

Geoarchaeology in the City of Thales – Deciphering Palaeogeographic Changes in the Agora Area of Miletus

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Abstract

Over the past millennia, the famous ancient harbour city of Miletus and its environs have experienced major changes in palaeogeography, related to (a) the progradation of the Büyük Menderes delta, (b) coastal dynamics such as littoral accumulation and fluctuations of sea level during the Holocene, (c) denudation processes from the adjacent slopes south of the city, and (d) the permanent impact of humans on the ecosystem since Late Chalcolithic times. In this paper, new results concerning the development of the city centre (agora) of Miletus are presented. Analyses of sediment cores collected between Lion Harbour embayment and South Market revealed wide areas of the later city centre to have been covered by a shallow marine environment during the time of the maximum postglacial stand in sea level around 2500 BC. Cultural layers beneath the transgression facies prove near-coast settlement activities in Late Chalcolithic times (Miletus I, 3500–3000 BC). Shallow marine and littoral conditions lasted until the Late Geometric to Archaic epochs. In the 6th century BC man-made infill was intentionally dumped in wide areas in the course of an enlargement of the Milesian city centre and the replanning of the settlement area in the so-called Hippodamian grid.

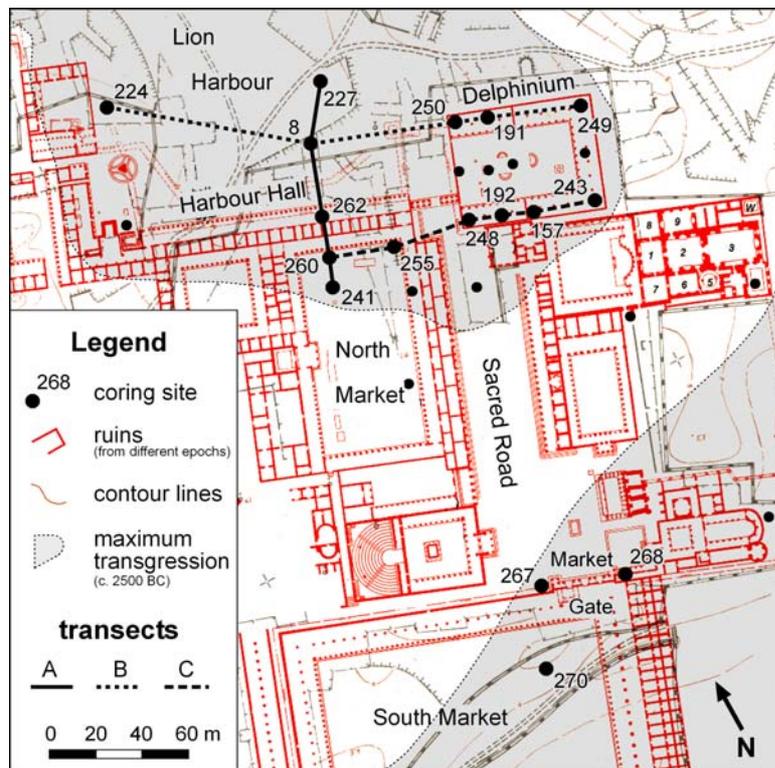


Figure 2: Location of corings and profile lines in the city centre (agora) of Miletus. Source: Own draft, based on Bendt's topographical map of Miletus (Bendt 1968)

3. Conclusions

This paper presents evidence of palaeogeographic changes between the southern margin of Miletus' Lion Harbour embayment and the Market Gate. All corings penetrated at least a thin transgression facies on top of the bedrock. In some cases, cultural layers of Late Chalcolithic age beneath the littoral environment were encountered (Miletus I, 3500–3000 BC). They hint at near-coast settlements which were later on flooded in the course of the postglacial transgression of the Aegean Sea. At some places debris was intentionally dumped in order to fight the rising sea level. The most landward position of the shoreline can be reconstructed for the Early and Middle Bronze Ages. This confirms the results for the Temple of Athena and its surroundings (Brückner et al. 2006) and supports the sea level curve for the Latmian Gulf (Müllenhoff 2005) with peak in the Early and Middle Bronze Ages and a slight regression during the 2nd mill. BC. In wide areas of the later agora, shallow marine and littoral conditions lasted until Late Geometric to Archaic times. It was only in the 6th century BC when man-made infill was dumped in the course of an enlargement of the agora as city centre. This enlargement formed part of a far-ranging replanning of the northeastern parts of the settlement (including Kale Tepe/Theatre Hill and Humei Tepe) in the so-called Hippodamian grid.

The newly discovered artificial enlargement of the Milesian city centre in the 6th cent. BC is most probably reflected in an episode told by the ancient author Plutarch. In his 'Life of Solon' (12, 11) he mentions that the famous Milesian philosopher Thales, who died c. 550 BC, chose "a cheap and disregarded place in the Milesian territory" to be the place of his grave "by foreseeing that this place would once be the agora of Miletus." It seems reasonable to search for the grave of Thales on the Milesian agora; perhaps even in the areas where our geoarchaeological approach evidenced the anthropogene transformation from a wet, "cheap" state to a comfortable meeting place for the citizens (Herda 2005).