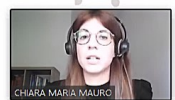


Introduction

- Coastal environments suffer substantial changes in their configurations depending on both external factors and endo-dynamic phenomena.
- When the coastal modifications were significant, coastal communities faced a choice: adaptation or abandonment.

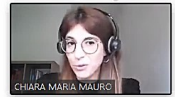
«Coastal communities can be dependend to a greater or lesser degree on coastal resources. These resources in themselves may be diverse [...] so that coastal ecosystems themselves are either more resilient or more stable, and therefore coastal communities are in general more resilient»

Adger, N. (2000), «Social and ecological resilience: are they related?», *Progress in Human Geography* 24(3), <https://doi.org/10.1191/030913200701540465>



Aims

1. Gain knowledge on how ancient Mediterranean port communities negotiated a constantly shifting place within complex and evolving maritime environments
2. Assess whether Adger's statement could be considered valid or not regarding ancient coastal communities



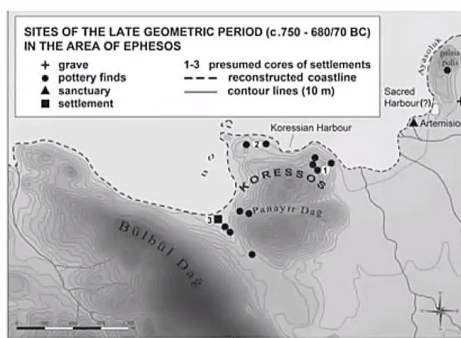
Paramètres audio

Discussion Lever la main Q. et R.

Quitter

Changes determined by external factors

EPHESUS



1. Use of two harbours: Sacred Harbour and Koresian Harbour.

Pliny the Elder (*HN* 2.87): 'at Ephesus once the sea used to wash up to the temple of Artemis'

2. The Sacred Harbour ceased to be used around 300 BC and the Koresian harbour took over the function of the main harbour.

Xen. *Hell.* 1.2: 'and having disembarked the hoplites at the foot of Mount Koressus'

Hdt. 5.100: 'When the Ionians had come to Ephesus with this force, they left their ships at Koressus'



Paramètres audio

Discussion Lever la main Q. et R.

Quitter

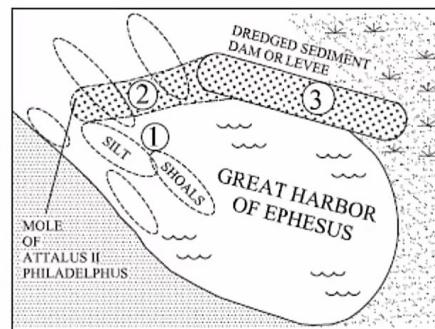


Changes determined by external factors

EPHESUS

3. Use of a third basin, the 'Hellenistic' harbour

'The city has both an arsenal (*neoria*) and a harbour (*limén*). The mouth of the harbour was made narrower by the engineers (*brachystomos*), but they, along with the king who ordered it, were deceived as to the result, I mean Attalus Philadelphus; for he thought that the entrance would be deep enough for large merchant vessels - as also the harbour itself, which formerly had shallow places because of the silt deposited by the Cayster river - if a mole were thrown up at the mouth, more shallow. Before this time the ebb and flow of the tides would carry away the silt and draw it to the sea outside'. Strabo 14.1.24

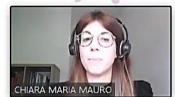


Kraft et al. (2007), 'The Geographies of Ancient Ephesus and the Artemision in Anatolia', *Geoarchaeology: An International Journal*, Vol. 22, No. 1, 121-149

Paramètres audio

Discussion Lever la main Q et R

Quitter

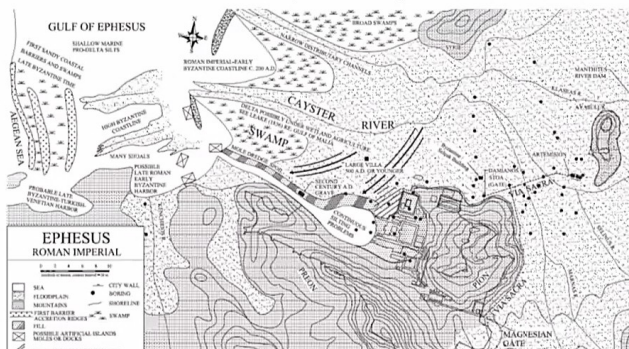


Changes determined by external factors

EPHESUS

4. Construction of a hexagonal basin under the Roman Empire

Several dredging attempts: e.g. under Nero (IvE 3066, 14-15); half of the 2nd cent. AD (IvE 23); half of the 3rd cent. AD (IvE 3071)



Kraft et al. (2007), 'The Geographies of Ancient Ephesus and the Artemision in Anatolia', *Geoarchaeology: An International Journal*, Vol. 22, No. 1, 121-149

Paramètres audio

Discussion Lever la main Q et R

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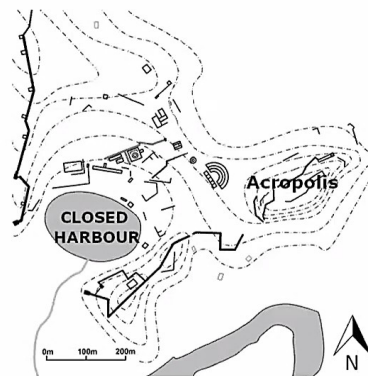


Changes determined by external factors

KAUNOS

Thuc. 8.39: "and having made their voyage the longer that it might be the safer, they put in at Kaunos in Asia. Now from thence, **as being in a place of safety** (ἐν ἀσφαλεῖ ὄντες), they sent a messenger to the fleet at Miletus for a convoy."

Ps.Skyl. 99.2: «Kaunos, a Karian city with **a closed harbour** (καὶ λιμὴν κλειστός).»



Mauro (2022), 'An analysis of the «closed harbours» in Strabo's Geography», *Annual*

Paramètres audio ^

Discussion ^ Lever la main Q et R

Quitter



Changes determined by external factors

KAUNOS

1st cent. BC.

Strabo (14.2.3): «The city [Kaunos] has dockyards and an enclosed harbour (καὶ λιμένα κλειστόν).»
However: «The Kaunians were somewhat pale»

2nd cent. AD:

- SEG XIV 639

- Dio Chrysostom (Or. 32.93): «However, fever has all but taken possession of the Kaunians, and in their case it is a reproach to the community, because they all suffer from it».



Mauro (2022), 'An analysis of the «closed harbours» in Strabo's Geography», *Annual of the British School at Athens*

Paramètres audio ^

Discussion ^ Lever la main Q et R

Quitter

Changes determined by external factors

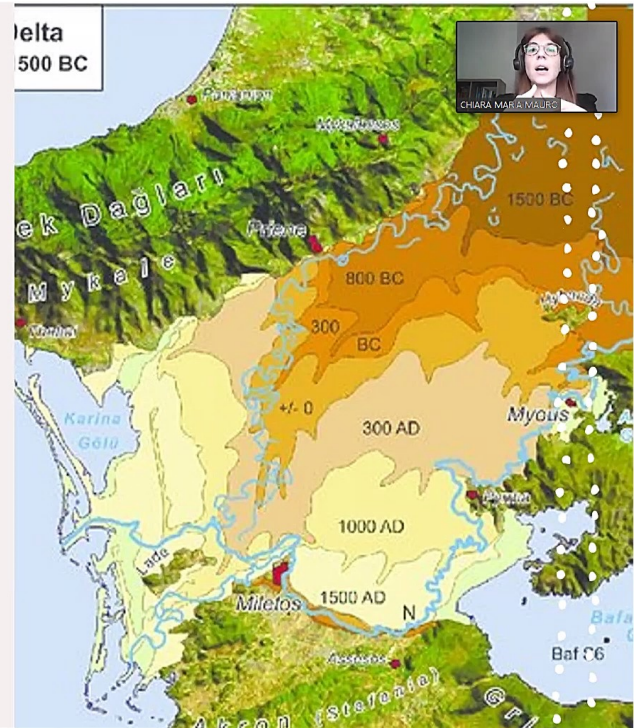
MYOUS

Hdt. 5.31.5; 36.4 and 6.8.1: 200 ships anchoring at Myous

Vitruvius (4.1.1): «Myous (long ago engulfed by the water, and its sacred rites and suffrage handed over by the Ionians to the Milesians)».

Strabo (12.8.17): "Myous is not only friable and crumbly but is also full of salts and easy to burn out."

Paus. (7.2.10-11): "When the water, ceasing to be sea, became fresh, gnats in vast swarms bred in the lake until the inhabitants were forced



Changes determined by endodynamic factors

RHODES

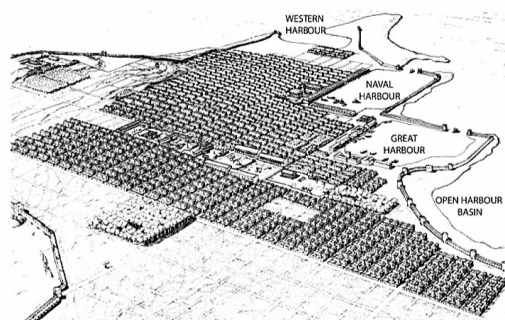
- 408/7 BC: foundation

- 227 BC: earthquake

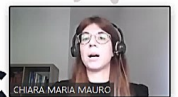
IG XII,1 708: τῶν κατὰ τὸν σεισμόν τελευτασάντων.

Polyb. 5. 88-90: 'it destroyed the great colossus, most of the walls and the shipsheds'.

Polyb. 5.88: The Rhodians enhanced the magnitude and importance of the earthquake [...] and they created thus such an effect upon other states, and especially upon the feelings of the kings, that they were not only overwhelmed with presents, but made the donors feel actually obliged for their acceptance of them.



Blackman, Rankov et al., *Shipheds of the ancient Mediterranean*, p. 213, fig. A11.2.

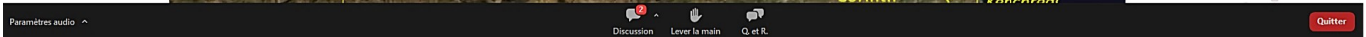


Changes determined by endodynamic factors



HELIKE AND BOURA

373 BC: earthquake (e.g. Paus 7.24.5-12; Strabo 8.7.2; Polyb. 2.41.7)



Changes determined by endodynamic factors

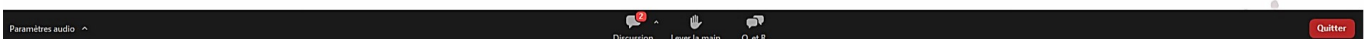


HELIKE AND BOURA

- Helike was not rebuilt so its harbour no longer existed after 373 BC (Paus. 7.25.4).
- Boura was rebuilt (Paus. 7.25.9); the harbour area was continuously occupied (Giaime et al. 2019).

Reasons for this different reaction?

1. The area of the city of Helike was completely subverted
2. Religious hesitation
3. Political reasons





Conclusions



- Ancient coastal communities often proved to be remarkably resilient to the challenge of (nature and anthropic induced) modifications.
- The complete disintegration of ancient harbours was seldom triggered by mounting environmental stress alone but from multiple drivers.