

GREEK COLONISATION

New Data, Current Approaches

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ALPHA BANK

Naxos of Sicily in the 5th Century BC: New Research*

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ΠΕΡΙΛΗΨΗ

Η Νάξος της Σικελίας τον 5ο αιώνα π.Χ. Νέες έρευνες και δεδομένα

Ο ορθοκανονικός κάρναβος του 5ου αιώνα π.Χ. που εφαρμόστηκε στη Νάξο –πρώτη ελληνική αποικία στη Σικελία– είναι το πιο γνωστό και καλύτερα τεκμηριωμένο χαρακτηριστικό στοιχείο της πόλης. Οι πρόσφατες ανασκαφές στη συμβολή της πλατείας Α και της στενωπού 11, καθώς και στην περιοχή των νεωρίων οδήγησαν σε πληθώρα νέων δεδομένων. Οι τοπογραφικές έρευνες που διεξάγονται από το 2012 συνέβαλαν στη δημιουργία του πρώτου γεωαναφερμένου σχεδίου της πόλης και οδήγησαν σε ένα τριμερές πρόγραμμα συνεργασίας για μία ενδελεχή αποτίμηση του συνόλου του αστικού ιστού της πόλης ανάμεσα στο Αρχαιολογικό Πάρκο της Νάξου, στο Φινλανδικό Ινστιτούτο Αθηνών και στο Φινλανδικό Ινστιτούτο στη Ρώμη.

Οι αρχαιολογικές έρευνες που πραγματοποιήθηκαν το 2001 και το διάστημα 2003-2006 επικεντρώθηκαν σε δύο διαφορετικούς τομείς της πόλης: τη βόρεια και την ανατολική πλευρά της χερσονήσου Schisò. Στην πρώτη περίπτωση αποκαλύφθηκε το μοναδικό σύμπλεγμα νεωρίων του 5ου αιώνα π.Χ. ακριβώς βόρεια της αγοράς, της πιο γνωστής τοποθεσίας της πόλης. Οι νέες έρευνες στη Νάξο με τις πρώτες συστηματικές αποτυπώσεις των αρχαιολογικών καταλοίπων συμπληρώνουν τις ήδη υπάρχουσες γνώσεις μας για την τοπογραφία της αρχαίας πόλης. Κατά τις πρώτες γεωφυσικές έρευνες το 2014 πραγματοποιήθηκαν μαγνητικές μετρήσεις, καθώς και χαρτογράφηση με μεθόδους ηλεκτρικής αντίστασης και γεωραντάρ, η τελευταία εκ των οποίων αποδείχθηκε η πλέον αποτελεσματική για τους σκοπούς της χαρτογράφησης των υπεδάφιων αρχιτεκτονικών μνημείων. Επιπλέον, διανοίχτηκαν μικρές δοκιμαστικές τομές προκειμένου να επαληθευθεί το πολεοδομικό σχέδιο και οι προσδιορισμένοι στόχοι των γεωφυσικών ερευνών.

Ο αστικός ιστός προσδιορίζεται από τρεις ευρείες οδούς ή πλατείες με κατεύθυνση από ανατολάς προς δυσμάς, οι οποίες κατά μικρά και τακτά διαστήματα τέμνονται από μία σειρά στενότερων οδών, των στενωπών. Ο προκαταρκτικός σχεδιασμός του πολεοδομικού συστήματος της πόλης κατά τις πρώτες δεκαετίες του 5ου αιώνα π.Χ. περιελάμβανε τη

* We would like to express our gratitude to the organisers of the conference, especially to Polyxeni Adam-Veleni, for inviting us. The authors of this paper are listed in alphabetical order: Lentini has the overall responsibility for the fieldwork and excavations, Pakkanen for the topographical work and Sarris for the geophysical prospection.

συστηματική διάλυση των προγενέστερων κτισμάτων του 6ου αιώνα π.Χ. Η υιοθέτηση του ορθοκανονικού καννάβου θεωρείται από κάθε άποψη ως μία επανίδρυση της πόλης, καθώς ακυρώνει το αρχικό σχέδιο της αποικίας απομακρύνοντας κάθε ίχνος των προηγούμενων αστικών δομών. Η δεύτερη, μετά το 460 π.Χ., αστική φάση, όπου παρατηρούνται βεβαιωμένες τροποποιήσεις στα σχέδια των κατοικιών καθώς και αποκαταστάσεις κτηρίων, συνδέεται προφανώς με την επιστροφή των εξόριστων κατοίκων στην πόλη μετά την πτώση της τυραννίας στις Συρακούσες.

INTRODUCTION

This paper concentrates on the cityscape of Naxos and how it can be reconstructed. We will also touch on the relationship of the town with its surroundings. The latest projects carried out in Naxos, the first Greek colony in Sicily, improve greatly the data concerning the 5th-century BC city plan, the best-known orthogonal grid plan of this period. The excavations in the crossroads 11 of *plateia* A and the area of the shipsheds have discovered a crucial segment of the ancient city, while the topographical survey work carried out since 2012 resulted in the first georeferenced and highly precise plan of the ancient city (fig. 1). This work has now evolved into a three-way collaborative fieldwork project between the Archaeological Park of Naxos and the Finnish Institutes at Athens and in Rome, which will result in a thorough re-evaluation of the whole urban territory. In this paper we will present a quick summary of the recent excavations and the topographical survey together with the results of the geophysical work carried out by the Foundation for Research and Technology-Hellas (F.O.R.T.H.) in March-April 2014. The hypothesis that the agora of Naxos was located in the middle of the city grid¹ can now be laid to rest. The test trench opened in December 2013 in the north-west corner of insula A6 indicates that normal house plots continue in this area.

Naxos was the first Greek colony in Sicily, founded in 734 BC by settlers from Chalcis in Euboea and Naxos in the Cyclades² and its destruction in 403 BC by Syracuse was definitive.³ The 5th-century BC history of the city was very turbulent: it was captured by the tyrant of Gela, Hippocrates in circa 492/1 BC and the citizens of both Naxos and Katane were expelled to Leontinoi in circa 476/5 BC by Hieron, the tyrant of Syracuse; the Naxians could only go back after the death of Hieron in 467 BC and the subsequent fall of the tyranny in Syracuse.⁴ The archaeological material confirms the restlessness of these years and the establishment of the Classical town grid was preceded by a systematic destruction of the Archaic buildings. Systematic excavations in the area started in 1953⁵ and two superimposed urban layouts were found.⁶ The earlier polycentric plan is datable to the mid-7th century BC and we argue that the second orthogonal one can be dated to circa 470 BC.

THE ORTHOGONAL GRID SYSTEM

The regular grid plan was discovered by Paola Pelagatti in 1973.⁷ The urban space is defined by three wide streets or *plateiai* (A, B, and C) running approximately in an east to west direction. They are of different widths and at regular intervals intersected by a series of

1 Fischer-Hansen 1996, 339, fig. 7; Mertens 2006, 345-346, fig. 616.

2 Hellanicus *FGrH* 4 F82; Thucydides VI.3.1. On a recent discussion, see Lentini 2001.

3 Diodorus XIV.15.2.

4 Herodotus VII.154; Diodorus XI.49.1-2, XI.76.3.

5 For a thorough recent review of the textual sources and archaeological evidence, see Lentini - Blackman - Pakkanen 2013, 393-409.

6 Pelagatti 1981, 295-297, fig. 3.

7 Pelagatti 1976-1977, 537-542, figs. 3-3bis. See also Martin 1974, 316 where the discovery was announced in advance.

north-south narrower streets (1-14 all together; fig. 2).⁸ The street network limits the housing blocks of circa 39.2 x 156.7 metres. Square bases, perhaps altars, systematically mark the intersections. Further excavations of *plateiai* B and C were carried out between 1983 and 1996 (figs. 2-3).⁹ The excavations of *plateia* A, the major axis of the system, undertaken in 1998 (fig. 4),¹⁰ continued almost without interruption until 2014: the sector is critical for our understanding of both the formation and development of the city of Naxos.

In April 2014 we chose, as the area of the next trial trench, the crossroads 8 of *plateia* A because of a high magnetic signal. The south side of the crossroads was uncovered and the excavations will be extended to the north side in 2015: the structures had again been damaged by the recycling of the stones and by the installation of a limekiln (marked with brown) occupying almost entirely the width of *stenopos* 8 and resting directly on the paved side channel of *plateia* A (marked with blue) (fig. 5). The Classical walls at the two plot corners were uncovered (marked with green), but the rectangular base is missing because it was embedded in the kiln. The road surface of *plateia* A is well preserved and the channel on the side is widened at the crossroads. Both this feature and the corner bases – and we could add the many Silen-mask antefixes found, above all, at and near the crossroads – have the clear aim of monumentalising the city plan.¹¹

THE EASTERN DISTRICT: CROSSROADS A11

Archaeological investigations undertaken in 2001 and continued in the years 2003-2006 concentrated on the north and the east sides of the Schisò peninsula (fig. 6). In the first part, the unique complex of 5th-century BC shipsheds was discovered immediately to the north of the most likely location of the city agora. The area has a direct contact with the bay and the port: the archaeological remains suggest that the area had both a civic and a military function. The seafront façade of the shipshed complex indicates that in the 5th century BC the coastline was circa 180-190 metres further in from the current sandy beachfront and that the relative sea level was about two metres higher than at present. The eastern part of the Schisò peninsula was, instead, mainly residential in the 5th century BC.¹² Two phases of the 5th-century BC urban development have been identified also in this area (fig. 4).

The preliminary preparations for the setting out of the urban plan of the 5th century BC involved systematic dismantling and levelling of the 6th-century structures (fig. 7). *Plateia* A has two superimposed Classical road surfaces: it remained in use until the end of the century and on top of the final road surface the destruction layers of 403 BC are evident.¹³ Similar phases were detected in the housing blocks A10 and A11: the first one datable to about 470 BC; the second one datable to post-460 BC. The last phase consisting in modifications of the house plans and restoration is best attributed to the return of exiles after the fall of the Deinomenid tyranny in Syracuse. As at the shipshed complex (see below), the changes were limited to modifying the existing infrastructure: moving property boundaries and altering the spaces and internal divisions of houses with the street network left as it was before. The same phenomenon can be observed at Himera.¹⁴

The data are consistent with a chronology according to which the orthogonal city grid was

8 Pelagatti 1998, 51. For the history of research, see Pelagatti 1993, 275-276.

9 Lentini 1990, 5-22; Lentini 1993-1994, 1002-1008, fig. 3; Lentini 1997-1998, 455-458, fig. 2. For the excavations on *plateia* B from gate 2 to *stenopos* 7 (the 1983-1984 excavations), see Lentini 1998, 74, figs. 2-3.

10 Lentini 1997-1998, 458-464, figs. 4-5, 111 (base), pl. 1; Lentini 1998, 74-75, figs. 5-6.

11 Martin 1974, 316, no. 52.

12 Lentini 2009, 1-19.

13 Lentini 1998, 83, figs. 4, 15-16 (*plateia* C and insula C4 house 14).

14 Belvedere 1990, 70, and more recently, see Allegro 2008, 217.

established in the initial decades of the 5th century BC and with Pelagatti's suggestion that Hieron I of Syracuse could have been responsible for the introduction of the new town plan,¹⁵ even though it is not mentioned in the textual sources.¹⁶

The new orthogonal grid counts in every aspect as a re-foundation of the city: it cancelled the original colonial plan and removed all traces of previous urban identities and properties. Only the city walls and some of the sacred precincts were left untouched; the monumental shipshed complex also escaped and it was merely fitted into the new urban design. These are all actions which would be appropriate for a Deinomenid ruler.¹⁷

THE AGORA AND THE SHIPSHED COMPLEX

The shipshed complex with four slipways defines the northern edge of the area where the agora was most likely situated (fig. 8). We have previously argued that the south-east corner of the agora is defined by Temple E and Casa Pastas, the demolished Archaic house which was not replaced by the 5th-century BC housing.¹⁸ The enigmatic structure to the south of Temple E could be the *propylon* leading into the agora from *stenopos* 9. A supposed central location for the agora of Naxos covering the north side of insula A6 can now be laid to rest because the 2013 excavations discovered that the normal house plots continue also in the northern half of insula A6 (fig. 8).

The shipshed complex measuring 28 by 40/48 metres is the largest building of ancient Naxos. The *proteichisma* wall discovered circa 25 metres to the north-west of the shipsheds (Wall 1) shows that it was inside the city and, therefore, part of the urban layout. The back wall of the second phase of the complex was modified to fit the complex to the two urban networks: the wall at the back of slipways 1 and 2 follows the original Archaic road alignment, while the orientation of the wall behind slipways 3 and 4 was adjusted to the new Classical grid (fig. 9). The fact that the alignment of the Archaic road was only partially changed suggests the presence of a gate in this section of the city wall.

Pottery from the first phase levels of ramps 3 and 4 dating from the late 6th to the early 5th century BC provides the shipsheds chronology, which is supported by the Sicilian type roof with Silen antefixes, two of which – the best-preserved ones found – have been presented in the exhibition “The Europe of Greece: Colonies and Coins from the Alpha Bank Collection” (fig. 10).¹⁹ Considering the drastic changes in the city layout, we would like to propose an updated chronology for the Classical shipsheds, adding a Phase 2 coeval with the city grid plan set up and including the remodelling of the back wall and the renovation of the Archaic roof testified by Silen antefixes of the late type B and C.²⁰ This was followed by a Phase 3 dating to the mid-5th century BC characterised by the introduction of the new undecorated Corinthian roof and by the construction of the façade Wall 1.²¹

There are several reasons why the shipshed complex at Naxos would have been built as ostentatiously as possible: its site on the harbour lies just next to the most likely location of the agora, and due to the height of its roof it would have been clearly visible from there. It would have been among the first monuments anybody arriving from the sea would see.

15 Pelagatti 1976-1977, 541-542.

16 Diodorus XI.49.1-2 only records the expulsion of Naxians and Katanians to Leontinoi in 476/5 BC.

17 Cf. Luraghi 1994, 335-348.

18 Lentini - Pakkanen 2012, 155-158.

19 Lentini - Blackman - Pakkanen 2008, 323-350.

20 This is a revision to the two-phase shipshed chronology suggested by us in Lentini - Blackman - Pakkanen 2008.

21 The chronology is suggested by the latest pottery from the sequence of rectangular pits underlying Wall 1 (cf. Blackman - Lentini 2003, 409, 428-432).

GEOPHYSICAL PROSPECTION

The main target of the geophysical work in 2014 was to locate structures of the Classical city grid and start work on defining the extent of the city. An additional target was to see whether Archaic remains below the Classical ones could be detected. As the first phase of geophysical exploration was mostly explorative, and in order to maximise the results of the geophysical prospection and test the quality of the signals collected, three methods were applied at the site: magnetic gradiometry, electrical resistance and ground penetrating radar (GPR).²² Tables 1 and 2 summarise the technical details concerning the sampling intervals, resolution and investigation depth of the different geophysical methods that were applied in the area. In total, an area of 9,800 square metres was covered.

The geophysical survey concentrated on the central and north-eastern sectors of the city (fig. 11). The 2014 survey season showed the importance of using different geophysical methods at Naxos. Each one of the methods applied has been able to suggest specific targets in terms of the physical quantity measured and the properties of the subsurface. The archaeological site of Naxos is challenging from both archaeological and geophysical perspectives. The magnetic survey suffered severely from the shallow stone foundations of the architecture and the wide and dense distribution of the igneous rocks, which have also been used as building blocks, and especially the igneous bedrock. The magnetic signals seem to spread over a large extent and they do not pinpoint specific linear architectural remains but rather larger regions of high magnetic values (fig. 12). This may be caused by the bad preservation of monuments and/or collapsed architectural blocks. In addition to this, volcanic debris from recent and older eruptions of Etna has created a magnetic lens covering the architectural remnants. In the test area the dynamic range of the magnetic values fluctuated within -200 to 150 nanotesla/metre indicating thermal targets. This was confirmed by the test trench excavated at the crossroads of *plateia* A and *stenopos* 8 where a large Roman limekiln was discovered (fig. 5).

The magnetic lens due to eruptions of Etna covering the architectural remnants also affected the soil resistance measurements since the particular material is porous and this created a trend towards higher background values with increased distance from the remote electrodes of the twin probe array. It was only after processing with equalisation of the values along transects that the resistivity values could have some kind of meaning (fig. 13). The general resistivity values hardly indicate isolated features, but they could be indicative of the Archaic road system below the Classical one.

The most consistent information came from the GPR data after processing and removing the background noise, as well as after band pass filtering to highlight interesting features. Plenty of linear anomalies, most of which aligned in the same direction with the reconstructed outline of the plan of the ancient city, are highlighted in the GPR slices extending mainly to a depth of 0.6-1.0 metres below the current surface (fig. 14). Details of wall foundations within the various city blocks are especially evident towards the west and east parts of the central surveyed region.

The preliminary results point towards a number of architectural remnants and geophysical methods can contribute towards the reconstruction of the city grid. Indeed, the sections investigated especially towards the western part of the surveyed region are consistent with the orthogonal plan of the city. The geophysical data indicate the continuation of the main road running in the east-west direction and at least two or three perpendicular (north-south) crossroads corresponding to *stenopoi* (fig. 15). Even though the precision of the measure-

22 For a recent review of the methodologies, see e.g. Sarris - Jones 2000, 3-75.

ments is not as refined as the one of the recent topographic survey, the evidence of the geophysical survey confirms that the city consisted of orthogonal blocks in the unexcavated parts as well. A number of structural elements also indicate the density of building within the city blocks.

NEW TOPOGRAPHIC SURVEY

The new fieldwork of Naxos integrates what is previously known about the topography of the ancient town and the layout of the modern city with a first systematic centimetre-precise total station survey of the archaeological remains: we have by now taken over 27,000 measurements of the man-made features, mainly of the ancient architecture but also several controls on modern buildings. The work conducted in December 2013 made it possible to double-check the measurements of the first 2012 campaign²³ and obtain new ones due to the uncovering of the backfilled trenches: compared with the previously published preliminary statistical analysis, four of the measurements taken in 2012 were substantially revised and eight new measurements could be taken.²⁴ Cosine quantogram analysis of these 48 direct measurements from Naxos reveals a simple modular design which can also be expressed in terms of the so-called “Doric-Pheidonic” foot. The new dimensions shift slightly the position of the maximum peak. The statistically highly significant peak corresponds to a module of 1,633 metres or, quite certainly, five feet of 0.327 metres.

The size of the city block, circa 39.2 x 156.7 metres, is 24 x 96 modules, and the designed widths of the streets vary: *plateia* A (circa 9.5 metres) is six modules, *plateiai* B (circa 6.4 metres) and C (circa 6.3 metres) and *stenopos* 6 (circa 6.4 metres) are all four modules and the normal *stenopoi* (4.94-5.19 metres) three modules (fig. 16). The distances between the centres of the quadrangular bases set in the south-east corners of the crossroads of *plateiai* and *stenopoi* strongly support the notion that they are an integral part of the city design: the north-south distance between the bases is 100 modules and the east-west distance 27 modules; the distance of the bases between *stenopoi* 5 and 6 is widened to 27.5 modules to accommodate the wider *stenopos* 6.

Our ultimate aim is to arrive at as full an understanding of the town as possible: for example, where did the raw materials for building come from, how should it be reconstructed, what was its relation to the surrounding landscape and can aspects of it be reconstructed based on excavated materials from the city? We have started the work on these themes but plenty still remains to be done.

23 Pakkanen 2013, 56-59.

24 The new data and statistical analysis will be presented in detail in Lentini - Pakkanen forthcoming.

REFERENCES AND INDICATIVE BIBLIOGRAPHY

- Allegro 2008: N. Allegro, "I blocchi 1 e 4. Considerazioni generali", in N. Allegro (ed.), *Himera V*, Palermo, 209-220.
- Belvedere 1990: O. Belvedere, "L'urbanistica", in *Lo stile severo in Sicilia. Dall'apogeo della tirannide alla prima democrazia*. Catalogo della mostra (Palermo, 10 febbraio-30 settembre 1990), Palermo, 63-74.
- Blackman - Lentini 2003: D.J. Blackman - M.C. Lentini, "The Shiphsheds of Sicilian Naxos, Researches 1998-2001: a Preliminary Report", *BSA* 98, 387-435.
- Fischer-Hansen 1996: T. Fischer-Hansen, "The Earliest Town-Planning of the Western Greek Colonies: with Special Regard to Sicily", in M.H. Hansen (ed.), *The Polis as an Urban Centre and as a Political Community*, Symposium 29-31 August 1996, Acts of the Copenhagen Polis Centre, Copenhagen, 317-373.
- Lentini 1990: M.C. Lentini, "Naxos: alcune case dell'isolato C4 (V secolo a. C.)", *Xenia* 20, 5-22.
- Lentini 1993-1994: M.C. Lentini, "Nuove esplorazioni a Naxos (scavi 1989-1994)", *Kokalos* 39-40, 1001-1025.
- Lentini 1997-1998: M.C. Lentini, "Esplorazioni nel sito dell'antica Naxos ed altri interventi (1995-1998)", *Kokalos* 43-44, 453-470.
- Lentini 1998: M.C. Lentini, "Le ultime esplorazioni a Naxos (1983-1995)", in M.C. Lentini (ed.), *Naxos a quarant'anni dall'inizio degli scavi*, Messina, 71-100.
- Lentini 2001: M.C. Lentini (ed.), *The Two Naxos cities, a Fine Link between the Aegean and Sicily*, Palermo.
- Lentini 2009: M.C. Lentini (ed.), *Naxos di Sicilia. L'abitato coloniale e l'arsenale navale. Scavi 2003-2006*, Messina, 9-37.
- Lentini - Pakkanen 2012: M.C. Lentini - J. Pakkanen, "Nouvelles découvertes sur l'agora de Naxos en Sicile", in V. Chankowski - P. Karvonis (eds.), *Tout vendre, tout acheter. Structures et équipements des marchés antiques*. Actes du Colloque d'Athènes (16-19 juin 2009), Bordeaux and Athens 2012, 153-161.
- Lentini - Pakkanen forthcoming: M.C. Lentini - J. Pakkanen, "Recent Research on Town Planning and Naxos in Sicily", in J. Pakkanen (ed.), *Greek Building Projects*, forthcoming.
- Lentini - Blackman - Pakkanen 2008: M.C. Lentini - D.J. Blackman - J. Pakkanen, "The Shiphsheds of Sicilian Naxos: a Second Preliminary Report (2003-6)", *BSA* 103, 299-366.
- Lentini - Blackman - Pakkanen 2013: M.C. Lentini - D.J. Blackman - J. Pakkanen, "Naxos in Sicily", in D.J. Blackman - B. Rankov - K. Baika - H. Gerding - J. Pakkanen, *Shiphsheds of the Ancient Mediterranean*, Cambridge, 393-409.
- Luraghi 1994: N. Luraghi, *Tirannidi arcaiche in Sicilia e Magna Grecia*, Firenze.
- Martin 1974: R. Martin, *L'urbanisme dans la Grèce antique*, 2nd edition, Paris.
- Mertens 2006: D. Mertens, *Città e monumenti dei Greci d'Occidente. Dalla colonizzazione alla crisi di fine V secolo a.C.*, Rome.
- Pakkanen 2013: J. Pakkanen, *Classical Greek Architectural Design: a Quantitative Approach*, Papers and Monographs of the Finnish Institute at Athens 18, Helsinki.
- Pelagatti 1976-1977: P. Pelagatti, "L'attività della Soprintendenza alle Antichità della Sicilia Orientale", *Kokalos* 22-23, 519-550.
- Pelagatti 1981: P. Pelagatti, "Bilancio degli scavi di Naxos per l'VIII e il VII sec. a.C.", *ASAtene* 59, 291-311.
- Pelagatti 1993: P. Pelagatti, "Nasso: storia della ricerca archeologica", *Bibliografia Topografica della Colonizzazione Greca in Italia* 12, 268-312.
- Pelagatti 1998: P. Pelagatti, "Dalle perlustrazioni di Paolo Orsi e Antonino Salinas alle ricerche recenti", in M.C. Lentini (ed.), *Naxos a quarant'anni dall'inizio degli scavi*, Messina, 39-69.
- Sarris - Jones 2000: A. Sarris - R. Jones, "Geophysical and Related Techniques Applied to Archaeological Survey in the Mediterranean: A Review", *JMA* 13, 3-75.

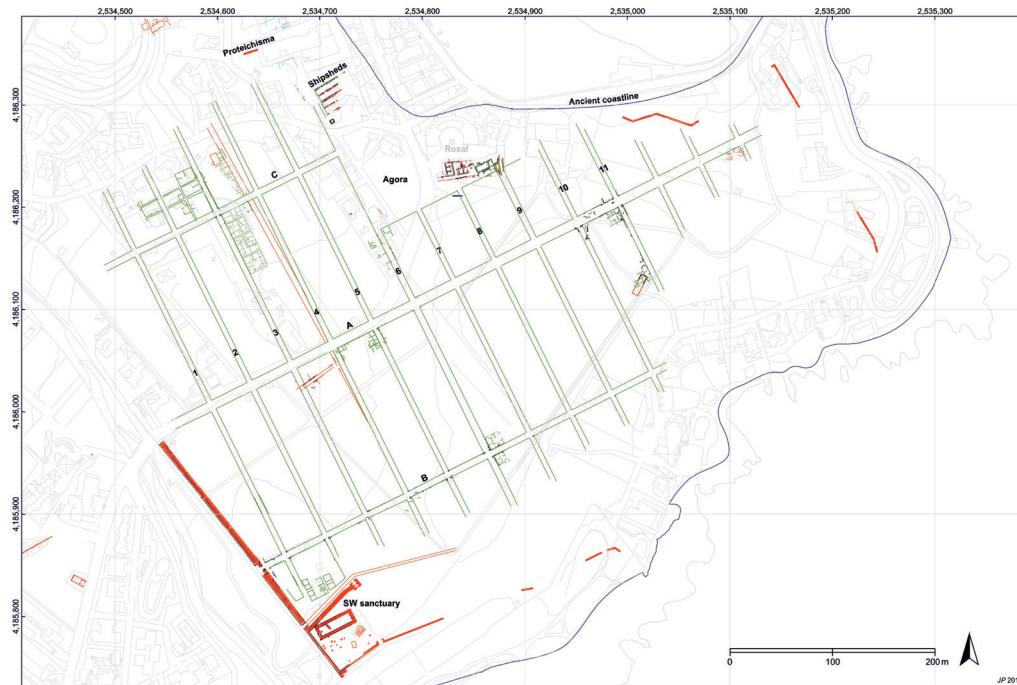


Figure 1

Archaeological remains and reconstruction of the 5th-century city grid of Naxos in Sicily superimposed on the plan of the modern town of Naxos-Giardini (Pakkanen 2013, fig. 4.2).



Figure 2

Plateia B: the stretch between crossroads 2 and 3 from the east (excavations by M.C. Lentini in 1983).



Figure 3

Crossroads of *plateia* C and *stenopos* 4 from the east. Above the Classical layers the Late Roman road level (excavations by M.C. Lentini in 1989).



Figure 4
Crossroads of *plateia* A and *stenopos* 11 from the south-east.

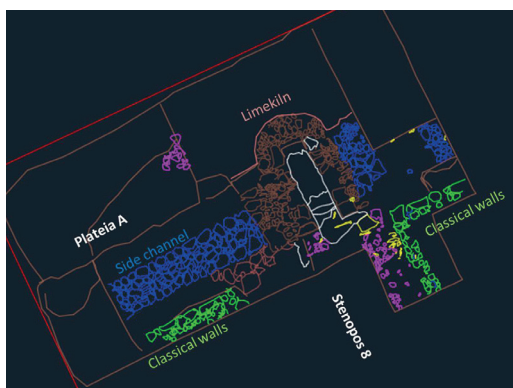


Figure 5
Roman limekiln built at the crossroads of *plateia* A and *stenopos* 8 excavated in 2014. Classical walls (marked with green) and paved channel (marked with blue) underneath.

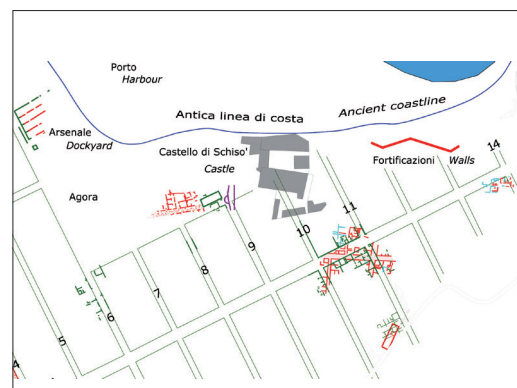


Figure 6
Northern sector of the town.



Figure 7
Excavations at the crossroads of *plateia A* and *stenopos 11*.

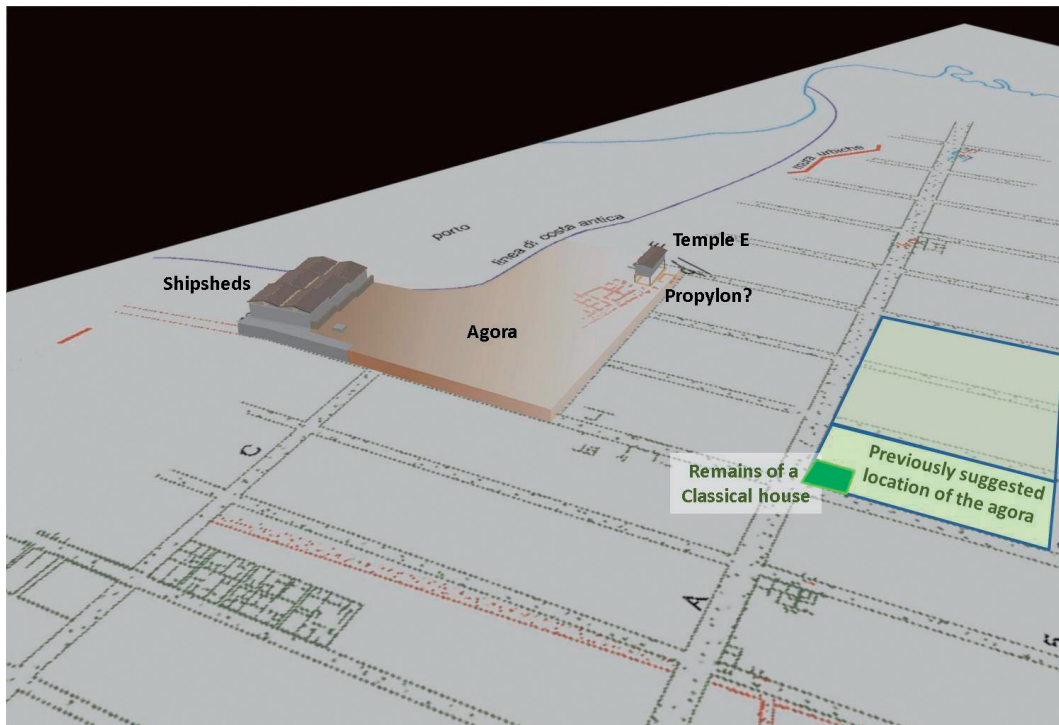


Figure 8
Three-dimensional reconstruction of the buildings at the agora and previously suggested site of the agora.

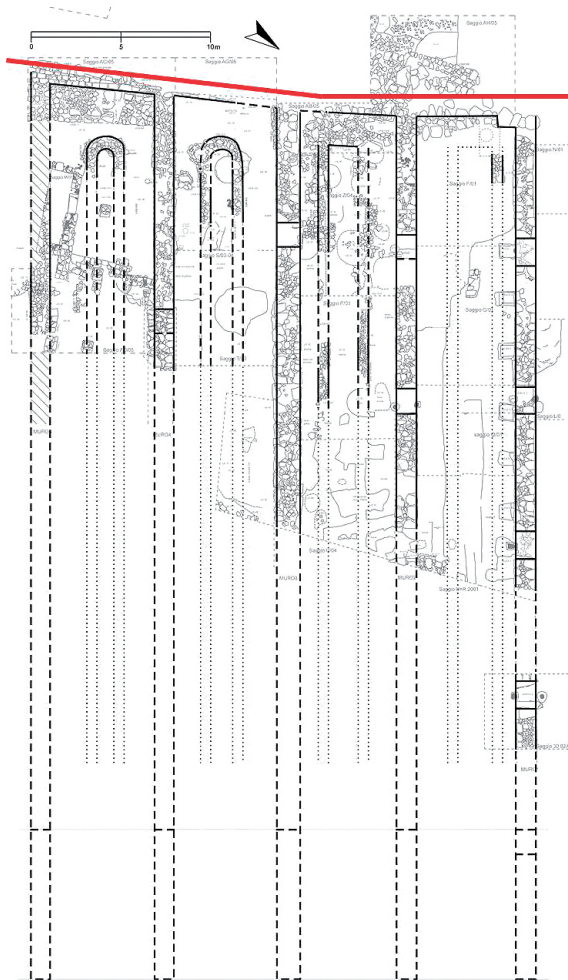


Figure 9

Change of alignment in *stenopos* 6 behind the shipshed complex. The northern part follows the Archaic street alignment and the southern part is adjusted to the 5th-century city grid.



Figure 10

Sicilian type roof with Silen antefixes from the first phase of the shipshed complex.

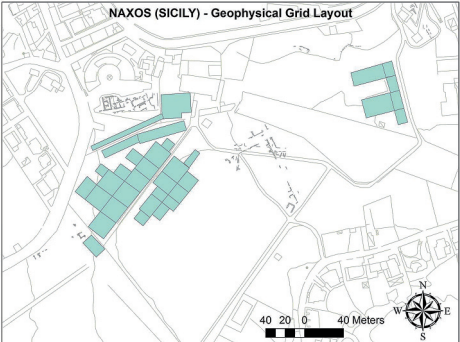


Figure 11
Areas of the geophysical
prospection conducted in 2014.

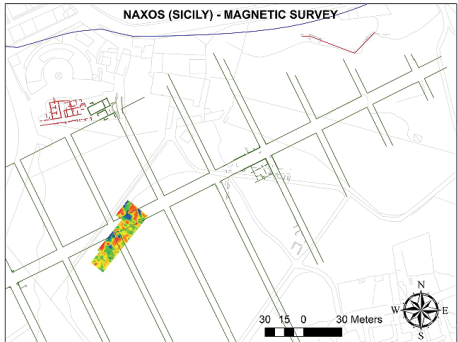


Figure 12
The 2014 test area of the
magnetic gradiometry.

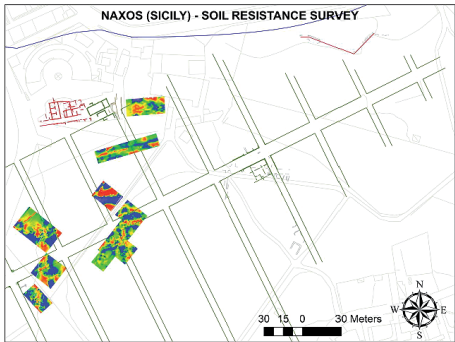


Figure 13
The 2014 areas of the electrical
resistance survey.

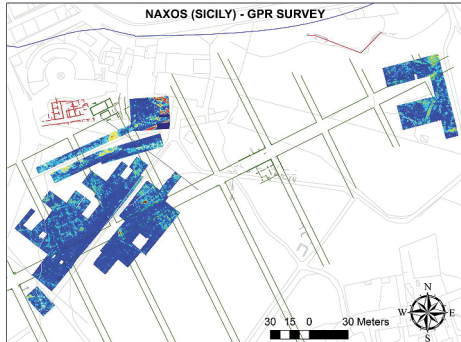


Figure 14
The 2014 areas of the ground-penetrating
radar survey.

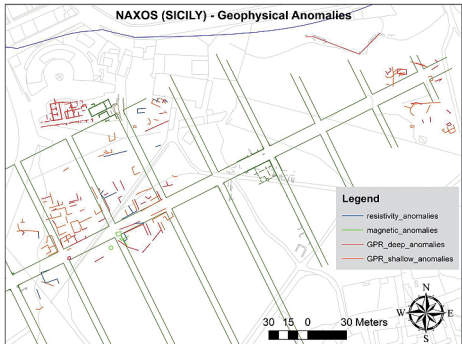


Figure 15
Summary of anomalies detected in the survey.

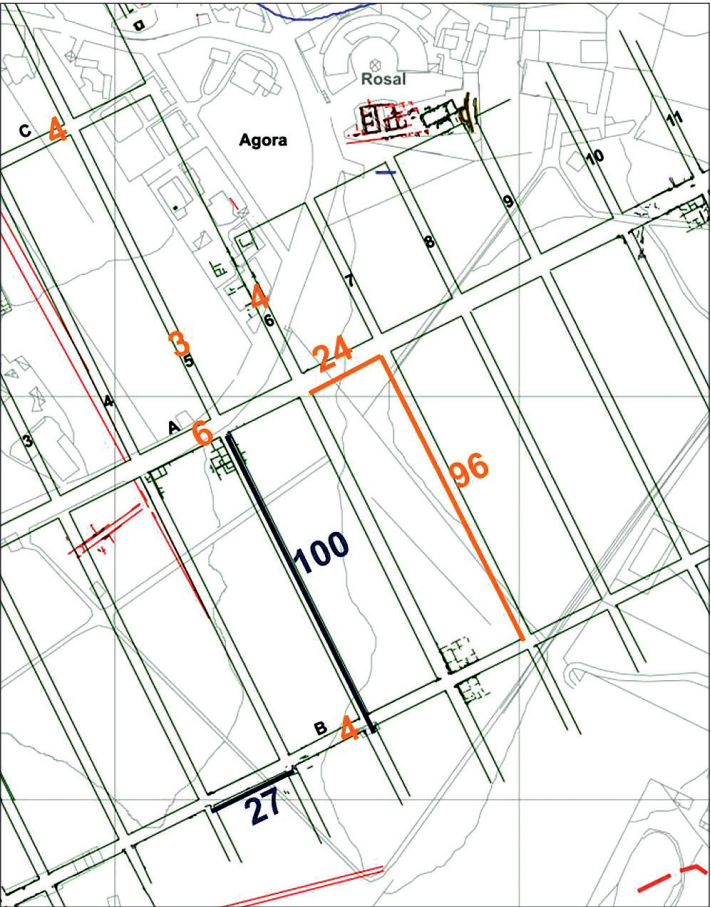


Figure 16
Modular layout of the city grid according to the statistical analysis of the topographical survey measurements.

TABLE 1: TECHNICAL DETAILS OF THE GEOPHYSICAL SURVEY PARAMETERS

Method	Δx (m)	Δy (m)
Magnetic gradiometry	0.5	0.5
GPR	0.5	0.025
Resistance	1	1

TABLE 2: DETAILS OF THE GEOPHYSICAL INSTRUMENTATION THAT WAS USED IN THE PROSPECTION OF NAXOS - 2014 GEOPHYSICAL CAMPAIGN SEASON

	Method	Instruments	Depth of Investigation
1.	Magnetic Survey	Bartington G601	2m
2.	GPR	Sensors & Software Noggin Plus Smart Cart with 250 MHz antennas	2-3m
3.	Electrical Resistance	Geoscan RM15	1-2m