

# CREATING A PROVINCIAL LANDSCAPE: ROMAN IMPERIALISM AND RURAL CHANGE IN LUSITANIA

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## SUMMARY

This paper suggests some general approaches and raises some problems in studying the impact of Rome on the rural landscape in Lusitania. It concentrates on three crucial ways in which the landscape was transformed under Roman rule: (a) changes in the pattern of rural settlement; (b) changes in the nature of land use and agrarian exploitation; and (c) changes in the ways in which the inhabitants of Lusitania perceived and thought about their world. It argues that a synthesis is needed of archaeological evidence from across the province, so that the impact of Rome on rural settlement patterns may be compared in differing environmental regions. Further intensive field survey should also help to resolve some current problems in reconstructing the pattern of Iron Age and Roman rural settlement. Increased collection and analysis of pollen samples, carbonised wood, seeds, agricultural implements and animal bones is needed to assess more precisely the extent to which the Romans caused major changes in the nature of land use and agrarian exploitation. When accounting for change, it is essential to consider a wide variety of factors and to remember that rural change continued to occur throughout the Roman period. Finally, it was in forcing the inhabitants of Lusitania to perceive their world in radically new ways that the Romans made a lasting impact on the provincial landscape. First, the Romans created broad ethnic identities for their opponents, ignoring the complex, highly fragmented ethnic and regional geography of the area. Then by dividing the region into clearly defined civitates, they forced the inhabitants of Lusitania to envisage the landscape in a very different manner than before. Finally, a series of rituals emphasising Roman power (the census, the holding of judicial assizes, and the activities of the provincial council) regularly reinforced these radically new mental maps of the new Roman provincial landscape.

The precise nature of Roman imperialism remains a central, but controversial issue. According to some the Romans did not actively seek imperial expansion, but were drawn reluctantly into conflicts overseas. Others see the Roman élite as more consciously expansionist, fully aware of the economic rewards of successful expansion and the opportunities provided by military victory for emphasising their *gloria* and hence their family's status<sup>1</sup>. The élite even developed rhetorical techniques for rehabilitating the political careers of some of those who had suffered military defeats by shifting the blame onto the common soldiers and/or the gods<sup>2</sup>. This debate has concentrated attention almost exclusively on the centre rather than on the periphery. Roman motives for expansion have been analysed at length, usually as expressed in the literary sources. But for a more balanced view of Roman imperialism, it is necessary also to assess the impact of Rome on the areas that became part of the Roman Empire.

In many studies of Roman provinces it is the cities that have claimed a large share of scholarly attention. This is understandable, since urbanisation was arguably the key change that the Romans brought to many areas of the western part of their Empire. For the Romans, as for the Greeks, civilization meant living in cities; and the Romans required towns to administer their provinces. Many of these urban centres have left an indelible mark on the landscape. They are highly visible sites for the archaeologist to investigate. The archaeologist, often trained first as a historian of Rome, is naturally attracted to the cosy warmth of these familiar and friendly places<sup>3</sup>. But this attraction is problematic, since it can produce too Romanocentric a vision of provincial culture. The more remote countryside, and also the more indigenous culture that often persisted in rural contexts, have until recently remained far less attractive topics for Roman historians and archaeologists alike. But arguably it was the changes in the rural landscape that were much more far-reaching for a far larger proportion of the inhabitants of the Roman Empire. Even by conservative estimates some 85 per cent. of the 54 million or so inhabitants of the Empire worked on the land, seeking to produce enough to support their families, to pay rent to the landowner if they were tenant farmers, and to pay their taxes to Rome, the major economic consequence of being integrated into an imperial system<sup>4</sup>. If we are to understand in any depth the impact Rome made on provincial society, it is absolutely essential to investigate the countryside.

Archaeological evidence must provide the basis of any attempt to reconstruct the Lusitanian countryside, and especially the impact of Rome upon it, since the literary sources are on the whole generalised and of dubious reliability. Greco-

1. For the debate see E. Badian, *Roman Imperialism in the Late Republic* (Oxford, 1968); W. V. Harris, *War and Imperialism in Republican Rome, 327-70 B. C.* (Oxford, 1979); J. A. North, 'The development of Roman imperialism' *JRS* 71 (1981) 1-9; E. S. Gruen, *The Hellenistic World and the Coming of Rome* (2 vols., Berkeley, 1984); J. S. Richardson, *Hispaniae: Spain and the development of Roman imperialism, 218-82 B. C.* (Cambridge, 1986).

2. N. Rosenstein, *Imperatores Victi: Military defeat and aristocratic competition in the middle and late Republic* (Berkeley, 1990).

3. Towns still occupied, however, present special problems for the archaeologist: see *Arqueología de las ciudades modernas superpuestas a las antiguas* (Zaragoza, 1983) (Madrid, 1985); *I Encontro Nacional de Arqueologia urgana (Setúbal 1985)* (Lisbon 1986).

4. For population of the Roman Empire see K. Beloch, *Die Bevölkerung der griechisch-römischen Welt* (Leipzig, 1886) 507.

Roman historians provide fleeting glimpses of the rural world as a thinly sketched backdrop for their accounts of the Roman conquest of the region (e.g. Polyb. 34.8.1; 34.8.4-10; Sall. *Hist.* 1.112; App. *Iber.* 66, 70, 73). A few valuable snippets of information can be gleaned from the elder Pliny (*NH* 8.191; 9.141; 15.17; 15.103). Strabo provides a fuller account in Book Three of his Geography, but this needs to be used with greater care than has sometimes been the case<sup>5</sup>. For his work was never intended to be simply descriptive; it also served important prescriptive ends. He used his literary imagination and rhetorical training to construct an ideological image of a barbarian world, that could only benefit if it was conquered and its culture transformed by Rome<sup>6</sup>.

Tertullian, writing in the latter of the second century A. D., was in no doubt about the extent of the rural changes generally brought about by the Romans:

Everywhere is now accessible, everywhere known, everywhere busy. Deserted places much talked about in the past have now been obliterated by very pleasant estates. Forests have been tamed by cultivated fields. Wild beasts have been put to flight by flocks. Sands are being planted, rocks quarried, marshes drained. There are now as many cities as there once were huts. No longer do islands make us quake with fear nor rocky promontories terrify us. Everywhere there is a household, everywhere a citizen-body, everywhere a community, everywhere life.

(Tert. *De Anima* 30.3)<sup>7</sup>

But how accurate is Tertullian's eulogistic assessment, and how appropriate are his general remarks for the province of Lusitania? For such a study the crucial questions are easier to isolate than to answer fully and satisfactorily. They would seem to be: (1) To what extent and in what ways was the countryside of Lusitania transformed under Roman rule? and (2) How were these changes engendered? In this paper I concentrate on three crucial ways in which the Lusitanian landscape was transformed under Roman rule: (a) changes in the pattern of rural settlement; (b) changes in the nature of land-use and agrarian exploitation; and (c) changes in the ways the inhabitants of Lusitania perceived and thought about the world around them. It will not be possible to treat all these topics in detail here. Rather, I hope to suggest some fruitful lines of approach, to point out some problems in addressing these questions, and to show how some techniques developed recently in rural archaeology in other parts of the Roman Empire can open up new insights into how a Roman provincial landscape was created in Lusitania.

#### A) CHANGES IN THE PATTERN OF RURAL SETTLEMENT

The increasing number of rural field surveys and thorough excavations of Iron Age and Roman rural sites, as well as the preparations of several gazetteers of

5. J. M. Blázquez, «La Iberia de Estrabón» *Hisp. Ant.* 1 (1971) 11-94, for example, places too much trust in Strabo's reliability as a source for the rural economy.

6. P. Thollard, *Barbarie et civilisation chez Strabon: étude critique des livres III et IV de la Géographie* (Paris, 1987).

7. *Omnia iam pervia, omnia nota, omnia negotiosa, solitudines famosas retro fundi amoenissimi oblitteraverunt, silvas arva domuerunt, feras pecora fugaverunt, harenae seruntur, saxa panguntur, paludes eliquantur, tantae urbes quante non casae quondam, iam nec insulae horrent nec scopuli terrent; ubique domus, ubique populus, ubique respublica, ubique vita.*

archaeological sites, have all led to major advances in our understanding of the changes in the pattern of rural settlement in Lusitania under Roman rule<sup>8</sup>. To date, changes have been investigated within narrowly defined regions of the province. This is, of course, an essential first step. But if we wish to integrate the evidence from Lusitania into the wider debate on the nature of Roman imperialism, it will be necessary to synthesise this evidence and compare changes in the pattern of settlement across several different regions of the province. This will allow us to assess the varying impact that Rome made across the entire provincial landscape. At present there are very few areas of the Roman Empire where rural archaeology has allowed anything approaching this<sup>9</sup>. But a recent analysis of changes in land-tenure and land-use in the province of Achaëa, based on a comparison of data from various field survey projects, has shown how fruitful a province-wide synthesis can be<sup>10</sup>.

To assess rural change under Roman rule, we need first to establish the patterns of settlement across the entire region when the Romans first became militarily involved in the area in 194 B. C. (Livy 35.1). This presents an immediate problem. For the later Iron Age is still one of the least well understood periods in the history of the region<sup>11</sup>. In general it appears that nucleated rural settlements dominated the landscape. Often situated at strategic points on rivers, many of these were well-fortified sites on hill-tops with powerful defensive walls, towers and ditches, and some were very impressive in size: for example, Yecla de Yeltes at 49.8 hectares, Las Merchanas at 53.4 hectares. Others were much smaller in extent and more accessible: for example, Castello Velho de Veiros, Estremoz at 4 hectares, Mesas do Castelinho, Santa Clara-a-Nova at only 3 hectares; Picon de la Mora, Cerralbo only 1.1. hectares<sup>12</sup>. Most were not just refuges in times of crisis, but permanent agrarian centres. Houses were constructed with stone foundations,

8. J. de Alarcão, *Roman Portugal* (Warminster, 1988) I, 62-72; G. Cardoso, *Carta arqueológica do concelho de Cascais* (Cascais, 1991); J. M. Fernández Corrales, *El asentamiento romano en Extremadura y su análisis espacial* (Cáceres, 1988); A. Rodríguez Díaz, *Arqueología de Tierra de Barros* (Badajoz, 1986); J. de Alarcão, R. Étienne, F. Mayet, *Les villas romaines de São Cucufate (Portugal)* (Paris, 1990); E. Cerillo Martín de Cáceres et al., «Excavaciones arqueológicas en la villa romana de Monroy (Cáceres). 1981-1985» *Extremadura Arq.* 1 (1988) 167-86; V. G. Mantas, «Implantação rural romana em torno da villa de S. Cucufate (Vitigueira)» *Arq. de Beja* ii, 3 (1986) 199-214; J. M. Arnaud et al., «Prospecção arqueológica na herdade do Gavião (Aljustrel)» *Actas das IV Jornadas Arqueológicas* (Lisbon, 1991) 83-86.

9. For example, Italy, Gaul, Britain and Greece: T. W. Potter, *The Changing Landscape of South Etruria* (London, 1979); J.-P. Vallat, «Les structures agraires de l'Italie républicaine» *Annales: ESC* 42 (1987) 181-218; A. Ferdière, *Les campagnes en Gaule romaine* (2 vols., Paris, 1988); D. Miles (ed.), *The Romano-British Countryside: studies in rural settlement and economy* (B.A.R. British Series, 103; Oxford, 1982); on Greece T. H. van Andel and C. Runnels, *Beyond the Acropolis. A rural Greek past* (Stanford, 1987).

10. S. Alcock, «Roman imperialism in the Greek landscape» *Journal of Roman Archaeology* 2 (1989) 1-34; id., *Graecia Capta: the landscapes of Roman Greece* (Cambridge, forthcoming).

11. For Portugal see A. C. Ferreira da Silva, «A idade do ferro em Portugal» in J. de Alarcão (ed.), *Portugal das Origens à Romanização (=Nova História de Portugal, I; ed. J. Serrano and A. H. de Oliveira Marques)* (Lisbon, 1990) 259-341.

12. For Las Merchanas and Yecla see J. Maluquer de Motes, *Carta arqueológica de España: Salamanca* (Salamanca, 1956) 74 and 122 respectively; J. M. Arnaud, «O 'Castelo Velho' de Veiros (Estremoz)» in *Actas das I Jornadas Arqueológicas* (Lisbon, 1970) II, 309-28, at 312; C. J. A. Ferreira, «Escavações no provado fortificado das Mesas do Castelinho (Almodôvar)» *Vipasca: Arqueologia e História* 1 (1992) 19-37, at 19; R. Martín Valls, «El castro del Picon de la Mora (Salamanca)», *BSAA*, 37 (1971) 125-144, at 130.

and at some sites were integrated into something approaching an organised, proto-urban layout. Animal enclosures and extramural burial grounds were often located in close proximity to the main settlement<sup>13</sup>. The agricultural implements<sup>14</sup>, mill-stones for the grinding of cereals into flour<sup>15</sup>, and carbonised seeds of cereals and other foodstuffs<sup>16</sup> found at many of these sites confirm that they acted as permanent centres for the agricultural exploitation of the surrounding countryside. The archaeological evidence thus provides an eloquent rebuttal to the picture so often presented in the Greco-Roman literary sources that pastoralism prevailed and that agriculture was rarely practised because of the endemic brigandage of the region (App. *Iber.* 56-60; Varro *RR* 1.16.2; Strabo 3.3.5).

But what is badly needed is a synthesis of all the available archaeological evidence for these late Iron Age settlements across the entire later province. This would allow us to see vividly how different areas were at very different stages of cultural development; it would allow us to see whether there was a hierarchy of settlements. If hierarchies could be discerned, this would allow us to treat the fundamental question of the indigenous political organisation of territory<sup>17</sup>. It would also be useful to know whether these nucleated sites stood alone as settlements, or whether they were surrounded by isolated farming sites. Vitruvius mentions huts with oak or thatched roofs that could still be seen in his day in Lusitania and Aquitania (*De Archit.* 2.1.4). Although he might here refer to houses within nucleated settlement, we cannot exclude the possibility that he means isolated rural farmsteads. Field survey in southern Britain, for example, has revealed a series of isolated farms around the hill-fort at Danebury in Hampshire, which clearly facilitated the agricultural exploitation of the countryside<sup>18</sup>. Was this also

13. For example, at Villavieja, Castillejo de la Orden, Alcántara: R. López Melero et al., «El bonce de Alcántara. Una *deditio* del 104 a.C.» *Gerión* 2 (1984) 265-323, esp. 288-95; Fuenteguinaldo, Ciudad Rodrigo: Maluquer, op. cit. (n. 12) 63-64; Sandanuela, Bermellar, Vitigudino: ibid. 52; at Castillazo, Belvis de la Jara: F. Jiménez de Gregorio, *AEA* 25 (1952) 151-53; and at Las Cogotas: J. Cabré Aguilo, *Excavaciones en Las Cogotas, Cardeñosa (Avila). II. La necrópolis (=MemJSEA 120; Madrid, 1932)*; W. S. Kurtz, *La necrópolis de Las Cogotas* (B. A. R. International Series, 344; Oxford, 1987).

14. For example, those found at «El Jardinero», Valencia de Alcántara: P. Bueno et al., *Entremadura Arq.* 1 (1988) 89-102, at 95 & figs. 7-8; Las Villasviejas del Tamuja, Botija: F. Hernández Hernández et al., *Zephyrus* 39-40 (1986-87) 419-25; Sansuena, Arroyo de la Luz: V. Soria Sánchez, *XV Congreso Nacional de Arqueología, Lugo 1977* (Zaragoza, 1979) 905; and Pedrão, Setúbal: J. Soares & C., *Actas das II Jornadas Arq.* (Lisbon, 1973) I, 245-305, at 263 & Pl. V.

15. For example, those found at Chões de Alpompé, Santarém: G. Zbyszewski et al., *AP* iii, 2 (1968) 49-60; Rosmaninhal, Mação: M. A. H. Pereira, *Monumentos históricos do concelho de Mação* (Mação, 1970) 259; Castro de São Miguel, Amêndoa, Mação: ibid. 245-46; Castro de Carcodá, Carvalhais, S. Pedro do Sul: A. & A. Correia, *Actas das III Jornadas Arq.* (Lisbon, 1978) I, 125-144; Los Villares de Parapuños, Monroy: M. Murillo Mariscal, *XIII Congreso Nacional de Arqueología, Huelva 1973* (Zaragoza, 1975) 477; Cerro de Castillejo, Casar de Cáceres: ibid. 473.

16. For example, those found at Las Cogotas: J. Cabré Aguilo, *Excavaciones de las Cogotas, Cardeñosa (Avila). I. El Castro (MemJSEA, 110; Madrid, 1930) 98-99 & Pls. II & IX*; Castelo Velho, Veiros, Estremoz; Arnaud, art. cit. (n. 12) 321; and at the late Bronze Age hill-fort at Senhora da Guia, Baiões, São Pedro do Sul: A. R. Pinto da Silva, «Carbonized grains and plant imprints in ceramics from the castrum at Baiões (Beira Alta, Portugal)» *Folia Quaternaria* 47 (1976) 3-9; C. Tavares da Silva, *Actas do Seminário de Arqueologia do noroeste peninsular* (Guimarães, 1980) II, 171-181, at 176.

17. For the suggestion that the site at Castillejo de la Orden, Alcántara controlled seven smaller sites in its vicinity see López Melero et al., art. cit. (n. 13) 308-9. For discussion of hierarchies in southern Britain see B. Cunliffe, *Danebury: an Iron Age hillfort in Hampshire II* (London, 1984) 550-52.

18. Cunliffe, op. cit. (n. 17) 552-54.

the case in Lusitania? Some intensive field surveys around important Lusitania hill-forts would help to resolve this issue. It would be possible, rather than just to study such settlements in isolation, to look at them in the overall context of their rural territories. How did these centres organise and control the exploitation of their territories? This in turn would allow a much clearer picture to be gained of land tenure and indigenous social organisation in the later Iron Age<sup>19</sup>.

As Roman contact with, and control over, Lusitania became more intense, important changes in the pattern of rural settlement started to occur. These changes took place gradually, and with varying intensity and at a varying pace across the various regions of the later province. A major, and far-reaching, agent of change was the appearance and development of cities<sup>20</sup>. Some Iron Age settlements had already developed urban characteristics by the late second/early first century B.C. especially in the southern and coastal part of the province (e.g. Conistorgis, Ossonoba, Myrtilis, Salacia, Olisipo). The Romans stimulated this process when Lusitania was organised as a province under Augustus. In many parts of the province indigenous nucleated sites were promoted to be the centres of the new *civitates* into which the province was divided (e.g. Coninbriga, Aeminium, Sellium, Mirobriga (modern Ciudad Rodrigo), Caparra). In a few cases (e.g. Emerita, Pax Iulia, and modern Idanha-a-Velha, the capital of the Igaeditani) completely new urban centres were created to serve this function<sup>21</sup>. The creation of these cities clearly affected rural settlement, as some inhabitants chose, or were forced by the Romans, to take up residence in these towns. As a result, many Iron Age rural nucleated settlements were gradually abandoned. But I would stress the gradual nature of this change. A fair number of hillforts were abandoned in the later first century B.C.<sup>22</sup>. The more peaceful conditions under Roman rule also allowed settlement in lower lying areas, closer to prime agricultural land, as occurred in the mid-Tagus valley near the south-eastern frontier of Lusitania at Puebla de Montalbán and Albarreal de Tajo, Toledo<sup>23</sup>. Many hill-forts, however, still continued to be occupied and were only abandoned in the mid to late first century A.D.<sup>24</sup>. In some parts of the province (e.g. around Salamanca)

19. For an interesting attempt to do this for a neighbouring region see M. Xusto Rodríguez, «La concepción territorial en la cultura castreña de Galicia» *Revista de Arqueología* 137 (1992) 28-37.

20. Alarcão, *op. cit.* (n. 8) I, 14-48; J. G. Gorges (ed.), *Les villes de Lusitanie romaine: hiérarchies et territoires* (Paris, 1990).

21. J. C. Edmondson, «Romanization and urban development in Lusitania» in T.F.C. Blagg and M. Millett (ed.), *The Early Roman Empire in the West* (Oxford, 1990) 151-78, esp. 160-67.

22. For example, Baldio, Arronches: T. J. Gamito, *Informação arq.* 5 (1985) 91-92; Cabeça de Vaiamonte, Monforte: J. M. Arnauld & T.J. Gamito, *AP* iii, 7-9 (1974-77) 194; Mesas do Castelinho, Santa Clara-a-Nova, Almodôvar: Ferreira, *art. cit.* (n. 12); C. Fabião & A. Guerra, *Actas das IV Jornadas Arq.* (Lisbon, 1991) 305-19; Castro de S. Miguel, Amêndoa, Mação: Pereira, *op. cit.* (n. 15) 237-56; Monsanto, nr. Idanha-a-Velha: D.F. de Almeida, *Egitânia: historia e arqueologia* (Lisbon, 1956) 19; Picon de la Mora, Cerralbo: Martín Valls, *art. cit.* (n. 12); El Raso de la Candeleda, Candeleda: F. Fernández Gómez, *Excavaciones arqueológicas en El Raso de Candeleda* (Avila, 1986); Las Villasviejas del Tamuja, Botija: F. Hernández Hernández, *Excavaciones en el Castro de Villasviejas del Tamuja (Botija, Cáceres)* (Mérida, 1989) 133-36.

23. M. Fernández Miranda et al., «Alio itinere ab Emerita Caesaraugusta: la vía romana entre Talavera de la Reina y Toledo y la implantación humana en el valle medio del río Tajo» in *La red viaria en la Hispania romana (simposio, Tarazona 1987)* (Zaragoza, 1990) 155-63, at 161.

24. For example, Serra da Segovia, Campo Maior: T.J. Gamito & J. M. Arnaud, *Informação arq.* 4 (1981) 69-71; T.J. Gamito, *AP* iv, 5 (1987) 149-60; Pedra da Atalaia, Santiago do Cacém: C. Tavares da Silva, *Setúbal Arq.* 4 (1978) 117-32; and two sites just to the south of the Lusitanian border: Ermita

the artificially created towns do not seem to have flourished at least at first<sup>25</sup>. As a result, many of the Iron Age nuclei remained as important rural settlements and centres of agrarian exploitation throughout the Roman period<sup>26</sup>. But what is needed is a major synthesis of these Iron Age nucleated sites, and their subsequent fate under Roman rule, so that a more precise impression can be gained of the complex processes of rural change.

At the same time in several, but not all, regions of the province there was a marked increase in dispersed rural settlement (even allowing for the possibility that there was more dispersed settlement in the Iron Age than is now apparent in the archaeological record). At present the best evidence for this is the appearance of rural villas in some parts of the province. The main lines of their chronological development and regional spread are now relatively well understood, and do not need to be repeated here<sup>27</sup>. However, villas were not the only type of rural settlement under Roman rule. Two further two categories of rural site played an important rôle, and would merit much greater attention than they have so far received: first, isolated farmsteads that were much smaller in scale and wealth than the villas; and secondly, villages<sup>28</sup>.

Field survey in many other parts of the Roman world has shown the importance of smaller farmsteads in the exploitation of territory<sup>29</sup>. Not surprisingly the intensive field survey around the villa of São Cucufate, Vidigueira, revealed a

de Belén, Zafra: A. Rodríguez DÍa, *XIX Congreso Nacional de Arqueología, Castellón de la Plana 1987* (Zaragoza, 1989) 619-28; and Hornachuelos, Ribera del Fresno: A. Rodríguez DÍaz, *Extremadura Arq.* 2 (1991) 283-300.

25. M. Salinas de Frías, «Las ciudades romanas de Lusitania oriental: su papel en la transformación del territorio y la sociedad indígena» in Gorges (ed.), *op. cit.* (n. 20) 255-63, at 262.

26. For example, the following hill-forts in the modern province of Salamanca: Ermita de la Virgen del Castillo, Pereña: Maluquer, *op. cit.* (n. 12) 93; Villarino de los Aires, Ledesma: *ibid.* 120; Saldeana, Vitigudino: *ibid.* 103-4; Castro de Sandanuela, Bermellar, Vitigudino: *ibid.* 52; Yecla de Yeltes: *ibid.* 121-28; Las Merchanas, Lumbrales: *ibid.* 74-87; Castro de los Huelmos, Carrascal del Obispo: *ibid.* 56; Alba de Tormes: *ibid.* 45-46; Castro de Lerilla, Zamarra, Ciudad Rodrigo; *ibid.* 29, 129; Iruena, Ciudad Rodrigo: *ibid.* 29; Fuenteguinaldo, Ciudad Rodrigo: *ibid.* 63-64; Cabeza del Castillo, Lagunilla, Béjar: *ibid.* 69; El Cortinal de S. Juan, Salvatierra de Tormes: E. Cerrillo, *NAH Arq.* 5 (1977) 313-18. From other parts of the province Nossa Senhora da Cola, Ourique: A. Viana, *Ar. de Beja* 17 (1960) 138-67; Parreitas, Barrio, Alcobaca: Pç Barbosa, *Informação arq.* 3 (1980) 11-12; Castro do Banho, S. Pedro do Sul: C. Moreira de Figueiredo, *I Congreso Nacional de Arqueología, Lisboa 1958* (Lisbon, 1959) I, 369-70; Castro de Carcoda, Carvalhais, S. Pedro do Sul: C. Tavares da Silva & A. Correia, *Beira Alta* 36 (1977) 281-306 & 589-610; Rompecilha, S. Martinho das Moitas, S. Pedro do Sul: A. Augusto Tavares, *XI Congreso Nacional de Arqueología, Mérida 1968* (Zaragoza, 1970) 666-67; Cristelo da Branca, Branca, Albergaria-a-Velha: A. Souto, *Trab. de Antrop. e Etnol.* 9.4 (1942) 320-28; *Informação arq.* 5 (1985) 37; Monte Redondo/Monte de S. María, Fiães, Vila de Feira: C.A.F. de Almeida & E. dos Santos, *Revista da Faculdade de Letras, série de História* [Oporto] 2 (1971) 147-68; *id.*, 3 (1972) 191-205, 207-214.

27. J. G. Gorges, *Les villas hispano-romaines: inventaire et problématique archéologiques* (Paris, 1979) 31-32, 40, 55, 65-66, 76-79, 98-100; *id.*, «Villas romaines en Lusitanie» *Bulletin des études portugaises et brésiliennes* 46-57 (1986-87) 149-70; *id.*, «Villes et villas de Lusitanie: interactions —échanges— autonomies» in Gorges (ed.), *op. cit.* (n. 20) 91-113; Fernández Corrales, *op. cit.* (n. 8).

28. A point also made, but not pursued, by M. Villanueva Acuña, «Problemas de la implantación agraria romana y la organización del territorio en la península ibérica en el Alto Imperio» *Espacio, Tiempo y Forma ii. Historia antigua* 4 (1991) 319-49, at 319, 325.

29. For example, in south Etruria: Potter, *op. cit.* (n. 9); in the territory of Caesarea in Mauretania: P. Leveau, *Caesarea de Maurétanie: une ville romaine et ses campagnes* (Paris/Rome, 1984) 410-14, 481-83; and see almost all the studies in G. Barker & J. Lloyd (ed.), *Roman Landscapes: Archaeological Survey in the Mediterranean Region* (London, 1991).

relatively high density of such farmsteads that were not monumental enough to be classified as villas. Of the sites discovered only 5 could be classed as villas, 42 were small farms, with 11 somewhere in between<sup>30</sup>. It is only by further intensive field surveys that these smaller rural sites stand a chance of being discovered. But they are important because they, just as much as villas, represent a fundamental shift in settlement under Roman rule. Nucleated rural villages (often called *vici*, a term all too often used imprecisely) also played an important rôle in the rural settlement patterns of other Roman western provinces<sup>31</sup>. In areas where villas and isolated farms were not found, they functioned as major centres of residence and rural production. In areas where villas did exist, they often provided villas with a supply of seasonal labourers, market facilities and services not available at the villas themselves. It is clear, therefore, that more attention needs to be paid to them in studies of the Lusitanian countryside<sup>32</sup>. Quite a few Iron Age nucleated sites remained in occupation under Roman rule, as we have seen. Some became *civitas* capitals, but the large majority functioned as rural villages. Just how these related to neighbouring villas, isolated farmsteads and the nearest towns needs to be worked out in detail.

However, there is a danger in just studying settlement patterns in isolation as evidence for rural change. For it does not necessarily follow that just because there was no Roman site in a given area, the area was not being exploited in the Roman period. Villa-owners, for example, might have owned several estates, on only one of which they built a permanent villa. Thus land that was being exploited by a Romanized landowner would not be visible in the archaeological record<sup>33</sup>. This problem has led some archaeologists conducting field surveys on the Berkshire Downs in Britain and in the territory of Tarraco in Spain to distinguish carefully between rural settlement sites and areas of arable and/or pastoral exploitation; the two types of site are marked by distinct combinations of surface finds<sup>34</sup>. Furthermore, major changes could take place in farming regimes and in the pattern and organisation of land-use without the development of villas<sup>35</sup>. This clearly occurred, for example, in Roman Britain in the area of southern Yorkshire and Nottinghamshire, where careful study of aerial photographs has revealed new field boundaries, new animal enclosures and new animal tracks, all representing a major change in how the rural landscape was exploited<sup>36</sup>. Although

30. Mantas, *art. cit.* (n. 8) 202; cf. Alarcão, Étienne & Mayet, *op. cit.* (n. 8) 151-60: 9 sites covering more than 2.000 m<sup>2</sup>, 9 sites between 500 and 2.000 m<sup>2</sup>, 43 sites less than 500 m<sup>2</sup> Fernández Corrales, *op. cit.* (n. 8) briefly mentions, and maps, many rural sites other than villas in his study of Roman settlement patterns in Extremadura; it is a pity that he chose not to publish an inventory of these sites.

31. E. M. Wightman, *Gallia Belgica* (London, 1985) 92-97, 115-19; B. C. Burnham and J. S. Wachter, *The «Small Towns» of Roman Britain* (London, 1990); *Le vicus gallo-romain* (*Colloque, Paris, 1975*) [= *Caesarodunum* 11 (1976)]; Leveau, *op. cit.* (n. 29) 412-14, 481-83.

32. A starting point for the Portuguese part of the province would be the numerous possible locations of such sites suggested recently by Alarcão, *op. cit.* (n. 8) I, 43-45 and *Gazetteer* (*passim*).

33. J. P. Vallat, «De la prospection à la synthèse d'histoire rurale: documents de la recherche et problèmes d'interprétation» in J. M. Pailler (ed.), *Actualité de l'Antiquité* (*Actes du colloque, Toulouse, 1985*) (Paris, 1989) 101-27, esp. 118.

34. M. Millett, «Roman towns and their territories: an archaeological perspective» in J. Rich & A. Wallace-Hadrill (ed.), *City and Country in the Ancient World* (London & New York, 1991) 168-89, esp. 176.

35. K. Branigan, «From Celtic farm to Roman villa» in Miles (ed.), *op. cit.* (n. 9) 81-96, esp. 95.

36. D. Riley, *Early Landscape from the Air: studies of crop marks in southern Yorkshire and northern Nottinghamshire* (Huddersfield, 1980).

some analysis of aerial photographs has recently begun in Lusitania, this is another area where more work is needed to get a more precise picture of changes in the rural landscape<sup>37</sup>.

## B) CHANGES IN THE NATURE OF LAND-USE AND AGRARIAN EXPLOITATION

Settlement patterns, however, are only one aspect of rural change. There are other questions that would repay further study. Did Roman rule bring significant improvements in the exploitation of the countryside? Were new crops and new agrarian technologies introduced?<sup>38</sup> It has been argued that once a region was incorporated into the Roman Empire, it needed to increase its agricultural production to produce a marketable surplus, that would in turn help pay its taxes to Rome<sup>39</sup>. Can evidence from the Lusitanian countryside be adduced to test this model?

One of the most fundamental issues is to determine whether more land was brought under cultivation during the Roman period. At the moment only a crude and impressionistic response can be made to this crucial question. Field surveys and gazetteers of archaeological sites in differing parts of the province invariably show that there were many more rural sites in the Roman period than in the later Iron Age<sup>40</sup>. As I suggested earlier, it would be unwise to push this too far, since land could be exploited by peasants who did not actually reside in the countryside. But in general it is likely that the denser the occupation of the rural landscape, the more intensive its exploitation<sup>41</sup>. Further more intensive field surveys in a variety of regions across the entire province would certainly help to answer this question more authoritatively, as they are now doing in various other provinces of the Roman Empire<sup>42</sup>.

If more land was brought under arable cultivation in the Roman period, an important corollary of this would have been significant deforestation<sup>43</sup>. This in turn would have led to major changes not only in the appearance of the Lusitanian landscape, but more importantly in the entire ecological balance of the region as well. Another potential cause of deforestation was the widespread use

37. For the potential of such an approach see M. Guy & M. Passelac, «Prospection aérienne et télédétection des structures de parcelles» in J. Guilaine (ed.), *Pour une archéologie agraire à la croisée des sciences de l'homme et de la nature* (Paris, 1991) 103-29; D.N. Riley, *Aerial Archaeology in Britain* (Aylesbury, 1982).

38. For these issues in Gaul see Ferdière, *op. cit.* (n. 9); id., «Gaulois et Gallo-romains: techniques et outillages agricoles» in Guilaine (ed.), *op. cit.* (n. 37) 81-101; for Britain see Miles (ed.), *op. cit.* (n. 9); M. Jones and G. Dimbleby (ed.), *The Environment of Man: the Iron Age to the Anglo-Saxon Period* (B.A.R. British Series, 87; Oxford, 1981).

39. K. Hopkins, «Taxes and trade in the Roman Empire» *JRS* 70 (1980) 101-25.

40. Rodríguez Díaz, *op. cit.* (n. 8); Cardoso, *op. cit.* (n. 8); Mantas, *art. cit.* (n. 8).

41. R. Osborne, *Classical Landscape with Figures: the ancient Greek city and its countryside* (London, 1987) 69-70.

42. For surveys of such projects see Barker & Lloyd (ed.), *op. cit.* (n. 29); D. R. Keller and D. W. Rupp, (ed.), *Archaeological Survey in the Mediterranean Area* (B.A.R. International Series, 155; Oxford, 1983).

43. For this in Pannonia see Aurel. Victor, *Epit. de Caes.* 40.9. On deforestation in the Roman Empire see R. Meiggs, *Trees and Timber in the Ancient Mediterranean World* (Oxford, 1982) 371-403; J. D. Hughes, «How the ancients viewed deforestation» *Journal of Field Archaeology* 10 (1983) 437-445.

of timber for charcoal for fuel. This occurred in Lusitania most of all in connexion with mining activity, which increased significantly in scale under Roman rule<sup>44</sup>. For definitive proof of changes in the vegetation cover we must turn once again to archaeology. For the scientific analysis of pollen remains and of carbonised wood can reveal much about the nature of the local environment. It can determine whether a given area was wooded or covered just with scrub. Pollen analysis at the Iron Age hill-fort at Hornachuelos, Ribera del Fresno, Badajoz has shown that the hill-fort was surrounded by open country, covered with just a few trees, but mainly with asteraceous scrub. Such a landscape, it has been plausibly suggested was more suited to the grazing of animals than to the cultivation of cereals<sup>45</sup>. If pollen is collected from different datable contexts, it can be shown whether woodland was cleared to create arable land<sup>46</sup>. Further analysis of pollen and carbonised wood samples collected from contrasting regions of the province would allow a much more nuanced picture to be reconstructed of the Lusitanian landscape before, during and after Roman rule.

Another series of questions concerns changes in the precise nature of agrarian activity under Roman rule. Did integration into the Roman Empire encourage different strategies of agrarian exploitation than those that had prevailed during the later Iron Age? Were new crops introduced? Were farming techniques improved? Were there changes in the pastoral economy? These are all questions that have rarely been posed in studies of the Lusitanian countryside<sup>47</sup>. As for new crops, we need to take account of seeds found on Roman sites and compare them with those found on Iron Age sites. Studies of various seed assemblages from sites in Iron Age and Roman Britain has revealed that the introduction of major new crops took place not under the Romans, but in the period 1000-500 B.C.<sup>48</sup>. Not much analysis of seeds has yet been published from sites in Lusitania, but the works that has been done shows how fruitful this data can be. Thus, for example, seeds from the late Bronze Age hill-fort of Castro da Senhora da Guia, Baiões, S. Pedro do Sul show that a full range of staple crops was already known in one of the most inaccessible regions of the later Roman province well before the arrival of the Romans: club wheat (*Triticum compactum*), barley (*Hordeum vulgare*), millet (*Panicum miliaceum*), Celtic bean (*Vicia faba*) and pea (*Pisum sativum*)<sup>49</sup>. A similar assemblage, but with the addition of emmer wheat (*Triticum dicoccum*), has been discovered in Iron Age levels at Mirobriga (Santiago do

44. For some orders of magnitude see J. C. Edmondson, *Two Industries in Roman Lusitania: Mining and Garum Production* (B.A.R. International Series, 362; Oxford, 1987) 77-81.

45. A. Rodríguez Díaz, "Proyecto Hornachuelos": 1986-1990 (Ribera del Fresno, Badajoz). *Extremadura Arq.* 2 (1991) 283-300, esp. 285.

46. J. L. Vernet «L'histoire du milieu méditerranéen humanisé révélée par les charbons de bois» in Guilaine (ed.), *op. cit.* (n. 37) 369-408, esp. 402-4, showing how much Grau Almero's analysis of pollen and carbonised wood at the site of Banyes del Almirall, Valencia has revealed about changes in the rural landscape. See also G. Jalut «Le pollen, traducteur du paysage agricole» in Guilaine (ed.), *op. cit.* (n. 37) 345-68; G. Chouquer & F. Favory, *Les paysages de l'antiquité: terres et cadastres de l'Occident romain (IVe s. avant J. C./IIIe s. après J. C.)* (Paris, 1991) 25-46.

47. For one part of the province see J. de Alarcão, «Sobre a economia rural do Alentejo na época romana», *Conimbriga* 15 (1976) 5-44.

48. M. Jones, «The development of crop husbandry» in Jones & Dimbleby (ed.), *op. cit.* (n. 38) 95-127; id., «Crop production in Roman Britain» in Miles (ed.), *op. cit.* (n. 9) 97-107.

49. See n. 16.

Cacém)<sup>50</sup>. These crops represent the species most commonly cultivated in Roman rural contexts. And so they prove an important negative: namely that the Romans were not responsible for introducing these important cereals and legumes to the region<sup>51</sup>.

An assemblage of seeds found in a Roman well at the *civitas* capital of the Igaeditani (modern Idanha-a-Velha) might give a hint of one important Roman innovation. For in the well were found the following types of seed: grape (*Vitis vinifera*), olive (*Olea europaea*), pine (*Pinus pinaster* and *Pinus pinea*), walnut (*Junglans regia*), plum (*Prunus domestica*), peach (*Prunus persica*), cherry (*Prunus fr. avium*) and pomegranate (*Punica granatum*)<sup>52</sup>. I would single out the variety of fruit-trees cultivated. Many of these may have been introduced by the Romans<sup>53</sup>. Again at the moment the evidence from Lusitania is scanty, but further work in this area will significantly increase our understanding of crop husbandry in the later Iron Age and Roman periods, and allow us to make some more definite conclusions on the extent to which the Romans transformed the rural economy.

Another crucial area where the Romans may have brought improvements was in the area of agrarian technology. Were agricultural implements such as hoes, scythes, pruning-hooks and ploughshares more effectively made under Roman rule, compared to those used in previous periods? In Britain and Gaul, for example, some ploughshares were capped with iron tips in the later Iron Age, which made them more effective<sup>54</sup>. If this also occurred in Lusitania, it would have allowed the ploughing of the heavier, alluvial soils of river valleys rather than just the thinner soils of inland plains and hillside terraces. Agricultural implements from Lusitanian sites of the Iron Age and Roman periods have rarely been studied, but a synthesis of what is known would be enlightening<sup>55</sup>.

Similarly the technology of rotary millstones would be an important topic to pursue. When was the rotary quern introduced in Lusitania? There are certainly many examples known of small hand-turned rotary querns from Iron Age hill-forts<sup>56</sup>. But were more mechanical mills, that could be powered by two or more

50. K. Warner Slane et al., «Mirobriga: a Portuguese-American project in southern Portugal» *Muse* 18 (1984) 35-54, esp. 51-54.

51. One should always be careful to establish that the seeds result from cultivation at the site rather than from importation: note the salutary comments of Jones in Jones & Dimbleby (ed.), *op. cit.* (n. 38) 97 on the fig seeds found at Colchester and the fig and grape seeds at York.

52. D. F. de Almeida & O. da Veiga Ferreira, «Um poço lusitano-romano encontrado em Idanha-a-Velha» *AP* iii, 1 (1967) 57-63, esp. 59-60.

53. For this as a general feature of Roman agriculture see M. P. Ruas & P. Marinval, «Alimentation végétale et agriculture d'après les semences archéologiques (de 9.000 av. J. C. au XVe siècle)» in Guilaine (ed.), *op. cit.* (n. 37) 409-39.

54. Jones in Jones & Dimbleby (ed.), *op. cit.* (n. 38) 111-12; Ferdière, *art. cit.* (n. 38) 82-84.

55. Alarcão, *op. cit.* (n. 8) I, 72 is overly pessimistic here. For some agricultural implements from Iron Age hill-forts at Villasviejas del Tamuja and Sierra de Martela, Segura de León, Badajoz see F. Hernández Hernández et al., «Hallazgo "in situ" de unos útiles de trabajo» *Zephyrus* 39-40 (1986-87) 419-25; J. J. Enríquez Navascués & A. Rodríguez Díaz, «Campaña de urgencia en la Sierra de la Martela (Segura de León, Badajoz)» *Extremadura Arq.* 1 (1988) 113-28, esp. 121 & figs. 7 & 10. For some from the Roman villas at Monroy, Cáceres and S. Cucufate, Vidigueira see Cerrillo, *art. cit.* (n. 8) 183; Alarcão, Étienne & Mayet, *op. cit.* (n. 8) 237-40 & Pl. XCV-XCVIII. S. Rees, *Agricultural Implements in Prehistoric and Roman Britain* (B.A.R. British Series, 69; Oxford, 1979) is a model study of how revealing this sort of data can be.

56. See n. 15.

people or donkeys, introduced under the Romans? Finally, one area of agrarian technology in which the Romans do seem to have brought considerable improvement was in systems of rural irrigation. To date, such irrigation systems have been found in the territories especially of the Roman colonies of Augusta Emerita and Pax Iulia, and also in the Algarve<sup>57</sup>. Their concentration in the territories of two Roman colonies might in itself suggest that this was a major Roman innovation.

As for the pastoral economy, the evidence of animal bones from Iron Age and Roman sites suggests that the Romans introduced no new domestic animals<sup>58</sup>. But bone evidence from other parts of the Roman world has been used to reveal more than just which species were exploited in a given region at a given period<sup>59</sup>. The age and gender of the animals found, for example, can help to determine whether the animals were kept for meat, or for wool, milk or traction. One particular issue of the Lusitanian pastoral economy that needs further study is the extent to which long-distance transhumance was practised in both the later Iron Age and the Roman period. Some have argued that the granite sculptures of animals (mainly wild-boar and bulls) found especially in the territory of the Vettones marked Iron Age transhumance routes<sup>60</sup>. This is very difficult to confirm or disprove, but it is *a priori* unlikely that regular long-distance transhumance was possible in an area beset with political fragmentation and instability, if not brigandage. Under the Roman peace transhumance was certainly much more feasible. The fact that several regulations in the Visigothic Law Code of the sixth and seventh centuries A.D. (e.g. 8.3.9; 8.4.26; 8.4.27; 8.5.5) addressed the problems that mobile flocks and herds perennially posed suggests that transhumance was a feature of the rural economy in the period immediately following Roman rule<sup>61</sup>. And certainly the western part of the Iberian peninsula was famous for its transhumance in the later medieval and early modern periods<sup>62</sup>. It is thus likely that under the relatively peaceful conditions of the Roman Empire transhumance was

57. J. M. Alvarez Martínez, «El embalse romano de Araya, en Mérida», *XI Congreso Nacional de Arqueología, Mérida 1968* (Zaragoza, 1970) 729-732; A. Viana, «Hidráulica agrícola na época romana» *Ar. de Beja* 4 (1947) 18-23; A. de Carvalho Quintela et al. *Aproveitamentos hidraulicos romanos a sul do Tejo* (Lisbon, 1986); id., «Barragens romanas do distrito de Beja: contribuição para a sua inventariação e caracterização», *Arq. de Beja* ii, 3 (1986) 153-65.

58. For some samples from Iron Age sites see P. M. Castaño, «Animales domésticos y salvajes en Extremadura. Origen y evolución» *REE* 47 (1991) 9-66; A. M. Martín Bravo, «Aproximación a la economía de los castros del norte de Extremadura» in *Alimenta: estudios en homenaje al Dr. Michel Ponsich (Gerión, Anejos 3)* (Madrid, 1991) 169-80, esp. 176 (on Castillejo de la Orden, Alcántara); B. Pretel et al., in Hernández Hernández, *op. cit.* (n. 22) 144-53 (on Villasviejas del Tamuja, Botija).

59. For discussion of the methodological problems that any bone assemblage presents see H. P. Uerpmann, «Animal bone finds and economic archaeology: a critical study of «osteo-archaeological-method»» *World Archaeology* 4.3 (1973) 307-22; C. Chang & H. A. Koster, «Beyond bones: towards an archaeology of pastoralism» in M. B. Schiffer (ed.) *Advances in Archaeology Method and Theory* 9 (New York, 1986) 97-146; M. Maltby, «Iron Age, Romano-British and Anglo-Saxon animal husbandry: a review of the faunal evidence» in Jones & Dimbleby, *op. cit.* (n. 38) 155-203; A. Moralez Muñoz, «Arqueozoología teórica: usos y abusos reflejados en la interpretación de las asociaciones de fauna de yacimientos antropicos» *Trab. de Prehistoria* 47 (1990) 251-90.

60. V. Paredes y Guillén, *Historia de los framontanos Celtíberos* (Plasencia, 1888); cf. G. López Monteagudo, *Esculturas zoomorfas celtas de la península ibérica* (AEA Anejos 10; Madrid, 1989).

61. P. D. King, *Law and Society in the Visigothic Kingdom* (Cambridge, 1972) 200-01, 215-16.

62. J. Klein, *The Mesta: a study in Spanish economic history 1273-1836* (Cambridge (Mass.) 1920).

practised, but as yet certainty on the matter is impossible. Interdisciplinary field-survey in the mountains of central Italy has recently demonstrated that transhumance can leave its physical mark on the landscape<sup>63</sup>. A similar project in Lusitania would help to throw light on this important issue.

The foregoing discussion has shown that any conclusions on these important issues of changes in land-use and agrarian activity can only be provisional ones. But it appears (admittedly as yet on a very small amount of evidence) that the Romans did not make a major impact on the basic aspects of agrarian activity. The crucial introduction of new crops and new farming implements had already occurred in the Iron Age. Lusitania, it appears, saw much more settled agriculture in the Iron Age than the Greco-Roman literary sources would have us believe. But it may be that under the Romans there was some intensification of land use, and some changes in the organisation of the pastoral economy. Improved irrigation techniques might also have increased crop yields. But for definite proof on these matters we must await further archaeological work.

### C) REASONS FOR RURAL CHANGE

When accounting for rural change, we must be careful not to privilege any one particular explanation. For clearly many complex and inter-linked factors were involved. First, all rural change was subject to the constraints of the natural environment. Not even Roman power could make crops grow in completely unfavourable ecological conditions. Secondly, the rural change that did take place under Roman rule was in some degree a continuation of processes that had started in the region in the early Iron Age: the expansion of arable land, the introduction of new crops, and (possibly) the development of more effective agrarian technologies. The Roman presence, however, may have helped indirectly to increase the intensity and pace of these changes. The new towns of the Roman province provided new markets for the products of the rural economy. And the need to pay taxes to Rome and, in some cases, rent to absentee landlords provided a possible stimulus for increased agrarian production. Furthermore, the new political geography of the province created by the Romans (i.e., the reorganisation of territory, the creation of a new road-network with new nodal points) in many cases persuaded the inhabitants of the province to abandon traditional settlements that had become suddenly isolated in the new organisation of space<sup>64</sup>. But in many cases the local inhabitants made the decision to change for themselves. They were merely reacting to the transformed world that a Roman province represented.

However, it would be wrong to underestimate the political power of Rome to effect rural change. During the period of conquest many Lusitanians lost their lives, their liberty or at least their land as a result of resisting Rome. The Roman army certainly always had the potential to enforce its will, for example, by resettling the local inhabitants in places more secure from a Roman perspective (Stra-

63. G. Barker, «The archaeology of the Italian shepherd» *Proc. of Cambridge Philological Society* n.s. 35 (1989) 1-19; G. Barker, A. Grant et al., «Ancient and moderns pastoralism in central Italy: an interdisciplinary study in the Cicolano mountains» *PBSR* 59 (1991) 15-88.

64. For this process at work at Sabora in Baetica see *CIL* II 1433 = *ILS* 6092.

bo 3.1.6; Dio 37.52.3-4)<sup>65</sup>. The surrender pact of 104 B.C. from Alcántara vividly illustrates a Roman general's power to confiscate territory and property; here as often he chose to be merciful and left the *populus Seano...* in their existing settlement at Villavieja, El Castillejo de la Orden, Alcántara<sup>66</sup>. The Roman civil wars of the first century B.C. caused further considerable rural disruption and possibly changes in land-ownership. The establishment of five Roman colonies in the province probably involved the forcible removal of existing inhabitants from their land, although we still await archaeological confirmation of this<sup>67</sup>. Furthermore, ownership of land did not necessarily remain static throughout the Roman period, but depended at least in part on the political will of Rome<sup>68</sup>. In short, the demands of the Roman political economy could always lead to transformations of the rural landscape. A provincial landscape, therefore, was constantly evolving from the first arrival of Roman armies in the region in 194 B.C. to the final loss of Roman political control at the start of the fifth century A.D.

#### D) CHANGES IN PERCEPTION OF THE LUSITANIAN LANDSCAPE

But where the Romans did play a major rôle in creating a Roman provincial landscape was the way in which they forced the inhabitants of Lusitania to look at, and think about, the world around them in radically new ways. In short, it was in creating a new cognitive map of Lusitania that Rome arguably made its greatest, and most lasting, impact on the landscape of Lusitania<sup>69</sup>. The first stage occurred when the Romans created a broad ethnic identity for the various peoples with whom they came into contact during the conquest period. These artificially created ethnic divisions then helped to bring some sense of geographical order to a landscape where previously there had only been very localised, imperfect, fragmented knowledge. Polybius remarks (3.37.11) that in his day the Atlantic coast of Iberia beyond the Pillars of Hercules had no name. This was due, he claims, to the fact that the region had only recently been observed [sc. by Greeks

65. For the potential of the Roman army to «bring the skies tumbling down» on the people of Hispalis cf. *Bell. Hisp.* 42.7.

66. López Melero et al., *art. cit.* (n. 13) = *AE* 1984, 495; Richardson, *op. cit.* (n. 1) 199-201 = *AE* 1986, 304; D. Nörr, *ASpekte des römischen Völkerrechts: die Bronzetafel von Alcántara* (Bayerische Akademie der Wissenschaften phil.-hist. Klasse, Abhandlungen, new series, 101; Munich, 1989), esp. 23 (new textual restorations).

67. The field survey conducted in the area around the villa of S. Cucufate at the northern edge of the territory of the Roman colony of Pax Iulia suggests that the Roman settlers were established on virgin land: Alarcão, Étienne & Mayet, *op. cit.*, (n. 8), 179-80. But, as they stress, this is just one part of the colony's territory.

68. For this at Emerita see A. M. Canto, «Colonia Iulia Augusta Emerita: consideraciones acerca de su fundación y territorio» *Gerión* 7 (1989) 149-205.

69. For stimulating remarks on the cognitive mapping of space see R. M. Downs & D. Stea, *Maps in Minds: reflections on cognitive mapping* (New York, 1977); id. «Cognitive maps and spatial behavior: process and products» in R. M. Downs & D. Stea (ed.), *Image and Environment: cognitive mapping and spatial behavior* (Chicago, 1973), 8-26; B. Goodey, *Images of Place: essays on environmental perceptions, communication and education* (Birmingham, 1974), esp. ch. ii; R. D. Sack, *Conceptions of Space in Social Thought: a geographic perspective* (London, 1980), esp. ch. vii. For some aspects of this in a Roman provincial context see N. Purcell, «The creation of provincial landscape: the Roman impact on Cisalpine Gaul» in Blagg and Millett (ed.), *op. cit.* (n. 21) 6-29.

and/or Romans] and was occupied by a very high number of (unnamed) «barbarian tribes». Strabo similarly comments that on the multiplicity of small, highly fragmented ethnic groups who controlled the far west of the peninsula. He admits that he, like all other Greek intellectuals (and, I would add, Roman generals), was ignorant of all but the better known regions (3.4.19). Elsewhere, he shrinks from listing all the peoples between the Tagus and the north coast of Spain because their names were «barbarous and unpleasant on the ear» (3.3.7). In short, Roman generals and Greek intellectuals only remembered those ethnic names that they wished to remember. They preferred to create for the sake of convenience a broad ethnic geography of the region, caring little about the complex social and ethnic divisions among their opponents<sup>70</sup>. Thus the «Lusitanians», «Vettones», «Celtici», «Vaccaei» and so on were in large part a Greco-Roman geographical construct. These divisions, however, became the framework for the first conscious mapping of the region. In time the indigenous peoples of the region came to accept the ethnic identity imposed upon them by the Romans, and began to see their world in the terms dictated to them by Roman generals and Greek intellectuals. The fact that these peoples often had to unite to resist Rome furthered the acceptance of these new terms of reference<sup>71</sup>.

Secondly, once an ethnic group had been defeated by, or surrendered to, Rome, they were compelled to define for their conquerors the limits of their rural territory. They were forced —perhaps for the first time— to envisage in very precise terms their micro-world. This comes out vividly in the surrender document from Alcántara<sup>72</sup>. The *populus Seano...* on surrender had to hand over their territory (*agri*) and property to Rome, only to receive it back thanks to the mercy of the Roman general, L. Caesius. This represented an important stage in the cognitive mapping of a small segment of the Lusitanian landscape, a process repeated innumerable times as other small entities submitted to Roman power.

When Lusitania was organised as a separate province under Augustus, the entire province was divided into *civitates*. This extended, and formalised, the cognitive mapping of the landscape. In some areas the territories of cities had already been defined in the second and first centuries B.C. and so little further work was required. But where new *civitates* had to be created, territories had to be defined, surveyed and formally marked out<sup>73</sup>. Boundary markers (*termini Augustales*) were set up at the limits of the new territories. These physically marked on the landscape itself the new Roman mapping of the Lusitanian world<sup>74</sup>.

70. Columbus similarly distorted the ethnic map of the native American world: T. Todorov, *La Conquête de l'Amérique: la question de l'autre* (Paris, 1982).

71. For the similar creation of ethnic identities in north America see E. R. Wolf, *Europe and the People without History* (Berkeley, 1982), esp. 170-72.

72. See n. 66.

73. Roman land-surveyors surveyed the territory of the *civitas* of Salmantica as one whole territorial unit, without dividing it internally: see Frontinus, *De Agr. Qualit.* 4 (Lachmann) = 1-2 (Thulin); Agenn. Urbicus, *Comm. de Agrorum Qualit.* 4 (Lachmann) = 55 (Thulin).

74. For a table listing these *termini* with map see Edmondson, *art. cit.* (n. 21), 163-64, where details of the Valdecaballeros and Montemolín *termini* were inadvertently transposed. To this list should now be added a second *terminus* from Valdecaballeros: A. U. Stylow, «Apuntes sobre epigrafía de época flavia en Hispania» *Gerion* 4 (1986) 285-311, esp. 307-11 = *Hep* 1 (1989) n<sup>o</sup> 115. For the *terminus* from Valencia del Ventoso see now J. M. Álvarez Martínez, «Algunas observaciones sobre el territorium emeritense» in *Homenaje a Samuel de los Santos* (Albacete, 1988) 185-92, esp. 188 & lám. II = *HEp* 2 (1990) n<sup>o</sup> 43.

Some of these boundary markers were altars, at which cultic activity presumably took place<sup>75</sup>. The gods were called upon to sanction this new organisation of rural space. Where new colonies were established, their territories (or at least part of them) were centuriated, to facilitate the assignation of plots of land to the new settlers<sup>76</sup>. These centuriation grids gave a dramatic, and very visible, new sense of order, distinctly Roman order, to the rural landscape. Furthermore, each colony, and possibly every provincial community, received its own copy of a map (*forma*) of its rural territory. This was kept in the city's archives; another copy was sometimes inscribed on bronze and displayed in public in the civic centre<sup>77</sup>. The immediate world around had now been given easily comprehended, visual shape. It helped give the local inhabitants a greater sense of place and, more importantly, very much a Roman sense of place.

The Romans also expended much effort on improving the road network of the new province. Regions on the periphery of the province no longer seemed remote and cut off. A major road now led from Portus Cale to Olisipo, another from the northern limit of the territory of Salmantica to the capital Augusta Emerita and beyond<sup>78</sup>. The major roads at least were provided with milestones. No longer were the inhabitants in any doubt where they going. For the distance to the nearest major centre was given in large letters at the end of the inscriptions that these milestones bore<sup>79</sup>. It did not matter in this context whether people travelled far along these roads. The milestones helped to make people mentally aware that they were now linked into a wider, and very Roman, world<sup>80</sup>. Their horizons had been significantly widened.

75. For example, the two *termini* from Valdecaballeros and the one from Valencia del Ventoso: Canto, *art. cit.* (n. 68) 183-190, with lám. III, IV & VIII (photos), and citing Hyginus, *Constit. Limit.* 162 (Thulin): *certis tamen locis aras lapideas ponere debebimus, quarum inscriptio ex uno latere perticae applicato finem coloniae demonstret.*

76. For centuriation in general see Chouquer & Favory, *op. cit.* (n. 46); for centuriation at Emerita see Agennius Urbicus, *De Controv. Agr.* 83-84 (Lachmann) = 44 (Thulin); Hyginus, *Constit. Limit.* 170-71 (Lachmann) = 135 (Thulin); P. Sillières, «Centuriation et voie romaine au sud de Mérida: contribution à la délimitation de la Bétique et de la Lusitanie», *MCV* 18 (1982) 437-448; J. G. Gorges, «Centuriation et organisation du territoire: notes préliminaires sur l'exemple de Mérida» in P. A. Février & P. Leveau (ed.), *Villes et campagnes dans l'Empire romain* (Aix-en-Provence, 1982) 101-110. For traces of two superimposed centuriation grids from Pax Iulia see briefly Alarcao, Etienne & Mayet, *op. cit.* (n. 8) 297; Gorges, *art. cit.* (n. 27) 101 and n. 35. For centuriation in the territory of Norba see A. Alvarez Rojas, «Contribución al estudio de las calzadas romanas en Extremadura» in *Homenaje a D. Jesús Cánovas Pesini* (Badajoz, 1985) 111-17, esp. 112; E. Cerrillo et al., «Ciudades, territorios y vías de comunicación en la Lusitania meridional española» in Gorges (ed.), *op. cit.* (n. 20) 51-72, esp. 63.

77. For a fragment of a bronze *forma* from the south-east corner of Lusitania see P. Sáenz Fernández, «Estudio sobre una inscripción catastral colindante con Lacimurga» *Habis* 21 (1990) 205-27 (with better photo at *Habis* 22 (1991) 437). For the importance of such *formae* see C. Nicolet, *L'inventaire du monde. Géographie et politique aux origines de l'Empire romain* (Paris, 1988) ch. vii.

78. On the former see V. G. Mantas, «A rede viária do Convento Escalabitano» in *La red viaria en la Hispania romana (simposio, Tarazona, 1987)* (Zaragoza, 1990) 219-39; for the latter J. M. Roldán Hervás, *Iter ab Emerita Asturicam. El Camino de la Plata* (Salamanca, 1971). On the roads in the Portuguese part of the province see Alarcão, *op. cit.* (n. 8) I, 49-61.

79. For example, the milestone from Campo Maior, marking 53 miles to Emerita on the road from Scallabis: *FE* 115 = *HEp* 2 (1990) 822. There are no parallels from Lusitania of the milestones from Baetica which give the starting point and terminus of the road «*ab Iano Augusto qui est ad Baetim usque ad Oceanum*» (*CIL* II 4712; cf. 6208). In general P. Sillières, *Les voies de communication de l'Hispanie méridionale* (Paris, 1990) 53-57, 791-94.

80. For the distinctively Roman cultural milieu of the major roads see Sillières, *op. cit.* (n. 79) 791-92.

And finally a series of rituals, regularly conducted, helped to reinforce these mental maps of the new provincial landscape. A provincial census was conducted in Lusitania, as in every other province, at relatively regular intervals<sup>81</sup>. At each census every head of a household had to give a precise declaration in his community of the name of his farm, the *civitas* and village in the territory of which it lay, the names of the two nearest estates, as well as details of agrarian potential and productivity of his farm (*Digest* 50.15.4: Ulpian). From a Roman perspective this information was important for administrative and fiscal purposes. But for a Lusitanian it very much helped to reinforce in his mind on a regular basis the changes nature of his local rural world.

Two further rituals helped to bind the various parts of the province to the new Roman centres of power. They created new lines of communication, new links in a landscape that had previously been highly fragmented. These links also helped to emphasise that there was now under Roman rule a very clear hierarchy of place. First, each *civitas* in Lusitania was allocated for judicial purposes to one of three *conventus*, or assize centres, located at Augusta Emerita, Pax Iulia and Scallabis (Plin. *NH* 4.22.117)<sup>82</sup>. Every time a member of the provincial governor, or every time that a member of the community was summoned before the governor's tribunal by a Roman citizen seeking legal redress, he or she had to travel along the Roman road to the *conventus* centre<sup>83</sup>. Secondly, every year each Lusitanian community sent a representative (*legatus*), always one of its leading citizens, to the provincial capital, Augusta Emerita, to take part in the deliberations of the provincial council (*concilium*). The council was responsible for overseeing the province's acts of devotion towards the deified members of the Roman imperial house, and for electing the chief-priest of the province's imperial cult (the *flamen provinciae Lusitaniae*)<sup>84</sup>. These journeys, each linked to rituals in which Roman power was emphasised, helped to create new mental maps of the Lusitanian world<sup>85</sup>. In these maps the important lines of communication converged on the Roman centres of power.

81. For a Roman official sent to Lusitania *pro censore* see *CIL* X 680. In general P. A. Brunt, «The revenues of Rome» *JRS* 71 (1981) 161-72, esp. 163-66; Nicolet, *op. cit.* (n. 77) ch. vi.

82. The date of this allocation is controversial. Since jurisdiction was a cornerstone of Roman provincial rule, I prefer the suggestion that it took place under Augustus: so N. Mackie, *Local Administration in Roman Spain A. D. 14-212* (B.A.R. International Series, 172; Oxford, 1983) 8; cf. R. Étienne, *Le culte impérial dans la péninsule ibérique d'Auguste à Dioclétien* (Paris, 1958) 185-89; Alarcão, *op. cit.* (n. 8), I, 32-33 (under Vespasian).

83. G. P. Burton, «Proconsuls, assizes and the administration of justice under the Empire» *JRS* 65 (1975) 92-106. There is also just a slight possibility that imperial cult took place at the *conventus* centres in Lusitania, in addition to that in the local communities and at the provincial capital; however, it is only so far attested in one of the Iberian provinces, Tarraconensis: Étienne, *op. cit.* (n. 82) 177-95. If there was such a *conventus* cult in Lusitania, this would further emphasise cognitively the geographical link between the community and the *conventus* centre.

84. J. Deininger, *Die Provinziallandtage der römischen Kaiserzeit von Augustus bis zum Ende des dritten Jahrhunderts n. Chr.* (Munich, 1965). For the honouring of a local Roman senator by decree of the provincial council of Lusitania see *EE* VIII 302 = *ILS* 8972.

85. For journeys as crucial for forming mental maps see Downs & Stea, *op. cit.* (n. 69) *passim*. For the importance of lines (roads, coastal itineraries, urban streets) in the Roman conception of space see P. Janni, *La mappa e il periplo: cartografia antica e spazio odologico* (Rome, 1984); N. Purcell, «Maps, lists, money, order and power» *JRS* 80 (1990) 178-92.

But the activities of the provincial council helped to reinforce the new geography of the province in another way. The council consisted of representatives from all communities in the province, not just *coloniae* and *municipia*<sup>86</sup>. This collective body, acting as a unit, gave a sense of geographical unification to the province as a whole. The representative from Ossonoba in the far south met the representative from Conimbriga in the north; the representative from Olisipo in the far west acted alongside the representative from Caesarobriga in the east. This all helped to encourage in the minds of these representatives the mental image that Lusitania, a land once marked by such a multiplicity of peoples and micro-regions, as Polybius and Strabo remarked, was now indeed an entity. One did not have to travel these routes for oneself. By merely being aware cognitively of the existence of these new lines of communication, all inhabitants of Lusitania had a fuller mental awareness of their world. In their minds a radically new Roman provincial landscape had been created.

86. Deininger, *op. cit.* (n. 84) 142; Étienne, *op. cit.* (n. 82) 150.