

New Perspectives on the Ancient World

Modern perceptions, ancient representations

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Agrarian systems in Roman Spain: archaeological approaches¹

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Archaeology and rural economy

In a relatively recent synthesis aimed at exploring some of archaeology's possibilities in defining the nature and functioning of the Roman economy, the author began the chapter on agriculture with a warning: 'Agriculture is perhaps the most complicated aspect of the Roman economy to study' (Greene 1987, 67). This advice is necessary to understand the difficulties of studying the rural economy in ancient Rome, whether regarded in its entirety or at different geographic and cultural levels. These difficulties depend on the nature of the material activities that take place in the rural area (whose identification is not always easy), as much as on the quality of the archaeological documentation. Simultaneously, it is necessary to keep in mind that the Roman world constitutes an imperial political construction at the same time as a historical process that encompasses very diverse societies and cultural situations, which generates very complex cultural circumstances (Leveau 1998, 25). These aspects should be noted.

First, agriculture, stockbreeding and, in general, all classes of strategies and resources related to the use of the environment signify a global value that, within pre-industrial societies, goes beyond the strictly economic arena and makes it difficult to condense them into specialized and segregated functions of other domains of human life. In the case of the cities' cultural system of the Greco-Roman world, these activities comprise a structural component that is inseparable from the social and political processes, since they represent the foundations of social hierarchies and judicial statutes. We must also take into account the importance of the continuity of the material culture. Because of this continuity, these activities are always evaluated on the basis of ethical and social categories: either as a patrimony that confers prestige, stability and power to a family, or as an exhibition of wealth and a sign of social status. In the same manner, these activities are not simply considered professions or affairs aimed to insure feasibility or sustenance. Latin writers, especially the agronomic ones, demonstrate their understanding of this situation by establishing a relationship among property, social status and political participation (Veyne 1979). The

awareness that altering this relationship would affect the existing social hierarchies and related procedures explains the importance given to the productive sphere by the writers and public figures of Roman aristocracy, as well as the kinds of 'solutions' or strategies contemplated in contexts of social and economic crisis.

Therefore, agriculture or other activities cannot be analyzed directly and exclusively as the result of economic strategies that are disconnected from the social order. This principle must be applied, to begin with, to the study of the behaviour of large and medium rural landowners, for whom a specialized literature was elaborated, just as focused on gains as on the relations between social position and the use of wealth. But it also serves to explain the strategies used by peasants or minor landowners. In other words, a region's exploitation systems and the specific configuration of landscape and settlement patterns are to be analyzed, in the first place, as the result of the presence, correlations and specific evolution of a series of activities and productive strategies; but it is also essential to contemplate the interaction between these factors and the social structure and ideological systems.

Second, rural areas are heterogeneous spheres in which very different activities, strategies and methods of production, property and management coexist. This diversity is a result of the global significance, already pointed out, that the exploitation of a territory has for a pre-industrial economy, as much as for the historic evolution of each society. This evolution generates a co-existence or overlapping of systems that originated in different socio-cultural situations and that follow specific paces of evolution. These systems share complex and dynamic relations, through which some of them reinforce their hegemony, rebuilding the institutions and strategies of the remaining systems for self-benefit. This phenomenon implies deep transformations as to the functioning and meaning of the subordinated system's structures, at the same time as it conditions some of the possibilities of the dominant system. As an example, one may consider the relations established between what has been called the *villa*-system in Italy during the end of the Republic, which involves a rational organization of complementary activities and investments, able to generate a surplus of products to market and supply city centres and local markets, and a small and basically self-sufficient peasant unit. These relations cannot simply be defined as

¹ The author would like to thank Travis Shearer for translating the text into English.

contrary, and their historical evolution cannot be reduced to the chronicle of one of the systems' decadence ('system' being the small property) as the result of the inexorable expansion of the other (the *villa*-system).

Such proposals can have important consequences regarding the reconstruction of historical processes (the decadence of the humble countryman, with its socio-political effects, and the global evolution of Italian agriculture between 200 BC and AD 200; or the matter of the existence of large estates in Italy and Hispania, for example), since they involve unsuitable generalizations based on the wrongful assimilation of phenomena that evolve at very different scales (the situation is very complex, as shown, in Italy, in the studies of Evans 1980; the problem reappears when studying the Late Antiquity's peasantry: Marcone 1997; for the large estate in Hispania: Blázquez 1979; Gorges 1979, 98; Sillières 1993, 244).

But this debate does not belong here. It is enough to point out the fact that small property and the use of various forms of work and management may complete the needs of the *villa*-system, serving as a source for a reserve labour force or contributing to raw material and other resources (Foxhall 1980, 105; Evans 1980, 20ff., 136). Furthermore, the relationships between the *villa* and the small property must have been dynamic, as the large Roman landowners showed interest in all kinds of activities, which they organized in very diverse manners (from wine production – the best example of a product related to the progress of urban life – to the *pastio villatica* or the seasonally mobile cattle). The diversity of strategies was to determine the need for labour or the integration of complementary activities aimed to fulfil these needs. The proper reconstruction of the economic structures of a territory requires, therefore, the identification of the existing systems as well as that of the relations that may have been established among them, in specific situations determined by a broader social and cultural context.

In the same way, to speak about agriculture, stockbreeding or craftwork simply as autonomous production systems constitutes a reductionism that impedes analysis of the functioning of the rural economic structures. These activities share complex and dynamic relations, as a result of their orientation and the forms of exploitation and management that determine the use (complementary, subordinated, etc.) given to working methods taken from other situations. There are numerous examples: the manufacturing of ceramic *instrumentum* assigned to agriculture (the amphorae), the use of seasonal labour (from agriculture to craftwork and vice versa) or the raw materials (mineral, vegetable and animal) used in craftwork or for direct sale. Therefore, it is necessary to conduct an analysis at various levels in order to define the particular articulation of activities and methods of exploitation within a territory.

At the same time, it is necessary to define the value of concept of 'rural economy': does it simply include all of the activities and exploitation processes concentrated in a territory? Is it an economic field with specific characteristics, linked to a particular series of structures or socio-cultural

formations? This matter must necessarily be dealt with when proposing the objectives of an entire investigation, as it may determine the final results, whether it deals with the study of a specific phenomenon (the development of viniculture or olive growing during a period of time, for example) or the global analysis of a territory. The notion of territory also suggests another problem, since it may be tackled from various perspectives (Leveau 1993; Leveau 2000, 566): as the influential area of a city (which also involves an evaluation of the administrative, social and ideological impact of any urban agglomeration); as a region whose natural limits are more or less defined; as a province (which forces one to suggest the Roman state's needs and capacity to organize wide-scale methods of exploitation for its spaces and communities, directly or through a fiscal apparatus). In any case, the definition of spaces and borders (which must be understood, in the first place, as cultural phenomena) responds to specific combinations of geographical factors, material processes and socio-political situations that must be analyzed on a global and diverse level.

It is obvious that simply cataloguing and unifying the productive processes located outside the city limits and qualifying them as 'rural' implies a sterile simplification: numerous activities (agriculture, stockbreeding, mining, craftwork) necessarily have to take place in a rural environment, due to their purpose (directly obtaining resources, in the form of food, raw materials or fuel) or due to the conditions imposed by very own execution (size, proximity to natural communication means, avoiding nuisances). Nevertheless, the functioning of some of them shows a productive volume and technical quality that are often interpreted (erroneously) as industrial processes. Many of these activities are also linked to long-distance exchange routes and their market is basically urban. An example, in this sense, is the production of *terra sigillata* in the South and centre of the Gaul territories in the Early Empire, whose high technical level does not involve, nevertheless, an industrial-scale organization. The location alone, hence, does not constitute an adequate criterion for defining the nature, organization or orientation of an activity within the context of a region's economy. Nor can that which is rural be considered a homogeneous economic sphere, separated from the city (Erdkamp 2001, 342-343, 351). The methods for exploiting a territory actually respond to particular combinations of exploitation processes, social strategies and political factors, through which the city and its elite satisfy their needs (under the form of taxes, rents or purchases on the market). These combinations vary within each historical period as a result of more general processes, which link a territory to a broader cultural and political field. All of this determines, at the same time, the perception and image that urban dwellers have of a rural space.

It is just as dangerous to deem the existence of a rural society as a fully defined and autonomous cultural formation, without specifying the historical conditions of its formation, as this belief could involve an arbitrary unification of diverse socio-cultural situations. To ignore

such conditions leads to creating a simplified view of the rural world: a lifestyle originated in the Neolithic era, based on a series of presumed natural conditions (as to material and social procedures), which would appear to transcend the successive overlapping civilisations inalterably; this form of life would be defined exclusively by restrictive or negative factors, such as productive and cultural autarchy or resistance to change. Endorsing this perspective would impede deliberation regarding the relations between economy, social order, ideological structures and historical changes. In the same way, caution is essential when comparing traditional Mediterranean agriculture and ancient economies as an interpretative and explanatory mechanism (Halstead 1987; Horden, Purcell 2000, 270; Evans 1980, 135).

The last consideration to keep in mind is regarding the available documentation. The value attributed to its nature, volume and significance is not balanced. This unevenness (which is a result of the diversity, mentioned above, of the activities and related lifestyles concentrated within the rural environment) implies problems, as much by default (the invisibility of certain situations in a traditional archaeological analysis) as by excess (the material size of some infrastructures, which may lead to an overrating of their importance). As an example, the archaeological evidence associated with an important landowner's residence and economic interests, which materializes through the architectural programs and productive infrastructures of a *villa*, is very different from that produced by the functioning of a peasant habitat or that which results from the implementation of a specialized agricultural or crafts activity, which can be organized, at the same time, in many different ways as to the use and quantity of labour, the volume of production and the pace of work.

Some agricultural productions clearly show the problems mentioned. Wine or oil, liquids obtained by means of a transformation process that ensures their conservation and may increase their price (as in the case of wine), demand a complex network of activities to ensure their distribution (as an example, Italic wine: Tchernia 1986; Manacorda 1985 and 1989; Carandini 1989). This network materializes as easily detectable – archaeologically – processing, storage and packing infrastructures, through which it is easy to define some of the relations among agriculture, craftsmanship and commerce that took place in some regions of the empire (Leveau 1998, 18).

On the contrary, the production, distribution and massive consumption of cereals, present in an infinity of written references as a basic element in the ancient diet, have left a scarce material trace. These differences in documentation also refer to varied socioeconomic strategies and methods of organizing work. The peasants also produce and introduce some goods into the market, but the conditions associated with their production and distribution (a limited surplus that can occasionally be sold in a nearby market in order to satisfy a specific need for currency and household assets or is handed over, as rent, to an important landowner) do not

allow the creation and maintenance of certain means, such as presses or kilns used in the manufacturing of amphorae, or make them unnecessary. It is particularly difficult to define the methods in which small peasants may organize their work throughout annual cycles (a combination of agriculture, craftsmanship, and occasional work in the fields or in the city: *cf.* De Ligt 1990). In the same sense, seasonal migration of cattle or *pastio villatica* have left material, and especially literary, evidence in republican Italy, much beyond that shown by the use of cattle in a peasant unit (as a complement to peasants' diets, in the case of poultry-yard livestock, or as a source of labour, when referring to draught animals). In the same way, certain practices related to subsistence or the functioning of a peasant economy in general is hardly documented (Frayn 1979; Evans 1980, 135). These gaps in the documentation complicate the analysis of the functioning and extension of certain lifestyles. It is no coincidence, in this context, that agronomical literature, despite its title, centres on aspects related to the wealth, material assets and ideological needs of the aristocracy, as on the materials used and organizational forms that are specified in the system of the *villa*. This literature only refers marginally to other situations and elements in that they can complement the needs of the *villa*'s system or they illustrate details of the discourse on this topic (Martin 1971; White 1973). The references to rural life that appear dispersed amongst all Latin literature are even easier to interpret due to their role as an 'ideal image,' which served the purpose of expressing ethical and socio-political values.

It is necessary, therefore, to eradicate the idea of the alleged absolute objectivity of the information provided by archaeology, an idea that sustains its importance (in an unconscious and, therefore, more dangerous manner) in recent studies about the economy of some Hispanic provinces or regions. Without a doubt, archaeology provides precise information regarding the geography and chronology of agricultural or manufactured productions, the technological level (which refers to the productive processes) or situations that have not been documented in other ways, but this evidence cannot be accepted in a non-critical manner as the direct expression of management or work procedure. The materialization of economy constitutes the reflection, in the first place, of a social order and the related property's structures and strategies. This is the way documentary evidence should be analyzed.

The problem with the nature of documentation and its use in the reconstruction of economic structures also has a cultural aspect, with obvious implications for the study of the evolution of the western provinces of the Roman Empire. Although the paradigm that conceded this evolution as a process of historical progress - and evaluated it according to the degree of implementation of the forms of Roman culture – has been overcome, it is still possible to find regional or thematic studies that, in practice, reduce the Romanization process of a territory to the colonial foundations and the implementation of *villae*, ignoring other factors. In these terms, the debate about the historical evolution of a region's settlements

is limited to establishing the moment of implementation (the further back the moment of implementation is, the earlier the stage of Romanization) and the subsequent widespread expansion of the *villae* (Prevosti 1981, 553; Prevosti 1995-1996, 136ff.; other approaches: Olesti 1997; the state of the matter of the rural settlement towards the end of the Republic in Chapa, Moret 2004). Those *villae* are the Roman form of occupation and exploitation of a territory is indisputable, but the socio-economic strategies and activities that may be organized from within them are diverse, and they generate specialized uses, differentiated from and complementary to the spaces and natural resources. This determines, at the same time, the settlement hierarchy (Revilla 2004b). The cultural, social and juridical interpretation of this evidence is very complex.

Rural economy in Roman Spain

In recent decades, the knowledge of the rural world in the Iberian Peninsula has experienced obvious progress, especially regarding settlement and the habitat structure, the elaboration and distribution of agricultural or manufactured products, technology and landscapes (Gorges 1992; Étienne, Mayet 1993; Keay 2003). This progress, which is the result of the development of field archaeology and the perfecting of document analysis techniques, has allowed us to rebuild some basic features concerning agricultural structures and to try to re-read the information offered by literary sources, at least, as far as certain productive activities and regions (the Mediterranean coastline of *Hispania Citerior*, the valley of Guadalquivir, coastlines of *Baetica* and *Lusitania*) are concerned. In reality, the scene is less positive than what the extensive nature of the available bibliography may suggest.

In the synthesis dedicated to the history of *Hispania*, for example, the study of rural economy is reduced to an inventory of activities that are described independently. In this group of activities there is a kind of agriculture that stands out and is simply defined as Mediterranean, due to its ecology (without considering the large regional differences within the Peninsula and the later changes in the landscape), products (wine, oil, cereal) and forms of exploitation (distinguishing extensive practices, in the case of cereal, as opposed to the intensive ones for viticulture and oil; on occasion, also qualified as systems with a speculative and capitalist basis). The inventory concentrates particularly on wine and oil, products especially visible because of their socio-cultural connotations and the combination of agriculture, crafts and exchange circuits involved in their consumption; other products are cited in an almost anecdotal way, without evaluating what their cultivation, treatment and exportation may have meant for a local economy (this is the case of wicker). All of these works make careless use of literary citations, which are scarce and used out of context, as they also do of archaeology regarding the reconstruction of the evolution of agriculture in Hispania (Blázquez 1978 and 1982; Montenegro, Blázquez 1982; Curchin 1996). In general, the descriptions of productive methods are reduced to simple evaluations, founded on the dimensions and complexity of the technology, while

references to the structure of property do not go much beyond mentioning the obvious presence of great or small landowners, combining archaeological evidence provided by large *villae* and technology with the epigraphy of *instrumentum*. This kind of procedure only allows an approximate evaluation of the entity of the many activities, defined in a purely qualitative manner, as more or less important (no one has been able to establish a reference as to at which level this evaluation has taken place).

The scarce syntheses that deal with regional or local domains, in which the economy is treated in a limited way, proceed in a similar fashion and their proposals are practically identical (Keay 1990). Most also avoid the problem of defining territories in their diverse senses and levels: as an environment delimited by an administrative border, as a region (constituted by the conjunction of specific natural conditions and a historical development), as in an area or group of areas, organized and controlled by a city. This matter is especially important when attempting to study the economy of a city. It is enough to remember the fact that a Roman city could own land and other assets in other provinces. Specifying the forms of integration between cities and territories, nevertheless, is fundamental for understanding the configuration and evolution of the economic structures of an urban community, as well as the relations between economy and political-administrative and social factors, and finally, the economic function of a classic city (each city kept specific relations with a rural space, depending on its needs and configuration, and those relations could be defined by various judicial methods; citing the extreme example of Rome's hinterlands should be enough: Morley 1996; Erdkamp 2001, 340ff., builds his model by redefining the relations between cities and territories). It is not odd, in this context, for the relationship between the economy and provincial societies to have been defined in such a sketchy manner (for *Baetica*: Chic 1994 and 1995; in Catalonia: Miró 1988, 248ff.) or for the analysis of very specific cases or situations to have been chosen over synthesis (the presence of freedmen in an economy constitutes a good example: Tchernia 1980; Remesal 1989). It is not easy to specify the origins and composition of the Hispanic elite's wealth either, beyond some obvious ascertainments (Curchin 1983).

The few studies focused specifically on agriculture or specific activities, such as viticulture or olive growing do not prove to be any better (Sillières 1993, offers a balanced synthesis of Mediterranean Hispania; Marcone 1997 offers a forcedly generalist view). The last two have generated a considerable amount of bibliography in the past few years (for the vineyard of *Citerior*: Pascual 1977; Miró 1988; *Col·loqui* I, 1987; *Col·loqui* II, 1998; Revilla 1995 and 2004a; for the oil of Guadalquivir: Remesal 1977, 1989, 1997 and 1999; Chic 1994 and 1995; an overview of the region: Saez 1987; Bernal, Lagóstena 2004; these studies are based on the archaeological evidence gathered by M. Ponsich 1974-1991). The main contribution of these studies lays in the perception of the relations between agricultural production and other activities that can be considered complementary to the productive process and that, therefore,

are organized in the same rural environment: either in the field of *fundus* or as an independently managed activity. The most obvious example is the production of amphorae, which is connected to the progress of viticulture and olive growing along the Mediterranean coastline and the valley of Guadalquivir. In the same way, these studies have also defined the existing relations between the genesis of these kinds of processes and the demand of certain groups (the population of Rome and other large cities, the army and the administration) that represent the development of a complex distribution and exchange network, ensured by fiscal and market mechanisms (see for example Remesal 1997 and 1999; Carreras, Funari 1998). In this context, the economic interests of Rome's and its provinces' elites constitute a key factor.

Currently, there is a clear perception that the global analysis of the diverse economic activities and their relations, productive structures, kinds of demand and forms of distribution constitute the indispensable starting point for a more precise knowledge of the evolution of a territory and its integration in the whole of the empire. This analysis must also be contextualized. Nonetheless, most of the cited bibliography tends to reduce the entire economic evolution of some regions of Hispania to the expansion and hegemony of a rational and intensive agriculture, related to large-scale overseas commerce. This combination allows some variations (as to the products – wine or oil -, the size of the properties or the role attributed to the state's needs), but it is always defined on the basis of the characteristic traits of a modern and dynamic economic system: specialization, investments, rational organisation of labour, commercial direction and functioning of market mechanisms. These systems appear as the motor that would propel a region's entire material and social life and determine its development and future crisis. In these reconstructions, which minimize the complexity of a region or province's economic structures and the relations that are established among its various activities, there is implicitly a colonial-type development model that reduces dynamic historical processes, with multiple internal nuances, to the creation or 'invention' of a society, based on the application of conscious political and economic strategies, colonization and introduction of new technologies. The case of viticulture in Catalonia is a good example (Miró 1988, 248ff. and 282ff.; these hypotheses are applied to the explanation regarding the evolution of the region's settlement, which is made to depend exclusively on the local vineyards' commercial expansion and crisis: Prevosti 1981, 555ff.; Prevosti 1995-1996, 137).

The theoretical and methodological problems are also obvious in the excavation monographs and the specific studies on rural settlement, especially those dedicated to the *villae*. This is an especially important field, since most publications that deal with the rural world in Hispania are centred on the habitat (for example: Prevosti 1981; Casas *et al.* 1995). In all of these it is possible to find a section dedicated to economic activities, but this generally means

no more than an inventory of practices and infrastructures that is interpreted through two excluding models: self-sufficiency and market-oriented production. In this context, the analysis centres on – and is conditioned by – the presence or absence of certain kinds of material evidence: presses, kilns, forging, amphorae. This allows, in the best of cases, to enumerate the activities present in a habitat or in the group of settlements located on a territory, but it constitutes a limited basis for the reconstruction of the productive structures and management. In fact, these studies insist on an unconscious approach to the search of material coincidences (in technology, architecture and lifestyles) related to the habitat, and therefore give the impression that the rural world is more homogeneous than it really was.

The regular use of archaeological documentation, essential for knowledge of rural environments in Roman provinces, presents as many advantages as it does problems. Amongst the problems, the nature of the available documentation is an important concern. Although it is very abundant, its quality is irregular, since most of the collected data come from preventive or archaeological excavations of an urgent nature. These efforts regarding these actions are centred on places or activities that stand out due to their nature (infrastructures, for example). All of this provides vast amounts of data regarding the 'productive architecture', but it has a distorting effect, since it only shows the economic activities that, by chance or thanks to their strength, are the best preserved. In addition, due to the conditions under which these archaeological practices take place, there are few chances of adequately collecting and analyzing other kinds of documentary evidence unless such evidence is linked to the architecture of the excavated settlement (information related to vegetation or cultivable land, for example).

An even worse problem is that archaeological interpretation is still subordinated to models almost exclusively build from Latin agronomic literature, more specifically, on simplistic readings of the texts; one must remember that this documentation belongs to a very specific historical, social and cultural context (Italy towards the end of the Republic and the Early Empire) and rarely provides direct information regarding the reality of the provinces. Consequently, we find the paradox that agronomical literature appears to have a greater interpretational value in the regions of the Roman world about which it does not provide information. In this context, all sorts of data fit in, extracted from other literary sources, which are combined amongst themselves or with archaeological data, in a methodologically incorrect way, given that the precise nature, intentions and chronology of such sources are not even evaluated. The example of the oil from *Baetica* illustrates the irregularities in the documentation and the danger of inferring certain conclusions: the production and distribution of this product between the first and the fourth century AD is a phenomenon with vast economic, social and political consequences, documented through archaeology and epigraphy; paradoxically, is hardly

mentioned in literature (literary documents for pre-Roman and Roman Spain: Mangas, Myro 2003).

The impact of the subordination of archaeology to literature can be discerned at two different levels: on one hand, regarding the reconstruction of economic processes and the definition of the social and economic system to which they belong; on the other hand, as to the hypotheses regarding the historical evolution of the provincial economies.

Concerning the first issue, most studies interpret the activities and technology present in the rural world on the basis of a single productive model: the medium/large-sized exploitation units, specialized or semi-specialized on vineyards or olive trees, which concentrate all productive infrastructures in one central spot (which, at the same time, is the owner's home), with a totally commercial outlook and rely on slave labour (see, however, Curchin 1986). Put in this manner, this reconstruction excessively simplifies the archaeological diversity as much as it does with the situations described by agronomists. Parallel to this, and this is even more precarious, there have been some attempts to define the structure of property, and even the social order of a territory, based on calculations that are based on the possible sizes of the estates. Using this as a base, hypotheses have been raised regarding the control of minor and medium-sized property ownership (supposedly originated from an Italic colonization) along the Catalan coastline between the end of the Republican era and the beginning of the imperial one, and it has been said that the expansion of viticulture during the same period also responded to this same kind of property (Prevosti 1981, 534ff; Gurt, Ferrando 1987; Miró 1988, 230ff., who admits the presence of important property-holders; cf. Revilla 1995; Tremoleda 2000 and 2005).

These estimations are incorrect because of the fact that they arbitrarily relate the size and the productive capacity of an estate or identify all rural sites, many times not yet revealed (dug up), as the centre of an estate. But they are even more perilous because they are based on an erroneous definition of the organisation of Roman property and a hypothetical equivalence between the size of an estate and the importance of its owner. The fact that an estate can be exploited by a lessee and that its owner can own various scattered estates is enough to prove the inaccuracy of this approach, based on a simplistic reading of agricultural experts and other literary sources and on a limited understanding of the Roman elites' values and attitudes. A *villa* is the centre of management and activity, but it is also a place of residence that responds to certain important symbolic demands. For this reason, a building's characteristics cannot be directly associated to the wealth and status of its owner whilst ignoring other factors. What archaeology really shows is the existence of a wide variety of kinds of settlements: from *tuguriums*, owning a small pressing device linked to the *villa*, to large buildings with complex architecture (but no *pars urbana*) that amass technology and a large storing capacity and are also correlated to nearby artisan workshops (an example: Sánchez *et al.* 1997). This kind of evidence suggests different ways of organizing agricultural

production, work and resources, which are correlated to a rigorous hierarchy of the settlement and rural environment (Revilla 2004b, 192, 196). The historical implications of these propositions are obvious; all that needs to be pointed out is that they have been used to try to reconstruct the evolution of urban life in some regions and have served the purpose of distinguishing socio-economic situations and processes of historical evolution (small property along the Mediterranean coastline versus the large estate that appeared to determine the history of the centre and south of the Iberian peninsula: Gorges 1979, 98; Prevosti 1981, 537-538 and 561; Miró 1988, 252ff.).

In relation to the hegemony of this form of commercial agriculture, various studies implicitly accept the relevance of market mechanisms as the main cause of the socio-economic development of the Hispanic peninsulas and their integration into an imperial economic structure (the empire's degree of integration and the causes which intervene happen to be a central issue in the debate about the nature of the Roman economy: Andreau 1995; De Blois, Pleket, Rich 2002, xiii-xiv; an original perspective in Bang 2002). Doubtlessly, the basics of the market play an important, but also limited, role, and their position and relations must be detailed, towards the end on the republic and during the Early Empire, in relation to other factors that may also condition the practices adopted by productive and consumption-related processes: social factors (patronage and dependencies, family relations), political factors (in at least two ways: the material possibilities related to the exercise of a specific post for a Roman aristocrat, on one hand; the taxation system, on the other) and ideological factors (the spreading of trends linked to the elite). Only in this context can the economy of a territory, region or province be defined – placing it in a broader context (without making an a priori assumption of a complete integration of these territories just because they were part of the Empire's political and cultural framework) and knowing the real scale of the changes associated to their Romanization.

Concerning the second matter (the elaboration of a hypothesis regarding the evolution of a provincial economy), many scientific studies are still built on an inaccurate epistemological and methodological basis: arranging the set of literary references that allude (or seem to allude) to a same product or a productive phenomenon – which can be placed within a more or less precise geographical context – in a chronological sequence. This procedure is discernable in many descriptions that are suggested as syntheses of the 'economic history' of a region, a province or a specific economic phenomenon. In all of them, there is a more or less extensive use of archaeological information, but this does not invalidate the serious problems that are derived from this practice, since archaeology is not used for much more than confirming the validity of hypotheses that had previously been based on literary sources. The problems respond, in the first place, to the characteristics of the literary documentation used. Then supposedly economic data is taken from very assorted genres, whose intention, above all, is aesthetic.

Thus, there are no worries regarding their geographical precision, whether temporal or quantitative. On the other hand, one cannot denote a Roman author's intention when he includes certain allusions in his works: it can be a matter of anachronisms or intentionally assembled topics.

The chronological and informative value of such information, therefore, is limited, unless it is certain that it corresponds to a phenomenon that truly existed when the text was being written. This leads to another problem. While civic ideologies reject all autonomy regarding economy as a human activity, material manifestations appear in ancient literature as phenomena related to the consumption, exhibition and possession of wealth. The phenomena are a sign of status and they take place in ritualized situations for which they take on a social meaning. In other words, the references to certain Spanish products (wine, oil, cereal, wicker, *garum*) refer to the knowledge of social values and behaviours that determine the consumption of this product. There is even less of a chance of their allowing an understanding of the economic structures of a territory and its evolution. As a result, this kind of information cannot be combined with archaeological documentation without a clear perception of its function within a scheme of social and moral values.

Another risk, especially in a provincial context, is that of using *ex silentio* argumentation. In the case of oil from *Baetica*, for example, it has been suggested that the end of the epigraphic documentation provided by Monte Testaccio, towards the end of the third century AD, meant the end of the exportation of this product to Rome and its substitution by African oil. From there, it was easy to deduce a crisis, which at the same time would be related to the problems in the Hispanic provinces during the third century. However, archaeology shows that that oil produced in the *Baetica* was still exported during the fourth and fifth centuries to the entire western part of the Mediterranean (Remesal 1997; for amphorae: Keay 1984). The absence of documentation in one region, hence, is not necessarily a sign of crisis, but a change of distribution itinerary and consumption nuclei, which is partially related to a change within the empire's administrative and economic structures. In the case of the wine from *Tarraco*, the apparent disappearance of certain archaeological evidence also led to the suggestion of a general crisis in viticulture in the province towards the end of the first century AD (Miró 1988, 203ff.; a crisis that would apparently affect the global structures of economy and population: Prevosti 1981, 538, 557). Nonetheless, a more rigorous interpretation of archaeological evidence has shown that the implementation of this vineyard and wine-based economy had a different intensity and evolutionary rhythm in the regions associated with wine production, as a result of specific socioeconomic conditions: urbanizing processes, settlement and rural property structures, linkage to the exchange routes. Because of this, it seems more appropriate to speak of a distinct evolution regarding these provincial vineyards (Revilla 1995, 135ff.; Revilla 2004a, 161ff. and 170). In this same context, it also seems necessary to re-evaluate the importance of viticulture, which is not the

only economic activity on the *Tarraconensis* coastline. It is also worth remembering that the lack of documentation can sometimes be due to causality or insufficient scientific rigor.

The study of the Hispanic provinces' economic and social development, on the basis of coincidences with an ideal archetype (the *villae* system and the social and juridical order, as defined by agronomists) implies, in fact, a reductionist understanding of the Romanization process in the Iberian Peninsula: conceiving Romanization as an objective acknowledged by the Roman state, which responds to the conscious application of a series of plans and which is ensured by certain procedures. This approach is no longer accepted by historians, but can still be implicitly found in the reconstructions of the settlement and economies of some territories or in certain thematic syntheses. This is clearly an evolutionistic approach, as it explains a very complex historical process (the socioeconomic transformation of the peninsula) as the result of the regular expansion and the hegemony (at least, in some Hispanic regions) of a uniform, rational and dynamic system, sustained by an intense use of technology and labour force (revision of Romanization as a problem in Roldán, Wulff 2001, 358ff.).

New perspectives

In order to overcome these problems it is necessary to rethink the methodology in use and change the conceptual definition of economic processes and phenomena, which must resort to the use of explanatory forms. Only on the basis of these changes will it be possible to elaborate a proper definition of the agricultural systems and their relations with other activities developed in rural environments, integrating the hypotheses obtained in a global reconstruction of the economy of Hispanic provinces.

In the first place, it is necessary to modify the analysis and interpretation procedures regarding traditional archaeological information. An inventory of a site's technology based on the descriptions provided by agronomic texts only allows for the emphasis of coincidences between a territory and other areas of the Roman World and contributes to creating a homogenous and static image of an agricultural economy, independent of the epoch and the geography. This is especially uncertain if one intends to analyze a specific provincial situation. Although technology allows us to identify the types of activities that take place in a region, it cannot reveal, by itself, the strategies, work processes and juridical forms related to the development or knowledge of how the products are distributed. For this purpose, it is necessary to put all material evidence into its spatial and organizational context (architecture and infrastructures, tools, production residues, ceramics and other household objects) and interpret it according to the different possibilities or strategies that a global reading of the written documentation may suggest, strategies that can be combined or modified with time: the production of surpluses for the market, autarchy, complementary work.

In this sense, the variously-produced pressing mechanisms

that can be found in many rural Hispanic establishments serve as an example. It is unquestionable that their maintenance implies a special effort related to the desire to obtain a product (wine or oil) and to modify its quality, at the same time as the technological performance was improved (Brun 1986, 60 and 193). Nevertheless, in many publications it is assumed that the presence of presses must always be understood as an expression of an agricultural economy that commercializes its production and therefore 'invests' in technology. In this context, the interpretation of the functioning of these installations is based on the implicit acknowledgement of the idea of an integrated, dynamic and expansive economy, which is the result of the application of modern market mechanisms. The sale at urban markets, made clear by the widespread distribution of wine or Hispanic amphorae, would seem to support this idea. It is unquestionable that there was an interest in the improvement of production rates and that this raise is related to sales: agronomists' worries show a desire to improve performance, and this is why the *villa* includes a rigorously organized *instrumentum* (Mattingly 1993, also speaks of an increase in productivity as a result of certain organizational methods and infrastructures; cf. Saller 2002). But this is a partial vision. To avoid this kind of approach all that is needed is to take a look at the diversity of pressing mechanisms: they can be found in a *villa* (isolated or in groups), in a small farm, in a large shop specialized in the production of wine or in a small *tugurium*, linked to a *villa*.

Presses are also known to have existed in small rural sites of the Late Empire (farms or villages) and correspond to other forms work and manners of distributing surpluses (an example in the Catalanian coastline: Barrasetas 2003). In many cases, the functioning of this kind of installation can be explained as the expression of a strategy aimed at selling part of the production, but it is obvious that the functioning of an isolated press cannot be interpreted in the same way as that of a factory that owns several presses, *calcatoria*, *lacus* and warehouses with *dolia*. Therefore, to define the meaning of a technology, it is essential to specify the strategies related to its use and the characteristics of the settlement in which it is incorporated.

Rural workshops dedicated to the elaboration of amphorae are an even better example of the problems regarding the evaluation of technology. These workshops can be modest or have a large number of kilns. But this is a relatively simple kind of structure, and what really defines its dimension and the workshop's productive orientation is the global organization of the technology and the characteristics and evolution of the collection of productions, which can integrate common ware / table ware and construction material. Only on this basis is it possible to deal with another matter: the relations between ceramic crafting and agriculture (Manacorda 1985 and 1989; for *Hispania Citerior*: Revilla 1995, 135ff. and 2004a). At this level, and with the contribution of agronomic literature, it is possible to propose hypotheses regarding the functioning of these units within the *fundus*, as a wealth producing estate, and

try to define the strategies developed by rural landowners. This kind of analysis will allow us to suggest interpretative models at the level of a territory or a region, as well as the establishment of comparisons. These archetypes or models can be very complex, as the rural environment concentrates numerous artisan activities, whose relations with agriculture and land ownership are quite varied (for the amphora production in Guadalquivir: M. Ponsich 1974-1991; Bernal, Lagóstena 2004; for the Mediterranean coastline: Miró 1988, 12ff; Gisbert 1998; *terra sigillata* in Mayet 1984; other manufactures: Pérez *et al.* 1998; for important landowners in Hispanic viticulture or olive growing: Revilla 2004a, 151; Remesal 1989; Tremoleda 2000 and 2005; important landowners' interests in artisan activities: Haley 1988).

Even so, it is necessary to go beyond the study of architecture, productive installations, tools and other artefacts that have been privileged by traditional archaeological analysis. The construction, sizes and organization of these elements reflect, in the first place, the ruling social and economic strategies in rural environments, with *villae* as residence and management centres (Purcell 1995; Leveau 1998, 22). Centring the study on the material sphere, which is very important, may limit the historical interpretation to mechanical comparisons between Archaeology and written sources, which would allow only for the observation of aspects linked to self-representation and the social order that the rural elites wanted to transmit, an order that also organizes the landscape and the occupation of a territory. In contrast, rural sites must be analyzed as something more than an assemblage of buildings. They must be understood as more complex entities and integrated in the rural environment to which they belong, alongside other elements: work areas, coops or poultry-yards, cultivation plots, terrain conditioning works (terraces, watering and draining systems), aqueducts, paths, and property limits (Sillières 1993; these features are included in recent congresses: Gorges, Rodríguez Martín 1999; Ariño 2003).

Similarly, archaeology must analyze all material manifestations generated by the application of strategies and production methods: vegetation, animal and vegetable species brought in, and agricultural lands (Leveau 2000, 567; Leveau 2003). The relationship between human processes and natural processes (erosion, sedimentation) must also be considered. These relationships are the result of – and at the same time, they influence – the activities that are developed and which can also be related to other factors: production and organizational strategies, and legal forms of appropriation and use of the land or resources. In other words, it is a matter of proposing a broad understanding of the material manifestations related to the exploitation of a territory. Expanding the field of study and integrating new evidence will allow us to define the characteristics and functioning of a production system better. In the same way, the overall impact of this production system on a provincial economy or its effect on the configuration of specific local or regional situations, in combination with other systems, will be evaluated with much more precision,

as it will be possible to identify different rhythms within the development of certain phenomena.

Making this kind of suggestion may seem obvious. It has been decades since this kind of perspective has been consecrated in nearby countries, but this is not the case of Spain. By way of exception, the studies dedicated to the evolution of the vegetation in certain territories in Catalonia are to be mentioned (Palet, Riera 1994, 1997 and 2000; Palet 1997). These studies integrate this factor in a broader context, which includes other resources (land, climate, hydrology), productive activities (agriculture, stockbreeding, exploiting forest resources), technology and productive systems in order to reconstruct the formation and global evolution of a landscape and explain it, ultimately, as the result of a specific (historical) combination of socioeconomic and natural factors. The results of these studies break with the traditional idea, determined by an 'ideology of progress', of an intensive and commercial agriculture, generalized in the region at the start of the empire as the result of a conscious and programmed colonial action (these reconstructions are linked to the idea of a detachment between a proto-historical economy and a dynamic Roman economy: Leveau 1998, 25; Revilla 2004b, 177ff.). At the same time, these studies explain the diversity of activities, uses of land, technology and habitat shown by archaeology, which would make a micro-regional analysis much easier. They also offer a better evaluation of the impact of certain techniques and activities that barely left an archaeological trace (this is the case of the landscape changes, related to the possible spreading of the seasonal migration of cattle between the fifth and tenth centuries towards the centre of the Catalanian coastline).

In the past few years, the addition of this kind of material evidence has led to the development of new technologies and laboratory procedures. These new technologies and procedures are especially important for the analysis of artisan technology, the evolution of species of animals and plants, the elaboration processes of agricultural products or the changes in vegetation. Hence, an archaeology focused on the rural world must be multi-disciplinary. However, the application of these new techniques must not be limited to identifying manufactured products or describing the complexities of their making; it must serve the purpose, above all, of defining the social and economic strategies that determine the classes of work that were used. In this context archaeological experimentation is especially useful, as it provides the possibility of suggesting hypothesis to explain the organization of an activity and its impact on the configuration of the neighbouring landscape.

However, the perfecting of traditional document analysis procedures and the introduction of laboratory disciplines related to the study of new evidence is insufficient. It is

necessary to have complex explanatory standards at one's disposal in order to formulate adequate working hypotheses. These standards must be based on the ascertainment that an ancient economy is not an independent field from society, political structures and the related value system. Consequently, it makes no sense to speak of agriculture, stockbreeding, commerce or rural craftsmanship simply as specialized activities or economic division. This division is only justified in a capitalistic system. These activities are organized and related amongst themselves, forming systems that are in continuous evolution, as the result of the diversity of strategies and ways of organizing work and management, which, furthermore, refer us to a broader socioeconomic context. It is also crucial to define the meaning of certain concepts and categories that have been used: market, commerce, investments, performances, productivity (used accordingly with their social equivalents: bourgeoisie, middle classes), which is a problem that has precisely been pointed out in the criticism aimed at 'modernist' historians of Roman economics (the existence of partial markets and mechanisms of supply and demand does not mean that the Roman economy, considered as a whole, should be considered to be regulated just by the 'market principle'; *vid.* the contributions collected in Scheidel, von Reden 2002). The standards and criteria must also consider the possibilities to be found by comparing them with other pre-industrial societies' agricultural systems, understanding that the comparison does not provide an explanation but must illustrate the diversity of possible interpretations.

Finally, it is essential to try to define the analysis's spatial frames: local, regional and provincial. This definition requires, once more, an evaluation of the combination of social, political and ideological factors that lead to the defining of a particular space, with its specific characteristics (geographical, administrative, cultural). Knowing the evolution of a specific productive system within this space, and its relation with others, will allow, in the first place, for a better characterization of local societies within a region; in the second place, since it facilitates comparisons of diverse situations, it will allow for the suggestion of more complex and clarified explanations of the internal evolution of a Roman province (the need for a meticulous regional analysis and the problems raised by certain excessively general explanations have been pointed out by Patterson 1987, 116; Leveau 1998, 25; Leveau 2003, 91-92, stresses heterogeneity as an attribute of the socioeconomic situation of provinces). This change of perspective ultimately allows historians to place economy in the context of the historical evolution of each province and understand its functioning in the whole of the imperial Roman structure. In turn, this will allow for the construction of better knowledge of the system of economic and political interdependences constituted by the empire (Crawford 1986).

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