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CARTHAGE, TUNISIA

The Carthage Circus Project: Aims, Strategy and Results



Working report 2016

Rome Department of the German Archaeological Institute

by Ralf Bockmann



e-FORSCHUNGSBERICHTE DES DAI 2017 · Faszikel 1

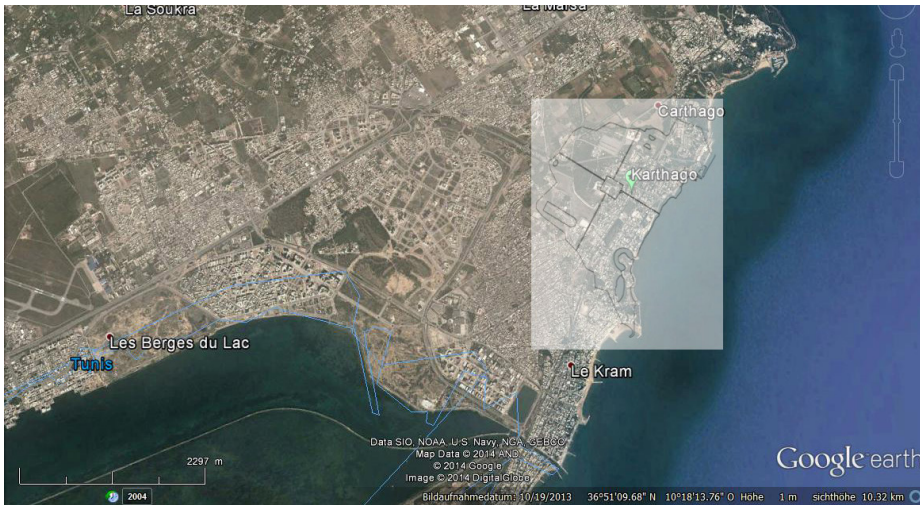
Co-operation: Institut National du Patrimoine (H. Ben Romdhane).

Head of project: R. Bockmann.

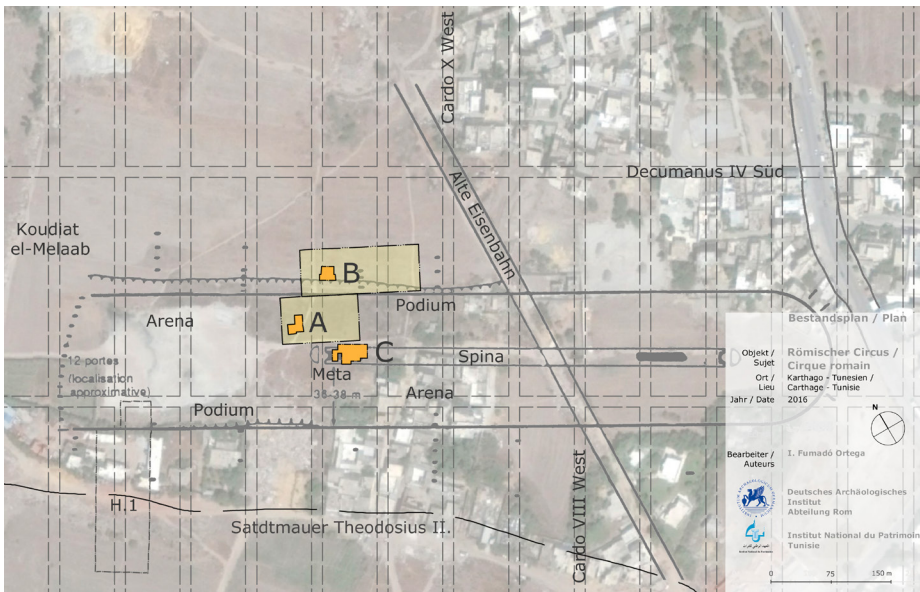
Team: St. Cespa, I. Fumadó Ortega, A.-M. Graatz, E. Jerray, B. Maraoui Telmini, N. Röring, F. Schön, Y. Sghaier.

The project studies the circus of Carthage, the biggest monument of the Roman city and the only one not excavated until now. The circus lay in the south western quarter of the ancient city, and the project analyses how the building changed the whole region and its urban patterns and infrastructure. We are looking at the diachronic development in this part of Carthage, from the Punic epoch through Roman times into Late Antiquity and Early Middle Ages in the only part of the city not overbuilt and not extensively studied.

In 2015, the Rome Department of the German Archaeological Institute together with the Institut National du Patrimoine of Tunisia started a new research project on the circus of Carthage and its surrounding area (see [eDAI-F 2015, 3](#)⁷⁾). The aim of the project is twofold: First, to understand and reconstruct the chronology, design and architecture of the circus of Carthage, the largest circus of North Africa and second only to the imperial circuses in Rome itself. Second, to understand the development of the urban area in



1 Tunis and Carthage (Tunisia), recent google earth image with projection of the ancient city limits and main monuments showing the topographical situation (graphic: R. Bockmann).

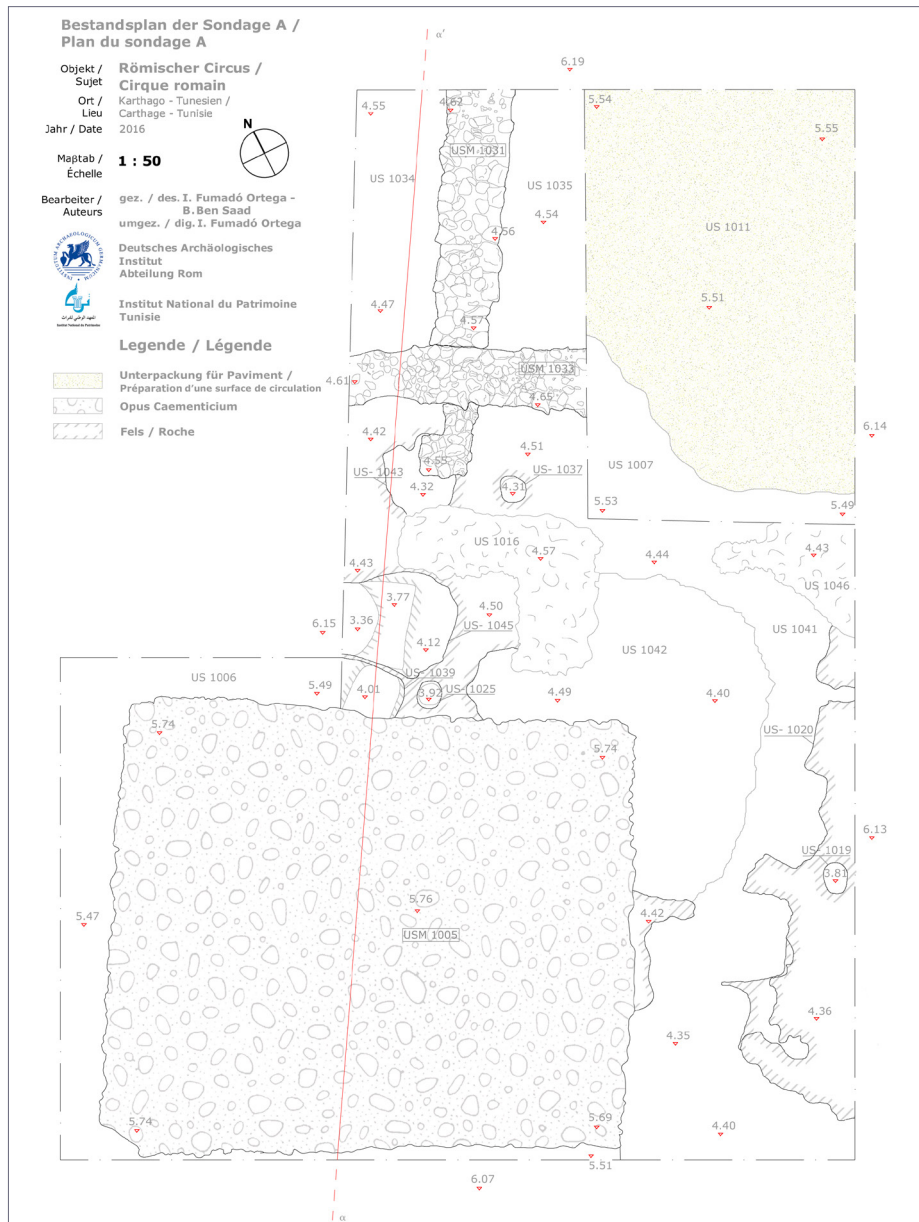


2 Plan of the sondages (orange), the area of georadar analysis (yellow) and projection of the circus and Roman street grid based on pre-excitation data (plan: I. Fumadó Ortega).

general: How did it look like before the circus was built, what changes occurred with the construction of this massive public building, how was it connected to the city and how did the urban patterns change after the circus had lost its primary function at some point in Late Antiquity? Lastly, how and when was it spoliated? The fact that the area has not been overbuilt in the modern period leaves us with a unique chance of studying a whole quarter of the ancient city of Carthage in a diachronic perspective. This has never been achieved before due to rather restricted excavations in the midst of the modern suburban structure of Carthage to the north of Tunis (fig. 1).

Two interventions had been undertaken before to study the circus of Carthage, albeit both remained very limited and have not been fully published. The first study was by a Polish team in the 1970s in the frame of the international UNESCO „Save Carthage“ activities that eventually led to the addition of Carthage to the World Heritage list in 1979. The Polish team carried out a geoelectrical survey of the region and proposed a plan based on their findings. Additionally, they carried out excavations in the eastern half of the middle barrier, the *spina* (which is a modern pathway with some ancient remains still visible on modern ground level). Although they were not able to identify a stratigraphy, they proposed a construction date in the early 2nd century AD for the monument. The plan produced by the Polish team has been fundamentally criticised and in part corrected by an American team working in the area in the 1980s. The American team opened a trench at the western end of the southern *cavea*, the spectators' ranks, where they were able to document a number of robber trenches that allowed them to propose a reconstruction of this part of the building. Furthermore, the southernmost starting box was found. A well-preserved capital from one of the robber trenches could be dated to the mid 2nd century AD. The American team was also able to suggest a domestic use of the former southern *cavea* area in the 7th century after it had been spoliated but could not add any information to the construction and development of the circus itself. Only the results of the first two seasons of the American project have been published.

The end of that project unfortunately left much to be desired. Also, pressure was constantly on the rise of the surrounding popular neighbourhoods



3 Plan of sondage A, with mausoleum foundation at the southern end, cavities, postholes (?) and walls, state of 2016 (plan: I. Fumadó Ortega, drawing: I. Fumadó Ortega, B. Ben Saad).

to encroach onto the area of the southwestern part of the ancient city of Carthage and the circus, that is theoretically protected by the archaeological zone defined after the UNESCO excavations, however, constantly infringed and contested by illegal building activities that create facts that cannot be overturned by the heritage department. Not only the scientific outcome is very promising, also the current situation demanded an intervention in this area.

The preparations for our project started in 2013 with a geophysical study of part of the research area, a total of 200 sqm, directed by M. Broisch from the University of Cologne. It was possible to identify by georadar analysis two first areas of intervention, one in the region where the arena itself must have been situated and the other where we presumed the northern spectators' ranks, the *cavea*. On the basis of the georadar analysis, sondage A (in the arena) and sondage B (in the *cavea* area) where opened in 2015, sondage C was added in 2016 around the remains of the western end of the *spina* that were still visible above ground (fig. 2). In May 2017, we carried out a third three-week mission in which we extended especially sondages B and C and continued excavating in sondage A. Due to the limited period of time between the end of the 2017 mission and the editorial deadline for this report, not all plans could be updated to the 2017 state of the excavation (dates are indicated). Also, the finds study season this year will be carried out in autumn, so that we have to limit ourselves to dating evidence from the pottery found in the 2015 and 2016 seasons.

The sondages have so far even exceeded the scientific expectations because preservation, especially of the late levels is exceptionally good at the site which helps to reconstruct late usage and abandonment phases. Furthermore, a considerable amount of data could already be gathered for the circus that allows a first hypothesis about the building process, phases and in case of the *spina* of the possibility to make suggestions about its built-up. Finally, information has been gained about the use of the area before the circus was built, not only including data about the early Roman colony, but also about Punic usage of the area, represented by the first posthole building of the Punic period ever found at Carthage.



4 Needle of bronze, probably used to produce and repair fishing nets (photo: D-DAI-ROM-2017.0130, D. Gauß).



5 View of sondage A with the mausoleum foundation in the back and wall foundations and cavities in the front (photo: D-DAI-ROM-KAR-2016.0318, R. Bockmann).

This building has been found in sondage A in an area that was later to become the arena floor of the circus. In the 2017 season, we were able to establish its Punic date (the detailed study of the pottery is pending) and reconstruct at least three phases for the area before the first building intervention took place that we can firmly date to the Roman period. The first building must have consisted of at least six medium-sized posts posed regularly to form a rectangular building (four posts have been identified). The posts covered an area of basins cut into the virgin rock. In later phases, the basins seem to have been enlarged and also larger posts been placed (two have been identified). At least one larger posthole is then overbuilt by a wall, to which a second wall ran in a rectangular orientation. It is not yet clear if the basins were still in use when the stone building was erected (fig. 3).

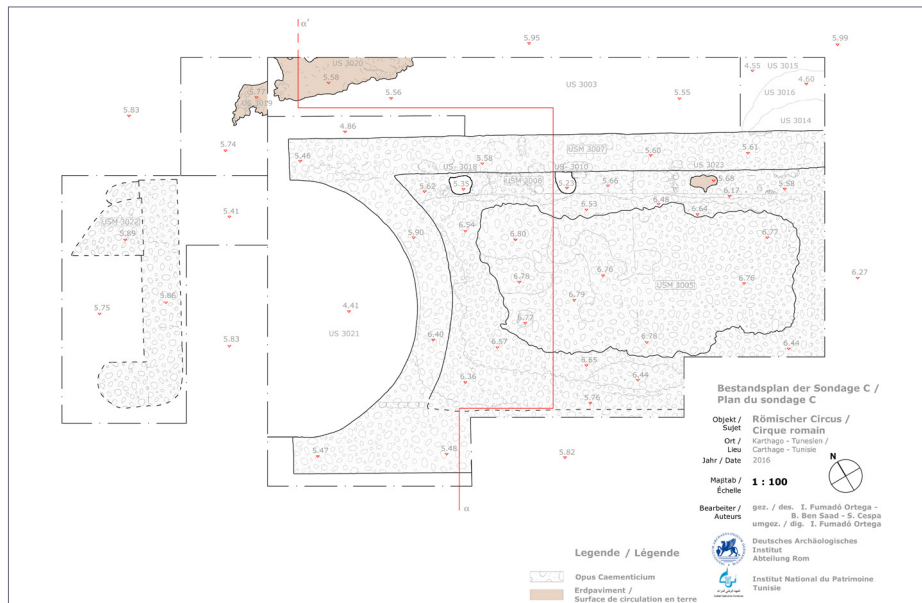
Finds from the basins area include fragments of terracotta statuettes and a bronze needle used to produce and repair fishing nets (fig. 4). The fact that we are not far from the coast line of the lagoon of Tunis where the Punic harbours until the late Punic period (when the circular war harbour was built directly at the gulf of Tunis) were situated might indicate the use of marine resources here.

Otherwise, the basins might have served for dyeing and tanning textiles or leather. The walls of the stone building were tore down to founding layers in the second half of the 1st century AD. The whole area now was levelled and a large block of *opus caementitium*, measuring ca 5 × 5 m, was set into it (fig. 5). This foundation served very likely for a mausoleum, similar to the ones excavated to the south of the circus region in the so called Yasmina necropolis.

Only relatively shortly after its construction, however, the mausoleum was itself deconstructed. The whole area was again levelled up in the first half of the 2nd century AD to create the arena floor on top of the former necropolis area. The necropolis apparently was relocated further south, where it has been documented in the Yasmina region. Accordingly, the *po-merium*, the legal and religious limit of the city, must have been extended to the south. This was by no means a common process. The construction of the circus seems to have validated this extraordinary measure.



6 Painted wall plaster originating probably from a suburban Roman *villa*, found in the fill-up layer next to the middle barrier of the circus with numerous other fragments of painted wall plaster (photo: D-DAI-ROM-2017.0115, D. Gauß).



7 Sondage C plan showing the preserved parts of the middle barrier and the turning point west of it, and our sondage in the north eastern part, state of 2016 (plan: I. Fumadó Ortega, drawing I. Fumadó Ortega, B. Ben Saad, St. Cespa).

In the course of the construction of the circus, probably also a suburban villa was deconstructed. A large number of painted wall plaster fragments of high quality, some with figural designs (fig. 6), were found in the fill-up layer next to the *spina*. Presumably, these did not come from afar. Further georadar explorations of the area will in the future hopefully help to locate the possible origins of these finds.

The *spina* itself, as our work in sondage C has shown, was constructed by an outer wall deeply founded into the area, of an approximate width of 1 m. The north and south walls are straight, whereas the western end circles in to create a crescent shape. The outer ring of the *spina* defined apparently the whole building. A sondage we did in the northern part directly at the *spina* has revealed dating evidence for the filling up of the area of the late 1st century AD (fig. 7).

The construction of the outer wall of the *spina* thereby predates the deconstruction of the mausoleum and levelling up of the arena itself to the west as documented in sondage A (see above). The inner area of the *spina* was subsequently filled up by layers of *opus caementitium* clearly distinguishable in the build-up of the middle barrier. The total width of the *spina* reaches 10 m. It is already possible to propose some elements of the design of the *spina*. The fore lying deeper foundations of 1 m width were not further built up with *opus caementitium*, as has the inner part of the barrier. We presume that ashlar blocks were set on the outer foundation ring, forming the „façade“ of the *spina*. The inner part seems to have held water basins, at least in the westernmost part, where traces of hydraulic mortar were found indicating that water had to be contained here. Towards the east, a rectangular shaped void and a small square foundation seem to indicate further particular elements of decoration, probably in the form of statues. In 2017, we further excavated a structure we had already identified in 2016: the *meta* lying in front of the *spina*. The *metae* in circuses normally held high cones that indicated the charioteers approaching the end of the barrier they needed to prepare for a turn soon. In the case of Carthage, the *meta* was of semi-circular shape and contained two rectangular holes. Two parts seem to be reinforced probably to carry cones. From the area between the *spina* and



8 Fragment of architectural decoration found among other pieces between the western end of the middle barrier and the turning point (photo: D-DAI-ROM-2017.0131, D. Gauß).



9 Original seat from the spectators' rank of the circus found in a robber trench in sondage B (photo: D-DAI-ROM-2017.0138, D. Gauß).

the *meta*, several fragments of architectural decoration of different sizes have been found (fig. 8). These, together with further study of the middle barrier and turning point will in future enable us to propose a detailed reconstruction of this part of the circus.

As discussed above, sondage B was planned to obtain information about the spectator's ranks, the *cavea*, following indications of large structures from the georadar mission. The sondage, covering initially ca 9 × 10 m, showed a two-part division. Whereas in the northern part, late occupational layers consisting of a number of overlying floor levels, which we could date to the 6th century AD and relatively small walls of spolia stone material cutting these floors were found in place, the southern half of the sondage showed a massive backfilled robber trench. Excavating this trench, we found among others a *cavea* seat that had apparently been classified as unfit for reuse and a number of El Haouaria stone fragments originating probably from the foundations that must have been extracted here (fig. 9).

The ceramic material retrieved from the robber trench indicates an early medieval date for its spoliation (fig. 10). A rectangular shaped extension in the large trench that was clearly cut and around which the preserved layers further to the north are arranged seems to indicate at least one of the sources for the El Haouaria fragments. The size of the cavity allows reconstructing the original placing of an El Haouaria stone block wall with measures known from other sites at Carthage. In the northern section wall, remains of the mortar have been found that served to fix the blocks. We dated the mortar by two pieces of charcoal using the carbon dating method to the late 2nd/early 3rd century AD. The date for the construction of this pillar therefore is considerably later than the construction dates we obtained for the construction of the *spina* and for the levelling of the arena floor. The most reasonable explanation for this seems at this point that the part of the *cavea* we are excavating right now was restructured or simply repaired at this later point. From the size and position of the robber trench, we presume that the apparently massive wall originally standing here served to support the *cavea* with pillars protracting. A second element we would see in direct relation with the circus is a floor made of large irregular stone slabs preserved to the



north of the massive robber trench. The stone flooring resembles the typical coarse floor setting of Roman streets, but also ground level flooring of large public monuments like the colosseum in Rome. Although we presume that the massive wall with protracting pillar(s) might represent the remains of the construction of the façade of the northern *cavea*, due to the limited extension of the sondage so far, the possibility that we are still inside the ground level of the *cavea* cannot entirely be ruled out. An indication that the stone floor might be already outside the *cavea* is the fact that this part of the sondage is considerably different from the southern part. Here, late floor levels and walls are preserved that might indicate late building activities against the probably still standing *cavea* north wall.

In 2017, we opened an extension to the south of sondage B where we presumed the *cavea* must have met the arena floor. We were able to identify the robber trench for the podium wall that separated both, the arena floor running up to it in two phases, a floor level behind the podium wall and a preserved east-west running wall to the north of the inner floor level. This wall must represent the lower *cavea* wall. The inner floor level has been used until the 6th century, as pottery and a coin indicate. At a later point, an amphora burial has been placed here against the apparently still standing podium wall.

Altogether, the three sondages have produced data for the erection of the circus, the preparation of the terrain, the usage of the area in earlier phases and indications of a long persistence of the built structure in its northern spectators' ranks. At least in the late Punic phase, a working place using cavities covered by a wooden roof resting on postholes was situated in this zone. This has been used into the early Roman period and constantly restructured. In the 1st century AD, the area was dedicated to a necropolis and the buildings removed to make space for a mausoleum foundation. At the end of the 1st century AD, the decision was made to construct the circus here, beginning with the *spina*, defining the area where the monument was to be erected. In a considerably large region, all pre-dating buildings were removed and the zone levelled for the middle barrier and later the arena

10 Excavation of the robber trench in sondage B, 2016 (photo: D-DAI-ROM-KAR-2016.0115, R. Bockmann).

itself. The arena seems to have been ready by the middle of the 2nd century AD when it covered the mausoleum foundations. The northern *cavea* with its massive walls was restructured in the early 3rd century or at least had to be repaired in this part. Usage of the circus seems to have continued through the Roman period into the 5th century at least. To the north of the *cavea*, floor levels were built up in the 6th century. These were cut by walls using irregular stone work set directly on top of the Roman cobble stone layer preserved in this zone. The circus seems to have been standing as a monument at least through the 7th century in its northern part. At some point probably in the medieval period, it was spoliated.

So far, the project has produced very promising first results that merit a more intense effort here. We aim to set up a three year project with funding allowing for two long field seasons each year with subsequent publication of the results on the circus of Carthage, the development of the area and the integration of the monument into the urban topography. The project will not only be the first research carried out on a Roman monument of ancient Carthage (in fact, the largest monument of the ancient city as a whole) combining classical archaeological and scientific methodologies, it will also help to protect the last region of the UNESCO world heritage site that has not been overbuilt in the modern period. We hope to be able to advance the knowledge on the diachronic urban development of this important ancient metropolis and offer the larger public especially including the local population a site worth visiting and enjoying instead of the lost place it is currently in many respects.