# Sagalassos: The Ancient Economy in Dialogue with Social-ecological Systems: à quoi ça sert?\*

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Classical Archaeology has a rich history in urban studies. Ancient historians like this theme too. One or other has to do with the recent past, in which modern European state formation was in need for a socio-political rationale and a cultural soul. The ruling/intellectual elites looked towards the classical past for exalted trajectories, combining the classical Greek 'democratic' urban past with the 'orderly' Roman approach with cities sustaining the message of empire as exemplary inspiration. More or less hand in hand the discipline of archaeology was asserting itself, with the study of the Graeco-Roman past dominating the early agenda of the discipline. Many large-scale excavations in famous ancient towns were launched.

In the meantime, archaeology has gone global, luckily, and so did the European nations. The domain of classical archaeology has lost its dominance and also its innocence, in the sense that it too needed to develop its conceptual agenda. The latter has worked quite well as far as social and cultural themes and topics are concerned. The economic framework, in which ancient cities were situated, has fared not so well. Although many aspects of ancient towns are very revealing on aspects of economic practices, the debate has crystallised on idealised concepts and modes of production/consumption. Implicit links between evolution and progress are noticeable as is the implicit acceptance of the not very deeply considered principles of the neo-classical/liberal economy. The alternative are studies which remain descriptive and processual. In general, such research, especially in an ancient urban context, focuses mostly on the issue of allocation of wealth – one of the two overarching questions in economics – and follows the central paradigm of the discipline of economics, considering the economy as an equilibrium system, moving from equilibrium point to equilibrium point over time, propelled along by shocks from technology, politics, changes in consumer tastes and other, mostly socalled external factors. Following the dominant neo-classical line(s) of thought, rational self-interest operated in competitive markets driving the economy to its optimal point, with authorities protecting the equilibrium. Although this paradigm brought about very influential ideas in economic analysis, basically the theory should be characterised as idealised, untested by data and often observably not in congruence with what is happening in the real world. From an archaeological point of view, these views are also a-historical, with a poor understanding on the 'natural' state of pre-money economies, for instance.

The second overarching question in economics is related to the issue of wealth creation. Not only is wealth creation a process, which can be followed in time, creating intrinsic historical research potential, but it is also associated with a logic of growth.

Conceptually, this theme is less dependent on conditions of equilibrium. On the contrary, wealth creation and growth imply system change and dynamism, differentiation, selection and amplification, innovation, trial and error, new designs and problem-solving capacities.

Building on the strengths of its interdisciplinary track record, the Sagalassos Archaeological Research Project of the University of Leuven is advocating for wider consideration of the conceptual agenda of social-ecological systems in order to (re-)open debates on the role of towns in past economic constellations. Mainly the conceptualisation of social metabolism, mapping the entire flow of materials and processes required to sustain human activities, should help to place the role of energy more central in our discussions. Preliminary results indicate that the phenomenon of urbanism in Roman imperial Asia Minor is path dependent on evolutions in Hellenistic times, and that in both periods it remains a simple fact that the majority of the population was and remained rural, not urban. In general, the goal of the rural population was to optimise the net primary productivity of the system as a whole, rather than the commercialisation of a given crop. Ancient agrarian regimes could experience growth, induced by productive specialisation, urbanisation and colonisation of new territory, but ancient agrarian growth was discontinuous as in not reaching metabolic change and not necessarily resulting in growth of income per head. Against this background, a case can be made for aggregate and per capita growth in urban Roman imperial Sagalassos (SW Turkey). Energy availability in the contemporary social-ecological system was limited, however, and data modelling made clear that energy needs were exponentially higher in domestic contexts, compared to the combined energy costs of facilities such as bath buildings and banausic occupations. Recent work on agricultural carrying capacities in the study region of Sagalassos pointed to the functioning of a similar structural brake on societal and economic development in the region.

These observations go a long way to explaining why the urban phenomenon is there in ancient Pisidia, how it functioned, but that its attestation was quite limited in time considered from a truly long-term perspective and basically limited in its potential for wealth creation and growth. So, although the Pisidian landscapes are rich in mineral and natural resources, the flows of energy represent limits on the generation of wealth in the long-term. The wider region of ancient Sagalassos, in more ways than one, is partialised by the mountainous landscape and represents a locked potential for growth and wealth generation. Although this sounds negative, it also implies that the structural nature of this condition can at times function as an element of resilience, for instance in late antiquity, when scaling back from a market-dependent system of Roman imperial times provided an alternative development basis by converting to patterns mostly dependent on local and regional exchange.

## **Notes**

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