, starting downslope at wall V and



moving upslope to wall B. Perhaps at this same time, although it is not altogether clear, other burials may have been taking place in the area surrounding wall W, that is, burials 14, 24, 25, 21 and 27. Moving upslope from wall W, room 17 appears to be the latest of the rooms incorporated into the cemetery. Shortly afterward, the cemetery fell into disuse, with habitation of the surrounding area having ceased, sometime during the later fifth or possibly early sixth century A.D.

The Siting of the Burials

An infant only cemetery, although not that unusual in the Roman world (see below for a discussion of infant cemeteries in the Roman world), does reflect a particular mortality pattern in which different segments of a society are buried in distinct areas. In this instance, the youngest segment of that society is buried apart from the rest of the community. Such differential mortuary treatment has been studied by a number of scholars, including Hertz, who was one of the first scholars to treat mortuary ritual effectively. His study published in 1907 and later outlined by Binford in his 1971 article, "Mortuary Practices: Their Study and Their Potential," revealed that such differential mortuary treatment is directly relative to the status of an individual or individuals within a given community and the perceived relationship of that status to the status of a

full participant in that community.²⁴ In particular, infants and children are often afforded differential mortuary treatment. This stems from their not being considered full societal participants at the time of their death. In addition, as members of this segment of society, who are not considered to be full fledged members of the "visible society," they need only to be given minimal rites of incorporation into the "invisible society," a position relegated to them as a result of their status in that society upon death.²⁵

This difference in the social status of very young individuals is directly related to their low rank on the social scale as well as their limited number of shared duty status relations. In contrast, older individuals have a higher social status, relative to their age, and numerous shared duty status relations. This allows us to "predict that age differences may be discriminated in mortuary ritual by differential placement of burial sites within the life space of the community. The choice of placement would vary with status to the degree that the performance of the ritual

²⁴R. Hertz, "Contribution a une etude sur la representation de la Mort" (L'Annee Sociologique 10 1907). Lewis Binford, "Mortuary Practices: Their Study and Their Potential" in Approaches to the Social Dimensions of Mortuary Practices (Memoirs of the Society for American Archaeology 25 1971), pp 6-29.

²⁵Hertz (1907) and Binford (1971), p. 7.

involves members of the community at large in the ritual activity and thereby disrupts their daily activities."²⁶ Binford points out that there are two general distribution patterns of infant burial: one, within the life space of the community, the other, on the fringe of the community. The first is known as cellular distribution. This mortuary pattern places the burial of infants under the house floor while adults are buried in a cemetery or more public location. The second is known as centrifugal distribution. In this instance, infants are buried around the periphery of a settlement while the adult population is buried at certain locations within the settlement area itself.²⁷

The infant burials in the villa Poggio Gramignano have characteristics of the first pattern of burial distribution in that the burials are placed within the confines of a dwelling, albeit one no longer used for that purpose. Overall, the burials appear to fit the second pattern of distribution, that is, they appear to be sited along the periphery of the settlement area, which may be consistent with the overlapping of dump and cemetery noted in rooms 10 and 15. Presumably, a dump site, covering a fairly large area, would be placed along the periphery of a settlement and not in the middle of it. In any case, the known

²⁶Binford (1971), p. 21.

²⁷Binford (1971), p. 22.

location of the infant cemetery, coupled with the probable location of the cemetery for the adult population, which may be, as stated earlier, located 500 meters north of the villa, should allow us to predict with some certainty the location of the settlement itself. If that is so, we would predict its location to be around the area occupied by the adult cemetery with the infant cemetery on its periphery.

The fact that the villa ruins were chosen as sepulchres may not have been by accident. The siting of the burials in this location may have been for purely functional reasons. Funerary rite, in addition to reflecting religious belief, reflects a basic functional consideration and that is, an efficient and decent means of disposal for the deceased.²⁸

"... the attraction of ruins, could well have been that they made the land on which they stood quite useless for agricultural purposes, so that by using them as cemeteries the local people could ensure, first, that their dead were not likely to be disturbed, and second, that they would not diminish the area available for farming."²⁹ Similarly, Spriggs has noted that, "even allowing for the requirement of population and social organization ... it is a reasonable hypothesis that the area of land required for settlement and

²⁸Giles Clarke, "Popular Movements and Late Roman Cemeteries" (World Archaeology 7, 1975), p. 51.

²⁹John Percival, The Roman Villa. An Historical Introduction (London, 1976, p. 199).

subsistence within a site exploitation territory may affect the location, clustering and density of burials."³⁰

The Status of Infants and Children in Antiquity and its Possible Correlation to Differential Mortuary Treatment

Wiedemann in his book, Adults and Children in the Roman Empire, addresses the "marginality" of infants and children in Roman society.³¹ Anyone who was not an adult male citizen, was in various respects, a marginal figure. As such, a child was considered to be only partially a member of citizen society, which implied that he was nearer the two extremes, heaven and hell. A child's marginality imbued him with certain magical powers. In antiquity, the ghost of a child who had died prematurely might even be invoked to haunt an enemy. Further, burial customs demonstrate that children were seen as people without a full place in the community. Therefore, the younger the age of the child at death, the more "marginal" it was considered to be. Although the laws of the twelve tables did not allow burial within the city of Rome, children under forty days old were the exception. Normally they would be buried within the city under the threshold or foundations of a wall of the

³⁰Matthew Spriggs, "Archaeology and Anthropology: Areas of Mutual Interest" (BAR Supplementary Series 19 1977), p. 29.

³¹Wiedemann (1989), p. 25

house, and unlike adults they would be buried at night.³²

In his article, "Child Rearing in Italy," Peter Garnsey has pointed out that the funerals of babies were simple and carried out with dispatch.³³ In addition, the fear of pollution, often associated with those who had died a premature death, did not prevent parents in certain societies, in particular early Rome, from burying their babies in or under the house. Garnsey considers this practice along with the practice of not cremating babies who had yet to cut their teeth, as suggesting that babies were not considered to have made the transition from nature into the human community.³⁴

There is an abundance of ancient literature regarding the status of infants and young children and their treatment upon death. Perhaps, this literary evidence can give us some insight into the differential mortuary ritual associated with infants and children at death. Aristotle in Book VII of his Historia Animalium says about infants, "Most are carried off before the seventh day, that is why they give the child its name then, as they have more confidence

³²Wiedemann (1989), p. 79.

³³Peter Garnsey, "Child Rearing in Italy" in The Family in Italy from Antiquity to the Present (New Haven, 1991), pp. 48-65.

³⁴Garnsey (1991), p. 53.

by that time in its survival."³⁵ Plutarch states that infants who died young, presumably before the naming ceremony occurred, did not receive the normal burial rites.³⁶ Both Aristotle and Plutarch are talking about their own Greek societies, however, in Roman society, it was much the same. After the birth of an infant, the father had the power, partria potestas, to either accept or reject the infant as part of the familia. If accepted, the child would be brought into the family. If rejected, however, the infant would presumably be exposed or killed by means of strangulation or drowning. Once an infant had been brought into a Roman family, a period of eight days for girls, nine days for boys, would elapse before the infant would receive its name. It was during this first "week" of life that an infant was thought of as being particularly dangerous due to the powers of evil that were thought to menace it. Therefore, the infant would be given charms and amulets to ward off the evil eye.³⁷ Plutarch refers to this period prior to the purification ceremony, or dies lustricus, as a time when the infant is in limbo, "more like a plant than an animal."³⁸ On account of the taboo and superstition

³⁵Aristoteles, De Animalium Historia, Book VII.

³⁶Plutarch, Moralia 612.

³⁷Guido Gianelli, Ancient Rome (New York, 1967), p.

³⁸Plutarch Quaest. Rom. 102. 288C.

associated with childbirth, the Romans considered the newborn child unclean and as stated previously, dangerous. Therefore, a ritual purification was necessary.

Regarding an infant's death, we do know that it was the ancient Roman practice not to formally mourn any child who died under the age of three. Any child who died between the ages of three and ten was mourned one month per year of life. According to late Roman law, any child who died before his first birthday was not to be mourned, while those who died between their first and third birthdays were to be half-mourned.³⁹ In any case, it is evident that children were not always mourned if they died very young.⁴⁰ Additionally, demographic studies, based on epitaph analyses, show that infants are in almost all cases, undercommemorated, although there is some regional variation within the Empire.⁴¹ Peter Garnsey has suggested that this

³⁹See Hopkins (1983), p. 225 for references.

⁴⁰Suzanne Dixon, "The Sentimental Ideal of the Roman Family" in Marriage, Divorce, and Children in Ancient Rome (Oxford: 1991), p. 110 cites Cicero's Tusculan Disputations 1.93 and Plutarch's Numa 12.

⁴¹See Acsadi's review of the Kesztheley-Dobogo series for the late Roman period. Gy. Acsadi and J. Nemeskeri, History of Human Life Span and Mortality (Budapest: 1970), pp. 224-234. It is possible that the evidence from Pannonia, especially for the late Roman period, could prove useful, particularly, if there are instances where infants and children are buried outside of the communal burial ground in that region. Beryl Rawson, "Adult-Child Relationships in Roman Society" in Marriage, Divorce, and Children in Ancient Rome (Oxford: 1991), p. 16 cites Hopkins (1966), p. 248 and

underrepresentation of, in particular, neonates and infants up to the age of one, in terms of funerary monuments and epitaphs, means that a lower evaluation was placed on their life than on the lives of older children and adults.⁴² We should not take this to mean, however, that the deaths of infants and children were never mourned. In fact, formal commemoration should not be employed as the perfect reflection of feeling. One might feel very strongly about an infant's death but fail to mark the grave due to societal pressures or financial hardship.⁴³ In the strictest sense the formal mourning of a dead infant was frowned upon by Roman society, and would effect whether or not such a death would be commemorated.

Saller and Shaw (1984), p. 130 for regional variation in dedications to children and infants, most notably the high percentage of infant and child commemoration in certain parts of North Africa.

⁴²Peter Garnsey (1991), p. 52.

⁴³Suzanne Dixon, The Roman Family (Baltimore: 1991), pp. 99-100.

VI. INFANT CEMETERIES IN THE ROMAN WORLD:

THE WESTERN PROVINCES

Although infant cemeteries are known from the Roman world, they are, in fact, not that well documented. Perhaps those factors which inhibit one from establishing an infant mortality rate for an ancient population, as outlined previously, also prevent the discovery as well as recovery of such sites. It may well be that this lack of documentation has been enhanced by scholars "who judge the subject of Roman burial and the study of Roman cemeteries as peripheral to the mainstream of Roman studies."⁴⁴ The exception to this is, of course, Jocelyn Toynbee's book on Death and Burial in the Roman World. Even within its pages, however, there is no treatment of infant only cemeteries in the Roman world.⁴⁵

A number of British scholars including Richard Reece, Giles Clarke and John Collis have led the way in recent years with their research on Romano-British cemetery sites. To judge by sheer quantity, not to mention quality, the British seem to have the best handle on Roman cemetery studies at the present time. Numerous infant only cemeteries, both on villa and farmstead sites, as well as

⁴⁴Richard Reece (1982), p. 347.

⁴⁵Jocelyn Toynbee, Death and Burial in the Roman World (Ithaca: 1971).

particular areas of cemeteries reserved for the burial of infants only, have been excavated and published in recent years. A survey of these sites as well as an infant cemetery found inside a potter's workshop in southern France will help to illuminate this practice in the western provinces of the empire over the course of the first four centuries A.D.

Owlesbury, a rural farmstead site, five miles southeast of Winchester in central Hampshire, has already been mentioned due to the high infant mortality rate recorded there. The burials which date to the period from 60 B.C. to A.D. 130 were placed around the periphery of the settlement area. Similarly, at another rural farmstead site in England, Barton Court Farm, twenty six of forty seven infant burials were recovered from a cemetery area especially reserved for the infants at the extreme southeastern corner of the main enclosure block. The excavator, David Miles, has suggested this could well be the normal infant mortality rate for the site over a hundred year span, the period of time the site was inhabited.⁴⁶ He does not, however, rule out the possibility of infanticide. It appears that the adult population was buried approximately 800 meters northeast of Barton Court Farm at Barrow Hills. The largest number of infant burials recovered from a British site are the ninety

⁴⁶David Miles (editor), "Archaeology at Barton Court Farm, Abingdon, Oxon" (Oxford Archaeological Unit Report 3 1986), p. 34.

seven burials found at the Hambledon villa in the middle Thames valley. Here it has been suggested that infanticide was being practiced on unwanted slave children.⁴⁷

Excavations at Portchester Castle have revealed the inhumation burials of twenty seven infants within the confines of the fort. The majority of these infants were only a few weeks old at the time of their death.

As for those cemeteries not connected with villa or farmstead sites in England, there are a number of examples of areas within the cemeteries reserved for infants only. The Bath Gate Cemetery at Cirencester is one example where excavations have revealed a concentration of newborn infants in one portion of the cemetery, area CS 74 10. Of the sixty three infants found south of the Fosse way, 30% died before they reached the age of two. According to the bone specialist at the site, Dr. Calvin Wells, that mortality figure for the cemetery as a whole is low compared to other sites.⁴⁸

Not only can the appearance of infant burials be revealing but also their absence. "The scarcity of infant burials in the large Romano-British cemetery at Trentholme

⁴⁷A. H. Cocks "A Romano-British Homestead in the Hambledon Valley, Bucks" Archeologia 71 (1921), pp. 141-198.

⁴⁸Alan McWhirr, Linda Viner and Calvin Wells, Romano-British Cemeteries at Cirencester, (Cirencester: 1982), p. 110.

Drive, York, favors the hypothesis that the inhumation of infants in the communal burial ground was not a general custom"⁴⁹ Similarly, at the Romano-British cemetery at Lankhills, neonate skeletons were underrepresented. The excavator, Giles Clarke, found that the neonate skeletons recovered from the site represented a neonate mortality rate of 4%, 30-40% is a more likely figure. From this discovery one would draw the conclusion that either the bones decayed in situ or infants, generally, were buried elsewhere outside the communal cemetery. Those infant burials that were recovered from the cemetery were confined to particular areas of the cemetery, including area O between features 40 and 24, and feature 12, a ditch. This ditch was found to contain a number of first burials of newborns that cut into the feature. Clarke has postulated that these first graves found clustered together in feature 12 were in place before the feature became integrated into the main cemetery plot.⁵⁰ These infant burials which have been recovered from areas on the fringe of the cemetery are dated to the period after A.D. 390 in area O and after A.D. 340 in feature 12.

⁴⁹Barry Cunliffe, Excavations at Portchester Castle Vol. I: Roman Reports of the Research Committee of the Society of Antiquaries of London XXXII, p. 376.

⁵⁰Giles Clarke, The Roman Cemetery at Lankhills Winchester Studies 3. Pre-Roman and Roman Winchester (Oxford: 1979), p. 190.

A recent discovery of an infant cemetery in a Gallo-Roman potter's workshop at Salleles d'Aude in southern France, has certain characteristics not unlike some of those found in the Poggio Gramignano cemetery.⁵¹ There were three types of burial rite employed at Salleles d'Aude. All three are found at Poggio Gramignano. They are: simple inhumation, burial a coppo, and a capuchin burial. The only example of a capuchin burial from this site is interesting in that it contained the remains of the eldest infant found, a six to nine month old infant. This capuchin tomb was also the most elaborate burial found, and the only one to contain funerary offerings of a glass, a jug and a cup. The fourteen graves uncovered in the potter's workshop were arranged along the walls, either parallel or perpendicular to them. The ages of the infants ranged from only a few days old up to three months old, the eldest infant being the aforementioned six to nine month old. The date of this infant cemetery has been placed in the first century A.D.

The Rest of the Empire

The information regarding the location of infant cemeteries in the rest of the Roman empire is woefully inadequate. At most these infant cemeteries garner a passing reference or maybe a brief description in a

⁵¹"Roman Child Cemetery Discovered in France," Minerva Vol. 1, No. 4 (1990), pp. 2-3.

publication. For example, only a passing reference is made to a cemetery of infants at El Jem in Tunisia.⁵² In another publication, a brief description is given of a sepolcreto for infants at a site called Fontanaccia in Italy.⁵³ Sometime during the second century A.D., the southwest sector of the site was used as a cemetery with poor tombs, almost all of them infants. Although this information does little in the way of allowing us to make a comparative study, it does prove the existence of infant only cemeteries in other areas of the empire. Thus, we can infer it was not a regional practice but one which appears to have been in use in different parts of the empire. It is clear that more work needs to be done before a comprehensive study of infant cemeteries in the Roman world will appear in print. Perhaps, the information from the cemetery at Poggio Gramignano will go a long way towards illustrating the practice in Italy during the late Empire.

⁵²El Jem: Hedi Slim in 30 Ans au Service du Patrimoine (Tunis, 1987) p. 166.

⁵³La Fontanaccia (Settone Fontanaccia e Ufficio Tecnico del Gruppo Archeologico Romano, 1989).

VII. CONCLUSION

In order to understand the character of the people living in the vicinity of the villa at Poggio Gramignano and using its ruins as an infant cemetery, one must take into account the unsettled times in which they lived, during the fourth and fifth centuries A.D. By the time of the Late Empire, vast tracts of land all over the Roman world had been abandoned and were allowed to stand idle, without anyone to cultivate them. The population of the empire continued to decline throughout this period, and the empire of the fourth and fifth centuries A.D. had never properly recovered from the plague outbreaks, famines and the general disorders of the latter part of the third century A.D.⁵⁴

These numerous plague outbreaks often coupled with famine have led one scholar to name the first 450 years of the Christian era the "First Age of Epidemics."⁵⁵ A brief examination of these pestilences which had such a devastating effect upon the population of the empire may offer proof of a cause for the number of infant deaths found in the Poggio Gramignano cemetery. Five great periods of pestilence have been identified during the course of the

⁵⁴Boak. 1955, 114. See also, Geoffrey Marks and William K. Beatty, Epidemics (New York, 1976), pp. 36-43. Dr. F. F. Cartwright, "Pandemics Past and Future" in Gerald Hart (ed.) Disease in Ancient Man (Toronto, 1983), pp. 267-280.

⁵⁵Cartwright in Hart (ed.). 1983, p. 270.

first four centuries of the empire.⁵⁶ The first occurred shortly after the eruption of Vesuvius in A.D. 79. Mortality was highest in the region of Campagna, and it is thought that the epidemic was as a result of an outbreak of malaria.⁵⁷ The second great period of pestilence occurred in A.D. 125 and was known as the plague of Orosius. This particular epidemic is interesting in that it was preceded by widespread famine. The famine was caused by the destruction of crops in Numidia and along the north coast of Africa in general, areas which provided Rome's chief grain supply. Famine was soon followed by pestilence. The source of the infection is unknown, but it must have had a devastating effect. Better known, perhaps, is the plague of Antonius, also known as the plague of Galen, which lasted for sixteen years from A.D. 168 - 180 and was brought back to Rome by Lucius Verus and his legions from the region of Parthia.⁵⁸ From a description of the disease left to us by the physician, Galen, it has been hypothesized that the

⁵⁶Adam Patrick, "Disease in Antiquity: Ancient Greece and Rome" in D. R. Brothwell and A. T. Sandison (editors), Disease in Antiquity (Springfield, Illinois, 1967, pp. 238-246.

⁵⁷Cartwright in Hart (ed.) 1983, 271. For a more complete discussion of malaria in the Roman world see W. H. L. Jones, Malaria, a Neglected Factor in the History of Greece and Rome (Cambridge, 1907) and P. A. Brunt, Italian Manpower 225 B.C. - A.D. 14 (Oxford, 1971), pp. 611-621.

⁵⁸Ibid.

epidemic represents the first instance of European smallpox.⁵⁹ The most severe pestilence occurred over a fifteen year period from A.D. 251 to A.D. 266, the so-called plague of Cyprian. This plague was so severe that Dr. F. F. Cartwright has said that it "may arguably have exerted the most profound effect of any disease upon the development of western civilization."⁶⁰ It is presumed to have been smallpox due to its highly contagious nature and the frequent affection of the eyes. About fifty years later beginning in the year A.D. 312, another smallpox epidemic erupted. Such recurrent episodes of pestilence were common over the course of the next three centuries particularly in combination with successive waves of barbarian invasions, however, our evidence for such widespread disease becomes less and less exact, until we are only left with rumors about a great mortality which occurred in Vienna in A.D. 455 and at Rome in A.D. 467.⁶¹

⁵⁹Patrick in Brothwell and Sandison (editors) 1967, 245. Patrick quoting A. Castiglioni diagnoses this epidemic as typhus but he also states it may have been bubonic plague. During the sixth century A.D. in Gaul, an epidemic, which has been diagnosed as either typhoid fever or typhus abdominalis, caused the most casualties among young children and babies. The mortality of typhoid fever during the first year of life is 75%. Dr. Paul A. Janssens, "The Moribus Desentericus in the *Hiscoria Francorum* of Gregory of Tours (Sixth Century)" in Hart (ed.) Disease in Ancient Man (Toronto, 1983), p. 264.

⁶⁰Cartwright in Hart (ed). 1983, p. 272.

⁶¹Ibid, p. 273.

One particular barbarian invasion, that of Alaric and his Visigoths, is important for the region of Umbria and the villa Poggio Gramignano. In A.D. 408, Alaric charged down the nearby Via Flaminia creating a path of destruction as he advanced on Rome. It is said that the citizens of Narnia in the region of Umbria, a point at which the Via Flaminia crosses over a gigantic bridge, were so frightened by these advancing barbarians that "they offered sacrifices to the old gods in the Etruscan manner. This act was rewarded by a splendid thunderstorm that deflected the enemy host."⁶²

The Romans were not so fortunate. In A.D. 410, Alaric and the Visigoths sacked Rome and a pestilence soon followed.⁶³ Undoubtedly, the invasion and the plague which followed had a profound effect on the inhabitants of southwestern Umbria.

Perhaps, then, the best explanation for the large number of infant burials at Poggio Gramignano, attributable to the mid-fifth century A.D. is as a result of a famine-pestilence sequence as described above.⁶⁴ The general

⁶²Justine Davis Randers-Pehrson, Barbarians and Romans. The Birth Struggle of Europe, A.D. 400-700. (Norman, Oklahoma, 1983), p. 110.

⁶³Ibid, p. 114.

⁶⁴Peter Garnsey in his article, "Famine in the Ancient Mediterranean" History Today 36 (1986), pp. 24-30, makes a distinction between famine and subsistence crisis. According to Garnsey, during the entire history of Rome as a developed city-state, it never experienced anything worthy of the name of famine. Perhaps then, the more appropriate term would be subsistence crisis, as opposed to famine.

character of the site appears to be that of an impoverished community. Although it is clear from the reuse of amphorae as infant coffins, that all trade had not ceased. Despite this, there are signs among the remains, specifically burials 6 and 36, in which the infant or child suffered from a condition, Mediterranean iron deficiency or aplastic anemia and cribia orbitalia respectively, which may in fact be derived from malnourishment. The large number of fetuses as well as newborns in the cemetery makes one wonder if famine, disease, or a combination of these two were to blame for so many premature deaths. Either famine or disease, and certainly the combination of the two, might result in numerous miscarriages and stillborn babies. Of course, these factors would also affect the life expectancy of those live births which took place under such conditions.⁶⁵

The most telling sign of such an occurrence may well be the manner in which the burials took place, that is, in clusters, whose deposition occurred over a relatively short period of time. Binford remarks that "deaths occurring simultaneously as a result of epidemics or massacres might

⁶⁵"Despite every care many babies must have fallen victim to disease, above all to gastric disorders, diarrhea and dysentery." Ralph Jackson, Doctors and Diseases in the Roman Empire (London, 1988), p. 103. Jackson also cites a passage from Celsus (De Med. VII, 29, 7) in which he states that dysentery "carries off mostly children up to the age of ten... Also a pregnant woman can be swept away by such an event, and even if she herself recovers, yet she loses the child."

be treated corporately, with mass graves, by virtue of their 'unusual' occurrence."⁶⁶ The Poggio Gramignano burials, however, appear to have been given individual treatment even when buried simultaneously in groups. This may stem from a desire to give each infant a ritually "proper" burial within the context of that society and to insure that these victims of a premature death, possibly due to an epidemic, would not return to haunt the living.⁶⁷ Such a set of circumstances would necessarily affect the placement of the burials, and the attendant mortuary ritual connected with them. While this practice of burying infants apart from the adult population is not restricted to the Late Empire, as the examples we have examined cover the period from the first to the fourth centuries A.D., a number of these are datable to that period and may reflect, how in troubled times, the fear of contamination from such "dangerous" individuals, may have been thought to be even greater than under normal circumstances.

As the present discussion of the infant burials in the

⁶⁶Binford. 1971, p. 14.

⁶⁷There is evidence for this belief held in antiquity that those who died prematurely might return to haunt the living. For example, Vergil in book VI of the Aeneid alludes to this when he reveals that infants are excluded from the innermost sanctum of Hades. Also, the third century A.D. Christian writer, Tertullian, tells us in his De Anima that such souls continue to wander upon the earth until their allotted lifespan has ended.

Poggio Gramignano cemetery comes to a close, it can only be said that at this time the burials do not appear to be the result of a normal infant death rate. Perhaps, once the chronology of these burials becomes more firmly established, it will bear this out. Meanwhile, one can only hypothesize why these deaths occurred and how these infants came to be buried in a portion of the ruins of a Roman villa. I have postulated a famine-pestilence sequence, which was common during the empire, to explain the occurrence of these burials. Their placement may be ultimately derived from the prevailing attitude of the ancients towards individuals who died premature deaths, particularly those who were victims of an epidemic. In addition, their placement may have been affected, in part, by functional considerations as well.

The picture is not yet complete regarding the general character and societal conditions of the provincial populations of the later Roman Empire. It is hoped that the present discussion which focuses on one important aspect of late Roman society, namely, its mortuary ritual, will help generate further scholarship and interest in Late Roman cemetery studies and Late Roman society in general. Once excavations like the one at Poggio Gramignano have been undertaken and completed with a full publication of the results, only then will the character of Late Roman provincial society be revealed.

APPENDIX 1: ARTIFACT DISTRIBUTION

A limited number of artifacts were recovered from the burials in the villa Poggio Gramignano cemetery. Some of these were not found in association with any particular burials, and thus were not recorded in the description of the burials. A brief discussion of all the artifacts recovered and their distribution within the villa will be outlined in the text which follows.

Several items of personal adornment were recovered from the area of the infant cemetery. Most of these were associated with burials and appear to have been unworn. Burial 16 in room 15 had two hairpins made of bone in association with it. Burial 20 a and b, also in room 15, contained a copper alloy finger ring. Similarly, burial 22 in sounding 20b provided another example of a copper alloy finger ring. A child-size copper alloy bracelet was found in room 11 but cannot be attributed to any particular burial. Although funerary offerings were sparse in the cemetery as a whole, this inclusion in a few instances of items of personal adornment with the burials of infants is noteworthy. Giles Clarke, the excavator of the late Roman cemetery at Lankhills in England has stated that between the period of A.D. 310 to A.D. 370, unworn personal ornaments were often associated with children in the Lankhills

cemetery.⁶⁸ He also goes on to say that such "personal ornaments were the ritually proper gift to the gods when disease or childbirth had brought a premature end to life. The purpose of the gift would have been to secure entry to the other world and so prevent any haunting of the living."⁶⁹

Other artifacts recovered from the cemetery included two copper alloy cauldrons from room 12. The two vessels, one placed inside the other, were found below burial 4, but did not appear to be associated with it or any other particular burials. Perhaps, then, these cauldrons, should be seen as a communal funerary offering for all the burials in the cemetery. Burial 40 a and b in room 19, a capuchin burial containing two infants, included a cooking pot and fragments from a glass pouring vessel. These offerings may represent a funerary meal, as has been hypothesized for a similar capuchin burial at Salleles d'Aude in southern France which included a cup, a jug and a glass as its funerary offerings.⁷⁰

Room 11 of the villa produced a bone doll which has not been identified with any particular burial and may have been

⁶⁸Clark. 1979, p. 363.

⁶⁹Ibid, p. 412.

⁷⁰"Roman Child Cemetery Discovered in France" Minerva Vol. 1, No. 4 (1990), pp. 2-3.

dumped in the area along with other refuse. The limbs of the doll were missing. Presumably they would have been attached to the body and were most likely made of some perishable material such as cloth or leather. According to Beryl Rawson, this type of doll was known in the early empire but was produced over a number of centuries.⁷¹ The example from the infant cemetery at Poggio Gramignano suggests a date in the third century A.D. due to the method of dressing the hair. The hair is flat in back and marked by sharp stylized incisions which criss cross the back of the head. The hair has been drawn up from the neck and is piled up high on the head, noticeably similar to a style current during the Severan period.⁷²

Of the forty seven burials so far recovered, only five included funerary offerings of any kind. In the distribution of these offerings, age does not appear to have played a role. This relative absence of funerary offerings in the cemetery may be explained by impoverished conditions, but it may also have been governed by the status of fetuses and infants as individuals, worthy or unworthy, of such commemoration in this particular society.

⁷¹Beryl Rawson, "Adult-Child Relationships in Roman Society" in Rawson (ed.), Marriage, Divorce and Children in Ancient Rome (Oxford, 1991), p. 19.

⁷²Kate Elderkin, "Jointed Dolls in Antiquity" American Journal of Archaeology, 34 (1930), p. 493.

APPENDIX 2: ANIMAL REMAINS

The 1992 excavation season has brought forth some new information regarding the animal remains recovered from the cemetery. A cat skeleton was mentioned as having been recovered from room 10 of the villa. It may, in fact, be the skeleton of a puppy. Further analysis of the animal bones recovered during the first four years of excavation has revealed six complete canine skeletons in addition to the one found in room 10. At Portchester Castle in England, almost half the infant burials contained a selection of animal, bird and fish bones. The excavator of the site, Barry Cunliffe, states that, "It will be seen that some types of animals consistently occur with infant burials which might suggest that their deposition was part of funerary ritual."⁷³ Similarly, at Barton Court Farm in England, the burials of the three eldest infants included animal skulls. Two were dog skulls. The other was a sheep skull. These three infants were aged between a few weeks and nine months unlike the others which were neonates. David Miles has suggested that their age at death may explain why they were buried in this manner.⁷⁴

⁷³Cunliffe. 1975, p. 376.

⁷⁴Miles. 1986, p. 16. "Animal remains ... could be regarded as offerings to the gods, being the ritually proper gifts for the purpose of attaining rebirth and guidance to the other world." Clarke. 1979, p. 810.

It is too early at this point to say anything further about the animal remains from the site until a complete report has been produced. Most important, it would seem is the distribution of these canine skeletons and their possible correlation with particular burials.

IX. REFERENCES

- Acsadi, GY. and J. Nemeskeri. 1970. History of Human Life Span and Mortality. Budapest: Akademiai Kiado.
- Aries, Philippe. 1962. Centuries of Childhood: A Social History of Family Life. Translated from the French by R. Baldiek. New York: Vintage Books.
- _____. 1981. The Hour of Our Death. New York: Alfred A. Knopf.
- Aristoteles. 1965. De Animalium Historia. English Translation by A. L. Peck. Cambridge: Harvard University Press.
- Balsdon, J. P. V. D. 1969. Life and Leisure in Ancient Rome. New York: McGraw-Hill Book Company.
- Bendann, E. 1930. Death Customs: An Analytical Study of Burial Rites. New York: Alfred A. Knopf.
- Binford, Lewis R. 1971. "Mortuary Practices: Their Study and Their Potential" in Approaches to the Social Dimensions of Mortuary Practices. Memoirs of the Society for American Archaeology 25, 6-29.
- Blake, Marion E. 1930. "The Pavements of the Roman Buildings of the Republic and Early Empire." Memoirs of the American Academy in Rome 8, 7-160.
- Blanckenhagen, P. V., M. A. Cotton, and J. B. Ward-Perkins. 1965. "Two Roman Villas at Francolise, Prov. Caserta. Interim Report on Excavations, 1962-64." Papers of the British School at Rome 33, 55-69.
- Blok, Josine and Peter Mason. 1987. Sexual Assymetry Studies in Ancient Society. Amsterdam: J. C. Gieben, Publisher.
- Bonomi, Laura. 1964. "Cimiteri paleocristiani di Sofiana (retrotterra di Gela)." Rivista Di Archeologia Cristiani XL.
- Boswell, John. 1988. The Kindness of Strangers. The Abandonment of Children in Western Europe from Late Antiquity to the Renaissance. New York: Pantheon Books.

- Bradley, Keith R. 1995. Discovering the Roman Family.
Oxford: Oxford University Press.
- Brothwell, D. R. and A. T. Sandison. 1967. Diseases in Antiquity. Springfield, Illinois: C. C. Thomas.
- Brunt, P. A. 1971. Italian Manpower, 225 B.C. - A.D. 14.
Oxford: Clarendon Press.
- Burger, A. SZ. 1966. "The Late Roman Cemetery at Sagvar."
Acta Archaeologica Academiae Scientiarum Hungaricae 18,
99-234.
- Carandini, A. 1988. Schiavi in Italia. Rome.
- Carrick, Paul. 1985. Medical Ethics in Antiquity.
Dordrecht: D. Reidel Publishing Company.
- Cederroth, S., C. Corlin and J. Lindstrom. 1988. On the Meaning of Death. Essays on Mortuary Rituals and Eschatological Beliefs. Stockholm: Almqvist and Wiksell International.
- Clarke, Giles. 1975. "Popular Movements and Late Roman Cemeteries." World Archaeology 7, 46-56.
- _____. 1979. The Roman Cemetery at Lankhills. Winchester Studies 3. Pre-Roman and Roman Winchester.
Oxford: Clarendon Press.
- Cocks, A. H. 1921. "A Romano-British Homestead in the Hambledon Valley, Bucks." Archeologia 71, 141-198.
- Collis, John. 1977. "Owlesbury (Hants.) and the Problem of Burials on Rural Settlements" in Burial in the Roman World. The Council for British Archaeology Research Report 22, 26-34.
- Cotton, M. Alwin. 1983. "Some Research Work on Roman Villas in Italy, 1960-80" in Rome and her Northern Provinces. London: Alan Sutton Publishing.
- Cowell, F. R. 1961. Everyday Life in Ancient Rome.
London: B. T. Batsford Ltd.
- Crook, John. 1967. Law and Life of Rome. Ithaca: Cornell University Press.

- Cunliffe, Barry. 1975. Excavations at Portchester Castle Vol. I: Roman Reports of the Research Committee of the Society of Antiquaries of London. XXXII.
- D'Arms, John H. 1970. Romans on the Bay of Naples. A Social and Cultural Study of the Villas and their Owners from 150 B.C. to A.D. 400. Cambridge: Harvard University Press.
- _____. 1981. Commerce and Social Standing in Ancient Rome. Cambridge: Harvard University Press.
- De Neeve, P. W. 1984. Colonus Private Farm-Tenancy in Roman Italy During the Republic and the Early Principate. Amsterdam: J. C. Gieben, Publisher.
- Del Chiaro, Mario A. 1989. "Villa with a View." Archaeology 42, 58-61.
- Den Boer, W. 1979. Private Morality in Greece and Rome, Some Historical Aspects. Leiden: E. J. Brill.
- Devereus, George. 1976. A Study of Abortion in Primitive Societies. New York: International Universities Press, Inc.
- Dixon, Suzanne. 1988. The Roman Mother. London: Croom Helm Ltd.
- _____. 1992. The Roman Family. Baltimore: The Johns Hopkins University Press.
- Duncan-Jones, Richard. 1974. The Economy of the Roman Empire. Cambridge: Cambridge University Press.
- Elderkin, Kate. 1930. "Jointed Dolls in Antiquity." American Journal of Archaeology 34, 455-479.
- Etienne, Robert. 1973. "La Conscience medicale antique et la vie des enfants." Annales de Demographic Historique 21, Infant et Societes, 15-61.
- Eyben, E. 1980-81. "Family Planning in Graeco-Roman Antiquity." Ancient Society 11-12, 5-82.
- Feruglio, E. (ed.) 1983. Ville e Insediamenti Rustici di eta Romana in Umbria. Perugia.
- Finley, M. I. (ed.) 1976. Studies in Roman Property. Cambridge: Cambridge University Press.

- Flandrin, Jean-Louis. 1976. Families in Former Times: Kinship, Household and Sexuality. Cambridge: Cambridge University Press.
- Frere, Shepherd. 1972. Verulamium Excavations Vol. I. Reports of the Research Committee of the Society of Antiquaries of London XXVIII.
- Gardner, Jane E. 1986. Women in Roman Law and Society. London: Croom Helm Publishing.
- Gardner, Jane E. and Thomas Wiedemann. 1991. The Roman Household. London: Routledge.
- Garland, Robert. 1986. "Mother and Child in the Greek World." History Today 36, 40-46.
- Garnsey, Peter. 1986. "Famine in the Ancient Mediterranean." History Today 36, 24-30.
- _____. 1988. Famine and Food Supply in the Graeco-Roman World. Responses to Risk and Crisis. Cambridge: Cambridge University Press.
- _____. 1991. "Child Rearing in Ancient Italy" in The Family in Italy from Antiquity to the Present. New Haven: Yale University Press.
- Garnsey, Peter and Richard Saller. 1987. The Roman Empire. Economy, Society and Culture. London: Gerald Duckworth and Co.
- Giannelli, Guido. 1967. Ancient Rome. New York: Putnam Publishers.
- Golden, Mark. 1988. "Did the Ancients Care when their Children Died?" Greece and Rome XXXV, 152-163.
- Greene, Kevin. 1986. The Archaeology of the Roman Economy. London: B. T. Batsford.
- Guido, Margaret. 1973. Southern Italy: An Archaeological Guide. Park Ridge: Noyes Press.
- Hands, A. R. 1968. Charities and Social Aid in Greece and Rome. Ithaca: Cornell University Press.
- Harris, W. V. 1971. Rome in Etruria and Umbria. Oxford: Clarendon Press.

- _____. 1982. "The Theoretical Possibility of Extensive Infanticide in the Graeco-Roman World." Classical Quarterly 32, 114-116.
- Harrison, G. A. and A. J. Boyce (eds). 1972. The Structure of Human Population. Oxford: Clarendon Press.
- Hart, Gerald D. 1983. Disease in Ancient Man. Toronto: Clarke Irwin Inc.
- Hassan, Fekri A. 1981. Demographic Archaeology. London: Academic Press.
- Hausfater, Glenn and Sarah Blaffer Hardy. 1984. Infanticide: Comparative and Evolutionary Perspectives. New York: Aldine Publishing Company.
- Heichelheim, Fritz M., Cedric A. Yeo, and Allan M. Ward. 1989. A History of the Roman People. Englewood Cliffs: Prentice-Hall, Inc.
- Henig, Martin. 1983. A Handbook of Roman Art. Oxford: Phaidon Press.
- Hertz, R. 1907. "Contribution a une etude sur la representation de la Mort." L'Annee Sociologique 10.
- Hopkins, Keith. 1965. "Contraception in the Roman Empire." Comparative Studies in Society and History 8, 124-51.
- _____. 1983. Death and Renewal: Sociological Studies in Roman History. Cambridge: Cambridge University Press.
- Humphreys, S. C. and Helen King. 1981. Mortality and Immortality: The Anthropology and Archaeology of Death. London: Academic Press.
- Jackson, Ralph. 1988. Doctors and Diseases in the Roman Empire. London: British Museum Publications, Ltd.
- Jones, A. H. M. 1964. The Later Roman Empire A. D. 284-602. A Social Economic and Administrative Survey. Norman: University of Oklahoma Press.
- Jones, W. H. S. 1907. Malaria. A Neglected Factor in the History of Greece and Rome. London: Macmillan and Co., Ltd.

- Joshel, Sandra R. 1986. "Nurturing the Master's Child: Slavery and the Roman Child-Nurse." Signs 12, 3-22.
- King, Anthony. 1982. Archaeology of the Roman Empire. Greenwich, Connecticut: Bison Books Limited.
- La Fontanaccia. 1989. Settore Fontanaccia e Ufficio Tecnico del Grupo Archeologico Romano.
- Lacey, W. K. 1968. The Family in Classical Greece. Ithaca: Cornell University Press.
- Lefkowitz, Mary R. and Maureen B. Fant. 1982. Women's Life in Greece and Rome. London: Gerald Duckworth and Co. Ltd.
- Lewis, Naphtali and Meyer Reinhold. 1955. Roman Civilization. Sourcebook II: The Empire. New York: Harper and Row, Publishers.
- Lloyd, G. E. R. 1983. Science, Folklore, and Ideology. Cambridge: Cambridge University Press.
- Lyman, Richard B. 1974. "Barbarism and Religion: Late Roman and Early Medieval Childhood" in The History of Childhood. New York: Psychohistory Press.
- MacMullen, Ramsay. 1974. Roman Social Relations 50 B.C. to A.D. 284. New Haven: Yale University Press.
- Majno, Guido. 1974. The Healing Hand. Man and Wound in the Ancient World. Cambridge: Harvard University Press.
- Manchester, Keith. 1983. The Archaeology of Disease. Bradford: University of Bradford Press.
- Manson, Michael. 1983. "The Emergence of the Small Child in Rome (Third Century B.C. - First Century A.D.)" History of Education Vol. 12, No. 3, 149-159.
- Marks, Geoffrey and William K. Beatty. 1976. Epidemics. New York: Charles Scribner's Sons.
- McDaniel, Walter Brooks. 1948. Conception, Birth and Infancy in Ancient Rome and Modern Italy. Lancaster, PA: Business Press.
- McKay, A. G. 1975. Houses, Villas and Palaces in the Roman World. London: Thames and Hudson.

- _____. 1977. Naples and Coastal Campania. Ancient Campania: Volume II. Hamilton, Ontario: Cromlech Press.
- McWhirr, Alan, Linda Viner and Calvin Wells. 1982. Romano-British Cemeteries at Cirencester. Cirencester, England: Cirencester Excavation Committee Corinium Museum.
- Mielsch, Harold. 1987. Die römische Villa Architektur und Lebensform. Munich: Verlag C. H. Beck.
- Miles, David (ed.). 1986. Archaeology at Barton Court Farm, Abingdon, Oxon. Oxford Archaeological Unit Report 3.
- Ovadia, Ashar. 1980. Geometric and Floral Patterns in Ancient Mosaics. Rome: L'erma di Bretschneider.
- Pader, Ellen Jane. 1982. "Symbolism, Social Relations and the Interpretation of Mortuary Remains." B.A.R. International Series 130.
- Painler, Kenneth (ed.). 1980. "Roman Villas in Italy" British Museum Occasional Paper No. 24. London: British Museum Publications.
- Paoli, Ugo Enrico. 1958. Rome. Its People Life and Customs. New York: David McKay Company, Inc.
- Peacock, D. P. S. and D. F. Williams. 1986. Amphorae and the Roman Economy: An Introductory Guide. London: Longman Group Limited.
- Percival, John. 1976. The Roman Villa. An Historical Introduction. London: B. T. Batsford Ltd.
- Plutarchus. 1927. Moralia. English Translation by Fran Cole Babbitt. Loeb Classical Library London: W. Heinemann Ltd.
- _____. 1974. Quaestiones Romanae. English translation by H. J. Rose. New York: Arno Press.
- Potter, T. W. 1987. Roman Italy. London: British Museum Publications.
- Randers-Pehrson, Justine Davis. 1983. Barbarians and Romans. The Birth Struggle of Europe, A.D. 400-700. Norman: University of Oklahoma Press.

- Rawson, Beryl. 1986. The Family in Ancient Rome. London: Croom Helm Ltd.
- _____. (ed.). 1991. Marriage, Divorce, and Children in Ancient Rome. Oxford: Clarendon Press.
- Reece, Richard. 1979. "Burial in the Roman World." The Council for British Archaeology Research Report No. 22.
- _____. 1982. "Bones, Bodies, and Dis-ease." Oxford Journal of Archaeology I, 347-358.
- Rollins, Alden. 1991. Rome in the Fourth Century A.D. An Annotated Bibliography. London: McFarland and Company, Inc. Publishers.
- "Roman Child Cemetery Discovered in France." 1990. Minerva I. No. 4.
- Rosenblatt, Paul C., R. Patricia Walsh and Douglas A. Jackson. 1976. Grief and Mourning in Cross-Cultural Perspective. HRAF Press.
- Rossiter, J.J. 1978. "Roman Farm Buildings in Italy." B.A.R. International Series 52.
- Scarborough, John. 1969. Roman Medicine. Ithaca: Cornell University Press.
- Shaw, Brent. 1991. "The Cultural Meaning of Death: Age and Gender in the Roman Family" in The Family in Italy from Antiquity to the Present. New Haven: Yale University Press.
- Shelton, Jo-Ann. 1988. As the Romans Did. A Source Book in Roman Society History. Oxford: Oxford University Press.
- Spriggs, Matthew. 1977. "Archaeology and Anthropology: Areas of Mutual Interest." B.A.R. Supplementary Series 14.
- Starr, Chester G. 1971. The Ancient Romans. Oxford: Oxford University Press.
- Tacitus, Cornelius. 1909. The Works of Tacitus. Oxford Translation London: G, Bell and Sons Ltd.

- 30 Ans Au Service Du Patrimoine. 1987. Tunis: Ministere des Affaires Culturelles Institut National D'Archeologie et D'Art.
- Todd, Malcolm. 1978. Studies in the Romano-British Villa. Leicester: Leicester University Press.
- Toynbee, A. 1968. Man's Concern with Death. New York: McGraw-Hill Book Company.
- Toynbee, J. M. C. 1971. Death and Burial in the Roman World. Ithaca: Cornell University Press.
- Vergil, The Aeneid. 1977. Second Edition. English Translation by Frank O. Lopley. Indianapolis: Bobbs-Merrill Educational Publishing.
- Von Hagen, Victor. 1967. The Roads that Led to Rome. Cleveland: The World Publishing Company.
- Wacher, J. S. "Excavations at Brough-on-Humber, 1958-61." Reports of the Research Committee of the Society of Antiquaries of London, XXV.
- Weidemann, Thomas. 1989. Adults and Children in the Roman Empire. London: Routledge.
- Williams, D. F. "An Interim Report on Amphorae from Recent Excavations at the Roman Villa at Poggio Gramignano, Lugnano in Teverina [Terni], Umbria." Forthcoming.
- _____. "The African Red Slip Pottery from the Roman Villa at Poggio Gramignano, Lugnano in Teverina [Terni], Umbria." Forthcoming.