

World-systems analysis and the Roman empire

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Archaeologists are necessarily historians of the *longue durée*. Romanists, in particular, concern themselves with patterns and phenomena that are immensely extensive in space and in time. But the very scale of the enterprise poses special difficulties: it is not easy to find appropriate ways of describing, let alone analysing, such subjects.

It comes as no surprise, then, that Immanuel Wallerstein's masterpiece, *The Modern World System* (1975, 1980)¹, has already proved a source of inspiration to many archaeologists (e.g. Frankenstein and Rowlands 1978, Ekholm and Friedman 1982, Rowlands *et al.* 1987, Bloemers 1988, Champion 1989), especially those working on the ancient civilisations of the New World (Schortman and Urban 1987, e.g. Pailles and Whitecotton 1979, Blanton and Feinman 1984, Dincauze and Hasenstaub 1989). But Wallerstein's analysis of the extension of capitalism has been most often applied to pre-capitalist periods in a manner that runs directly contrary to his own conception of world history. This paper is intended to review Wallerstein's own propositions regarding the world before capitalism and to examine these propositions in the light of the experience of the Roman empire. My results suggest some general conclusions about pre-capitalist world-systems, and the ways in which Wallerstein's thesis may be profitably applied and developed by archaeologists and historians of antiquity.

World-systems in world history

The Modern World System is a neo-marxist analysis both of the dynamics of capitalism and of the structures produced by those dynamics from the 15th c. to the present day. Like Marx, Wallerstein has not been directly concerned with earlier periods (Schneider 1977, McGuire 1989, 42-43). But his work inevitably includes an account of them, partly out of the need to locate capitalism in world history and to explore its roots therein. But antiquity serves another purpose in the work. Wallerstein, again like Marx, uses the ancient world as a means of pointing out what was specifically modern and particular to capitalism. Pre-capitalist world-systems illuminate, by contrast, the nature and originality of capitalism.

Archaeologists will search Wallerstein's works in vain for detailed analyses of the ancient world. But fortunately (and again like Marx) Wallerstein is remarkably up-to-date in his accounts of the ancient world. As will become apparent, his accounts form the basis for fruitful analysis of pre-capitalist periods.

What is the Wallerstein thesis? Briefly, it runs as follows. Until recently in world history, most human social activity has been carried out within mini-systems, loose groupings of small numbers of people. Such communities were unstable and relatively short-lived. But in the last few millennia, world history has been dominated by the rise and fall of much more extensive phenomena — world-systems. A world-system may be defined as 'a unit with a single division of labour and multiple cultural systems': crucially they unite very large populations, spread over wide distances, and they are comparatively stable.

Wallerstein distinguishes two kinds of world-systems, those united politically (world-empires) and those which depended on economic ties alone (world-economies). Most world-economies were rapidly

1 All references in this paper are to works by Immanuel Wallerstein unless otherwise indicated. The development of his ideas may be followed in the first two volumes of his analysis of the rise of capitalism (1975, 1980) and in his collected essays (1979a). *Review* (1977-), the Journal of the Fernand Braudel Center, is devoted to social analysis through a worldsystems approach. *Political economy of the world system, Annuals* (1978-) publishes the proceedings of conferences on similar themes, and collections of papers devoted to world-systems analysis of particular topics appear in the series *Explorations in the world economy* (1983-) (Beverly Hills). Two collections of archaeological studies on this theme have recently been published (Rowlands *et al.*, 1987; Champion 1989).

converted into world-empires by the expansion of one of the ruling groups in the region. Capitalism is special because it represents the first stable world-economy, a world-system united by a single economic logic but ruled by a multiplicity of nation states. But the capitalist world-system too is in decline and shortly to be replaced by a socialist world order.

Most of Wallerstein's writings examine the origins and workings of this latest world-system. Wallerstein describes how the original core countries dominated a periphery of nations from which they extracted raw materials at terms very favourable to themselves. But the system was not static: competition in the core meant that new peripheries were constantly being opened up, while new subordinate cores were set up in the first areas to be exploited, now semi-peripheries. Semi-peripheries are areas which both exploit and are exploited. Frequently they supplied markets for the goods produced in the core from raw materials extracted from the periphery.

The structure created by these processes (and enabling their continuance) is highly visible today. Core regions are increasingly separated from semi-peripheries and peripheries in the Third World. Inequality is increased, rather than ameliorated, by the exploitative contacts (largely commercial) between core and periphery.

Wallerstein's thesis is highly persuasive, although open to criticism from several directions (Ragin and Chirot 1984). Some historians complain at the vagueness with which the chronology and changing geography of the modern world-systems is delineated or at the treatment of specific phenomena such as feudalism (Dodgshon 1977, Stinchcombe 1982). Marxists complain that Wallerstein does not pay sufficient attention to class or that his world-system is characterised by a single mode of production, rather than a social formation in which a number of modes of production are articulated and dominated by the capitalist mode (Nash 1981, cf. Semenov 1980, Wickham 1984). More serious for non-marxists is the criticism that Wallerstein's analysis is excessively materialist, allowing economics to determine all other features of society and history (Ortner 1984, 141-46). Culture, ethnicity and presumably demography and gender relations are all seen as generated by economic conditions, and the rôle of states and individuals is marginalised. Perhaps the aspect of this critique that is most relevant to archaeologists is the notion that Wallerstein reacted against modernisation theory by inverting it (Skocpol 1978). Although the long-term consequences of the relationship are viewed differently (increasing inequality rather than a general rise in living standards), the motor of history remains in the core while peripheral populations are reactive, passive and deprived of their own history (Ortner 1984).

Despite this fierce debate — itself a tribute to the importance of Wallerstein's work — world-systems theory continues to inspire a wide variety of studies (Thompson 1983, Ragin and Chirot 1984). Many of the initial critiques have been answered, either by the subsequent work of Wallerstein and his collaborators or indeed by his critics (e.g. Wolf 1982).

World-systems analysis has special attractions for social archaeologists. Firstly, it deals with patterning on a grand scale, geographical as well as temporal. Secondly, it protests against an analysis in terms of notionally closed 'societies', or individual nation-states (1987, 136, cf. Mann 1986). Thirdly, it offers a theoretically sophisticated approach to the generation of inter-regional structures by clearly defined dynamics (Schortman and Urban 1987). For the student of the Roman empire and Roman imperialism, the clarity of such a vision is very attractive.

Problems remain. Most importantly, how much should the model be customised for use in pre-capitalist contexts? (Rowlands 1987, Champion 1989) Only a few of the many attempts to apply world-systems analysis to the precapitalist world face up to these challenges (e.g. Frankenstein and Rowlands 1978, Ekholm and Friedman 1982, Kohl 1987a, 1987b, Dincauze and Hasenstab 1989). The clearest indicator of this is that most take as their starting-point world-economies, which played little part in Wallerstein's view of the ancient world. By contrast, the present analysis begins from the other category of world-system, the world-empire.

World-empires

Wallerstein's scattered references to early empires show his dependence on earlier analyses (Weber 1922, Polanyi *et al.* 1957, Finley 1973, Eisenstadt 1968, 1969). The originality of his approach lies in his conception of empires as world-systems. But this conception has only been presented in scattered references (1974a, 390-391; 1975, 15-16; 1976, 346-49; 1979b, 390; 1987, 317-18). A necessary first step is to extrapolate from these discussions an ideal type. I use the term in Weber's sense of an heuristic construct. Historical exemplars correspond only imperfectly to the type, but the points at which a given case diverges from the ideal should suggest both modifications to the type and historical features specific to that case. The second stage of this discussion is thus an analysis of the Roman empire as a world-system.

The world-empire may be considered in terms of its structure and its dynamics. The most obvious structural feature is the opposition between centre and periphery:

"[World-empires] were a constant feature of the world scene for five thousand years. There were continuously several such empires in various parts of the world at any given point in time. The political centralisation of an empire was at one and the same time its strength and its weakness. Its strength lay in the fact that it guaranteed economic flows from the periphery to the centre by force (tribute and taxation) and by monopolistic advantages in trade." (1975, 15)

The existence of a semi-periphery is more doubtful. Wallerstein does not explicitly discuss the issue, but his discussion of the importance of semi-peripheries to the modern world-system is suggestive (1974, 404-5). The argument concerns both the division of labour and the means by which the ruling groups sustain their dominance. Both kinds of world-system survive only because of the presence of intermediate groups between those who exploit most and those who are most exploited. While in the world-empire this relatively privileged middle group comprises traders and urban elements politically disenfranchised but allowed some of the surplus by their masters, in the modern world-system the buffer-zone is provided by semi-peripheral states. In other words, in the world-empire the principal divisions of labour are within each society; under capitalism there is an international division of labour.

"[A world-empire] expands to the socio-technical limits of effective political control of the redistributive process" (1979b, 390)

All things being equal, then, a world-empire would presumably be circular, organised concentrically around its centre, its radius determined by a balance between its maintenance costs and its revenues (Elvin 1973, 18-20). But all other things are rarely equal. Geographical limits to or privileged channels of communication distort the shape of the empire. Wallerstein, following Braudel, suggests a typical radius equivalent to 30 days' travel for both categories of world-system (1975, 16-17; Braudel 1972, 365-74). Equally, the proximity of other world-empires limited expansion (1979, 390). Adjacent empires might compete for the control of groups who were peripheral to both (Kohl 1987a). We might expect the optimum frontier between two equally powerful empires to be located midway between their capitals. A potential exists for conflict between this principle and the principle of centrality. Such considerations, together with the likelihood that neighbouring world-empires would expand and contract, and the relatively low level of political infrastructure, may account for the frequency with which the capitals of world-empires were relocated.

Within these limits the world-empire was not a socially homogenous whole, even if it lacked zoning into semi-peripheries and peripheries:

"Within the economic division of labour, multiple 'cultures' flourished — parallel groups of agricultural producers, 'world'-wide trading groups, endogamous trans-local 'administrative' groups. But the key note of this mode of production was the political unity of the economy." (1976, 347)

Ernest Gellner has developed a very similar analysis in another discussion of the differences between the political structure of pre-capitalist and capitalist societies (Gellner 1984, 8-18). 'Agro-literate' societies were composed in the main of near-subsistence cultivators, but also contained a small élite of administrators, priests and their retainers. Gellner suggests that their typical political structure was a number of culturally-segregated agricultural communities controlled by culturally-homogenous ruling strata of ruling groups. By contrast, the modern era is characterised by culturally-unified nation-states. I suggest that empire-formation may have entailed the cultural unification of the ruling strata of formerly

independent states, while the subject populations remained as segmented as before. Certainly the absence of national cultures must have assisted this process.

The world-empire, then, is cellular. It was formed out of a number of formerly independent mini-systems made tributary to a core (Alcock 1989, 89-94). Within each cell are elements of the translocal ruling groups and their urban and commercial lackeys, but there is no semi-periphery. The picture may be compared to that suggested by Colin Renfrew for the formation of large and complex polities through the combination of numerous smaller and simpler ones (Renfrew 1975).

The dynamics of world-empires are less clearly described. The most useful discussion is this: "World empires' are vast political structures (at the apex of the process of expansion and contraction which seems to be their fate) and encompass a wide variety of cultural patterns. The basic logic of the system is the extraction of tribute from otherwise locally self-administered direct producers (mostly rural) that is passed upward to the centre and redistributed to a thin but crucial network of officials." (1987, 317)

The logic of the world-empire (corresponding to capitalism in the modern world-system) is the tributary mode of production (cf. Wickham 1984). The world-empire expands, taking over more and more mini-systems, and eventually contracts or disintegrates (1979, 390). China, for example, is characterised as a succession of world-empires expanding and contracting within the same geographical space. Any acceptable explanation of these oscillations must avoid the temptation to rewrite the history of capitalism. Wallerstein is very clear that the world-empire is driven by quite different forces. "[The modern world-system] is an economic but not a political entity, unlike empires, city-states and nation-states ... the basic linkage between the parts is economic." (1975, 15)

Commerce, for example, played a very different rôle in the world-empire than it did in the mercantile and early capitalist economies of the modern world-system:

"World empires were basically redistributive in economic form. No doubt they bred clusters of merchants who engaged in economic exchange (primarily long distance trade) but such clusters, however large, were a minor part of the total economy and not fundamentally determinative of its fate." (1974, 392)

Wallerstein's view of ancient economies is thus very close to the substantivism of Karl Polanyi, best known to Romanists through the work of Moses Finley (1973).

The key notion that underlies these contrasts is the idea of the relationship between economic and political power. Before the 15th c. the odds were stacked heavily in favour of political and military rulers: traders existed but were subject to their rulers' control and were obliged to serve their needs. No independent bourgeoisie ever emerged before the rise of capitalism. Exchange was relatively 'uncommoditised' (Appadurai 1986). It follows that world-empires must have expanded and contracted in accordance with politico-military stimuli and restraints.

The dichotomy between past and present economies is purely descriptive. No explanation is offered for the shift in the balance between economic and political power. The dichotomy has in any case been challenged, both by those who see the rise of capitalism as simply a part of longer-term trends (e.g. Ekholm and Friedman 1980, 1982), and by those who see world-economies operating in pre-capitalist conditions (Schneider 1977, Blanton and Feinman 1984). If Wallerstein is wrong to make such a sharp distinction between modernity and the past, other features of the modern world-system may apply to the ancient world. For example, cycles of growth and recession have been hypothesised, characterised by shifting tensions between the core and its dependencies. The operation of the modern world-system is also held to have resulted in increasing inequality between core and periphery ("the development of under-development"), rather than in the progressive modernisation and westernisation of 'primitive' peoples. If similar processes characterised ancient world-empires (or pre-capitalist world-economies), the issue has obvious relevance for proponents of secondary state-formation and acculturation in general.

The question of pre-capitalist world economies and ancient world-systems in general will be discussed in the final section. We may summarise discussion so far by characterising world-empires as centralised and extensive political units, comprising a number of tributary cells. The economy of a world-empire is subordinate to its political structure, as are its internal dynamics. How well does Rome fit this model?

The Roman world-empire

World-empires have been characterised as centralised, cellular, and roughly concentric. How closely does the Roman empire conform to this ideal-type? For ease of analysis, I will focus my discussion on the empire in the mid 2nd c. A.D.

At that period the empire was controlled from a centrally-located capital, Rome, and flows of tribute and taxation were directed there, and to the frontier armies, from the provinces. The empire was not circular, but its east-west extension may be accounted for by contrast between the communications channel offered by the Mediterranean and the barriers posed by the Sahara and the Alpine range. The centrality of Rome also reflects the lack of any similar world-empires in the vicinity.

The situation altered with the mid-3rd c. re-establishment of a new world-empire in Persia. The subsequent shift of the imperial capital to Constantinople may have been in part a response to the new political geography, as it reduced the time-lag between events on the periphery and responses at the core. Similar motives may lie behind the ultimately unsuccessful experiments in devolved, regional government which resulted in the fragmentation of the empire and the eventual loss of the western territories furthest from the new centre. A similar process may account for the difficulties experienced earlier by the Seleucid world-empire in retaining control of its easternmost provinces, when competition with other hellenistic world-empires attracted its capital to the extreme western fringe of its territory.

The Roman empire was cellular, some cells originating in earlier world-empires (e.g. Egypt, Asia), some being regroupings of cells from former empires (e.g. Sicily), yet others, particularly in the west, being once-independent polities. Nothing like a semi-periphery can be identified within the empire: the inner provinces seem if anything to have been exploited more than the outer ones (Garnsey and Saller 1987, 55-58, 95-97). The term semi-periphery must be used in a fairly precise sense. It cannot be used simply to designate an area which has lost control of a former dependency, a degraded core area, so to speak (e.g. Carandini 1986, 16-17). Other analyses have suggested that a semi-peripheral zone existed, beyond the borders of the empire, which in some sense mediated between the provinces and independent 'barbaricum'. Along the northern frontier such a zone did exist, an area to some extent controlled by Roman diplomacy and to some extent penetrated by Roman traders (Hedeager 1987, Pitts 1989). But to qualify as a semi-periphery, a zone must play an intermediate rôle between core and periphery, not between world-empire and external groups. The 'buffer zone' or 'third zone' may in any case be better considered as part of the outer fringe of the empire, the northern segment of a broadly homogeneous zone created by the Roman frontiers (Whittaker 1989, 71).

This brings us to one major structural feature of the Roman empire not included in the ideal-type of the world-empire. The frontiers of the empire were major consumers of the tribute and taxation extracted from the rest of the empire. To a certain extent the areas controlled by the professional army were also outside the cellular structure of the world-empire. The non-agriculturalists concentrated in these zones may have made up as much as 2% of the adult male population of the empire. The military organisation of the empire thus represented a significant division of labour within the empire (cf. Wallerstein 1974a, 390).

But this divergence from the ideal-type need not derive from a faulty characterisation of the world-empire. Not all world-empires had large-scale permanent frontier garrisons. The majority, including republican Rome, imperial Athens, Carthage, Persia, and Sparta, conquered and maintained their hegemony with a mixture of levies and mercenary troops, often based around levies from the core who fought so frequently that they shared many of the features of professional armies.

World-systems analysis indicates an important variable to be considered when examining other world-empires. Rome, like some other world-empires (notably China in some periods), separated its tributary cells from the outside world with garrisons which served to control both. It may be that this innovation lies behind Rome's long resistance to the processes of contraction and disintegration which Wallerstein sees as characteristic of world-empires in general. Disintegration of empires involved the splicing off of cells or their absorption by rival empires. The *cordon sanitaire* of a non-cellular frontier zone may have made these processes less likely to occur. The Roman empire was able to maintain its

coherence as long as the frontier zones survived — even the 3rd-c. crisis only culminated in *internal* fission — while the distinctive military systems of the late empire may have made it easier for peripheral cells, like Britain, to opt out or be shed.

The dynamics of the Roman empire are much less easy to analyse in world-system terms, largely because of the imprecision of the world-empire model in this respect. What is clear is that they are not to be thought of in purely economic terms, and certainly not in terms of mercantile, or, *a fortiori*, industrial capitalism. There is wide agreement among ancient historians that commerce within the empire was in some sense subordinated to political needs and stimuli: political structures and social values provided the framework and constraints within which commerce took place, and political and military means did not serve commercial ends (Hopkins 1980, Whittaker 1985). If the seeds of capitalism existed, their growth was stifled by political and social constraints (Runciman 1983, c.f. Wallerstein 1979b, 71). Economic growth was either non-existent or a response to the establishment of the tributary mode of production (Finley 1978, Hopkins 1980).

Currently, discussion of the dynamics of the Roman empire stresses military and political factors, especially competition and martial values among the élite (Harris 1979; 1984). But ideologies of competition were hardly unique to republican Rome and, in any case, themselves demand explanation at a more profound level (North 1981). Links have been made with the rise of the slave mode of production in central Italy (e.g. Hopkins 1978). The extent of the slave mode remains controversial, but in any case attempts to make the need for raw materials or slaves a determinant of expansion (e.g. Nash 1987) fail to show the causal nature of the connection. Roman nobles were clearly well aware of the personal gains to be made from expansion (Finley 1978; Harris 1979), but these gains seem to have been conceptualised mainly in terms of booty and glory. Expansion was in fact against the interests of slave traders, since enslavement within the empire was forbidden and slaves were regularly extracted from lands beyond the empire. In this respect at least, Roman imperialism would conform to Wallerstein's description of the expansion of a world-empire within, and to the detriment of, a world-system.

Tribute-extracting structures were developed only slowly, in the last centuries of Roman expansion, mainly through the use of tax-farming. As a result, the profits of expansion consisted largely of booty from campaigns, and defeated groups were exploited primarily by compelling them to participate in new conquests as allies (cf. Conrad and Demarest 1984, 52-60), and through the institution of clientage. Only with the Augustan creation of a systematic infrastructure for the extraction of tribute did expansion cease. But it is still necessary to explain why expansion was seen as a higher priority than consolidation as long as the republic lasted. Whether viewed from a world-systems perspective or in more traditional terms, we are as far from a satisfactory explanation of Roman imperialism as ever.

The end of Roman expansion should also shed light on the dynamics of imperialism. The reasons for the end of expansion are much debated. Some archaeologists have invoked an ecological limit, while others have suggested that Roman conquest was restricted to areas where pre-existing socio-political systems had developed sufficient infrastructure to pay the price of conquest (Groenman van Waateringe 1983). Ancient historians prefer explanations in terms of the change from competitive aristocratic warlords to autocratic government. The issue remains open. But it is clear that, while the end of expansion coincided with a period of tension among the Roman aristocracy, it did not result in any economic crisis — no analyst puts the crisis of the slave mode of production earlier than the end of the 1st c. A.D., a century after the end of most Roman expansion, while some see little change before the 4th and 5th c. (MacMullen 1987, 376; Whittaker 1987, 88-94). The primacy of political over economic factors is suggestive.

The end of Roman expansion was separated by some centuries from the beginning of contraction. It was argued above that the frontiers may be significant in accounting for this exception from Wallerstein's generalisation. It was also suggested that the emergence of the Sasanid world-empire may have precipitated the eastward relocation of the world-empire and that this inevitably weakened control of the western half.

But additional factors are needed to explain the ultimate disintegration of the western world-empire, and also the gradual contraction of the Byzantine state. Mark Elvin has suggested that the Chinese

empire only maintained its cohesion because it sustained a level of technological innovation and economic growth that maintained its advantage over neighbouring groups (Elvin 1973, 20). Acculturation, conceived as flows of information across the frontier, continually threatened to increase the military resources of external groups (van der Leeuw 1983). Frontier systems like those of Rome or China, although they may have allowed world-empires to survive without expanding, may have actually accelerated these acculturative processes (Lattimore 1940, Whittaker 1989).

Very little can be said about the other dynamics suggested by analogy with the modern world-system. Cyclical trends are difficult to detect. It remains an open question whether the lot of provincials as a whole improved or worsened over time. Although taxation increased over time and the privileges of certain regions (principally Italy) and some groups (especially citizens) were eroded, it is unclear how far these social changes can usefully be regarded as 'the development of underdevelopment'. The long-term impact on the provinces of Roman imperialism is very much on the agenda, and world-systems analysis may yet provide a framework through which to study it.

In most respects the Roman empire corresponds fairly well to Wallerstein's conception of a world-empire. It is hardly surprising, since both Wallerstein's conception and the syntheses on which it was based drew heavily on the case of Rome. Yet world-systems analysis can still be useful, both in indicating what is unique or distinctive about the Roman case, such as its non-cellular frontier zone, and in generating new interpretative hypotheses, for instance about the locational shift of capitals, and the way the west was lost.

Above all the process of theoretical abstraction allows issues, structures and dynamics to be envisaged and debated with a clarity impossible in discussion at a more concrete level. To be sure, there is a corresponding loss of detail and, in particular, of empathy with the actors in these macro-historical dramas. Analysis at the theoretical level properly complements, rather than replaces, conventional studies which focus on the particular. Because the Roman empire was very large and lasted a long time, it is difficult to deal with except at this general level. World-systems analysis offers one way to envisage the whole. Further analysis of Rome in terms of a world-empire, perhaps even in an explicitly comparative framework, might well yield further results.

Pre-capitalist world-economies

World-empires covered much of the ancient world, but not all of it. The remainder of this paper looks beyond the world-empire and considers the application of world-systems analysis to other pre-capitalist societies.

"Whenever one [world-empire] expanded it destroyed and/or absorbed both mini-systems and world-economies and whenever one contracted it opened up space for the recreation of mini-systems and world-economies."
(1987, 317)

It should be admitted at once that the division of all ancient political systems into mini-systems or world-empires is analytically inadequate. Very few mini-systems — essentially non-stratified hunter-gatherer bands — can ever have existed, and even those that did exist were probably fragmented by divisions of labour based on gender and age. While because 'peripheralisation' is an inevitable concomitant of centralisation, local centre-periphery effects must have operated within all states — by definition centralised — and in many other societies as well. Further elaboration of the socio-political taxonomy may be a fruitless exercise: these smaller centralised polities should simply behave much as world-empires, but on a smaller scale.

Much more important are the macro-regional systems characterised by Wallerstein as pre-capitalist world-economies. Ephemeral entities of little significance, according to Wallerstein, world economies have nevertheless loomed larger than world-empires in world-systems analyses of the ancient world. In this section I will consider the nature of world economies before suggesting one further modification of world-systems theory that might increase its utility still further.

Two key issues surround the issue of pre-capitalist world-economies. First, how powerful were early

world-economies by comparison with either the modern world-system or the early empires? Second, was long-distance trade always or ever organised in a manner analogous to the modern world-system? These questions are very important for prehistorians, since of the two types of world-system currently on offer, only the world-economy can be applied to prehistoric situations. A growing number of studies of prehistoric societies have taken for granted the plausibility of extensive networks of exchange, generating supra-regional patterning and transforming material culture and social structure across entire continents. Some researchers have even suggested that such processes may have played a determinant rôle in social evolution, at least in some areas and at some epochs (e.g. Rowlands 1980, Wells 1980, Blanton and Feinman 1984, Brun 1987, Kohl 1987b, Cunliffe 1988, Dincauze and Hasenstab 1989, McGuire 1989).

An alternative view exists. Wallerstein, in accordance with his primitivist view of ancient economies, considered that long-distance commerce was not significant before the rise of capitalism. Exchange between world-systems was trade in luxuries, "that is non-essentials" (1979b, 390). Trade was equal as opposed to unequal. World-economies were unstable entities, collapsing or being transformed into empires (1974a, 390). They are described as:

"vast uneven chains of integrated production structures dissected by multiple political structures. The basic logic is that the accumulated surplus is distributed unequally in favour of those able to achieve various kinds of temporary monopolies in the market networks. This is a 'capitalist' logic." (1987, 317)

Ancient and modern world economies are much the same, then, with only one important difference: whereas the capitalist potential of earlier world-economies was crushed by the political and military muscle of the world-empires (1974b) the modern world-system has achieved stability, largely as a result of technological change. Wallerstein's claim that earlier world-economies were relatively insignificant is an integral part of his explanation of the differences between antiquity and modernity.

The aim of this survey is not to settle the issue — and certainly not to attack the stimulating and imaginative applications of world economies to prehistoric settings cited above. Rather, I aim to show that the issue is more problematic than has frequently been claimed. My own view is that recent research and discussion poses problems both for Wallerstein's assessment of the significance of ancient exchange and also for analysts who wish to see world-economies like our own dominating the majority of prehistoric societies.

Debate has been focused in particular on exchanges of luxuries, dismissed by Wallerstein as non-essentials (Schneider 1977, Blanton and Feinman 1984). The rôle of luxury trade in non-capitalist systems has been argued from two distinct positions, one asserting the economic insignificance of luxuries, the other proclaiming their social importance.

Economically, luxuries are important because they tend to have a very high value per unit of weight or size. This enables profitable long-distance trade under ancient transport conditions and provides a potential for individual fortunes to be made, but also forces considerable investment required in any venture, with a high risk and a long delay before any return can be expected. When a world-empire is involved, we may suspect the involvement of wealthy aristocrats, as in Rome (Hopkins 1983), or state control as in Han China. Outside world-empires, likely candidates are petty chiefs, like the rulers of eastern 'caravan-cities' or wealthy merchants.

Can external trade organised and financed by members of world-empires usefully be considered in terms of a world-economy? China's external trade was integrated with and subordinated to her internal, tributary economy. In theory the commercial interests of Roman aristocrats may have had some impact on imperial policy, but it is difficult to demonstrate any such effect. Much clearer is the penumbra of petty traders who operated just beyond the frontiers of the empire. But whatever military or political protection they may have hoped for, these groups cannot have exercised any influence on policy. The overwhelming priority enjoyed by political considerations suggests that they did not really constitute a world-economy.

But trade in luxuries may have had a social importance out of all proportion to their economic value. Luxury is not inessential, and in many societies, bourgeois capitalist as well as 'traditional', it is used to

reproduce the social hierarchy (Veblen 1899). Many prehistorians' applications of world-systems analysis posit peripheral élites dependant on core societies for a supply of exotic luxuries which function as 'prestige-goods', either for display and use in ceremonial, or for redistribution to subordinate chiefs (Frankenstein and Rowlands 1978, Wells 1980, Blanton and Feinman 1984, Brun 1987).

The key question raised by such analyses is whether these élites were really *dependent* on the core. No-one would suggest that the Roman social hierarchy would have collapsed had the silk route been diverted. Prestige-goods, it has been pointed out, need not be imports: they can be manufactured locally so long as the paramount chiefs retain control of the craftsmen, their techniques or the necessary raw materials (Gosden 1985).

The question of the power of ancient world-economies is thus difficult to resolve. Quantitatively they were feeble compared to the modern world-system, but it is difficult to assess their economic significance relative to the low levels of productivity that must have characterised the majority of the peasant and tribal communities of both the prehistoric world and the world of the empires. Prestige-goods *may* have played a vital rôle in the establishment and maintenance of some late prehistoric hierarchies, but the grave-goods in question may have been merely incidental trappings of power.

Central to the issue is the nature of the differences between our world and theirs. Ekholm and Friedman (1982) have pointed out structural similarities between ancient and modern patterns of capital-accumulation: they view the differences between ancient and modern economies as differences in scale, rather than in kind. But even differences in scale may be crucial in determining the capacity of trade to play a major rôle in constituting society (Adams 1979). Nor have they not been able to show that the relative power of the economic and political establishments was not radically different in the ancient world. Most crucially, they have not provided an alternative to Wallerstein's criterion of modernity. Yet there was no Roman industrial revolution.

Romanists also have a special interest in the debate about the power of pre-modern world economies, because of its relevance to a central concern of Roman economic history, the nature of inter-regional trade. Most Roman archaeologists accept that, at least in the Mediterranean basin, considerable quantities of goods were transported long distances from the areas in which they were produced to those in which they were consumed. Nor were these exchanges restricted to luxuries. Considerable quantities of grain, oil, fish-sauces, ceramics and building materials were all moved long distances (e.g. Ward-Perkins 1980, Giardina and Schiavone 1981, Paterson 1982, Garnsey and Whittaker 1983, Garnsey, Hopkins and Whittaker 1983, Giardina 1986, Greene 1986, Peacock and Williams 1986, Fulford 1987, Mattingly 1988). But despite the growing recognition of the scale of these exchanges, there is considerable disagreement over how to relate it both to the agrarian base of the Roman economy and to the political structures of the empire.

World-systems analysis offers one approach to this issue. From this perspective the key question becomes, whether the archaeological traces of long-distance exchange are to be interpreted in terms of a pre-modern world-economy, or as characteristic of a world-empire. If a world-economy existed within the Roman empire, then the world-economies postulated by prehistorians and mesoamericanists have an added plausibility. So too do studies which treat the empire as a whole as a core surrounded by a semi-peripheral frontier zone and a barbarian periphery (e.g. Hedeager 1987, Cunliffe 1988). More significantly for Romanists, Rostovtzeff's (1957) view of the ancient economy is vindicated at the expense of that of Finley and his students (Finley 1985).

As it happens, the only explicit application of world-systems theory to the problem of Roman trade takes precisely this position. Carandini (1986) argues for the existence of a Roman world-economy based on mercantile capitalism, comparable to that of Europe before the 15th c. While agreeing that the Roman empire constituted a world-empire, he argues that archaeological evidence makes it possible to identify a world-economy *within* the Roman empire. Accepting the proposition that world-empires expanded within existing world-economies, Carandini suggests that Italy dominated the western Mediterranean economically prior to Rome's conquest of it, but that the resulting world-empire did not stifle mercantilism until the increasing bureaucratisation and regulation of the late empire.

Carandini presents a number of archaeological arguments in support of his claim that the empire contained a world-economy. What he does not do is to ask how many of the traits he identifies might equally be explained in terms of the working of the world-empire. The argument of this paper suggests that it is necessary to examine the exchange-systems of the Roman Mediterranean, first of all, in terms of its incorporation in a world-empire, before identifying contradictions which might indicate the persistence of any pre-imperial world economy.

Carandini cites 6 features of the Roman economy that suggest to him the action of a world-economy: the empire included an internal division of labour; its economy incorporated different modes of production in different regions; the growth of African exports to Italy suggested a semi-periphery supplanting an dominating a former core; the institutions of the Roman state were beneficial to trade as had been those of early modern Europe; the empire experienced limited economic growth, manifested demographically as well as in the scale of its trade and production; and spheres of trade began to develop, regular commercial routes transporting more than simply luxuries. But many of these features can equally well be seen as characteristic of a world-empire. It was argued above that an interregional division of labour characterized world-empires, while the existence of multiple modes of production is a characteristic of all socio-economic formations (Semenov 1980). The existence of trade-spheres, the economically beneficial rôle of the state, economic growth and the dominance of Africa over Italy, are more controversial matters, but explanations for each have also been offered in terms of responses to the politically engineered flows of goods characteristic of world-empires (Hopkins 1980, Wickham 1989). I conclude that Carandini has not shown the existence of patterns of trade that cannot be explained by the simpler hypothesis that the economy of the Mediterranean was dominated by the demands of the Roman world-empire. To demonstrate the co-existence of both a world-economy and a world-empire, features need to be shown that cannot be explained by either one or the other world-system alone.

Disagreement with Carandini's arguments for a Roman world-economy does not entail accepting a primitivist view of the Roman economy. Finley's position encapsulated two propositions which are often confused: first, that long-distance trade was insignificant in scale (a view he shared with A. H. M. Jones), and second, that Roman exchange-systems were not analogous to early modern mercantilism. While archaeological research seems to have proved him wrong on the first count, his arguments stand firm on the second. World-systems analysis contributes to the consensus that the ancient economy was dominated by political and military forces. Within that consensus, it is still unclear whether exchange was directly controlled by the state or whether traders benefitted parasitically from flows of tax and rent. It is also unclear whether or not the Roman empire experienced economic growth, and if so whether it should be seen in terms of prosperity or exploitation or both. On these matters world-systems theory has less to offer, since even if we accept that the Roman economy should be characterised as that of a world-empire superimposed on a base of peasant agriculture, state power is neither purely beneficial nor purely antagonistic to the economy (Carandini 1986, 17).

On the broader issue of whether or not powerful world-economies existed before the modern era, the case of Rome offers little encouragement for prehistorians investigating supra-regional patterning of material culture. But then a world-empire is not, perhaps, the first place that we might expect to find a world-economy. We still await a rigorous archaeological demonstration of a world-economy. Necessary components of such a demonstration would include empirical evidence of synchronous change in different regions arranged roughly concentrically around a core area. Alternative explanations, such as climatic change or geographic factors would have to be ruled out. Evidence for contact between the concentric zones (rather than within them) should be presented. Finally, an internally plausible account of these processes should be attempted. Many existing studies include one or more of these components, but none yet presents a watertight case. Admittedly, it would be a difficult task.

What is clear is that not all long-distance exchange was organised as in the modern world-system.

Cores, peripheries and semi-peripheries may have been the exception rather than the rule. If exchange systems are classified according to patterns of capital-accumulation, considerable variety emerges. Some trade-systems were organised by the élite or government of world-empires, but others were relatively independent of them or operated between them. The impetus for long-distance exchange sometimes originated in such intermediate areas (Dietler 1989). Often particular ethnic groups monopolised trade in a wide region, creating 'trade diasporas' which accumulated wealth in a dispersed rather than a centralised pattern (Curtin 1984). Ancient world-economies were not always centralised; nor were they always exploitative. For example, different exchange rates between gold and silver coin encouraged mutually beneficial exchanges between mediaeval Europe and the Islamic world (Grierson 1960).

What are the implications of these observations for prehistorians? Most seriously, it remains to be proven that world-economies were at all significant in their effect before the 15th c. A.D. But it may well be worth experimenting with other varieties of world-system.

World-symbols

Most needed seems to be a conception of symbolic dominance. Wallerstein's historical world vision depends on a particular conception of the relationship between economic and political power. A third category of world-system might be envisaged in which supra-regional dominance is achieved by a social formation in which symbolic or religious power has subordinated political and economic interests to its own.

World-systems do not depend on only one form of power. World-economies and world-empires alike encompass both particular modes of production and characteristic military-political formations. The essential difference is one of dominance. Wallerstein, in common with many other analysts, distinguishes capitalism from its predecessors in terms of the balance of power between economic and military-political interests. Symbolism has always been conceived as legitimating political or economic world-systems, but it is theoretically possible that a world-system might exist in which political and economic forces were largely subordinated to a symbolic order.

The argument might be challenged from a number of positions. Substantivists might argue that it is impossible to disentangle economies from political-military structures or ideological-symbolic systems, at least in the case of the ancient world (Kohl 1987b, 10-11). Some Marxists would contend that the economic base always determines the political and ideological superstructure, although that would pose problems for the world-empire as Wallerstein describes it. But most social theorists would subscribe broadly to the threefold distinction between political, economic and symbolic power, and all but hardline historical materialists would regard these three as interdependent, each having a variable degree of autonomy from and dominance over the other two in any given social configuration. If one suspends debate on these larger issues it is worth seeing whether systems of world symbols are analytically useful in practice.

One application would be to provide a world-systems description of mediaeval Christendom and early Islam. Europe during the early middle ages, we are told, was neither a world-economy nor a world-system (Wallerstein 1975, 35). But it was not merely a collection of adjacent mini-systems: early mediaeval societies shared broadly similar political systems and a common series of modes of production. The unity of early Christendom seems best explained by a shared allegiance to particular symbolic systems. Chivalric and feudal ideologies played a part as well as Christian, but it was the latter which was most efficiently centralised. Expansionist crusades were organised, in the Baltic and Spain as well as in the eastern Mediterranean, and heresy came to be dealt with centrally. Consideration of the phenomena through world-systems analysis might well prove interesting.

Systems of world symbols would have to be bounded, but there is no reason in principle why they should be geographically centralised. The papacy managed to dominate Christendom only for a short period and then ineffectually: other symbolic systems might be envisaged where power resided in groups defined by age and gender but not by location. Australian aboriginal societies share common sets of beliefs, and individuals may mobilise resources and people by appeal to these beliefs, yet there is little that can be termed stratification. Rather than try to customise the capitalist world-economy for use in ancient

conditions, prehistorians might experiment with symbolic systems maintained by the constant circulation of specialists or populations and by exchanges of women and goods and knowledge.

The stress on symbolic power is also implicit in an analysis of early iron-age society already mentioned (Frankenstein and Rowlands 1978). The symbolic power of some prestige goods is even clearer in a meso-american example, where historical documents attest the meaning with which some items of personal ornament were invested (Blanton and Feinman 1984). Prestige-goods may be distinguished from luxuries precisely along this axis. While luxuries are relatively interchangeable for the purposes of élite display in bourgeois society, goods invested with religious *mana*, perhaps by use in ceremonies, may be rather less easy to replace. The demonstration that extensive and powerful world-systems based on symbolic power existed in prehistory would be a considerable contribution to our understanding of world history. Not that the dominance of symbolic power need necessarily precede political or economic power. Rather, narratives of world history should describe (and account for) the shifting balance between the three forms of social power. The result might be better world-systems accounts of feudalism and nationalism, as well as of ethnicity and prehistory.

As ever, alternative hypotheses should also be born in mind. It may be that there were no world-systems before the early empires, and that all prehistoric social, economic and symbolic systems were essentially local, displaying little inter-regional patterning. Even similar artefact-types, such as bell-beakers, may have been assigned local values and used in very different ways in different regions. It is difficult archaeologically to distinguish luxuries from prestige-goods, and perhaps very few societies chose to invest imported goods with symbolic value. This view might be extreme, but is worth considering.

The issue of cultural choice raises the last major topic to be discussed — determinism. A major criticism of Wallerstein's approach is that the historian's attention is directed to the core of a world-system (Ortner 1984, 143-44). As a result, the choices and actions of the victims of expansion are peripheralised (Paynter 1982, 236; Wolf 1982, 22-23). Roman trade did not always have the same impact on external societies (Fulford 1985). Similarly, iron-age archaeologists have concentrated so much attention on core-periphery interaction that they have neglected both the distinctive historical trajectories of temperate Europe and also major differences within it (Ralston and Woolf, forthcoming).

How can archaeologists avoid similar criticisms in using world-systems analysis? One possible model is Wolf's (1982) analysis of the same process described by Wallerstein. Wolf focuses on the dynamics of mercantilism and capitalism more than on the structures generated, and by way of a series of detailed case studies he attempts to place equal weight on indigenous modes of production and political systems with those of the imperialists. The result is a subtle evocation of a complex history. But there is inevitably a loss in clarity and simplicity which makes it a very difficult model from which to generalise.

Archaeologists may prefer to abandon a focus on concentric structures in favour of the image of power extended in space (Cherry 1987). The articulation of symbolic, political and economic power creates variations on the theme of patterned behaviour recurring across great distances and over long periods of time. But beyond the volume of space-time occupied by a world-system, along its time-space edges where it abuts its predecessors, its neighbours, and its successors, this patterning breaks down (Giddens 1984, 164). At the time-space edges of world-systems, groups and individuals within local communities resist incorporation, or attempt to negotiate favorable positions for themselves in the new order (Olsen 1987). These strategies themselves generate the structures of world-systems which constrain and channel the dynamics of subsequent expansion or contraction.

Conclusions

World-systems analysis has been shown to be a powerful tool for conceptualising and analysing the modern world. I have argued that it has a similar potential for understanding the macro-scale structures and dynamics of the Roman empire and its neighbours, and for facilitating comparisons between Rome and other early empires. A number of preliminary hypotheses have been suggested.

World-systems analysis of the pre-capitalist world demands a sense of history equal to that exem-

plified by Wallerstein's work. Applications of his thesis to the ancient world must take critical account of his own writings on the subject. Among the many problems faced by prehistorians using the concept is the strong possibility that world-economies of an earlier epoch were simply too weak to generate much inter-regional patterning. More progress may be made with local world-system effects within early states, with world-symbolic systems, and other varieties of exchange system which are not so clearly centralised and in which dominance is less apparent at a regional scale. The very clarity permitted by the world-systems formulation should ensure its continued utility.

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