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NUOVE SCOPERTE E NUOVE PROSPETTIVE

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ΝΕΑ ΕΥΡΗΜΑΤΑ ΚΑΙ ΝΕΕΣ ΠΡΟΟΠΤΙΚΕΣ

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EMANUELE GRECO - ATHANASIOS RIZAKIS

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Atti del Convegno di Aigion
Πρακτικά του Συνεδρίου στο Αίγιο
(12-13/12/2016)

SCUOLA ARCHEOLOGICA ITALIANA DI ATENE

2019

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KROTON IN THE ARCHAIC PERIOD*

GRETA BALZANELLI – MARIA ROSARIA LUBERTO

Riassunto. Il contributo è dedicato all'analisi delle fasi di nascita e sviluppo della città di Crotona, dall'età del Bronzo alla fine del VI sec. a.C. La ricerca si è basata su dati editi provenienti dalle indagini condotte su vari siti compresi entro il perimetro urbano antico. Sono state individuate una serie di fasi trattate in dettaglio e per ciascuna elencati gli elementi caratterizzanti, con un focus più specifico su due temi particolari emersi nel corso dell'indagine: la distribuzione degli spazi sacri e l'architettura domestica in pietra. Questo studio rappresenta quindi un tentativo di sintesi critica e aggiornata dei dati archeologici disponibili per la città.

Περίληψη. Το άρθρο μας ασχολείται με την ανάλυση των φάσεων γέννησης και ανάπτυξης της πόλης του Κρότωνα, από την εποχή του Χαλκού μέχρι τα τέλη του 6^{ου} αι. π.Χ. Η έρευνα πραγματοποιήθηκε με βάση τα δημοσιευμένα στοιχεία των ερευνών σε διάφορους χώρους που συμπεριλαμβάνονται στην περίμετρο του αρχαίου άστεως. Εντοπίστηκαν μια σειρά φάσεων που έγιναν αντικείμενο λεπτομερούς επεξεργασίας και για καθεμία από αυτές καταγράφηκαν τα χαρακτηριστικά στοιχεία, εστιάζοντας πιο συγκεκριμένα σε δύο θέματα που είχαν αναδυθεί κατά τη διάρκεια της έρευνας: την κατανομή των ιερών χώρων και την οικιστική αρχιτεκτονική με λίθους. Σκοπός της μελέτης είναι η προσπάθεια επαναπροσέγγισης της έρευνας της πόλης διαμέσου μιας κριτικής ανάγνωσης των αρχαιολογικών στοιχείων.

Abstract. This paper is devoted to the analysis of the phases of birth and growth of the city of Kroton, from the Bronze Age to the end of the VI c. BC. The research has been conducted on published data coming from urban surveys within the ancient urban perimeter. There have been identified a series of phases analytically considered and for each of them there have been highlighted some peculiar elements. Two topics have been specifically considered: the distribution of the sacred spaces and the domestic stone architecture. The aim of the study is to try to reshape the archaeological research on the city through a critical and updated interpretation of archaeological data.

INTRODUCTION

This work presents the results of a study on the phases of foundation and urban development of Kroton from the Bronze Age until the end of 6th c. BC, taking into account the published evidence on the urban sites during this timeframe. The information have been organized into topographical records (one for each site)¹, divided into eight areas² (Fig. 1): Southern, Northern and Central Districts (QS, QM, QC); fortification walls (M); the necropolis (N); the acropolis (A); the port; and the sacred areas (S).

In each section the data have been in turn divided into phases defined on historical and archaeological bases:

- 1a. Pre-Greek phases.
- 1b. End of the 8th - beginning of the 7th c. BC: supposed arrival of the first Greeks.
- 2. First - second half of the 7th c. BC: first stages of town's occupation.
- 3. End of the 7th - beginning of the 6th c. BC: first traces of an urban grid plan.
- 4. First-second half of the 6th C. BC: growth of the urban grid plan.

* We wish to thank E. Greco and A. Rizakis for inviting us to present the results of our research. Par. 1 by M. R. Luberto and G. Balzanelli; 1a-b, 2, 5b and Final Conclusion by M.R. Luberto; 4, 4a and 5 by G. Balzanelli.

¹ Each record is organized as follows below: general introduction about the geographical framework of the site; *excursus* on all the phases and structure identified; indication of the typology of the site (fortification walls, necropolis, sacred area *etc.*); characterizing evidence (roads, houses,

walls; *etc.*); overall dating of the site. This is followed by a list of the phases (see *supra*) containing the following information: summary description of the archaeological evidence; dating elements; specific bibliography. For a very short synthesis see BALZANELLI-LUBERTO 2017.

² The subdivision of the three districts is based on the orientation of the corresponding roads: see SPADEA 1983, 119-166 and *infra*. The names (Quartiere Meridionale, Settentrionale e Centrale) are those traditionally used.

- 5. End of the 6th - beginning of the 5th c. BC: development of the urban plan. Each site is identified by an alphanumeric abbreviation composed by the first letter of the section it belongs to followed by a serial number³; accompanied by its associated traditional nomenclature (see bottom-right Fig. 1).

In the following paragraphs and tables, a synthesis and interpretation of the evidenced allocated in accordance with the phases listed above is presented, along with two discussions dedicated to the sacred areas and the domestic stone architecture.

1A. PRE-GREEK PHASES (TABB. I-V)

The area that, during the Bronze and Iron Age, corresponds to the future Greek city of Kroton was occupied by a settlement described, in its final stages of life, as spanning approximately 50 hectares and characterized by the presence of a series of residential nuclei⁴, however, bibliographic research on this topic has actually led to a drastic downsizing of this area⁵. As can be seen from the table presented the collected data organized according to what has been published so far (Tabb. I-III), it does not seem possible to postulate the existence of an indigenous settlement before the Late Bronze Age⁶. At this stage, the evidence is concentrated in the central area of the modern city (see Tab. III⁷), however, it does not seem to have been occupied with continuity during the Final Bronze Age (Tab. IV)⁸. Not by chance, the First Iron Age is again attested in the same zone (Tab. V.1-3) and in two other sites that will be of crucial importance for the development of the future Greek city: the area near the future Vigna Nuova (Greek) sanctuary (Tab. V.4), and the zone that will correspond to a portion of the largest urban Greek necropolis located on the Carrara hill⁹, named «Carrara I» (see Tab. V.5): in both sites few objects, predominantly fibulae, were found of their original contexts.

Given the absence of valid information on the exact provenance of these indigenous finds, it does not seem appropriate at this time to offer any specific interpretations on their significance. It is only possible to argue that they could testify to the existence of indigenous presence at the time of the arrival of the first *apoikoi*¹⁰. The same situation is verified in the central area of the future city (Tab. V.2 in particular), where indigenous pottery has also been found, however, unfortunately there is no information regarding its place of manufacture. This group of potsherds has been variously published as Iapygian or Oinotrian, without any indication of specific chronological framework¹¹.

Some information can be obtained from these data, despite their paucity and fragmentary nature. First of all, it seems clear that one or more indigenous settlements had existed at the site of Kroton, prior to the arrival of the Greeks and partially coinciding with the areas they occupied. The lack of information on actual extensions and chronologies of these early settlements makes the examination and complete publication of the findings urgently required, as only very generic information has been published so far.

1B. END OF THE 8TH – BEGINNINGS OF THE 7TH C. BC. (TABB. VI-VII)

The arrival of the Greeks, which according to the literary tradition was represented by Achaeans led by the hunchbacked and initially recalcitrant Myskellos of Rhype¹², is marked by the widespread presence of imported pottery dating back to at least the last quarter of the VIII c. BC (Tab. VI), largely recovered from

³ E.g. QM1 is the abbreviation for the site of via Tedeschi, identified by the number (1) located in the Southern (M=Meridionale) quarter (Q).

⁴ JONES *et alii* 2014, 35, site No. 36; RACHELI 2014, 25-26; BETTELLI 2002, 32, No. 73, *Crotone*; MEDAGLIA 2010, 227-229; but, above all, MARINO 2014, with previous bibliography.

⁵ But C. Sabbione already has noticed it: see *BTCGI s. v. «Crotone»*, 497 (very few pre and proto-historic finds).

⁶ The same point of view in MARINO 1995, 240.

⁷ The excavation at via Firenze (Tab. III.2) mostly coincides with that named «Crugliano 1975», from the name of the owner of the demolished building along which the survey was conducted: see now LUBERTO 2017a, 137-142.

⁸ Unlike what is usually found in reports: see for bibliography fn. 1.

As is possible to detect from the data collected in Tab. III.1-3, several publications mention finds that belong to the Final Bronze Age. Nevertheless, for none of them has been published data such as their exact finding place or their quantity, neither has been given any documentation (even a minimal one). For what instead concerns the Late Bronze Age, the discovery of pottery of Aegean tradition that should testify to the openness and the vitality of the center like those known in the Sibaritide is of great importance (see now JONES *et alii* 2014, 35), but again these data have been only preliminarily published several years ago.

⁹ *Infra*, par. 1b.

¹⁰ SABBIONE 1982, 259.

¹¹ SPADEA 1983, 124 = SABBIONE 1982, 251, fn. 1: Oinotrians or Iapygians; FOTI 1974, 312: Oinotrians.

¹² MELE 1984, 18-20.

levels dating to later periods¹³. The quantity and variety of artefacts discovered at the site of «Coop. Proletaria Pertusola» stands out in the context of these first testimonies (Tab. VII, QC7) and includes both imported and colonial productions inspired by the Thapsos style and Early Protocorinthian repertoire. Local production of both classes is supported by the presence of kiln waste¹⁴.

Ceramics with similar chronologies to those recovered from the urban area are also found on the Carrara hill, in the Greek necropolis: a Thapsos style krater and two cups, almost entirely reconstructed (Tab. VII, N1)¹⁵. Although they should be considered residual since they were collected in disturbed areas near more recent burials, their state of conservation and find location seem to confirm the hypothesis that they came from the graves of the early generations of *apoikoi*¹⁶.

Despite some hypotheses previously presented on this point, it is not possible to attribute either residential structures or roadways to this phase¹⁷.

This archaeological evidence is, as for of the proto-historic phase, numerically very meagre, but again they allow us to put forward some preliminary considerations, above all concerning their distribution. This new survey confirms what has been stated on several occasions by different scholars: the future urban area of the city has been widely occupied, although certainly not yet systematically on a grid system, starting from the last quarter of the 8th c. BC¹⁸. The archaeological finds that can be dated back to this period come from sites located in all three future districts (Table VII), which will be continuously occupied in later stages. The absence of documentation for this phase of the sites close to the Esaro River contrasts the dense urbanization that will characterize the area in later centuries, when it will become a privileged place for the location of production activities¹⁹. The use of the Carrara hill as funerary place indicates that the function of this area of the city, one which remained unchanged throughout the Greek period of the settlement, was chosen early and consciously²⁰. In absence of city walls, erected only at a later stage, this choice provides evidence of urban boundaries, that is to say, the existence of a marked distinction between the *polis* and its territory²¹.

The discovery of locally produced ceramics and the presence of kiln waste at the QC7/Coop. Proletaria Pertusola site leave no doubt about the identification of the function of this sector. Again, in this case it is possible to verify the anticipation of the function that the zone, and the entire sector in which the site was located, will maintain until the 3rd century BC²².

The Greek city was thus born following a program, whose main focus were already clear in the first decades of its life.

Finally, the problem of the relationship between the new inhabitants and the indigenous population remains to be discussed. Despite the reduction of the size of the indigenous settlement/s as a response

¹³ None of the stratigraphic excavations conducted in Kroton have been published yet in a comprehensive and detailed way. From the different syntheses and preliminary reports we learn that 8th c. BC stratigraphy has not yet been identified. Among the most recent studies, see LUBERTO 2010, 2017a; RACHELI 2010, 2014; MARINO *et alii* 2010; VERBICARO *et alii* 2005.

¹⁴ SABBIONE 1982, 267, Nos. 27-29 for Thapsos style cups of local production to which two other unpublished examples exhibit in the local museum can be added. They belong to typologies of the beginning of the 7th c. BC in terms of morphology and decoration with an upside down S in the reserved area on the shoulder. *Ibid.*, No. 39, in particular No. 44: Thapsos style cup of later types (end of the 8th-beginnings of the 7th centuries BC) with fillet on the lips and body. The same series of pottery can be found at other sites, but their quantities are lower: see Tab. II, QM1/via Tedeschi, QM2/Banca Popolare Cooperativa (since now shortened BPC); QC9/via XXV Aprile.

¹⁵ Krater: SABBIONE 1982, 259, fn. 25, No. 14, fig. 5, from a disturbed zone near grave 124, without the bottom; cups: restored and one (No. 16) without one handle, *ibid.*, fn. 26, Nos. 15-16, found together with *pitbos* fr. and a small bronze cup near grave 373, later.

¹⁶ *Ibid.* and FOTI 1974, 305: Archaic graves are generally very scant. Few of them produced cups with fillets on the lip from the 7th c. BC and very few examples of Corinthian pottery.

¹⁷ In previous literature several pathways are dated contemporaneously with the foundation of the city. It does not possible to find a documentary base to which refer these chronologies for any of them however. The *stenopos* unearthed in the site QM6/Microcitemia, one of the most important for the definition of the urban plan because

it lays at junction between the Southern and Central Districts (the so called “hinge”), has been dated on the basis of some potsherds identified as Thapsos style cups and Early Protocorinthian *kotylai* (VERBICARO *et alii* 2005, 8, figs. 4-5; only photos). Actually, the first fragment has a reserved band at the height of the shoulder with vertical strokes: the reserved band (that is not a panel) and this kind of decoration are peculiar of Early Protocorinthian type cups (see LUBERTO 2010, 282, 289-290, fnn. 47-54, figg. 19.10, Nos. 7-9). The second one is a cup, not a *kotyle*, to be attributed to the same sphere as the previous one on the basis of shape (it clearly has a rim and not a lip) and decoration (same reserved band and body entirely painted); it should be dated to the course of the 7th c. BC. Therefore, neither fragments confirm the dating in the last quarter of the 8th c. BC attributed to the *stenopos*.

¹⁸ On the chronologies of the foundation of Kroton there are, as is known, discordant literary traditions. For a close examination of the question, see AVERSA 2011, 42-45. The most ancient material found, reviewed and in course of publication by M. R. Luberto, offers a good documentary base for the version connected with the “high chronology”.

¹⁹ In general, on the distribution, typologies and chronologies of the workshops in Kroton: VERBICARO 2010.

²⁰ SABBIONE 1982, 260.

²¹ On the trajectory of the urban walls see 2011, 109-110. The traces of a defensive circuit date back to the 4th c. BC, while for the Archaic phase its presence is only presumed.

²² *Infra*; for a general overview of data until the Hellenistic epoch: VERBICARO 2010.

to the paucity of published information, in addition to the caution imposed by the insufficient archaeological research carried out so far, some intersections between indigenous and Greek settlements can be highlighted. The data from the Carrara necropolis (Tab. VII, N1) suggest an initial integration process, especially if the fibulae, once thoroughly analyzed, can be attributed to the horizon related to colonization. A residential area will be developed in QS2/Vigna Nuova, a site that, despite its peripheral location, will be densely urbanized²³. Nearby, in the early 6th c. BC, a sanctuary will be built whose topographical location, clearly one of its peculiarities, will be respected and maintained when the city walls were constructed in the 4th c. BC²⁴. Despite the difficulty in linking and interpreting the small amount of data pertaining to Greek and indigenous occupation of the QS throughout the different phases, perhaps it is possible to assume that the frontier function of the entire area was the cause of the early and continuous urbanization of this sector, further supported by the presence of a sacred site.

The situation in the urban center is markedly different. Here the excavations at the QM4/ via Firenze site recovered traces of activity from the Mid Bronze Age to the second half of the 8th c. BC. The continuity witnessed during the Final Bronze Age is perhaps due to the fragmentary and speculative nature of the published data. In any case, it is possible to postulate overlapping activity of the Greek and indigenous settlements for this site with some degree of certainty²⁵.

2. FIRST – SECOND HALF OF THE 7TH C. BC.

During the 7th c. BC the occupation of the previously identified sites continues without any interruption. The *stenopoi* at the QS2/Vigna Nuova site are attributed to this date, but again there is no solid documentary evidence (at least not published) to support these chronologies²⁶.

At the QC2/Campo Sportivo site, in the area called «Curva Nord»²⁷, the presence of post holes attributed to a hut was discovered that can be dated, on the basis of the pottery, to the first half of the 7th c. BC²⁸. Some remains possibly related to the same housing typology have also been identified at the QM2/BPC site. Here pebbles placed on a bed of sand were discovered in levels dated to between the end of 8th and the beginning of the 7th c. BC²⁹. In the middle of the 7th c. BC two fireplaces surrounded by post holes, perhaps again related to a hut such as the one at the Campo Sportivo site, were built³⁰. Similar installations have also been found at the QS2/Vigna Nuova site³¹.

Around the middle of the 7th century, the first site attesting archaeological evidence of clay manufacturing was established, i.e. the kiln I, near the Campo Sportivo³² in the heart of the Central District, the urban sector chosen, as we have seen, for these activities from the end of the 8th c. BC.

Therefore, during this phase the settlement is characterized by the continuity of activity at sites occupied since the arrival of the first *apoikoi*, as well as by the use of the Carrara necropolis³³ (Tab. VIII). The permanent character of these forms of occupation is highlighted by the creation of the first residential structures in all three Districts and by the installation of the first production facilities in the Central one, according to the function established in the previous phase.

²³ *Infra*, par. 4a.

²⁴ SPADEA 2018.

²⁵ This is the most correct definition on the basis of the information we have: with the beginnings of the 7th c. BC the site doesn't give back traces of Indigenous production (LUBERTO 2010 for the analysis of the pottery from the excavation Crugliano 1975/via Firenze).

²⁶ LIPPOLIS-STOCCO 2014, 136 and 139: a later development of the District is supposed because the first residential buildings date to the first half of the 6th c. BC.

²⁷ LATTANZI 2000, 991-992 and now AVERSA 2014, 291.

²⁸ *Ibid.* Non-perishable walls will substitute the hut in the Campo Sportivo only during the 5th c. BC, while around the middle of the 4th a rich building will be erected here.

²⁹ RACHELI 2010, 248: the A. quote Marino 1995 who is said to have given a chronology of the first Iron Age for this installation, but this does not correspond to the quoted text. The pottery related to the use of the possible hut consists of «coppe ad aironi [maybe a mistake for *kotylai*] insieme a ceramica d'impasto». Aside from these, about which we have no information concerning the fabrics, chronologies, or any kind of documentation, the rest of the finds should be referred to the Greek period

of occupation of the city and, consequently, the possible structure.

³⁰ *Ibid.*

³¹ BORRELLO 1993, 45: these evidences has been related to the pre-Greek phase, but actually the *impasto* potsherds, the *fibula* and the spindle whorl found in the site are residual. Therefore they cannot belong to the phase described in the text by the Author. A pit with food remains, dating to the 7th c. BC (?), has been connected with the residential function of the area. On these finds see the most recent synthesis in LIPPOLIS-STOCCO 2014, 139.

³² VERBICARO 2010, 229: the kiln is in the area of the so called *Officina II* where are workshop structures attested in use until the 3th c. BC. The abandonment of the kiln should be dated at the end of the 7th c. BC, as documented by a fragment of a cup with fillets on the lip (*Ead.* 2014, tav. XXXIVg). The cup belongs to the DV3 type of Protocorinthian origin (lip slowly flaring and few developed, low body; fillets on the lip, body painted) of the classification elaborated by the present author for Achaean colonial Archaic pottery (LUBERTO 2017b, 195-196, 206 and fig. 4.1-2).

³³ FOTI 1974, 304: very few Archaic graves that produced mainly cups with fillets on lip of the 7th c. BC and very few Corinthian vases.

3. END OF THE 7TH – BEGINNING OF THE 6TH C. BC.

Between the end of the 7th and the beginning of the 6th c. BC the occupation of the urban area becomes even more systematic: in addition to the continuity of activity at the sites of the previous phase, is now possible to record the establishment of new roadways and the construction of the first dwellings.

At the QM1/via Tedeschi site, the oldest identified walls date back to the end of the 6th c. BC, while a higher chronology for the *stenopos* on the basis of the potsherds found in the same levels has been proposed³⁴. Although the presence of an unregulated road in the previous phases cannot be ruled out, the construction of the boundaries of the houses, and the consequent delimitation of the lots of the corresponding block, make it plausible to speak of a real implementation of urban planning only in this phase. In fact, these constructions represent the only tangible archaeological evidence of the road axis limits.

In addition, at QM4/via Firenze, the first recognizable structures, the internal walls ζ1 and κ³⁵, were built during this phase and were aligned according to the orientation of the future road only at the end of the 6th c. BC³⁶. At the northern side of wall κ, a lithic shrine containing ceramic and organic residue, apparently a foundation deposit, was found³⁷. The meaning of the installation, the memory of which was preserved by the ritual deposit, is suggested by the physical connection of the shrine itself with one of the oldest walls found at the site. With regards to its typology, location and function, it recalls the platforms found both in Megara Hyblaea and Selinous, connected to the first delineations of the boundaries of the urban blocks³⁸.

At both the QM6/Microcitemia and QM7/Ospedale sites structures of houses and roads have been identified, which, although not contiguous, must be considered pertinent to the same block: the first one represents its west side, the second the eastern (Fig. 2). The area is a crucial point of the urban topography as it is the link between the divergent orientations of the Southern and Central Districts. The actual hinge between the two sectors can be identified in the N-S road of the site QM6³⁹. Regarding this *stenopos*, it has already been mentioned that the proposed chronology of the 8th sec. BC does not seem suitable because of its associated finds⁴⁰. At the QM7 site an *ambitus* was dated to the end of the 7th c. BC; it is the eastern extension of the portion unearthed in investigations of QM6/Microcitemia, where it was excavated only in its highest levels⁴¹. Also at QM6, on both sides of the road, two residential buildings, the so called Case I and III, date back to the phase in question⁴². Based on these data, it can be assumed that the *ambitus* must have had an archaic phase even in its eastern section that ended at the NS road axis of the QM7 site.

The physical and topographical relationships between the *ambitus* and the roadway of QM6 and the indirect links between them and the two houses “Casa I” and “III” makes the assignment of a date at the end of the 7th – beginning of the 6th c. B.C. plausible, a date which can also be extended to the *stenopos*⁴³. On the basis of the revision of the chronologies proposed here for the other urban road⁴⁴, the placement of this hinge area between QM and QC appears to be one of the first, if not absolutely the first, to undergo meticulous planning, probably because it was the junction between a series of topographical elements of primary importance. The axis indeed joined together two urban sectors and furthermore connected the city center, where, from the early stages of life of the city, workshops were located, along with the hinterland and above all with the Carrara necropolis, in use since the 8th c. BC (Fig. 3).

The hypothesis that the urban street plan started from this central area is reinforced by the fact that even the *stenopos* at QC9/via XXV Aprile dates back to the chronological stage we are dealing with⁴⁵. The road has the same direction as the former, oriented SE-NW and leads from the central area to the coast. Along with the street at the QM7/Ospedale site, it represents the backbone of the Krotonian street grid (Fig. 3).

³⁴ The chronology, proposed by C. Sabbione (1975, 589-595), has been reclaimed by A. Racheli (2014, 29). *Ibid.*: at the site QM2/BPC the establishment of a pit filled with iron tools fragments is recorded. Information about these finds are noted also in other publications with discording indications and chronologies (LATTANZI 1987, 104).

³⁵ LUBERTO 2017, 148-150.

³⁶ *Infra*, par. 5.

³⁷ LUBERTO 2017, 150.

³⁸ For Selinous see now MERTENS 2010, 1160-1161. At Megara Hyblaea there are both round platforms, as in Selinous, and squared, which are related to the medium axis of the blocks and not with the streets: GRAS *et alii* 2005, 542 for a summary of the data, their interpretation and parallels with Selinous.

³⁹ VERBICARO *et alii* 2005, 19-20.

⁴⁰ *Supra*, fn. 17.

⁴¹ VERBICARO *et alii* 2005, 10-11: they are those equivalent to Casa I and II.

⁴² VERBICARO 2014, 84.

⁴³ For the road found in QM7 site there is no information for the phase we are dealing with because it has been excavated just in the most superficial levels: *ibid.*, 88.

⁴⁴ *Supra*, fn. 17 and par. 2.

⁴⁵ VERBICARO 2014, 81: the chronology is confirmed by the finding of cups of typologies derived from Protocorinthian and Corinthian prototypes (LUBERTO 2017b, 195-196, fig. 4.3-4, types D and E).

The central area continues to provide important evidence both of different typologies of housing and of productive activities during this stage. At the Curva Nord, at the QM7/Campo Sportivo site, the formerly built hut was still in use, while a brick dwelling had now been erected to the west of this area, replacing the dismantled kiln, in use between the 7th and 6th c. BC⁴⁶. A new workshop was established at QC7/Coop. Proletaria Pertusola and at QM6⁴⁷, in the courtyard of Casa I⁴⁸.

Occupation also continued in the Northern District with the construction, on the hill of Vigna Nuova, of a house and a building of uncertain function (QS2)⁴⁹. The *stenopoi* identified in this district, only hypothesized during the previous phase, can be considered in use at the beginning of the 6th c. BC⁵⁰.

Based on this information, it is evident that the urban planning course of the city started at this stage with the construction of the first roads, the first houses and the first workshops, respecting the functional designation that had been assigned to the different areas and sites since the arrival of the *apoikoi*.

4. END OF THE 6TH C. BC.

During the 6th c. BC the first dwellings were built at the QM2/BPC site, together with the supposed construction of two *stenopoi*, dated by the excavators to the 6th c. BC⁵¹. Actually, examination of the contextual data suggests a revision of the proposed chronologies to the end of the same century⁵².

In the central sector, the occupation of the sites inhabited since the end of the previous century continued, while at the same time new building activity began, involving the reconstruction of the house in QC2/Campo Sportivo and the establishment of a new kiln in the place of the previously dismantled one⁵³. Around the middle of the 6th c. BC archaeological traces of burning testify to the abandonment of the hut, located at the opposite side of the house⁵⁴. At the QC7/Cooperativa Pertusola site, the workshop lost its function⁵⁵, while near the QC9/XXV Aprile site, two wells and a house were constructed⁵⁶. Further evidence related to residential buildings in the same district have been recognized in some walls located at the QC10/Via Di Vittorio site⁵⁷, while at QC11 and QC12 sites, near the Esaro River, in the area of Fondo Gesù, structures referable both to houses and small workshops dating to the 6th c. BC have been recognized⁵⁸.

Beyond the river it is possible to observe the same continuity of activity as in the other sectors of the city, as is highlighted by the occupation of the QS1/Ex Montedison⁵⁹ and QS4/Contrada Vela sites⁶⁰, already inhabited since the last decades of the 8th c. BC. On the hill of Vigna Nuova⁶¹, in the area of the QS2/Collettore site, new dwellings were built at the same time as the only known sanctuary dating to the Archaic period in the city, that of Vigna Nuova⁶². The road axes identified with excavations at QS3/Acquedotto can also be dated to the 6th c. BC: they are part of a residential neighbourhood that climbed the slopes of the Batteria Hill⁶³.

4A. SACRED AREA OF THE ARCHAIC PERIOD

The available data on the topic are, as a whole, conspicuous, but predominantly related to mobile finds mainly not in situ and therefore lacking context⁶⁴. They document the presence of sacred buildings in all

⁴⁶ *Supra* for the hut. VERBICARO 2014, 75-78 for the Archaic phase of the house. The A. describes also an *ambitus*, which should delimit the house, and a *stenopos*. While for the first one the chronological pertinence to the same phase of the house has been explained, no information has been provided for the road. The only edited potsherd that supports the chronology proposed for the house is a fragment of a cup of colonial production, inspired by Protocorinthian prototypes (Type D LUBERTO 2017b), dated at the end of the 7th c. BC.

⁴⁷ VERBICARO 2014, 80-81, 90-92.

⁴⁸ *Ibid.*, 231-232.

⁴⁹ BORRELLO 1993, 47. Only the stone foundation structure of the Building B are preserved, but it most likely should also be interpreted as a house.

⁵⁰ LIPPOLIS-STOCCO 2014, 139.

⁵¹ RACHELI 2014, 26-28 e *infra*. One of the road axes has been only partially excavated; therefore, there are no certainties about its chronology. The date of the road in this sector is discussed further on: see *infra*, 5b.

⁵² *Infra*, fn. 78.

⁵³ VERBICARO 2014, 77-78, 94.

⁵⁴ AVERSA 2014, 291.

⁵⁵ VERBICARO 2010, 92.

⁵⁶ *Ead.* 2014, 81; for the *stenopos* in QC9 see previous paragraph (chronology: between 7th and 6th BC).

⁵⁷ RUGA 1998, 90.

⁵⁸ LATTANZI 2002, 730.

⁵⁹ LIPPOLIS-STOCCO 2014, 131.

⁶⁰ MARINO *et alii* 2010, 206-217.

⁶¹ BORRELLO 1993, 47.

⁶² *Infra*.

⁶³ SABBIONE 1976, 912-913.

⁶⁴ These finds mainly consist of architectural decorations. For those of the Archaic period found in the city see AVERSA 2005, 69-75; 2012 (on the examples properly belonging to Achaean types roofs), 42-47, fnn. 15-30 e 113-121. See also *infra*, fn. 65 and G. Aversa in this volume.

three districts between the end of the 7th and the end of the 6th centuries BC, with a particular focus on the first half of 6th (Fig. 3). The most significant amount of evidence is found within the Central District, where they are distributed especially along the sites of the SW side, bordering the Southern District (QC2, 7, 9), and in the area of the Fondo Gesù (QC11).

The only known sacred building dating to the Archaic period is the sanctuary of Vigna Nuova, situated on a hill near the residential district QS2, positioned immediately outside of what, much later, will be the path followed by the city walls⁶⁶ (Fig. 3). It is a simple rectangular building⁶⁷, built at the beginning of the 6th c. BC and restored around the middle of the same century. Soon after, it suffered several destructions, promptly followed by reconstructions and renovations, until it was definitively abandoned at the end of the 4th BC or immediately at the beginning of the following century⁶⁸. The complex is famous for the discovery of, among other materials, a very large quantity of iron chains stored within a bronze cauldron or in *pithoi* or deposited directly on the ground, together with work tools and weapons, especially spears. Among the metals, there were also three bronze studs that carry inscriptions of difficult reading. Based on these finds it was possible to establish that the divinity worshipped here was Hera, perhaps with the epiclesis *Eleutheria* or *Oplosmia*⁶⁹. These votive deposits date back to the Classical Period⁷⁰. For the Archaic phase it is possible to suppose that a similar cult existed on the basis of a principle of continuity and on some similarities with the sanctuary at Capo Lacinio⁷¹. It should be emphasized, however, that the attention of scholars has focused almost exclusively on the atypical finds recovered from the sanctuary and on the forms of worship related to the period to which they belong. Therefore, information about the first periods of activity of the building is limited.

5. END OF THE 6TH – BEGINNING OF THE 5TH C. BC

Between the end of the 6th c. BC and the beginning of the next century occupation of the three districts continues seamlessly from the previous phase. The grid system of the urban plan was now implemented, in particular through the provision of the road along the urban area.

The *stenopoi* of via Firenze and via Tedeschi⁷² in the Southern District were established, while on other sites the existing structures were still in use.

In the Central District the situation seems to contrast with the one just described. If, on the one hand, previously constructed houses and roads continued to be in use, on the other hand, at the end of the 6th c. BC levels of collapse and abandonment have been recorded,⁷³ followed by a *vacuum* in the archaeological record relating to the 5th c. BC. Activity resumes abundantly in the course of the following century, which represented a general period of economic recovery and renewed building fervor in the city⁷⁴.

⁶⁵ AVERSA 2012, 113-121. The terracottas are primarily antefixes, *simae* and covering slabs. Within the middle of the 6th c. B (all the following numbers are referred to AVERSA 2012 catalogue except where not explicitly indicated; see also Fig. 1):

-in QS: No. 14 from QS1 (= ex Montedison, excavations 1976); Nos. 28-30 from Vigna Nuova (Fig. 1 = AS1), perhaps belonging to a cult building near the sanctuary or to its most ancient roof;

-in QM: No. 15 from S. Chiara church, excavations 1996-1997;

-in QC: No. 16 from QC9 (= between the present roads XXV Aprile and M. Nicoletta); Nos. 17, 22-25 from QC11 (= Fondo Gesù); Nos. 18, 21 from QC2 (= Curva Nord and Area; Nos. 19-20 from QC7 (Cooperative, excavations 1976).

-in QC: AVERSA 2005, 71-72, pl. XXXII.8 from QC9 (= via XXV Aprile – cantiere Foti), 73, pl. XXXIII.11 from QC2 (= Area A);

-in QM: AVERSA 2005, 72, pl. XXXIII.10 and XXXIV.12 and *Id.* 2014 from QM1 (= via Tedeschi); *Id.* 2005, 74-75 and pl. XXXV.15 from QC6 (= via Telesio).

⁶⁶ The precise relationship between the structures of the sanctuary and the city walls has been discussed for some time. Thanks to some new surveys it was finally possible to ascertain the *extra moenia* position of the construction in all its phases of use: see now SPADEA 2018. *Ibid.*, 63 for literary sources on urban cults and for remains of two possible sacred buildings of the Classical period. On the problem of the city walls see *Id.* 2011.

⁶⁷ Measures: 22.50x8.85 m; it is not sure the presence at this time of the *adyton*, surely documented in the second phase: SPADEA 2018, 64-65 and 1997, 98-127 for the most complete edition of the sanctuary. More recently BARBANERA 2006, 371-372.

⁶⁸ SPADEA 2018, 65, 71 and 1997, 122; *ibid.*, fn. 55 with references to previous bibliography.

⁶⁹ *Ibid.*, 73 with previous literature, sceptic on the epithet *Hoplosmia*. See also *Id.* 1997, 121-127; on Greek contexts that have returned the same information known by literary sources see the revision in BARBANERA 2006, 371, fn. 88.

⁷⁰ SPADEA 2018, 65-70; 1997, 118. R. Spadea explains this amount of peculiar votive deposits in light of the information from historical sources on the *manumissio* of Sybarite prisoners, employed as slaves in the *chora* of the city, by the tyrant Clinia during the first quarter of the 5th c. BC (*ibid.*, 68-69). BARBANERA 2006, 372, fn. 92: it is here recalled the uncertainties around the exact chronological positioning of Clinia's tyranny and, as a consequence, of the episode of *manumissio* and formation of the archaeological deposit.

⁷¹ See now BARBANERA 2006, 371, fn. 87.

⁷² LUBERTO 2017a for via Firenze; for via Tedeschi *supra*.

⁷³ The workshop at the QM7/Cooperativa Proletaria Pertusola site is dismantled and, in the same way, the house and the kiln in the Campo Sportivo are abandoned VERBICARO 2010, 92; 2014, 78, 95.

⁷⁴ SPADEA 2011, 110-112.

Finally, in the Northern District this period represents the moment of greater intensity of occupation. At the QS1/ex-Montedison site traces of houses are identified, while the establishment of the streets dates back to the 5th c. BC⁷⁵.

In the area of the QS2/Collettore and QS3/Acquedotto sites on the hills of Vigna Nuova and Batteria, there is evidence of the continuity of use of both roads and dwellings⁷⁶. The *stenopos* identified in QS4/Contrada Vela is supposed to have been settled around the end of the 6th c. BC. At this stage, houses were already documented and one in particular among them, whose subsequent phases of rebuilding respects the original position of the internal/external walls of the first construction⁷⁷.

From the end of the 6th c. BC, but especially in the following century, the Carrara I necropolis extends to nearby Carrara III. However, based on the dating of the grave goods, only three graves can be attributed to this stage⁷⁸.

5A. DOMESTIC ARCHITECTURE IN STONE

A phenomenon of great interest that characterizes especially the end of the 6th c. BC is the diffusion of building techniques involving the use of square blocks with *anathyrosis* for the foundations of some houses located both in the Southern and Northern Districts, with a particular concentration in the Southern District⁷⁹ (Figure 4).

These blocks are consistently employed along the perimeter walls at the edges of the roadway and not for the internal divisions of the dwellings. In the Southern District they are regularly located along the eastern side, while in the QS4/c.da Vela site, the only case in the Northern District where detailed information is available in the publications, along the southern side⁸⁰. This use has been considered as an indication of the wealth of the homeowners and, in general, a symptom of the city's economic well-being⁸¹.

In fact, the use of different techniques on the two sides of the same road, associated with the consistent recurrence of blocks on a specific front, may suggest other plausible interpretations. It is possible that the *opera quadrata* had been used to level the ground sloping towards the sea⁸². If the hypothesis is correct, we must assume that the planning initiative was not private but, instead, could have been the result of a public interest determined by a careful study of the geomorphological features of the sites. The same comparisons with Selinous evoked by A. Racheli on this aspect seem to support this interpretation⁸³.

According to D. Mertens, at the turn of the 6th c. BC the renovation of the urban plan in the Megarian colony led to the use of square stones in the building lots behind the *agora*. The aim was to preserve boundaries of the lots over centuries, as is possible to verify following the reconstruction of the urban system at the beginning of the 5th c. BC⁸⁴. Public management of the urban space determined this operation: the different arrangement of the internal subdivisions of dwellings, left to the decisions of the individual private owners or renters, speaks in this direction⁸⁵.

⁷⁵ LIPPOLIS-STOCCO 2014, 13.

⁷⁶ BORRELLO 1993, 47; SABBIONE 1976, 912-913.

⁷⁷ MARINO *et alii* 2010, 197-204.

⁷⁸ AVERSA-VERBICARO 2014, 154-156, 169-170.

⁷⁹ The involved sites and buildings are: QM1/via Tedeschi, SE side (RACHELI 2014, 37); QM4/via Firenze, SE side (LUBERTO 2017a, 142-144); QM2/BPC, NE side (RACHELI 2014, 33); QM7/Ospedale, side NS and *ambitus*. QS2/Vigna Nuova, building C (perhaps also building B), but it is not specified on which side (BORRELLO 1993, 47); QS4/c.da Vela, US 23, southern limit probably of a *stenopos* (MARINO *et alii* 2010, 748-749). See also most widely LUBERTO *forth*. The *stenopos* QM2/BPC has to be dated in editor's opinion generically to the 6th c. BC. Nevertheless, it has to be considered that this road is the continuation towards the north of the same axis identified in the site QM2/via Firenze. For the latter, the chronology is firmly based on the systematic analysis of excavation's data. Though accepting the idea that these two streets have been established in different decades of the same c., the peculiar use of squared blocks in both cases seems to implicate a homogeneous chronology for the street in its entire extension. Elsewhere, in the QC, the *ambitus* of the site QM7 has blocks employed on both its northern and southern sides. It is of course clear that the walls of the *ambitus* should be considered perimeter walls of residential building that, as declared by the editor, have

not been identified because it was not possible to extend the survey (VERBICARO 2014, 84). The same *ambitus* most likely continues towards the West, as it has been already shown, in the site QM6 where it is indeed the boundary wall of two houses. It should be dated between the end of the 7th-beginning 6th c. BC, but this high chronology can be explained in the light of the peculiar function of this section in the context of the urban road network (*supra*).

⁸⁰ See previous fn.

⁸¹ SPADEA 2014, 6-7, but above all RACHELI 2014, 37-38.

⁸² RACHELI 2014, 26 for the site QM2/BPC and MARINO *et alii* 2010, 748-752 for QS4/c.da Vela.

⁸³ RACHELI 2014, 37-38.

⁸⁴ MERTENS 2010, 106-108: the use of square blocks during the second half of the 6th c. is particularly attested for the buildings located around the *agora*, in this phase deeply transformed and monumentalized. The isodomic technique becomes a peculiarity of the urban reconstruction of the beginning of the next century, when it is abundantly employed in elevation in the field of domestic architecture: *ibid.*, 117-118. On the use of squared blocks for the definition of the boundaries of the streets also in Megara Hyblaea, where their presence is linked to the public destination of the buildings they delimit, see GRAS *et alii* 2005, 472-474.

⁸⁵ *Ibid.*

The examples in Kroton are numerically limited and this is perhaps due to the frequent reuse of this material for Classical and above all Hellenistic reconstructions⁸⁶, but the information they provide in comparison to the Sicilian data are clear and consistent.

FINAL REMARKS

Some peculiar features, briefly summarized below, emerge from the present analysis:

- the knowledge of the settlement during the phases preceding the arrival of the Greeks still needs to be expanded in its essential features;
- several sites, distributed throughout the area that later become the urban space of the *apoikia*, were simultaneously occupied from the last quarter of the 8th c. BC. In some cases (eg QM4/via Firenze), their overlapping and resulting replacement of the indigenous settlements is certain (QM4/via Firenze);
- the functional destinations of the main urban areas (funerary, residential, artisanal) are identified during the early stages of occupation of the city and remained unchanged throughout the following centuries;
- the most ancient dwellings documented so far are huts, replaced by masonry constructions only from the end of the 7th c. BC, together with the established of the first street routes, preserved at least until the restoration of 5th and 4th cc. BC⁸⁷;
- the axis of the urban plan, from which the road network most likely developed in the three Districts, can be located at the hinge area between the Southern and Central Districts, at the height of the streets in the sites QM6/7, QC9;
- the distribution of architectural terracottas throughout the city, most likely belonging to sacred buildings, follows the path of this axis. But it is necessary to consider that they all derive from secondary contexts, so we cannot be certain about their relationship with the “hinge”;
- the frontier, the connection with the indigenous world invoked with insistence by historical and literary sources, finds its archaeological materialization already in the early 6th c. BC, with the construction of the Vigna Nuova *extra moenia* sanctuary;
- at the end of the same century the urban plan, broadly programed from the early stages of activity of the settlement, reaches its more concrete appearance through the construction/definition of the boundaries of the streets.

This data attest that the city was founded and developed without significant period of abandonment or gaps in activity during the first two centuries of its history. This situation is witnessed by the international fame it gained within a few decades of its foundation thanks to Olympian athletes, known in literary sources from 672 BC onwards and whose victories increased in frequency quickly during the 6th c. BC. On the other hand, the same period was characterized by turbulent warfare that the city engaged in with the aim of widening its borders: they do not appear to have had any influence on the socio-political or urban structure of the newly founded *polis*⁸⁸. M. Giangiulio discusses the presence of a moderate oligarchy that governed Kroton in a way that did not facilitate the emergence of predominant individual political figures, while at the same time provided stability to the community⁸⁹. This balance seems to have a direct echo in the process of urban planning, gradual and meditated, but above all respectful of the guidelines set up in the early stages of occupation⁹⁰, the practical implementation of which demanded time: this is, for example, verified also in Sicilian settlements, which despite the regular urban planning encountered a precocious development⁹¹.

⁸⁶ SPADEA 1983, 141.

⁸⁷ For similar systems of coexistence of domestic constructions of different typologies in other Greek settlements see: MERTENS 2013, 95, for Selinous.

⁸⁸ GIANGIULIO 1989, 302-304.

⁸⁹ *Ibid.*, 299-301.

⁹⁰ The need to overturn the monolithic idea of the urban development of the Greek city of Kroton, starting from archaeological data, was already underlined by E. Greco (1983, 185-186), as E. Lippolis has reminded, agreeing with his point of view and compounding the problem: LIPPOLIS-STOCCO 2014, 139, fn. 50.

⁹¹ MERTENS 2010, 58; TRÉZINY 2010, 1139-1140.

Even the break generated after the victory over Sybaris which led, first of all, to the loss of the equilibrium we just mentioned, does not find direct evidence in archaeological terms⁹². It is worth remembering that the monumental development at the Lacinion sanctuary dates to the 5th c. BC⁹³.

In conclusion, it could be useful to propose some brief remarks on two important issues: the identification of the *agora* and the relationship with the indigenous population.

Literary sources inform us of the presence of a civic space in the city in relation to Pythagoras's speeches⁹⁴. Recently, it has been proposed to identify the *agora* in the intersecting area between the Southern and Central Districts on the basis of topographical reasons and some peculiar archaeological material⁹⁵. That this area had a central role in the history of the city is beyond question: it is evident by the form of the road grid, the early development of workshops and by the distribution of evidence concerning the sacred sphere since the Archaic period. It would not be inappropriate to consider it, given the quality and nature of archaeological documentation, a space with commercial rather than civic value. However, the shortage of data on one hand and the practical impossibility of excavating large parts of the ancient urban center due to the overlapping of the contemporary city on the other hand, make it difficult to verify this and other hypotheses.

As far as concerns Vigna Nuova and the *extra moenia* sanctuary, the records collected demonstrate that there was a close relationship between the topographic location of the building, its function and the cults performed there. The liminal position of its structures was respected even with the construction of the city walls in the 4th c. BC. On the light of these data, it seems intuitive to postulate a role of connection, rather of control, with the hinterland for the sacred building: its structures may identify an urban frontier permeable to foreign elements, filtered through the sacred. This interpretation may also be extended to the occupation of the residential District, the Northern one, located in this portion of the town. It has been considered peripheral, despite the rich archaeological documentation and, above all, its continuous occupation. This zone of the city was founded and developed according to the same modalities verified for the center of the city. It would be very useful, from this point of view, to gain a deeper understanding of the findings from the excavations here conducted, with the aim of verifying the existence of similarities and differences with other urban sectors.

In addition, it would be of capital importance to provide careful and methodologically correct responses, based on the screening of all the available data, to the numerous questions generated by the present synthesis. These problems will remain unsolved in absence of an in-depth study of the various archaeological data brought to light by so many excavations and surveys conducted in the city over decades, today almost entirely unpublished.

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⁹² VERBICARO 2014, 118-119: a contraction of the archaeological evidence has been supposed for the QC during the 5th c. BC. On the risk of confusing the historical level with the archaeological one, especially in the interpretation of urban problems, see GRECO 2013, 79.

⁹³ See now AVERSA 2014, 307.

⁹⁴ On the problem of the *mouscia* of Pitagora and on their possible locations in the city of Kroton, Metapontion and Taras see CARUSO

2014, though with information on the distribution of the sacred spaces, especially the Archaic ones, that does not correspond to the data collected in this paper (537). Also the literary sources explicitly record the existence of the *agora*: D.S. XII.9.3 on the Sybarite prisoners who tried to seek refuge at the altars near the *agora*.

⁹⁵ See now SPADEA 2014, 8, in general, and VERBICARO 2014, 108; see also SPADEA 1993, 29.

TABLES

MID BRONZE AGE
No data for this phase
LATE BRONZE AGE
Data only from the area of ex Ferrovie Calabro-Lucane/via Firenze (QM4). Published potsherds are 6 on the whole. Generic information about discoveries in via Venezia and on the presence of <i>dolii</i> along the urban area.
FINAL BRONZE AGE
Generic information about discoveries in the urban area, most of them without indications on provenance, all without documentation.
FIRST IRON AGE
Finds from ex Ferrovie Calabro-Lucane (near QM4), Vigna Nuova (QS2; unpublished) and Carrara necropolis (N1-3).

Table I. Synthesis of data on pre-Greek phases in the urban area of Kroton.

	Period and chronology	Provenance and description of the collected data	Bibliography/notes
I.	Mid Bronze Age		
	Impasto potsherds		MEDAGLIA 2010, 227.
1		Via Venezia	Only finds from Late Bronze Age (see <i>infra</i>).
2		Area Foti	Impasto sherds of the <i>facies</i> of Diana and Stentinello found, together with obsidian slivers, at the crossroads between XXV Aprile and M. Nicoletta (MARINO 1995; 2005). Bowl from XXV Aprile (SPADEA 2012, 726 without bibliographical references and documentation). Same finds mentioned by D. Marino and S. Medaglia, <i>supra</i> ? No one of these finds belongs to this phase.
3		Microcitemia (QM6)	
4		Vigna Nuova (QS2)	<i>Infra</i> , Table V.4 (Iron Age pottery).
5		Castello (A1)	Proto-historic impasti from surveys conducted by a local archaeological group of volunteers; found together with grey and Medieval pottery; no chronologies (MEDAGLIA 2010, 227 without bibliographical references and documentation).
6		Campitello (QM5)	
7		ex Ferrovie Calabro-Lucane (near QM4)	See <i>infra</i> , Tab. III.1-2; V.2-3 (Late Bronze and First Iron Age pottery). (MARINO 1990, 140 = SPADEA 1983, 124: «Important nucleus of impasto potsherds dated between Medium and Late Bronze Age»).
8		Banca Popolare Cooperativa (QM2)	<i>Supra</i> , in the text, par. 2-3 and fn. 34.

Table II. Synthesis of data and bibliographical references on Mid Bronze Age in Kroton (M.R. Luberto).

	Period/chronology	Provenance/description	Bibliography/notes
II.	Late Bronze Age		
		“Grey pseudominian”, <i>dolia</i> potsherds, impasto pottery.	MEDAGLIA 2010, 227-228 = MARINO 1998.
1		Area of the ex Ferrovie Calabro-Lucane, excavation 1975 (near QM4): 6 fragments. Impasto bowl; one vase for manufacturing milk.	MARINO-FESTUCCIA 1995, 245, figs. 2.3-6: drawings; description; parallels mainly at Broglio di Trebisacce. SPADEA 1983, 124, fn. 25, tab. V: photos and very brief description of the finds. The mug (slightly incurved bottom with vertical handle) described first corresponds to MARINO-FESTUCCIA 1995, fig. 2.3; potsherd with ribbon decoration described as latter corresponds to <i>ibid.</i> , fig. 2.6.
2		Between via Firenze (QM4) and via Roma: 320 impasto potsherd, 178 of Mycenaean type and 18 of grey pottery.	Found under levels of the 7 th and 5 th century BC (8 th -7 th in MEDAGLIA 2010, 227) during rescue excavations. Fine pottery has many parallels in Broglio di Trebisacce and, to a lesser extent, in other sites like Porto Perone. It is dated to the LEII, LEIIIB and IIIC (LATTANZI 2004, 622-623). D. Marino on fine pottery (MARINO 1998, 287): several potsherds of open and closed vases decorated with horizontal bands and traces of floral motifs; tight parallels with Broglio di Trebisacce (no documentation). Pseudominian pottery: bowls with body at sharpe angle (MARINO 1998, 288).
3		Via Venezia: «strati indicanti livelli di frequentazione risalenti alla tarda età del Bronzo (XIII-XII sec. a.C.), preziose testimonianze di presenze indigene a Crotone».	LATTANZI 1989, 424 (no documentation, no description).
		« <i>Dolia</i> a cordoni e fasce con fascia liscia». Without data on precise provenance.	MARINO 1988b, 288; MEDAGLIA 2010, 228.

Table III. Synthesis of data and bibliographical references on Late Bronze Age in Kroton (M.R. Luberto).

	Period/chronology	Provenance/description	Bybliography/notes
III.	Final Bronze Age		
1		S. Francesco (N6): indigenous grave.	Information dated to the the first years of the XX cent. by Sculco Baron (MEDAGLIA 2010, 228; MARINO 1995, 242). There are no other information published, neither documentation; no finds preserved.
2		Castello (A1)	<i>Supra</i> , II.5
3		Generically from the urban area: proto-historic; traces of metallurgic activities; increase of the number of <i>dolia</i> ; 20 examples with bands of grooves and ribs; one with bands of grooves and <i>cuppelle</i> .	MARINO 1998 (without bibliographical references, data on finding places and documentation).

Tab. IV. Synthesis of data and bibliographical references on Final Bronze Age (M.R. Luberto).

	Period/Data	Provenance/description	Bibliography/notes
IV.	First Iron Age		
	Pottery dated between 9 th and 8 th century BC found in several areas of the city; ample settlement composed by a series of residential nuclei scattered all over the future site of the Greek <i>apoikia</i> .		MEDAGLIA 2010, 228.
1		Via Tedeschi (QM1): <i>fibulae</i> with twist arch.	<i>BTCGI s. v. «Crotone»</i> , 497 [C. Sabbione] (without documents, nor bibliographical references).
2		Area of ex Ferrovie Calabro-Lucane (near QM4): “fruit bowl” with 4 handles stored in the Museum of Kroton = open shape on high foot coming from via Firenze (?), exhibited in the Museum. Vases produced without potter’s wheel; dark and coarse clay; decorated with black-violet bands. Oinotrian or Iapygian (via Firenze; QM4).	MEDAGLIA 2010, 228 = SPADEA 2012, 725, fn. 16 (without documentation). SPADEA 1983, 124 (= SABBIONE 1982, 251, fn. 1). Under levels of the Greek period there have been identified two archaeological levels, separated by one semi-sterile. The lowest gave back <i>kotylai</i> with fillets (= between EPC and MPC?), Thapsos type cups and water birds <i>kotylai</i> of the end of the 8 th c. BC, associated with Indigenous finds (FOTI 1974, 312).
3		BPC (QM2): hearth and Indigenous pottery. Bottom of a closed shape «estraneo alla prima presenza dei Greci».	MEDAGLIA 2010, 228; <i>supra</i> , in the text, par. 2-3 and fn. 34. SPADEA 2012, 726.
4		Vigna Nuova (QS2): impasto potsherds and a four spiral <i>fibula</i> , found in a secondary context.	MEDAGLIA 2010, 228; MARINO-FESTUCCIA 2005, 246. <i>Supra</i> , par. 2, fn. 31.
5		Carrara necropolis: a <i>fibula</i> almost intact and one fragmentary with twist arch; a fragment of another one.	SABBIONE 1982, 258-259, fn. 27 and fig. 7, nos. 17-18bis. The first one found outside a grave of the 5 th century BC, near the grave goods; the second and third ones in a drain of mixed materials not far from the previous grave.
6		Generically from the urban area: impasto <i>attingitoio</i> exhibited in the Museum.	C. Colleli, PhD Thesis Groningen, 86-87, No. 285.

Tab. V. Synthesis of data and bibliographical references on First Iron Age (M.R. Luberto).

Sites with finds of the last quarter of the 8 th century BC	Sites with finds probably of the last quarter of the 8 th century BC
QM1/via Tedeschi	QM2/BPC
QM4/Via Firenze-Crugliano 1975	QM5/Campitello
QC7/Coop. Proletaria Pertusola	QM6/ Padiglione Microcitemia
QC9/Via XXV Aprile - Cantiere Foti	QC2/Campo Sportivo - Curva Nord - Area A
QS2/Vigna Nuova-Area “Piccole Industrie” – Collettore	QC8/Gravina Pignara
QS3/Acquedotto	QC10/Via Di Vittorio
QS4/Contrada Vela	QS1/Area EX-Montedison
N1/Carrara	

Tab. VI. Synthesis of data on first Greek presences in Kroton (M.R. Luberto).

Site	Published finds	Unpublished finds, exhibited in the Museum	Unpublished finds not exhibited in the Museum, mentioned in bibliography	Bibliography/notes	Chronology
QM1/via Tedeschi	Imported Thapsos style. Cups: 3; <i>Kantharos</i> : 1.	Imported Thapsos style. Cup: 1.		SABBIONE 1982, 255-256; 1983, 249.	From 730 to 720 BC.
	Locally produced Thapsos style. Krater, wall fig.: 1.				
QM4/Via Firenze-Crugliano 1975	Late geometric pottery. <i>Kotyle</i> , handle frg.: 1; closed shape, handle frg.: 1.	Imported Thapsos style. Krater: 1.		SABBIONE 1982, 255-256; LUBERTO 2010, 280-281.	From 730 BC.
	Early Protocorinthian pottery. <i>Kotyle</i> , restored: 1; frgs. of various others.				
	Imported Thapsos style. Cups: 3.				
QM2/BPC			Imported and locally produced Thapsos style cups; water birds <i>kotylai</i> .	RACHELI 2010, 248; 2014, 32.	End of the 8 th c. BC?
QM5/Campitello			Imported Thapsos cups.	VERBICARO 2010, 231.	End of the 8 th century BC.
QM6/ Padiglione Microcitemia			Lips of Thapsos style cups; Early Protocorinthian <i>kotylai</i> .	VERBICARO <i>et alii</i> 2005, 8-9. (N. B. The two cups have to be more appropriately referred to Protocorinthian types of the full 7 th century BC: Luberto in this volume).	7 th century BC.
QC2/Campo Sportivo - Curva Nord - Area A			Part of a Corinthian <i>skyphos</i> , Thapsos panel cups and sub-Thapsos potsherds (Campo Sportivo). Thapsos kraters panel and sub-Thapsos cups potsherds; cups with fillets on lip.	AVERSA 2014, 291. VERBICARO 2019, 229-230; 2014, 76, 96.	Last decades of the 8 th century BC? VERBICARO 2014, pl. XXVg: the cup in the table is not a Thapsos type. It has a high flaring lip without internal swelling, neatly separated from the body. It corresponds to LUBERTO 2017b type C, DV 2, dated between the end of the 8 th and the beginnings of 7 th century BC. See also Luberto in this volume.

Site	Published finds	Unpublished finds, exhibited in the Museum	Unpublished finds not exhibited in the Museum, mentioned in bibliography	Bibliography/notes	Chronology
QC7/Coop. Proletaria Pertusola	Imported Thapsos style pottery. Krater, fig.: 1; <i>kantbaros</i> , fig.: 2; panel cup, fig.: 1; cup with only fillets, fig.: 1. Thapsos style pottery of local production. Cups, fig.: 3. Protocorinthian type pottery of local production. Pixydes: fig. 5.	Early Protocorinthian cups: 2.		SABBIONE 1982, 265, 267, 270.	Since 730 BC.
QC7/Cooperativa S. Vincenzo 1976	Imported Thapsos style pottery. Krater, fig.: 1.			SABBIONE 1982, 256.	
QC8/Gravina Pignara			Thapsos cups.	CIMINO 1993, 40.	End of the 8 th century BC?
QC9/Via XXV Aprile - Cantiere Foti		Imported Thapsos style pottery. Krater, fig.: 1.	Early Protocorinthian pottery (mainly <i>kotylai</i>), Thapsos type cups and pottery of local production.		Since 730/20 BC.
QC10/Via Di Vittorio			Early Protocorinthian-subgeometric pottery, Thapsos type cups.	RUGA 1998, 91.	
QS1/Area EX-Montedison			Archaic pottery.	BORRELLO 1993; LIPPOLIS-STOCCO 2014, 131.	
QS2/Vigna Nuova - Area delle "Piccole Industrie" - Collettore	Imported Thapsos style pottery. Krater: fig. 1 (?).			GRECO 1983; DEHL 1984, 211.	From 730 BC.
QS3/Acquedotto	Imported Thapsos style pottery. Krater: fig. 1.		Thapsos type cups.	RUGA 1998, 81.	From 730 BC.
QS4/Contrada Vela	Thapsos style imported pottery. Krater, fig.: 1; cup, fig.: 1.			MARINO <i>et alii</i> 2010, 206-217.	From 730 BC.
N1/Carrara	Imported Thapsos style pottery. Restored krater, fig.: 1; restored cups, figs.: 2.			SABBIONE 1982, fn. 26, Nos. 15-16	From 730 BC.
From the urban area, without provenance			Imported Thapsos style pottery: cups 2.		Since 730/20 BC.

Tab. VII. First Greek presences in Kroton.
Distribution, quantification and typologies of the finds with bibliographical references (M.R. Luberto).

	End of the 8 th – beginnings of the 7 th century BC	First – second half of the 7th century BC	End of the 7th – beginnings of the 6th century BC	First – second half of the 6th century BC	End of the 6th – beginnings of the 5th century BC
ROADS			QM6 QM7(?) QC9 QS2 QS3	(QM 2?) QM6 QM7(?) QC9 QS2 QS3 (?)	QM1; QM2; QM3(?); QM4; QM6; QC9; QS2; QS3; QS4
AR (Residential areas)		QC2(hut) QM2 (? fireplaces) QS2 (? pit)	QM4 QM6 QM7 (?) QC2 (casa VIII) QS2	QM2; QM3; QC2; QC9; QC10; QS1; QS2	QM1; QM2; QM3; QM4; QM6; QM7; QC2; QC9; QC10; QC11; QS1; QS2; QS4
AA/OF (Workshops)		QC2	QM6 QC7	(QM5?); QC12	QM5(?); QC2; QC12
AS (Sacred areas)				QM3(?) QS2	QM3(?); QS2
AP (Public spaces)					
Port (?)			QC12(?)	QC12(?)	QC12(?)
City walls			QS2(?)	QS2(?)	QS2(?)
Necropolis	N1	N1	N1	N1	N1, N3

Tab. VIII. Synthesis of all the data collected on the urban development of Kroton between the 8th and the 6th century BC. (G. Balzanelli).

ABBREVIATIONS AND BIBLIOGRAPHY

- BTCGI = *Biblioteca topografica della colonizzazione greca in Italia meridionale*, Pisa-Roma-Napoli 1977-2012.
- AVERSA G. 2005, «Le terrecotte architettoniche di Croton. Nuove acquisizioni e considerazioni tipologiche», R. Belli Pasqua - R. Spadea (a cura di), *Kroton e il suo territorio tra VI e V secolo a.C.*, *Atti del Convegno Internazionale* (Croton, 3-5 marzo 2000), 67-79.
- AVERSA G. 2011, «Riflessioni sulla fondazione di Crotone fra problematiche della colonizzazione e dinamiche di occupazione territoriale», *Sicilia Antiqua*, I, 39-66.
- AVERSA G. 2012, *Tetti achei. Terracotte architettoniche di età arcaica in Magna Grecia* (TEKMERIA 15), Paestum
- AVERSA G. 2014, «Coperture fittili ed edilizia a Croton. Vecchi indizi e nuove testimonianze per una storia dello sviluppo urbano», R. Spadea (a cura di), *Kroton. Studi e ricerche sulla polis achea e il suo territorio*, *AttiMGrecia* Quarta Serie V, Roma, 289-307.
- AVERSA G. - VERBICARO G. 2014, «La necropoli della 'Carra 3' di Croton: rapporto preliminare di scavo», R. Spadea (a cura di), *Kroton. Studi e ricerche sulla polis achea e il suo territorio*, *AttiMGrecia* Quarta Serie V, Roma, 143-179
- BALZANELLI G. - LUBERTO M.R., «Croton e la sua forma urbana in età arcaica», A. Pontrandolfo - M. Scafuro (a cura di), *Dialoghi sull'archeologia della Magna Grecia e del Mediterraneo*, *Atti del Convegno Internazionale di Studi* (Paestum, 7-9 novembre 2016), Paestum, 253-258.
- BARBANERA M. 2006, «Altre presenze. Stranieri nei luoghi di culto in Magna Grecia», A. Naso (a cura di), *Stranieri e non cittadini nei santuari greci*, *Atti del Convegno Internazionale*, Firenze, 359-395.
- BETTELLI M. 2002, *Italia meridionale e mondo miceneo. Ricerche su dinamiche di acculturazione e aspetti archeologici, con particolare riferimento ai versanti adriatico e ionico della penisola italiana*, Firenze.
- BORRELLO L. 1993, «Lo scavo il Località "Vigna Nuova"», *Croton e la sua storia tra IV e III secolo a.C.*, *Atti del Seminario Internazionale* (Napoli 1987), Napoli, 45-50.
- CARUSO A. 2014, «*Museia* pitagorici in Magna Grecia», R. Spadea (a cura di), *Kroton. Studi e ricerche sulla polis achea e il suo territorio*, *AttiMGrecia* Quarta Serie V, Roma, 529-553.
- CIMINO M. G. 1993, «Lo scavo dell'area "G.V. Gravina-Pignara" a Croton: risultati preliminari», *Croton e la sua storia tra IV e III secolo a.C.*, *Atti del Seminario Internazionale* (Napoli, 1987), Napoli, 37-44.
- FOTI G. 1974, «L'attività archeologica in Calabria», *Orfismo in Magna Grecia*, *Atti Taranto* XIV (Taranto, 6-10 ottobre 1974), 291-323.
- GIANGIULIO M. 1989, *Ricerche su Croton in età arcaica*, Pisa
- GRECO E. 1983, «Intervento», *Croton, Atti Taranto* XXXIII (Taranto, 7-10 ottobre 1983), 183-185.
- GRECO E. 2013, «L'archeologia della polis in Magna Grecia», *Polis e Politeiai nella Magna Grecia arcaica e classica*, *Atti Taranto* LIII (Taranto, 26-29 settembre 2013), Taranto, 65-90.
- JONES R. - LEVI S. T. - BETTELLI M. - VAGNETTI L. 2014, *Italo-Mycenaean Pottery: the Archaeological and Archaeometric Dimensions*, Roma.
- LATTANZI E. 1987, «Attività della Soprintendenza Archeologica in Calabria», *Klearchos* 29, 99-111.
- LATTANZI E. 1989, «L'attività archeologica in Calabria», *La Magna Grecia e i grandi santuari della madrepatria*, *Atti Taranto* XXXI (Taranto, 4-8 ottobre 1991), 415-429.
- LATTANZI E. 2000, «L'attività della Soprintendenza Archeologica della Calabria nel 2000», *Problemi della chora coloniale dall'Occidente al Mar Nero*, *Atti Taranto* XL (Taranto, 29 settembre-3 ottobre 2000), 983-1003.
- LATTANZI E. 2002, «L'attività archeologica in Calabria nel 2002», *Ambiente e paesaggio nella Magna Grecia*, *Atti Taranto* XLII (5-8 ottobre 2002), 721-737
- LATTANZI E. 2004, «Discussione», *Preistoria e protostoria della Calabria*, *Atti della XXXVII Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria* (Scalea-Papasidero-Praia a Mare-Tortora, 29 settembre - 4 ottobre 2002), Firenze, 622-623.
- LIPPOLIS E. - STOCCO R. 2014, «Pianificazione e sviluppo urbano a Croton: nuovi dati dall'area ex-Montedison», R. Spadea (a cura di), *Kroton. Studi e ricerche sulla polis achea e il suo territorio*, *AttiMGrecia* Quarta Serie V, Roma, 121-142.
- LUBERTO M.R. 2010, *La ceramica arcaica dallo scavo Crugliano 1975 a Croton*, L. Lepore - P. Turi (a cura di), *Caulonia tra Croton e Locri*, *Atti del Convegno Internazionale* (Firenze, 30 maggio-1 giugno 2007), Firenze, 279-297.
- LUBERTO M.R. 2017a, «Lo scavo Crugliano 1975 e l'urbanistica di Croton antica», G. Vannini (a cura di), *Florentia* III, 135-156.
- LUBERTO M.R. 2017b, «Material Koinai in the West: Achaean Colonial Pottery Production between the 8th and 6th Centuries BC», A. Gadolou - S. Handberg S. (eds.), *Material Koinai in the Greek Early Iron Age and Archaic Period*, *Acts of an International Conference at the Danish Institute at Athens* (30 January - 1 February 2015) (MONOGRAPHS OF THE DANISH INSTITUTE AT ATHENS 22), 191-220.
- LUBERTO forth., «Edilizia domestica di periodo arcaico a Croton», L. Ficuciello - G. Zuchtriegel (a cura di), *Abitare in Magna Grecia. L'età arcaica*, *Convegno Internazionale* (Napoli-Paestum, 15-16 marzo 2018).

- MARINO D. A. 1990, «Considerazioni sul sito protostorico di Timpa dei Santi e il bronzo recente nella Calabria centro-orientale», *AnnBari* 33, 133-145.
- MARINO D. A. 1995, «Brevi note topografiche sugli insediamenti protostorici nella Calabria centro-orientale», G. De Sensi Sestito (a cura di), *I Bretti. Cultura, lingua e documentazione storico-archeologica I, Atti del 1° Corso Seminariale* (Rossano, 20-26 febbraio 1992), Soveria Mannelli, 237-246.
- MARINO D. A. 1998, «Aspetti dell'insediamento nella Calabria centro-orientale tra Età del Bronzo Recente e Prima Età del Ferro», N. Negroni Catacchio (a cura di), *Protovillanoviani e/o Protoetruschi, Ricerche e scavi, Atti del III Incontro di Studi su Preistoria e Protostoria in Etruria* (Manciano-Farnese 1995), Firenze, 287-300.
- MARINO D. A. 2014, «L'età del Ferro nel territorio di Crotona», M. Cerzoso - A. Vanzetti (a cura di), *Museo dei Bretti e degli Enotri*, catalogo esposizione, Soveria Mannelli, 49-51.
- MARINO D.A. - CORRADO M. - MITTICA G. P. - CRISTIANO F. 2010, «Materiali greci e coloniali della prima fase dell'antica Kroton. Scavo 2009 nel Quartiere Settentrionale», *Alle origini della Magna Grecia. Mobilità, migrazioni, fondazioni, Atti Taranto L* (Taranto, 1-4 ottobre 2010), 741-801.
- MARINO D.A. - FESTUCCIA S. 1995, «Siti costieri dal bronzo medio al bronzo finale nella Calabria centro-orientale», N. Christie (ed.), *Settlement and Economy in Italy 1500 BC-Ad 1500. Papers of the Fifth Conference of Italian Archaeology*, Oxford, 241-25.
- MEDAGLIA S. 2010, *Carta archeologica della provincia di Crotona: paesaggi storici e insediamenti nella Calabria centro-orientale dalla Preistoria all'Alto Medioevo*, Rossano.
- GRAS M. - TRÉZINY H. - BROISE H. 2005, *Mégara Hyblaea 5, La Ville archaïque. L'espace urbain d'une cité grecque de Sicile orientale*, Rome.
- MELE A. 1984, «Crotona e la sua storia», *Crotona, Atti Taranto XXIII* (Taranto, 7-10 ottobre 1983), Taranto, 9-87.
- MERTENS D. 2010, «Urbanistica della città greca», S. Tusa (a cura di), *Selinunte* (STUDIA ARCHEOLOGICA 179, CITTÀ ANTICHE IN SICILIA 1), Roma, 97-126.
- MERTENS D. 2010, «Selinunte: l'eredità di Megara Hyblaea e tante domande aperte», *Alle origini della Magna Grecia. Mobilità Migrazioni Fondazioni, Atti Taranto L* (Taranto, 1-4 ottobre 2010), Taranto, 1151-1170.
- MERTENS D. 2013, «L'archeologia della polis in Magna Grecia (discussant)», Polis e Politeiai nella Magna Grecia arcaica e classica, *Atti Taranto LIII* (Taranto, 26-29 settembre 2013), Taranto, 91-98.
- RACHELI A. 2010, «Continuità e discontinuità nella struttura della città: il caso della Banca Popolare Cooperativa», L. Lepore - P. Turi (a cura di), *Caulonia tra Crotona e Locri, Atti del Convegno Internazionale* (Firenze, 30 maggio-1 giugno 2007), Firenze, 243-271.
- RACHELI A. 2014, «Continuità e discontinuità nella struttura della città: l'area meridionale dell'antica Kroton», R. Spadea (a cura di), *Kroton. Studi e ricerche sulla polis achea e il suo territorio, AttiMGrecia Quarta Serie V*, Roma, 13-65.
- RUGA A. 1998, «Lo scavo di Via XXV Aprile», R. Spadea (a cura di), *Kroton: scavi e ricerche archeologiche a Crotona dal 1985 al 1998*, Crotona, 81-84.
- SABBIONE C. 1975, «Attività archeologica nelle province di Reggio e Catanzaro», *La Magna Grecia nell'età romana, Atti Taranto XV* (Taranto, 5-10 ottobre 1975), 569-598.
- SABBIONE C. 1976, «Attività della Soprintendenza Archeologica della Calabria nelle province di Reggio e Catanzaro», *Locri Epizefiri, Atti Taranto XVI* (3-8 ottobre 1976), 893-940.
- SABBIONE C. 1982, «Le aree di colonizzazione tra Crotona e Locri Epizefiri», *ASAtene* 60.2, 251-299.
- SPADEA R. 1983, «La Topografia», *Crotona, Atti Taranto XXIII* (Taranto, 7-10 ottobre 1983), Taranto, 119-166.
- SPADEA R. 1997, «Santuari di Hera a Crotona», J. de La Geniere (éd.), *Hera. Images espace cultes, Actes du Colloque International du Centre de Recherches Archéologiques de l'Université de Lille III et de l'Association P.R.A.C.* (Lille, 29-30 novembre 1993), Napoli, 234-59.
- SPADEA R. 2011, «Crotona tra i Dionisi ed Agatocle», R. Neudecker R. (Hrsg.), *Krise und Wandel. Süditalien im 4. und 3. Jhd v. Chr., Internationaler Kongress anlässlich des 65. Geburtstages von Dieter Mertens* (Rom 26. bis 28. Juni 2006), Wiesbaden, 107-118.
- SPADEA R. 2014, «Note topografiche di introduzione», R. Spadea (a cura di), *Kroton. Studi e ricerche sulla polis achea e il suo territorio, AttiMGrecia Quarta Serie V*, Roma, 3-11.
- SPADEA R. 2018, «Santuari con dediche di armi votive a Crotona: Hera Hoplosmia?», R. Graells i Fabregat - F. Longo (a cura di), *Armi votive in Magna Grecia, Atti del Convegno Internazionale di Studi* (Salerno-Paestum, 23-25 novembre 2017) (RGMZ – TAGUNGEN 36), Mainz, 63-74.
- TRÉZINY H. 2010, «Mégara Hyblaea: le domande e le risposte», *Alle origini della Magna Grecia. Mobilità Migrazioni Fondazioni, Atti Taranto L* (Taranto, 1-4 ottobre 2010), Taranto, 1133-1147.
- VERBICARO G. - RACHELI A. - SPADEA R. 2005, «Ricerche sull'edilizia domestica in Magna Grecia», *Siris* 6, 5-26.
- VERBICARO G. 2010, «Aree produttive a Crotona tra VII e III sec. a.C.», L. Lepore L. - P. Turi (a cura di), *Caulonia tra Crotona e Locri, Atti del Convegno Internazionale* (Firenze, 30 maggio-1 giugno 2007), Firenze, 227-241.
- VERBICARO G. 2014, «Aree residenziali ed officine ceramiche di Crotona antica: un contributo sull'organizzazione dello spazio urbano nel quartiere centrale della polis tra l'VIII secolo a.C. e il III secolo a.C.», R. Spadea (a cura di), *Kroton. Studi e ricerche sulla polis achea e il suo territorio, AttiMGrecia Quarta Serie V*, Roma, 67-119.



Fig. 1. Kroton. Location of the archaeological sites along the urban plan (after SPADEA 2014; cf. G. Balzanelli).

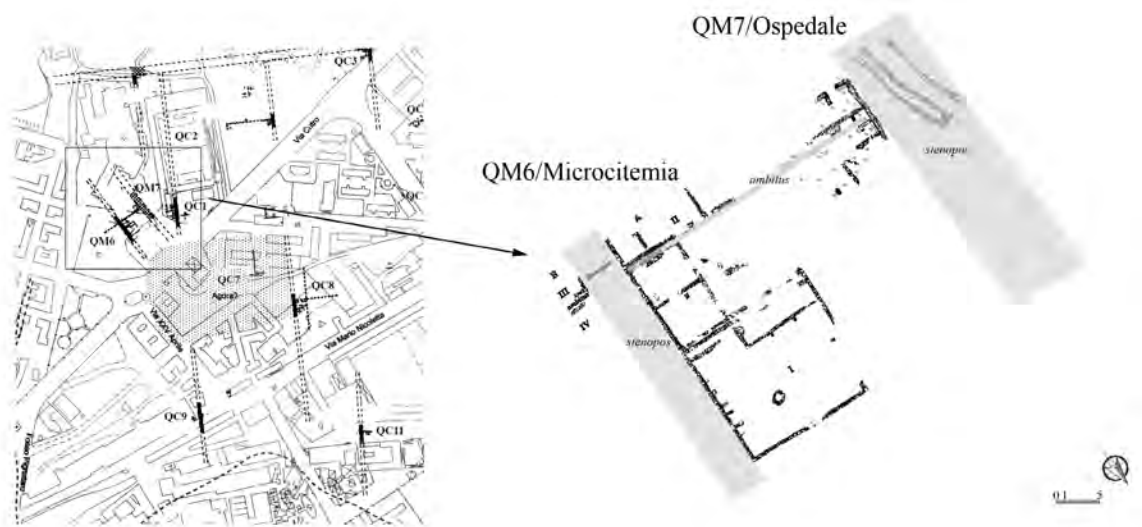


Fig. 2. Kroton. The “hinge” between QM and QC (after VERBICARO *et alii* 2005, SPADEA 2014; el. M.R. Luberto).

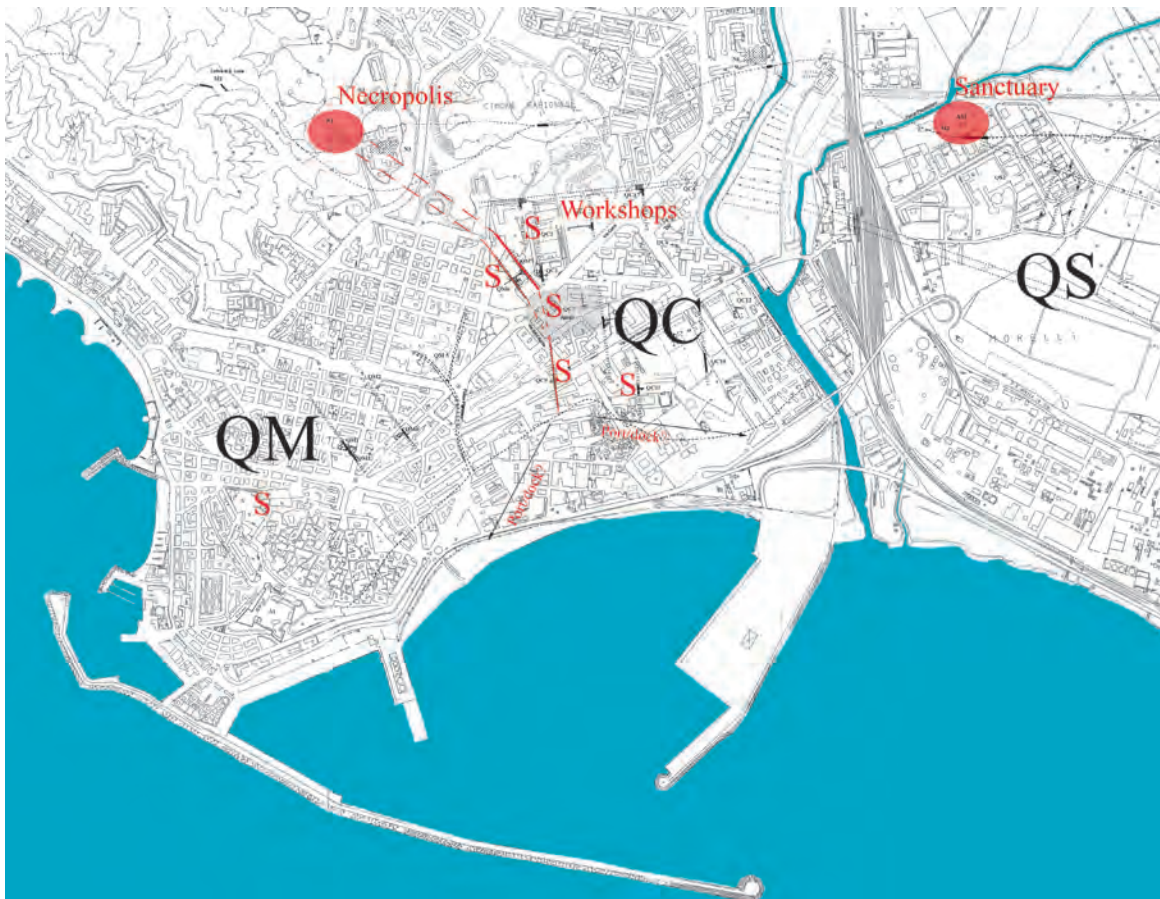


Fig. 3. Kroton. Hypothetical reconstruction of the grid roads (“hinge”) in QM. The letters S show the distribution of the architectural terracottas, most probably coming from sacred buildings (after SPADEA 2014; el. G. Balzanelli, M.R. Luberto).



Fig. 4. Kroton. Distribution of the sites where stone blocks were found. In red their position (after SPADEA 2014; cl. G. Balzanelli, M.R. Luberto).

