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> Pottery and lamps from the Foundationand Upper Walls Constructions of the Gerasa Hippodrome: Excavations 1984-1996 by Antoni A. Ostrasz

## Introduction

This paper concludes the series of discussions Antoni Ostrasz and I have published in preliminary reports covering many years of our work and research at the hippodrome: in the main its architecture and archaeological contexts comprising the occupational history and changes of the hippodrome and the site<sup>1</sup>. Salient architectural evidence for the original building process of the Gerasa hippodrome has already been introduced by Antoni Ostrasz allowing for omitting references already cited in his published reports<sup>2</sup>. Nor are the site and our work unfamiliar to ICHAJ / SHAJ participants and readers. Lastly this paper does not set out to review, compare and contrast copious corpi of ceramics. All pottery and lamps are standard forms representing Gerasa pottery of the Late Hellenistic, Early Roman and Roman periods discussed in various preceding papers<sup>3</sup>. We are fortunate to have abundant material evidence to ascertain dates of manufacture and commerce of the pottery and lamps; even transitional cultural phases of production are relatively easily discernible to ceramicists backed by solid quantitative and corroborated data at Gerasa and other Decapolis cities.

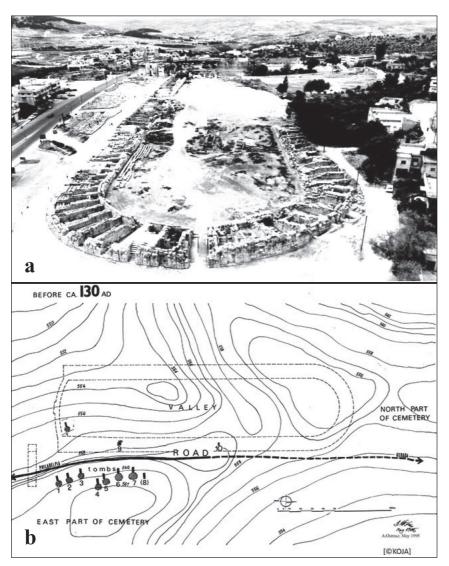
The paper aims at rounding up and adding new evidence since our earliest publication (Ostrasz 1989a, 1989b; Kehrberg 1989) by presenting a concise illustrated account of the site during construction, i.e. archaeological data from foundation contexts and some of the original hippodrome building seen on (FIG. 1a) The photo taken by Antoni in 1995 (from a crane) shows the cavea and arena excavated by Antoni from 1984 on and his restoration in progress. I was -and still am- in charge of the study of the archaeological material finds, but not infrequently engaged in fieldwork after the tumbled remains had been plotted and systematically removed by Antoni and we had reached contexts which required minuti excavation like in chambers W2 and W3, the mass burials of the mid-7th century plague victims and the strata below<sup>4</sup>. I might mention here that all burials of the hippodrome phases, not those of the necropolis phase, and their archaeological contexts are

<sup>1.</sup> I wish to thank Bob Bewley for having presented my paper on 22nd May, 2016, Amman.

<sup>2.</sup> See Ostrasz 1989a, 1989b, 1990, 1991, 1995a, 1995b; Kehrberg and Ostrasz 1997.

<sup>3.</sup> See e.g. Kehrberg 1989, 2004, 2006, 2011b.

<sup>4.</sup> Assisted by Mark Kehrberg-Ostrasz in the excavations and finds assemblages; see also cited references in Kehrberg and Ostrasz 2017.



1a. Hippodrome aerial view facing south (1995, A.Ostrasz).1b. Necropolis and topography of the site with projected plan of the hippodrome (May 1995, A.Ostrasz).

published by Antoni (posthumously) and myself in *ADAJ* 58 (Kehrberg and Ostrasz 2017).

A brief explanation of the copyright ' $\mathbb{C}$  *KOJA*' (Kehrberg and Ostrasz Jarash Archives) cited on (FIGS. 1-10) is warranted: In recognition of our work at Jarash the Australian Government, in affiliation with the University of Sydney, awarded a large amount of permanent e-storage for *KOJA* on their digitalised database site, e-RDSI (Research Data Storage Intersect). The site has been created to protect and preserve major archaeological and historical archives for future research.

## **Contexts and their Archaeological Finds**

As pointed out in the introduction, this paper

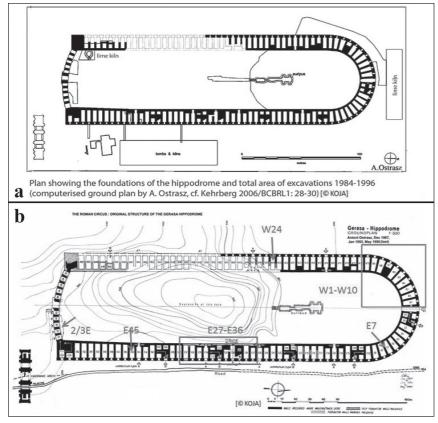
completes the published series of phases of use and reoccupations at the hippodrome (*e.g.* Ostrasz 1989; Kehrberg 1989; Kehrberg and Ostrasz 1997) concluding with samples of the rich archaeological finds deposits, in the main from the 1989-1996 excavations, dating the foundation, – construction – and original use phase of the hippodrome as an arena for chariot racing (Ostrasz 1990).

The plan on (FIG. 1b) maps the topography and known or excavated hypogean tombs of the said necropolis, and locates precisely where the circus was to be. Like the other plans and sections by Antoni, it has been published in a previous paper (Ostrasz 1995) sufficing here to illustrate them as a recall for the figures concerning the foundation contexts presented here.

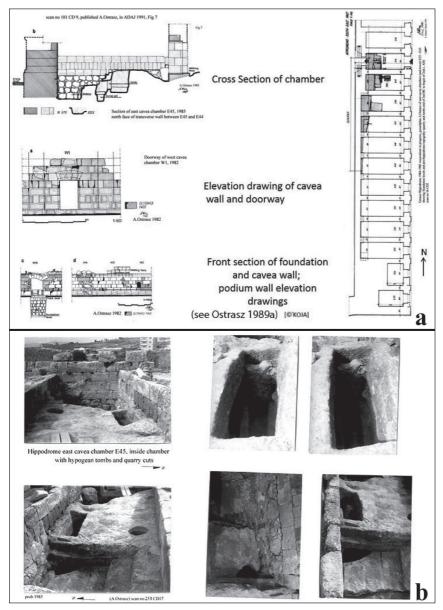
The date range for laying the foundation of the cavea seen on (FIG. 2a) is bracketed within the first half of the second century AD by archaeological data corroborated by numismatic evidence presented on (FIG. 6). The most telling contextual evidence is the closure of the S-W precinct of the necropolis or its hypogean tombs and the annexed quarry. This occurred before or latest by 129/130 AD in preparation for building Hadrian's Arch dedicated in 129/130 AD; the date of the inscription of the arch is equally backed by contextual finds of the structure's core (Seigne and Morin 1995) and the subsequent building of the circus dated by contextual finds from foundations and upper building levels occurring shortly after.

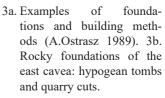
The ground plan on (FIG. 2b), (Ostrasz 1995) marks some of the excavated contexts showing the spread of the loci and their deposits; they are representative of many more find spots giving an overview of their homogeneity; one has to remember that we excavated almost the entire hippodrome and its periphery from 1984-1996. Construction methods of cavea foundations and chambers and podium walls illustrated on (FIGS. 3a, 3b) (Ostrasz 1989 and 1991) also serve to show where some of the contextual artefacts were found, that is, in the fills of wall constructions and collapsed wall and/or seating segments. The hypogean tombs and quarry cuts (FIG. 3b) were part of the foundation of the east cavea chamber E45 exposed during excavation.

The same applies to sketches on (FIG. 4) showing rare examples of 'dirt layers' *in situ*, preserved through careful excavations which also confirmed how the lowest courses sealing the foundation or ground level of the cavea were built: layers of small stone chips with finer dust particles from chipping – a whitish-grey layer – prove that final dressing of blocks occurred after being put on the wall course; the stone chips were then covered by another dirt layer embedding the 'planned "floor" level'. Once identified by Antoni, I recognised the same construc-



2a. Ground plan of extant remains of the hippodrome after excavations 1984-1995 by A.Ostrasz. 2b. 1995 Ground plan with areas of foundations and construction contexts.





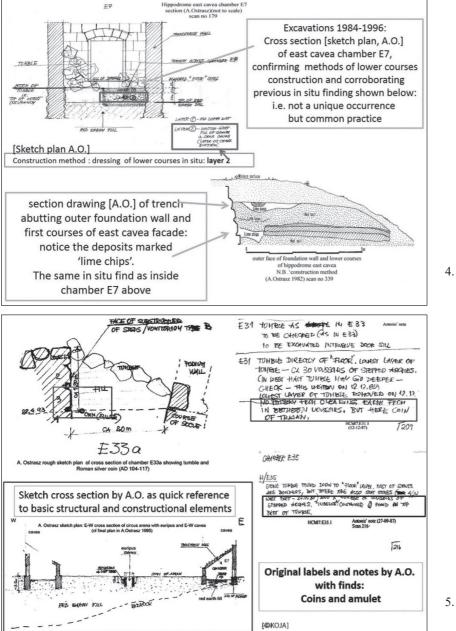
tion method evidenced at other excavations. It is important to note that the chip layer or 'layer of construction' (FIG. 4:2) was sterile, *i.e.* there was no time for accumulation of residue before the chip layer was covered, yet more evidence for the building method. At another find along the east cavea chambers were unused and unfinished building blocks still aligned *in situ* in the foundation trench, clearly not having been needed when completing the lowest courses of that transverse wall and covered with fill up to the floor level in the chamber.

The sketches on (FIGS. 4, 5) provide another

glimpse of Antoni's in-field sketches and labels accompanying each excavated find or deposit. Depending on the quantity of a deposit there may be any number of labels for the same find spot and numbered, for instance "1 of 5" with identical description or sketch per label. It is this meticulous method of recording which enabled accurate calculations of total assemblages from the excavated areas.

The main purpose of showing the coins on (FIG. 6) is to provide some of the numismatic evidence as collateral confirming the date range of the ceramic finds in the same or similar con-

#### THE GERASA HIPPODROME: EXCAVATIONS 1984-1996



4. Examples of construction methods of lower courses of the cavea.

texts<sup>5</sup>. These coins, among others come from contexts of foundation levels, upper walls construction and tumble of original upper strata of the cavea. As with the early lamps and pottery, the majority of the coins date to the necropolis phase of the site. Some examples from the east cavea chambers E27 and E29 date either the foundation and / or construction phases of the circus and corroborate the ceramics finds like

overview of the material evidence attesting the beginning or building and first use of the circus. Some of the lamps and early pottery

As the coins the ceramics give a concise

the Gerasa Lamps. Christian Augé and Julian

Bowsher studied the coins and their contribu-

tions will appear together with Antoni's coin in-

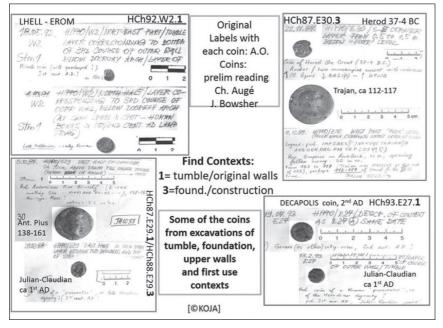
ventory listing the find spots, contexts and loci.

shown on (FIG. 7) are known from previous

<sup>5.</sup> Sketches and notes on site: fieldwork in progress by A. Ostrasz.

<sup>5.</sup> I must apologise for the poor quality of the photos on fig. 6; they were taken for record's sake before handing over the entire coin

collection of the hippodrome to the DoA, with Antoni's labels as shown here.



6. Coins from foundation and construction contexts with labels by A.Ostrasz.

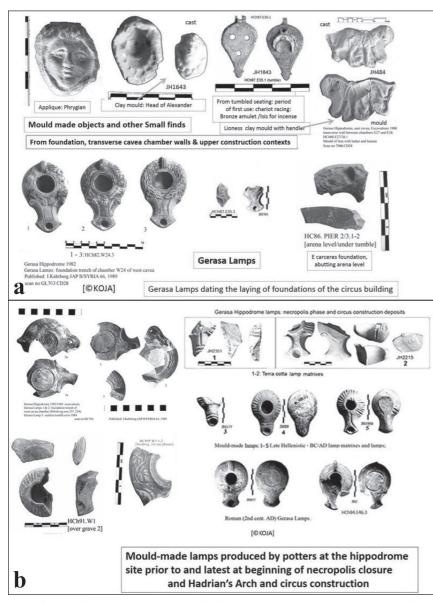
papers (*e.g.* Kehrberg 2011) and introduced in our first articles on the hippodrome (Kehrberg 1989), together with Borkowski's study of the inscribed altars related to chariot racing victories (Borkowski 1989). The inscription on Hadrian's Arch and the altars have provided a solid bracket within which the circus was built and subsequently used for chariot racing, fitting well with the ceramic and numismatic evidence.

The objects on (FIG. 7a), or especially their types are traditionally used to date contexts; they, especially the lamps are defined by their iconographic and form styles associated with cultural periods of production, *i.e.* Late Hell, BC/AD, Early Roman or Trajanic, Roman and Late Roman, Byzantine etc. I have been able to demonstrate that mould-made objects are not always 'safe' to use for dating a context: hippodrome potters reused earlier moulds and lamps to make new moulds (Kehrberg 2001, 2011a). However, this becomes apparent once one examines and correlates quantitatively the whole deposit or assemblage – a holistic approach to chronological typology. Here we see the classic Gerasa Lamps: their primary productions dating from the end of the 1st to mostly first half of the 2<sup>nd</sup> century AD as established by Iliffe (1945) stands firm; our lamps are the original

product – not 'compromised' by above mentioned later reproduction. Other finds, especially pottery and rarer items like coins, the bronze amulet, the moulds of a lion and cameo head of Alexander the Great shown here as well as the appliqué head of probably a Phrygian on a rim of a rather fanciful bowl all fit within the period of construction of Hadrian's Arch and the hippodrome which was probably planned already during the building of the arch as shown on Antoni's pre 130 AD plan of the site. There is no space to go into details but I have discussed planning aspects of Roman Gerasa in a previous paper (Kehrberg 2011b).

Some of the lamps on (FIG. 7b), as those on (FIG. 8a), are representative samples evidencing Late Hellenistic to 1<sup>st</sup> century BC/AD potters having been active at the necropolis site catering for burial gifts. Although the two, and quite unique clay lamp matrixes nos 1-2 were found in Late Roman pottery workshop waste dumps they affirm the same activity prior to the hippodrome. This is indeed corroborated by other lamps finds of the earlier or pre-Gerasa Lamps period, the BC/AD types like the examples shown on (FIG. 7b) coming from contexts of the east and west cavea. I have discussed most of the lamps shown here, and their con-

#### THE GERASA HIPPODROME: EXCAVATIONS 1984-1996



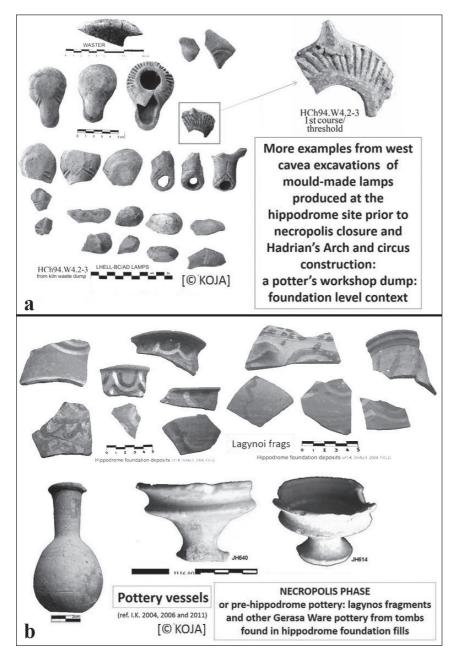
texts in previous papers (e.g. Kehrberg 2011a).

Whilst some of the Gerasa Lamps appear to have been placed at the very foundation of the cavea chambers as a *quasi* votive offering, (FIG. 8a) shows some examples and further evidence of BC/AD lamps coming from potters' waste dumps incorporated in the foundations of the hippodrome.

The waster, a fragment of a standard carinated bowl or cup and one of several examples, was found with the lamp fragments and highlights the nature of the foundation deposits being that of pottery workshops waste dumps. The lamp type is again the common variety 7a, b: Lamps from the necropolis phase and the construction phase of the hippodrome.

current in the first centuries BC and earlier AD. Detail of the unusual and messy attempt of attaching a knob-like 'handle' may suggest poor workmanship or, more likely experimentation as this early lamp type is not known to have had a handle in Gerasa; more importantly, these examples were probably made in the first century AD rather than BC. Knob-lug handles become part of the late 1<sup>st</sup>-2<sup>nd</sup> century AD repertoire of Gerasa Lamps and their descendants (FIG. 7).

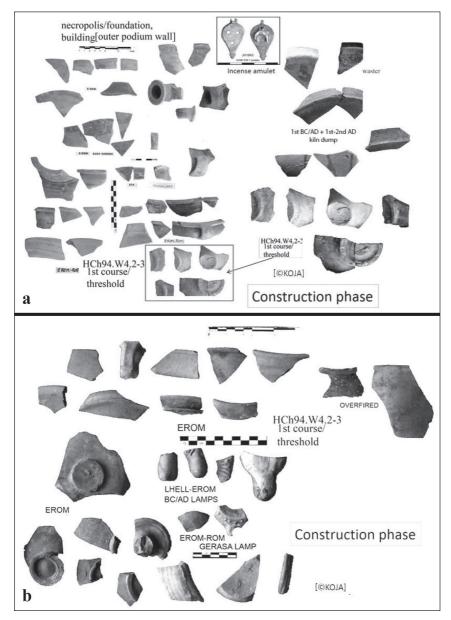
(FIGS. 8b, 9) present some of the pottery finds that either accompanied the lamps shown here or were found without lamps; clearly not every waste dump had the same composition of



8a, b. Lamps and pottery from the necropolis phase in foundation fills of the circus.

discarded objects, nor would the circus builders be 'selective' but rather avail themselves to dirt found at hand and underfoot as it were. This is another point I noted during other excavations I took part in and remarked upon in articles: *in situ* evidence clearly shows that builders used materials lying underground or nearby, whether stones or dirt fill carrying the material remains of that particular lot or locality with it. The hippodrome is no exception and the builders availed themselves to whatever could be retrieved from the site itself as seen on (FIGS. 8b-10).

As noted above with the lamps, the pottery shown on (FIG. 8b) is associated with the hypogean tombs or necropolis at the site. While the phial is a typical example of the 1<sup>st</sup> BC, and the cups are usually associated with burials of the 1<sup>st</sup> century BC/AD, the painted pottery fragments can be associated with the burials dating from the later 2<sup>nd</sup> to 1<sup>st</sup> century BC. After far reaching research I identified and named the pottery '*Early Painted Gerasa Ware*' and



9a, b. Pottery from west cavea construction and first use phases of the hippodrome.

discovered that it had to be associated with the lagynos jug and the *lagynophoria* burial cult of that period. I have discussed this new Gerasa ware in a number of publications together with the lagynos and other objects of the Late Hellenistic Tomb found in the 2001 season of the 2000-2003 city walls excavations project<sup>6</sup>.

Suffice it to say here is that these locally made examples or copies of imported lagynoi (Kehrberg 2004) come from the tombs at the hippodrome site and were found with foundations deposits, the cavea chamber either incorporating a hypogean tomb or a tomb lying within vicinity shown earlier and thus also employing a potter's or necropolis dump. The same can be said for the east carceres foundations in part incorporating a tomb underneath the arena in front of the stalls (FIG. 1b). It allows us to pinpoint the beginning date of the necropolis being more or less contemporary with or even earlier than the earliest lamps shown in this paper (see especially the matrixes on FIG.7b).

Jarash City Walls Project: see Kehrberg and Manley 2001, 2002, 2003; on the lagynoi and lagynophoria see Kehrberg 2004 and 2006,

and cited literature.

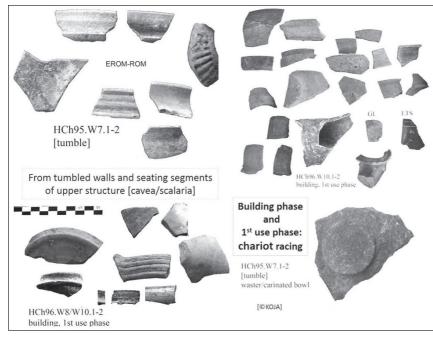
The pottery and lamps on (FIGS. 9 and 10) come from contexts of the west cavea; most forms, including the wasters, are the same as at the east cavea associated with the 2<sup>nd</sup> century AD and are contemporary with the Gerasa Lamps. As in the east cavea the deposits include some 1<sup>st</sup> century examples. And as the waster fragments show we are again dealing with a pottery waste dump rather than residual randomly accumulated artefacts.

The concentrated quality of fragments and clusters are an indicator that we are dealing with waste dumps of pottery production at the time of closure of the necropolis site and commencement of constructions of Hadrian's Arch and the circus in the second century. They are wasters and examples of misfired pottery many of whose types we are familiar with from tomb finds of the second, and indeed some being still produced in the early third century. What narrows down the laying of the foundation and also building the above ground construction of the hippodrome are the numerical ratio between the types and the wasters in particular which fit comfortably within the first half of the second century AD.

As stated above, some forms, especially the carinated bowls are produced throughout the

second century, their precursors having started in the first century (see Braemer 1986), mostly local copies of the imported sigillata variety, as the Late Hellenistic potters had copied contemporary imports. Most of the pottery on (FIGS. 9-10) came from upper structures of either tumbled courses of transverse cavea walls, the podium wall and of seating tiers (scalaria). Antoni also found fragments still in situ as part of the masonry fill when he had to carefully dissemble segments or blocks from standing courses in order to remove and replace original eroded or corrosive blocks to consolidate the still standing wall. This is how we retrieved the lion mould shown with the other moulds on (FIG. 7a). Included in the core of the walls in part made up of dirt were other pottery fragments seen on (FIG. 10).

Careful excavation of tumbled remains covering the cavea and arena for plotting and then removal of blocks for subsequent restoration enabled Antoni to piece together not only the matrix of the lower scalaria and the east carceres for restoration; it enabled me to study the finds within the original contexts of that particular building part. Being able to excavate and study each element thoroughly over fourteen years of permanent fieldwork allowed not only



10. Pottery from west cavea dating the building and first phase of use of the hippodrome.

meticulous recording and study and restoration by Antoni of these building parts, but it also provided me with the means for the archaeological reconstruction of the building phases, that is, dating the construction phase and in rare instances also the phase of the circus when it operated as a chariot racing course. The bronze amulet worn by a spectator, no doubt a woman (FIG. 9a) came from such a context, a dense and compact and undisturbed layer of seating tumble, a lost trinket during the excitement of the race, fallen into a crack or onto the floor of the seating tier as so often happens at shows with big crowds.

The ceramics on the last two figures, as indeed on all figures serve to illustrate that while being only a small representation of the actual quantity of finds, they convey the homogeneity of types and date-range. As aforementioned, each assemblage or deposit of finds was accompanied by labels including a sketch of the find spot which enabled me to reconstruct the locus and level for each separate deposit.

To conclude, the last two figures sum up what has already been observed on the material shown in the previous figures from other contexts: the building incorporated artefacts from the necropolis period of the site and pottery and lamps dating the beginning of construction and most likely its completion as we have material evidence belonging to the first use of the circus. The ultimate proof that chariot racing did take place was in the altars placed on the top of the east carceres (Ostrasz 1989; Borshowski 1989), found with the collapsed carceres on the arena floor and protected for almost two millennia by the tumbled remains of the stalls. Antoni's careful excavations made possible the complete reconstruction of the east carceres north facade which had collapsed like a house of cards onto the arena. One of the altars had been dedicated to Julia Domna (Borkowski 1989). This means that chariot racing was in full swing by the 3rd century, in other words racing had begun in the second century, most likely in the latter part of the second half of that century judging by the latest pieces of pottery and lamps found within the wall structures or their tumbled but otherwise undisturbed remains.

### Abbreviations

JAP I and II JAP I: Jerash Archaeological Project, 1981-1983, Vol. I, edited by F. Zayadine, DoA: Amman 1986; JAP II: Vol. II 1984-1988, in SYRIA 66/1-4, Amman-Lyon 1989.

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