Research on the Crustumerium Road Trench

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Introduction

During 2004 - 2008 the University of Oulu (Finland) carried out a research project in collaboration with the Soprintendenza Speciale per i Beni Archeologici di Roma and University of Cambridge at the location of an ancient Latial city called Crustumerium, about 17 kilometres north of Rome (fig. 1). The research done by the University of Oulu focused on the monumental Road Trench crossing the ancient settlement area (fig. 2-3). The authors worked on the project in 2005 - 2008, and the following article is mostly based on their Master’s Theses, discussing the function and dating of the Road Trench, the two tombs discovered on the western side of the Trench, the development of the settlement at Crustu-merium and its role as a notable city at the borders of Latium and Etruria.

Crustumerium Road Trench: function and dating

The site of Crustumerium is located on hilltops that are nowadays covered with fields. The main road cutting, dubbed as the Road Trench, rises to the north towards the ancient settlement, and continues on the north side of the hill, descending and curving to the west, towards the Tiber. The research focused on the road cutting at the south side of the hill for its accessibility, as the northern part of the Road Trench was extremely thick with vegetation. The southern part of the Road Trench is still in use as a rural road, so it has been cleared from overgrown bushes seasonally. The overall look of the area suggests the presence of several road cuttings, which have been filled with earth due to the lack of use (or while levelling the fields?), and can be spotted only as a continuous slopes running across the countryside.

The main objective of the research was to gather information about the ancient function of the Road Trench in order to determine, whether it was a defensive moat similar to the agger discovered at Ficana\textsuperscript{2}, as suggested by the previous research\textsuperscript{3}, or a monumental road leading to the settlement area. However, as there were no signs of defen-
sive structures to be found during the excavations in 2004 - 2005, it became evident that the Road Trench functioned as a route for traffic in antiquity.

Some indication of the magnitude of the Road Trench was acquired in 2005, as the bottom of the Trench dug into the tuff bedrock was reached during the excavations. The maximum depth (measured from the regular level of the tuff bedrock to the bottom of the Road Trench) at the point where the Road Trench reaches the apex of its ascent was ca. 5 meters; at a certain point during its ascent the depth plummets down to 8 meters. The angle of ascent seems to have been only 2.3 degrees, at least along a notable length of the Trench. The motive for such an undertaking can very probably be surmised by regarding a bigger picture of the locality in the 7th and 6th century BC: the whole area of central Italy experienced a notable population increase during the Archaic period, which can be witnessed in the signs of urban development and diffusion of mass-produced pottery. According to the archaeological evidence, the city of Crustumerium also flourished during this period of time, and it has been suggested that a large commercial route leading from the city of Veii in Etruria ran through Crustumerium and continued all the way to Campania. As the establishment of the assumed commercial route must have notably increased the amount of wheeled traffic through Crustumerium, there is no doubt that the logistic benefit provided by the Road Trench richly justified the amount of work required to dig it. The evidence gathered at the excavations seems to suggest that the Road Trench was dug in the Archaic period, probably not later than the 6th century BC. Thus it seems plausible that the fashioning of the Road Trench was linked to the increased traffic and trade during this period, providing easier access to the settlement of Crustumerium situated on a hilltop.

During the excavations in 2006 - 2007 several gravel road surfaces were discovered; one lined with rectangular tuff blocks in 2006 and, beneath it, three successive layers in 2007 (figg. 4-6). According to the fragments of black gloss ware found in context, the top-most two discovered in 2007 (and presumably the one found in 2006) can be dated to the Republican period, namely to the 3rd century BC. In addition, regarding the stratigraphic layers containing Archaic pottery that partly cover the earliest gravel layer on its edges, it seems probable that the earliest gravel road surface from the excavations in 2007 reaches back to the Archaic period, assumedly to the last half of the 6th century BC. The stratigraphic information collected during the excavations in 2005 seems to suggest that the

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4 CIFANI 2002.
5 AMOROSO 2002: 305-311.
Road Trench was gradually abandoned towards the 2nd century BC. Scarce pottery finds datable to the Republican period seem to implicate the same concerning the city of Crustumerium. This was probably due to the third Roman conquest ca. 500 - 499 BC, as mentioned by Livy, which led to commissioning the fields of Crustumerium to the

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7 Quilici & Quilici Gigli 1980.
8 Liv. II 19.2.
newly-created 21st Roman tribe, the *Clustumina*. As a result, *Crustumerium* fell to delivering agricultural products to the markets of Rome, and very probably at this time also lost connections with *Veii* in Etruria. This disrupted the assumed commercial route, dealing the final blow to *Crustumerium* as a commercially important city on the border of the neighbouring territories. The gravel road surfaces found in 2006 - 2007 (with the probable exception of the earliest found in 2007) were most likely utilized during this period, and while the evident re-paving of the road implies activity on the area, it occurred probably in the form of Roman farmers, nothing like the former bustle of the busy commercial route and a city in its heyday.

**Excavations at Trench E**

Excavation at Trench E (see fig. 2) began in the 2005 season with the intention of seeking information as to whether there had been some defensive structures on the west side of the Road Trench as suggested in the preceding studies. However, no signs of such structures were found in the stratigraphy; instead two tombs (1-2) cut to the tuff appeared in the bottom of the excavation area. Tomb 1 was located on the very bank of the Road Trench and became only partially visible (fig. 7). The excavated part revealed that we were dealing with a shallow trench tomb (*tomba a fossa*). The tomb type is typical for *Crustumerium* and appears in many of its burial grounds.

The only find that was discovered from the Tomb 1 was a small, severely corroded iron javelin head. No skeletal remains were found in the excavated part of the tomb. The east end appears to have been cut during the construction of the Road Trench and its dating is thus probably earlier than the monumental phase of the Road Trench. Furthermore, it is possible that the construction of the Road Trench destroyed some tombs that had belonged to the burial ground.

The 2006 excavations on the Trench E revealed that Tomb 2 is a Narce-type loculus tomb (*tomba a loculo tipo Narce*). The type has frequently been discovered in the necropoleis of the ancient city. Moreover, it has been suggested that the type reflects larger regional connections of *Crustumerium* with other centres of that time, since it has been discovered in the burial grounds of Capena, Narce and *Veii*, for example.

The filling layer of the shaft rose above the tuff bed, revealing that the actual height had been between 1.4 - 1.6 meters. The loculus had been cut to the north wall of the shaft and it was closed by three tuff blocks of different  

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10 QUILICI & QUILICI GIGLI 1980.  
11 DI GENNARO 1999.  
12 DI GENNARO 1988: 113-123.  
sizes. Removal of the blocks revealed that at least two successive partial collapses of the roof had occurred in the past.

The skeletal remains, as in Tomb 1, were very scarce. Only a few teeth and small fragments of the jawbone were preserved, but the location of these finds enables us to suggest that the deceased had been buried with its head towards east. The masticatory surface of the teeth indicates that the deceased was a mature adult whose age had probably been between 40-60 years at the time of death.

In total, there were 30 grave goods which were mainly located in the east part of the loculus. These consisted of 13 vases of brown-to-black impasto pottery, 9 fine ware vessels, 3 red impasto vessels, an iron spearhead and some very fragmented metal artifacts. A few distinctive observations emerged from these finds. The quantity of Italo-Protocorinthian aryballoi, seven in total, is a significant discovery and we can concur that some very fragmented metal artifacts. A few distinctive observations emerged from these finds. The quantity of Italo-

Protocorinthian aryballoi, the dating of the Tomb 2 falls between 650-630 BC, and thus some time before the second conquest of Crustumerium by Romans in 617 BC, which is mentioned by Livy and Dionysius of Halicarnassus.

Funerary rituals at Tomb 2

A spiral amphora was discovered at the height of 40 cm above the bottom of the loculus. This discovery suggests that libation or sprinkling of the body with wine had taken place at the open grave, after which the vessel had been deliberately broken and placed in the grave. This ritual has not been mentioned among the published tombs discovered in Crustumerium. However, indications of the ritual have been occasionally noticed in the burial grounds of other Latial centres such as Veii and Caere in the 7th century BC. One of the fine ware aryballoi was uniquely embellished with small glass rings that formed lines on the mouth and the body of the vessel. The grave goods also included a carinated amphora provided with peaked handles (anforetta con anse cuspidate), which is regarded as typical for the culture of Crustumerium. On the basis of these grave goods, especially the Italo-

Protocorinthian aryballoi, the dating of the Tomb 2 falls between 650-630 BC, and thus some time before the second conquest of Crustumerium by Romans in 617 BC, which is mentioned by Livy and Dionysius of Halicarnassus.

Evidence of funerary banquets in Crustumerium have been reported in the previous studies as well. Some graves from the burial ground of Monte Del Buffalo have had similar or even more distinctive selection of grave goods that can be interpreted as part of the banquet set. Noteworthy is also that these banquet sets have been mainly discovered in tombs where the deceased was a female. Even so, the question still remains as to whether these people did receive a banquet at their funerals, or whether the vessels rather depict their role in the society.

15 Liv. I.38. 3-4.
17 In Osteria dell’Osa the ritual has been identified on graves 76 and 562 which are dated to IV B, see Bietti Sestieri 1992: 46-47, 93-94, fig. 3c; see also Zevi et al. 1982: 267; Bartoloni 1981: 129; Cataldi Dini 1981: 132.
20 Beside its use as name for a certain type of vase, kotyle is also an Attic unit of capacity that corresponds to the Roman hemina (app. 2.73 dl).
22 For example Palottino 1991: 59.
26 Di Gennaro 1999.
27 There is, however, a contradiction whether women were allowed to drink wine in the religious or civic life in the ancient times. According to some ancient authors women were not allowed to drink wine and could be severely punished if caught doing so. See Plut. Quest. Rom. VII.6; Gel. X.23; Plin. Nat. XIV.90; Dion. Hal. Ant. Rom. II. 25.6. Thus, modern archaeologists have as-
Road Trench burial ground and the settlement progress

As the Road Trench burial ground was discovered inside the suggested settlement area of Crustumerium it raises questions of the size of the city during its earliest phases. Quilici and Quilici Gigli have estimated that the size of the settlement was ca. 40 hectares\textsuperscript{28}. Later estimates based on the new research led by di Gennaro propose the size of the urban area to be ca. 60 hectares (fig. 8)\textsuperscript{29}.

According to previous research, the settlement of Crustumerium included the area of Road Trench burial ground already in the Latial period IIB/IIIA (usually dated to 820 - 750 BC)\textsuperscript{30}. On the basis of the discovery of two tombs and the field survey material, the estimated size of the city in the 8th and 7th centuries BC has to be reassessed. There are, however, few exceptions to the common usage of burying the dead outside the settlement area; one of them is from Fidenae where a single fossa tomb, a female inhumation, was excavated inside the settlement area\textsuperscript{31}. Other exceptions are made with child burials which have been discovered inside city boundaries in Ficana, for instance\textsuperscript{32}.

Fig. 8. The urban area of Crustumerium.

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\textsuperscript{28} QUICICI, QUICICI GIGLI 1980.
\textsuperscript{31} DI GENNARO 1990: 260-262.
\textsuperscript{32} JARVA 1981: 141-147.
Even though the processing of the field survey material has just recently started, it seems to indicate that in the beginning of the Orientalising period the boundaries of the urban area were located in the upper part of the field survey area near the 100 meter contour (see fig. 8). In that area, the field survey material changes and becomes more complex with material from the 8th century BC to the Imperial period. Under the 100 meter contour the field survey material does not include pottery from the earliest settlement phases. Moreover, on top of the filling layer of tomb 2 there is a stratigraphical layer which can be dated to the Archaic period, alluding to the later use of the area as part of the settlement in 580-480 BC. Thus it is probable that the area under the 100 meter contour was actually a burial ground, at least during Orientalising period and perhaps even in the earliest settlement phases. The suggestion presented here is also supported by the fact that the other Latial settlements, during this period, were also smaller.33 Furthermore, it can be maintained on the basis of the field survey material that it was not until the end of the Orientalising period or in the beginning of the Archaic period that the city reached its maximum size. This is only about a hundred years before the third and final Roman conquest of Crustumerium in 500-499 BC.34

Road cuttings in Etruria and Latium

In order to appreciate fully the meaning of good connections to ancient Etruria, one must take into account the topography of central Italy. Although the Tiber served people as a useful water route in antiquity, it also hindered traffic between Etruria and Latium. In addition, the volcanic terrain of southern Etruria was vulnerable to erosion and full of ravines, making travel problematic. As the traffic increased during the Archaic period and developments in architecture required heavy loads of raw material to be transported from quarries, while natural routes passable by wheeled traffic were scarce, Etruria saw the emergence of rock-cut roads which minimized the grade.36 The uneven terrain forced the roads to be cut into the tuff bedrock, which fortunately was soft enough to allow efficient digging.37

Road cuttings were very prominent in the Archaic Etruria as a response to the population increase and the development in architecture and its requirements. At the same time in ager Veientanus, a vast network of roads was engineered in order to facilitate the transport of agricultural and manufactured products inside the Etruscan area as well as to the neighbouring settlements.38 Road cuttings have been documented also in connection to the Etruscan cities such as Blera, Caere, Veii and Narce, to mention a few.

However, the known road cuttings in Latium are much scarcer: most of them can be found – maybe not so surprisingly – along the Tiber, notably from the aforementioned Eretum, Crustumerium and Fidenae. There is also a documented road cutting at ancient Gabii, which was probably located on the commercial route from Veii to Campania.39 Considering the abundance of road cuttings in Etruria along with the sites where road cuttings can be found in Latium, one can hypothesize that the emergence of road cuttings in Latium could be seen as a sign of Etruscan influence, probably spread via the aforementioned commercial route.

The Role of Crustumerium between Etruria and Latium

Naturally the existing passes were utilized to the fullest: for example the routes to Fidenae and Rome from Veii went through natural valleys that reached the Tiber. However, the places where crossing the Tiber was possible were as scarce as the natural passable routes, making the crossing points strategically and commercially very important. Known crossing points of the Tiber were situated at Fidenae and probably between Lucus Feroniae and Eretum.40 Considering the apparent connections between Veii and Crustumerium in addition to the assumed existence of an ancient commercial route from Etruria to Campania, it seems plausible that there was a third crossing point located near Crustumerium.

34 LIV. II.19; see also AMOROSO 2002: 317.
35 JACKSON, MARRA 2006.
38 CORNELL 1995: 310.
40 ENEI 2001.
41 WARD PERKINS 1961: 4-20.
43 O'GILVIE 1965: 73-74.
45 QUILICI 1979: 16; MELIS, VARDARO 1993: 41-42.
48 O'GILVIE 1965: 72.
Keeping all this in mind, we may conclude that there were strategic motivations behind the capture of Fidenae\textsuperscript{49}, Crustumerium and later Eretum\textsuperscript{50}. By securing these locations, the Romans could cut known routes over the Tiber during war, thus making it more difficult for the Etruscans to advance into Latium.

Conclusions

The present research indicates that there is a burial ground in the southwest corner of Crustumerium in an area previously regarded to be part of the settlement from the Latial IIB onwards. Future studies on the area can, of course, elucidate whether it is its own entity or a part of the Monte Del Buffalo burial ground located few hundred metres to the south. Tomb 2 provided information on the burial customs in Crustumerium, interpreted to consist of the not very well-known ritual of libation, or sprinkling the body with wine after which the used vessel is deliberately broken and placed to grave in several locations. The grave goods and the tomb structure confirmed some of the earlier notions of the contacts of Crustumerium with southern Etruria and especially with the Etruscan centres. The location of the tombs and the field survey material provided an alternative hypothesis for the settlement development of the ancient city, concluding that the size of the settlement and its location appear to have been restricted in the earliest settlement phases. It is also probable, according to the research results, that the settlement area reached its maximum size in the end of the Orientalising and early Archaic period (610-570 BC).

The city of Crustumerium was without a doubt very important commercially and strategically: its location at the borders of Etruscans, Latins and Sabines, the supposed close proximity of one of the rare crossing points of Tiber and the famous fertile fields, among other things, made it one of the most notable cities of Latium during the 6th century BC. With the rapid increase of population in the central Italy in the 7th and 6th century Crustumerium flourished, apparently enjoying close commercial relations with Etruria and being a part of a large commercial route from Veii to Campania. This prompted the Crustumerians to create better access to their perched city, and – probably influenced by their Etruscan neighbours – to dig a monumental Road Trench, with a grade of only 2.3 degrees in order to facilitate controlled wheeled traffic.

The political and societal upheaval in Rome at the beginning of the 6th century BC meant the end for Crustumerium: as the Romans marched to war against the Etruscans, the crossing points of Tiber had to be secured, and thus Crustumerium was conquered along with other cities. The good relations of Crustumerium with the Etruscans must have posed a threat to Romans, so the fields of Crustumerium were allotted to the 21st Roman tribe, the Clustumina. During the Republican period after the Roman conquest, the archaeological record suggests that the population of Crustumerium gradually dwindled. However, the successive paved gravel road surfaces indicate that the area and the Road Trench was still in use at least to the end of 3rd century BC, albeit mostly for delivering agricultural goods to Rome. By the Imperial era, only a few Roman rural buildings stood on the fields of the city.

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\textsuperscript{49} CORNELL 1995: 311.

\textsuperscript{50} OGILVIE 1965: 80.


