Country in the City

Agricultural Functions in Protohistoric Urban Settlements
(Aegean and Western Mediterranean)

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Introduction

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The urban and rural worlds are subject to intensive scrutiny and debate by archaeologists and historians, but few ventures attempt to explore the links between these two domains. Studies focusing on the imprints left by agricultural activities within the town are rarer still, particularly for the early periods during which towns emerged. To archaeologists, the title and some of the subjects broached in this book will thus appear to be innovative, or will at least arouse fresh interest. On the other hand, geographers will undoubtedly consider them to be somewhat more banal, but may also see them as an in vogue subject for planners. Indeed, it was in the 1970s-1980s that large towns in emerging countries, which were at that time ideal places for the interaction of the urban and rural domains, became the focus of research on the ‘ruralization of towns’ and the ‘urbanization of the countryside’ (Miossec 1985; Houssay-Holzschuch 1994). Today, this is still a promising field of research and continues to stir up interest, as for example in the geography of the Maghreb countries. Over the past few years, this topic has been taken over by planners and developers, in the light of the growing importance of urban agricultural solutions which now also concern cities in industrialized countries.

Unlike geographers and sociologists, historians and archaeologists generally steered clear of this topic and studies led by the latter are exceptions to the rule. The Medieval town generated some interest in this regard: for example, the urban 14th century censuses in Montpellier show that a fifth of the town’s populations was made up of agricultural labourers. In Great Britain, Henry French developed remarkable research on the use of ‘commons’ in modern age towns (French 2000). But this is mainly the work of historians, in the same way as the best known works on agro-urban activities, namely the major transformations associated with the Industrial Revolution in the 19th century. Nonetheless, we observe an imbalance, illustrated by an interesting symmetry: in the economic historiography of the West spanning the period from the end of the Middle Ages until the modern era, rural crafts and proto-industry play a vital role, and are also used to account for the Industrial Revolution. Conversely, the agricultural functions of towns are very largely overlooked.

Finally, it is important to mention recent renewed interest for the archaeology of gardens (Miller and Gleason 1994), as shown by two very recent works (Malek 2013; Van Ossen and Guimier-Sorbets 2014). Depending on their location, documentation or association, gardens can be linked to our topics and the methods developed to explore them are identical to those used for the reconstruction of agricultural activities. There are three notable exceptions as regards wider scale strictly archaeological approaches: the Mesoamerican, Singhaler and Khmer cases (Fletcher 2009), which are all part of a specific urban model, characterized by a very low density of buildings in a lowland subtropical environment (Isendahl 2012; Evans et al. 2007; Fletcher 2009), an urban complex defined, sustained, and ultimately overwhelmed by a complex water management network. Since the 1980s that view has been disputed, but the debate has remained unresolved because of insufficient data on the landscape beyond the great temples: the broader context of the monumental remains was only partially understood and had not been adequately mapped. Since the 1990s, French, Australian, and Cambodian teams have sought to address this empirical deficit through archaeological mapping projects by using traditional methods such as ground survey in conjunction with advanced radar remote-sensing applications in partnership with the National Aeronautics and Space Administration (NASA). Apart from these exceptional cases, the issue of agro-pastoral activities in urban settings has hardly been broached by archaeology.

When working at a different scale focusing more generally on links between the urban and rural worlds, and when we incorporate processing and storage activities, the state of research is considerably different. If we examine the early periods, these questions are generally only tackled for historical periods, but not for protohistory. Consequently, the aim of this volume, which represents an international colloquium that took place in Marseille in October 2014, is more to stir up interest in a rather neglected topic, than to establish an overview of the subject. In this way, we did not wish to extend the scope of interest by widening the chronological and geographic fields and we consequently limited our range to the protohistoric Mediterranean region. These questions are clearly innovative, whereas this chronocultural area is particularly well adapted to such a study: the urban phenomenon occurs there at an early stage, at least
in the eastern zone, whereas intense prior research provides an indispensable critical mass of data for our work.

But, on a Mediterranean scale, there is no single town model, either during protohistory or during Antiquity. Moreover, during the Bronze Age and the Iron Age, the acceleration processes, referred to as ‘Mediterraneanization’ by D. Garcia and J.-C. Sourisseau (Garcia and Sourisseau 2010) are not yet at work. Therefore, a wide variety of situations exist, and in this respect, the Western Mediterranean region during the Iron Age is very different from the Eastern Mediterranean during the Bronze Age. In the latter region, the emergence of a palatial system at the turn of the second millennium, in the Aegean domain, could a priori form a useful marker for differentiating an urban and pre-palatial economic system, which was followed by the palatial system. But this interpretation presents two major inconveniences. Firstly, the Eastern Mediterranean is by no means fully palatial from the end of the second millennium onwards. In addition, certain features of palatial systems go back to the early Bronze Age, such as urbanity and the control of part of agricultural production. Ultimately, rather than a clear chronological and systemic division, it is essential to consider the degree of political and economic integration, and the Minoan and Mycenaean palatial systems represent the highest level of integration at the end of the Bronze Age.

In the Western Mediterranean region, in the Iberian world and in southern Gaul during the Iron Age, urban systems can be assessed on the basis of contacts between indigenous societies and Greek, and then Roman colonies. Three phases can be differentiated: before processes of ‘Mediterraneanization’ (Garcia and Sourisseau 2010), the pre-classical habitat is polynuclear, archipelagic and not very integrated; it develops as part of a subsistence economy. During the contact phase, these habitats are clustered together into larger urban cores, which are also centres of agricultural production: this is the case for example for Carsac (Albi, France) during the Final Bronze Age (Guilaine et al. 1986). Lastly, the third phase is the urban boom: towns are integrated into the Mediterranean urban network and into the market system; rather than being producers, their main tasks now involve the organization and management of agro-pastoral production.

The reasons behind the relative disinterest in these topics in protohistory are multiple and differ from one side of the Mediterranean to the other. In the Aegean world, like in the East, the palatial phenomenon generated several biases: agrarian systems and their links to towns were generally considered through the prism of recent and Middle Bronze Age palatial systems, according to a centre/periphery model in which the town – and especially the palatial system – was seen as a concentration of consumption of agricultural production (Renfrew 1972 and abundant literature since then). Only certain facets of towns generated interest and they were never considered in their entirety. The history of towns, and in particular, of the earliest towns, focuses on pioneering dynamics, such as urbanization (Konsola and Hägg 1986), or on segments or specific roles. It is clear that everywhere, only the central remains are taken into consideration, as they are also the most impressive, and as they are both exclusive and essential, they allow for the most immediate definition of the town compared to the rest. These remains are represented by monumental architecture and the traces left by political, economic or religious institutions. Finally, some rare isolated cases have been studied, but they do not tackle the same issues as those addressed here1.

In the West, the proximity of the Iberian and Celtic worlds with classical civilizations (first Greek, then Roman), meant that for a long time, agro-pastoral activities were rapidly classified as ‘traditional’, in comparison to those of contemporaneous classical urban societies.

On the other hand, certain themes are better known everywhere. Storage, for example is the focus of attention in the East and the West, as are processing activities (milling and pressing). Nonetheless, as of yet, no studies have focused on their role in the agricultural economy. Ultimately, a systematic approach to agriculture in towns is still missing today. Such an approach should focus on production activities, as well as on storage and processing activities. To this end, we can say that the archaeology of agriculture in urban environments remains to be developed, alongside a reevaluation of the links between the town and the agro-pastoral economy. If, at least for the time being, we leave aside the question of techniques, we can ask: what was produced, where was production based and who was this production for? The advent of major agglomerations against a backdrop of heightened social hierarchisation, the development of specialized classes of craftspeople and state institutions, during the Bronze Age in the Eastern Mediterranean region and the Aegean world and during the Iron Age in the Western Mediterranean, marks at least a partial rupture with the traditional patterns of production and consumption established during the Neolithic. In spite of that, agricultural and livestock farming – we will take both of them into consideration – still hold a central role in these societies.

1 With the exception perhaps of the reasonably dated work by H. van Effenterre on Malia (Le palais de Mallia et la cité minoenne, Rome, 1980).
Before attempting to outline the links between the town and agro-pastoral activities, perhaps it is pertinent to define what ‘agriculture in town’ is not, or at least not yet. Our knowledge of pre-classical techniques and the agricultural economy is relatively advanced. This field of research is, in any case, extremely dynamic and has been active for a long time in the West, with the early works of F. Audouze and O. Buchsenschutz or J. Guilaine (Audouze and Buchsenschutz 1989; Guilaine 1991), followed by numerous books (Carpentier and Marcigny 2012) and studies by L. Bouby, Ph. Marinval or P. Ouzoulias. This domain was developed at a later stage in the Aegean world, when it is now vigorous, as shown at Physis 2012 (Touchais et al. 2014). On the other hand, although agglomerations are probably the best known types of habitat in archaeology, we still know relatively little of several aspects of urban reality, as this series of questions illustrates:

1. as regards urbanism: in spite of considerable efforts in the Aegean world over the past few years (at Knossos and Mycenae in particular), only the central zones of towns are relatively well known (cf. Malia); little is known of the peripheral zones and their morphology;  
2. from an economic point of view: it is vital to assess the degree of food dependency of the town (on a domestic or community level)? By what means can we evaluate this? (storage?);  
3. at the end of the Bronze Age in the East, during the Iron Age in the West, an increased hierarchisation and concentration of the habitat point towards several degrees of urbanity: are agro-pastoral activities a pertinent gauge of this new structuration? 

For the agro-pastoral economy, the type of production is relatively accessible through paleobotanic (and particularly through carpological analyses) and archaeozoological studies, which are now combined with other data (paleodiet).  

4. but for us, it is essential to identify the original production place in the territory, or at least to distinguish between extensive production outside the town and intensive intramural production;  
5. which economic circuits are these productions part of? can we distinguish internal consumption from market consumption?  

The last vital question concerns the types of protohistoric towns:  

6. from a social point of view: it is still difficult to represent what a protohistoric urban society may be; the question is not so much to determine whether our protohistoric towns present a rural dimension, as to define the criteria and tools to evaluate it.

Archaeology of productive areas: production in the urban environment

A first approach to these questions could proceed from a spatial perspective: this is the archaeology of productive areas or subsistence landscapes, if we use the term coined by K. Shelton and L. Kvapil. 

The notion of agglomeration is inseparable from the concept of density, although the degree of the latter varies considerably. One result of agglomeration is of course, the pressure exerted on the area, and in the same way as the other activities, urban agro-pastoral production is part of this context. In contemporary agglomerations, many complex schemes of spatial competition denote increased land pressure. However, it would be wrong to try to relate our pre-classical towns to models derived from the modern world as many parameters separate the first from the second and numerous variables make such comparisons difficult. In this way, the economic criteria governing the value of space are not the same, whereas other, often cultural factors create major disparities between agglomerations. We can for example allude to dense agglomerations, as opposed to loose agglomerations, as mentioned above for the Mesoamerican, Khmer and Sri-Lankan cases, but also, nearer to us, to the classical opposition in Aegean protohistory between tells and ‘flat settlements’, which can probably be assimilated to the duality between concerted urbanism and disorganized aggregation. The work of Erika Nitsch et al. on Knossos will provide ample reflection on this topic. Occupation density within agglomerations, and even the regular displacement of certain parts of the habitat, determine the presence and the importance of free spaces liable to be used for agriculture. Limits are another important factor: some agglomerations are contained by natural boundaries (Mycenae), or by walls (Lattes), whereas others are free of these constraints and can be extended as needed. This has important consequences: land pressure is undoubtedly much higher in the first case and the degree and the perception of urbanity may thus be reinforced. In the Aegean world, open areas in urban settings have received much attention in some cases (the ‘courtyards’ of palaces and Minoan towns), and less in others (in particular in Mycenaean agglomerations). Invariably, these areas are only considered for their political potential and the possibility of any other function is not even envisaged (Cavanagh 2001 refers to the problem without suggesting a new avenue of research). New agglomerations with areas left empty represent a specific case and this question will be tackled in Daniel Pullen’s communication on Mycenaean Kalamianos.
The productive area in agglomerations also includes courtyards and gardens and henceforth, archaeology has a firm grasp of these domains. However, many methodological and technical obstacles encumber this sphere of research. We can, particularly for urban sites with complex stratigraphies, evoke difficulties in identifying undeveloped zones. Today, the enhanced accuracy of excavation techniques allows for the identification of palisades and light developments, whereas a wide range of geochemical and micromorphological investigations provide information on the role of livestock in agglomerations, but also on agricultural food processing activities. Combined with traditional investigation methods (carpology, archaeozoology), documented here by several texts, these techniques raise our expectations for differentiating between intensive productions in urban settings and extensive productions in the countryside. This is the primary aim of Nuria Rovira and Natalia Alonso for the agglomeration of Lattara (Lattes).

**Agglomerations, land development and production management**

Mediterranean protohistory, particularly during its most recent phases, is a period characterized by what has commonly, and perhaps too conveniently been called ‘social complexification’, as in my opinion, this term is devoid of meaning when it is not explicitly defined, as is often the case. In the Near East from the 4th millennium onwards, in the Aegean world during the Early Bronze Age (towards the middle of the 3rd millennium), then especially from the second millennium onwards in the southern zone with the development of Minoan, then Mycenaean palatial systems, or during the Iron Age in the West, in the Iberian Peninsula or in Southern Gaul: all these regions undergo structuration processes affecting many domains, to different degrees and according to different systems. On a political level, this is marked by the appearance of state type institutions; on a social level, it is both the affirmation of the elite and the development of specialized classes of craftspeople; lastly, as far as the habitat is concerned, it is the concomitant observation of increasing nucleation and a more intensive hierarchisation of agglomerations.

Most of the models dealing with these transformations rightly place agriculture in a central position, as traditionally, the introduction of new crops and progress in agricultural techniques are used to infer the production of surpluses liable to create wealth (see the works of C. Renfrew, P. Halstead, but also A. Sherratt). Here, we are not so much concerned with the accuracy and pertinence of these models, as with the observation that concrete links between central places and farmland are insufficiently explored. Even recently, interest in the political economy (Voutsaki and Killen 2001; Galaty and Parkinson 2007; Pullen 2010) largely disregarded agricultural issues, with the exception of P. Halstead’s contribution on palatial interventionism in Mycenaean agriculture (Halstead 2001). Based on earlier work by J. Killen, the latter author shows that some of the lands belonging to rural communities were cultivated for the benefit of the palace. The Mycenaean case is exceptional as it is backed up by written documentation; but it only provides evidence of links between the state domain and rural communities, with no mention of the private sphere.

In addition to qualitative and quantitative information related to the exploited and consumed foodstuffs, two types of remains at the core of agglomerations provide evidence of the links between the land and production management methods. On one hand, recipients and conservation structures allow for the differentiation of several levels of storage strategies (individual-household / collective-community / centralized – state) and also enable us to detect the level of economic integration of agro-pastoral production (domestic subsistence production? an allocation from the authorities? access to the market?). The interest and relevance of these data are revealed here by a number of related texts (Kostis Christakis, Maia Pomadère, Emmanuella Alberti and Sylvie Mülller-Celka for Crete, Diane Thumm, Peter Pavuk and Magda Pieniazek for Troy). Systematically, these studies highlight links with the land, and in the case of Troy, storage strategies are accompanied by the inflection of agricultural activities.

On the other hand, processing structures (millstones, presses, etc.) provide evidence of the urban management of agricultural production. These are assessed in several papers (Natalia Alonso / Guillem Perez-Jorda) aiming to place them in their operational chains. In this way, the different processing stages can be identified, and the links between the agglomeration and farmlands can be explained. Ultimately, we can ask whether a connection can be established between the type of processing action and its position in the operational chain, and the role of the agglomeration within its political and economic network (Natalia Alonso / Guillem Perez-Jorda).

Lastly, if the town is defined by certain non-objective, but nonetheless measurable criteria (building density, population density, presence of institutions, etc.), it is clear that urbanity also depends on less quantifiable and more relative parameters. In this respect, the notion of a hierarchized network is primordial and must be included in the definition of the degree of urbanity.

**Conclusion: urban societies and rural societies?**

This brings us to the question of people and society: our starting point was the necessity of a systematic – and
thus systemic - approach to agriculture, which involves questioning and balancing the role of agglomerations, as they were not only centres of production and consumption, but integral players in agro-pastoral production. This brings us to another observation: the borders between rural and urban are undoubtedly much less clear than in most of our depictions. Would it be more apt in certain cases to refer to ‘large villages or large rural centres’, as suggested by Natalia Alonso and Guillem Perez-Jorda? Town and country: generally depicted as two antagonistic concepts, are united here and are a lot less detached from each other than we wish to believe. Some authors rightly underline the danger of using models where rural and urban are defined too exclusively of one another. In reality, in the proto-urban societies in question here, the urban share was reduced and amassed in small-sized agglomerations, in immediate contact with the rural world.

Bibliography


