## Integrating Late Roman Cities, Countryside and Trade

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### I) Introduction

This paper is ostensibly about the economic integration of city and countryside under the later Roman empire, and the forms of trade which are plausible for a system based on this integrated rural/urban economy. The paper thus falls into two main parts, the first one explaining why a separation of rural and urban economy – something which could be termed a feudal transformation – is unlikely to occur in the fourth and fifth century CE. The second part takes the argument on plausible economic developments one step further, trying to explain how the same socioeconomic contexts which make the separation of rural and urban economy unlikely, can also be used to explain why trade and market exchange should not diminish over the same period.

However, in keeping with the question of methodology in economic history which is the theme of this volume, there is an important subtext to these arguments. Neither of the two parts of the economic modelling which are proposed here contribute any substantially new elements to the debate about the nature of the late Roman economy. What they are meant to show however is the interdependence of the various arguments.

The model chosen to describe the integrated economy of the late Empire conditions a quite precise corresponding model of late Roman trade. And vice-versa, of course. The methodological point which I attempt to treat through this concrete example is the proposition that discussions about various aspects of the ancient economy cannot be conducted in isolation. In the present example it would seem difficult to discuss trade without thinking about how consumption and production are located. And vice-versa it would not make sense to postulate that consumption and production have different geographical and social centres without proposing a model for the distribution of goods and revenue. What this paper proposes are two models of two different economic aspects of the late imperial period which are generated from an analysis of the same socioeconomic background factors. The fact that the two resulting models (hopefully) interlock should give increased probability to the interpretation of the background factors which are the same for both models.

### II) City and Countryside, an integrated model

#### a) The city as a measure of late Roman prosperity and power

Already for its late Roman contemporary commentators the question of prosperity – not only, but also economic prosperity – was tied up with the development of the cities of the Empire and the conditions of urban life in them. Ammianus' short geographic excursion on Gaul¹, for example, consists mainly of a list of cities, meant to illustrate the prosperity of the Gallic provinces. Cities are mentioned as symbols of imperial power – the capital of Trier – as concrete manifestations of Rome's military power – Cologne and Tongres –, but also, as in the case of Strasbourg, as a memorial of Julian's victory. However, mainly they are enumerated as just a sign of prosperity and *romanitas* in Gaul. Even the garrison cities Cologne and Tongres are not described as military settlements, or praised for the number of troops stationed in them, but Ammianus insists on their quality as "large and wealthy cities²". They defend the Gallic provinces, not so much because they are important garrisons, but because they are a visible symbol of Roman civilisation

<sup>1</sup> Amm. 15, 11.

<sup>2</sup> Amm. 15, 11, 7: "... secunda Germania, prima ad occidentali exoriens cardine, Agrippina et Tungris munita, civitatibus amplis et copiosis."

on the frontier of the Empire. The prosperity of a province, in Gaul and elsewhere, is clearly related to its degree of urbanisation, the province of Viennensis for example is said by Ammianus to "take pride in the splendour and multitude of its cities<sup>3</sup>".

On the other hand the decline of cities, or even their abandonment, is related to a general theme of decline and crisis in the Empire. If the vitality of the Empire is exemplified by the number of its cities and their prosperity, then it is only logical to take the fragility of Roman urban culture as an ominous sign of the fragility of Roman rule. Autun for example is characterised by its long urban tradition and the size of its walls, but perhaps Ammianus' commentary also implies that the real greatness of the city belongs already to the past<sup>4</sup>. In the same passage Ammianus mentions Avenches, the greatest city of the Alpes Graiae et Poeninae, which otherwise count only "obscure" cities – but, perhaps again ominously, it is "now abandon ed<sup>5</sup>".

At the other end of the Empire, too, the state of Amida after its attack by the Persians reduces the emperor Julian to tears<sup>6</sup>. This precise passage concerns of course the violent destruction of a city in war, but the theme of urban decline in all contexts is a common one in late Roman moralising discourse, as for example in Augustine. The connection between prosperity and urbanisation continues to be made even in post-imperial times, thus Gildas, a British monk of the 6th century writes: "And yet neither to this day are the cities of our country inhabited as before, but being forsaken and overthrown, still lie desolate."

The importance of the theme of the city and its prosperity in late Roman authors poses two problems. On the one hand we have to examine the question whether there is really a decline, or at least a crisis, of the late antique city, and on the other hand we have to account for the prevalence of the theme in contemporary writings. The second question is not necessarily answered by the first. The feeling of the contemporaries that the urban culture of the late Empire was something both vitally important and fragile, could just as well be motivated by a generally sombre mood concerning the future of the Empire, or indeed, perhaps perversely, concern about the city could be motivated by growing urbanisation in the period which increases the importance of the city in the minds of city-dwelling authors.

Answering the question of the reality of urban decline under the later Roman empire head on, using empirical evidence, is a difficult and perhaps impossible task. Reduced walled surface and abandoned areas of city territory can be balanced against new constructions elsewhere. An end of the epigraphic tradition of civic munificence in some cities can be set against its continuation elsewhere. The supposed decline of the city in Britain<sup>9</sup> and the north-western provinces in general can be countered with the – perhaps equally supposed – vitality of the African cities. Also in Africa, the proud affirmation of *ubique res publica* of Tertullian in the 3rd century can be set against the lamentation of *ubi tantae splendissimae civitates?* of Quodvultdeus in the fifth century<sup>10</sup>.

<sup>3</sup> Amm. 15, 11, 14: "Viennensis civitatum exultat decore multarum, quibus potiores sunt Vienna ipsa et Arelate et Valentia;

<sup>4</sup> Amm. 15, 11, 11: "... et moenium Augustoduni magnitudo vetusta." (my italics).

<sup>5</sup> Amm. 15, 11, 12: "... Aventicum, desertam quidem civitatem, sed non ignobilem quondam, ut aedificia semiruta nunc quoque demonstrant."

<sup>6</sup> Amm. 20, 11, 5: "Cuius cum prope venisset moenia, favilis oppleta conlustrans flebat cum gemitu, reputans qualis miseranda civitas pertulerat clades."

<sup>7</sup> Gildas *De excidio Britonum* (or *Britanniae*) 26. This citation gives at the same time the title to the paper by P. Dixon, *The cities are not populated as once they were*, in J. Rich (ed.), *The city in late antiquity*, London and New York 1992, 145-160.

<sup>8</sup> A reduced walled urban area is for example documented for some cities in Gaul, cf. E. M. Wightman, *Gallia Belgica*, London 1985, 223 ff., but Wightman herself states that this is difficult to use as a measure for urban population. An attempt of a summary on city size, building activity and urban prosperity, using archaeological evidence, is given by B. Ward-Perkins, *The Cities*, in A. Cameron – P. Gamsey (eds.), *Cambridge Ancient History*, XIII, Cambridge 1998, 371-410, of 403 ff.

<sup>9</sup> Cf. Richard Reece, *The end of the city in Roman Britain*, in J. Rich (ed.), *The city in late antiquity* cit., 136-144, especially his conclusion, 143.

<sup>10</sup> The two examples of contemporary "evidence" are taken from C. Lepelley, *The survival and fall of the classical city in Late Roman Africa*, in J. Rich, *The city in late antiquity* cit., 50-76. Tert. *De anima* 30, 3 and Quodvultdeus *Sermo II de tempore barbarico* 5, 4.

The aim of the present discussion is therefore both more modest and more general. Since "proof" for the general situation of the city under the later Roman empire remains elusive, a discussion of "plausibility" can already be considered a step forward. Moreover, I would like to restrict the discussion of plausibilities to economics — perhaps however with the ambition that economic prosperity can be considered as at least a necessary base for the overall prosperity, vitality and viability of late Roman cities. This limited approach can be formulated as the question of whether city and countryside in late antiquity continue to function as an integrated economic model.

### b) Roman and proto-feudal economics

The economic integration of city and countryside in the Roman empire is dependent on three factors: ownership of the bulk of rural property by a city based elite, the functioning of the city as the principal focus of consumption in the Roman economy, and finally the city constituting the centre of economic exchanges. If these factors continue to structure the Roman economy under the late Empire – assuming that they indeed determine a high Empire economic model – it would be plausible to assume that an urban/rural integrated economic model continues to function. Which means effectively that continued vitality and prosperity of the cities of the Empire in the fourth, and even the fifth century, is also a plausible assumption. This does not preclude the decline of certain cities, Ammianus' example of Avenches, or even the decline of urban structures in some regions of the Empire, the postulated general decline of British cities for example, but it would indicate that the emergence of a significantly different, dominating economic model under the late Empire is not very likely.

The three factors just outlined condition an integrated economic model where a bulk of rural produce is sold on the urban market, either by peasants in order to raise cash for tax and rent payments or by elite landowners themselves in order to raise the cash necessary for the sophisticated consumption and life-style of an estate owner who lives in a city. Precisely because the landed elites live in the cities, the urban space provides also the principal focus of consumption in the Roman empire. Prestige goods which are part of conspicuous elite consumption cannot be produced locally, but have to be traded over a network of urban markets. This trade further strengthens the urban market, which otherwise would remain limited to local products, and absorbs the cash revenues which are raised by the land owning elites. Urban consumption also expresses itself in the competition of the elites for social status, which in the form of euergetism provides cities with urban amenities, a functioning local administration, as well as demand for local labour and production.

In order to examine in more detail these factors which would define also a late Roman urban/rural integrate economic model, it is useful to test them against a hypothetical model of transformation of the economy.

A plausible model for the transformation of the Roman economy into a medieval feudal economy could look something like this: disruptions during the third century increase the strain on a structurally weak economic system which has to feed not only the population of the Empire, but also pay for the consumption of luxury goods and services by the elites, as well as the sophisticated imperial superstructure. Disruptions come in the form of political – and hence one might suppose economic – instability: barbarian invasions, an increased level of civil warfare, and the political disunity of the Empire. Even more important could be the demographic decline of the third century, triggered by the epidemics during the reign of Marcus Aurelius, and then again in the 250s. Extreme figures of demographic decline have been proposed, but if we accept that the Roman economy is structurally weak, even a modest decline of 10% could trigger a transformation of the economic

It is quite clear from the respective contexts that we cannot take them as objective statements on urbanisation in Africa – or indeed take them at face value at all. Quodvultdeus' implication of urban decline in the fifth century for example is part of a generalising and profoundly moralising passage: "Vos alloquitur veritas, o dilectores mundi: ubi est quod amabatis? ubi est, quod magno tenebatis? ubi est, quod dimittere nolebatis? ubi est Africa, quae toto mundo fuit velut hortus deliciarum? ubi tot regiones? ubi tantae splendissimae civitates?"

system<sup>11</sup>. As surplus production in the Roman economy is relatively low, demographic decline would lead directly to nearly commensurate economic shrinkage.

The demands on the economy from elite consumption as well as government expenditure are comparatively independent of demographic decline. Thus even modest demographic decline and political disruption would imply sharply increased competition for the available surplus. This competition between private elite consumption and state expenditure should express itself in two ways: on the one hand competition for access to the means of production and on the other hand competition for the surplus produced by the Roman economy. Competition for the means of production implies mainly competition for labour. Access to arable land is not a limiting factor, because if there really is a decline in population, land should be readily available. Competition for the surplus produced implies that rent paid to landowners and taxes paid to the state are increasingly incompatible.

This development would create the conditions for a plausible proto-feudal transformation of the economy and a rupture of the integrated rural/urban economic model. In order to maintain expenditure the state has to try to increase the per capita tax burden. In an economic formation like the Roman empire with relatively little available surplus this is especially difficult. Even more so than in earlier periods, the late Roman state would have to co-opt private elites for its administrative purposes. A more efficient tax system which yields higher per capita tax revenues can only be run when the elites are heavily used as co-opted tax collectors and administrators. The late Roman elites on the other hand have no interest in collaborating in this system. They might benefit from imperial legislations which for tax reasons ties peasants to their *origo* – also some positions in the tax-collecting system, *exactor* for example, might enhance the social status of curiales and give them more opportunities to exploit peasants – however overall, late Roman elites are interested in a low per capita tax rate, because this allows higher per capita rent payments<sup>12</sup>.

Collectively speaking it is the elites, from senators to curiales, who hold political power in the late imperial system. The administration is recruited mostly from among them, and thus does not constitute a fully independent factor of power. Under these conditions it would not be plausible for the elites to durably collaborate with a system which allows the state to raise higher per capita tax payments, which necessarily are detrimental to the level of rent sustainable. In this situation a feudal transformation would be plausible: landowners could move permanently to their estates and thus avoid the attempts of the government to co-opt them for the use of its fiscal administration. Retiring to a rural power base would also remove peer pressure from other curiales, and facilitate tax avoidance by the elites. Also fitting into this model of a feudal transformation is a factor which allows enhanced control over the peasant work force on the estates: for tax reasons the imperial government has already tied peasants to the land as coloni.

A "feudal" economic transformation as has just been outlined does not automatically imply a complete breakdown of an integrated rural/urban economic model, but it would render such a model much less plausible. The transformation would in fact remove two of the tree factors which we have assumed as sustaining the model: a majority of the land comprising a *civitas* territory would no longer be owned by city dwellers and consumption would shift at least partly from the city to the estates of this hypothetical proto-feudal elite. The urban market, the third constituent factor of the model, would be weakened. However, unless we make the implausible assumption of purely interestate exchanges, it would not disappear. This also means that part of the elite consumption, i. e. consumption of long-distance traded goods, would remain on the urban market, even if the elite no longer lives in the city. Consumption of services on the other hand, or consumption for euergetic purposes, would disappear from the urban market, and overall the persistence of a model integrating rural and urban economy would seem less likely.

Decline of late Roman cities and a weakening of the integration of rural and urban economy are not implausible, but I think that a model for the persistence of economic integration fits the observed

<sup>11</sup> For the epidemics during the reign of Marcus Aurelius, Bruce Frier, 173 ff., for example suggests a decline from 61.4 million in 164 CE to perhaps 55.5 million at the end of the second century, R. S. Bagnall – B. W. Frier, *The demography of Roman Egypt*, Cambridge 1994.

<sup>12</sup> The plausible relationships between taxes and surplus extraction by the private Roman elites are clearly recognised and discussed in K. Hopkins' economic model for the high Empire, K. Hopkins, *Rome, Taxes, Rents and Trade*, Kodai, 6/7 (1995/96), 41-75, cf. 48 ff.

socioeconomic and sociopolitical trends of the later Roman empire even better. There are two principal problems with a feudal transformation model: government expenditure and elite consumption.

The proposition that rent and taxes are in direct competition for the available economic surplus is certainly correct – it may even be correct to assume that for demographic reasons this competition is more fierce in the late 3rd and early 4th century – but the question of whether the competition between government and elite landowners significantly shifts the balance of surplus exploitation – and at which point in time – is much less clear. The proposition of the feudal transformation model is certainly seductive: land owning elites and imperial administrators – certainly not a class which can be described as civil servants in a modern sense –, both the actual members of the central administration and the curiales who carry out its tax policies, coincide to a large extent. Why should they not have both the motivation and the means to retire to a proto-feudal, non-tax-paying economy? The plausibility of this proposition is further reinforced by the apparent ease of the accommodation between Roman landowners and the barbarian kingdoms. These proto-feudal kingdoms, feudal in the sense that they do not rely on a paid, professional army, but on a levy which is supported by rural property or revenue granted by the king, raising much less revenue in tax than the Empire does, could seem like exactly the system the Roman land owning elites had been waiting for.

However a significant shift in the distribution of surplus between elites and government is just not visible, certainly not in the fourth century, and perhaps not even in the fifth – despite the complaints of Valentinian III<sup>13</sup> about the imperial treasury being empty. On the contrary, in many models of late antique development, notably Jones' *Later Roman Empire*<sup>14</sup>, the period is considered to see an increase in the level of taxation<sup>15</sup> and of tax revenue. If the land owning elites were really abandoning the integrated rural/urban economic model, which serves also as the basis for imperial taxation, the consequences should be easily visible in the imperial budget and its accompanying legislation. However, apart from the usual degree of moralising by the emperors, there is no real sign of the financial crisis which a transition to a proto-feudal economy would surely cause.

It could perhaps be argued that the partial barbarisation of the late Roman army is undertaken for cost reasons – federates do not receive regular pay in cash – and thus is a sign of financial crisis following an economic decline. But despite of the existence of federate troops, it would be impossible to argue that the late Empire no longer maintains a large regular army, paid in both cash and kind, raised through taxation which depends on a functioning and integrated economy.

Since the tax revenue generated by an integrated rural/urban economy is still available, and thus there is no sign of a proto-feudal economy emerging under the late Empire, it is necessary to consider the question of why apparently the late Roman elites fail, or perhaps are unwilling, to transform themselves into a feudal, non-tax-paying elite. The key questions here are level and patterns of elite consumption. The late Roman elites may indeed be more rural-based than they were before, at least they may be spending more time in their villas; as opposed to just visiting them for inspections. The writings of Ausonius<sup>16</sup> or Sidonius Apollinarius<sup>17</sup> give the impression that in Gaul for example a new type of no longer entirely city-dwelling, but also not yet entirely rural elite does exist<sup>18</sup>.

This however cannot be equated with a corresponding shift of elite consumption. Indeed the residence, either urban or rural, of elite landowners has very little impact on the urban market where

<sup>13</sup> Nov. Val. 15.

<sup>14</sup> A. H. M. Jones, The Later Roman Empire, Oxford 1964, e.g. 468 f.

<sup>15</sup> The example of Jones is given only to underline the appearances of a possible increase, rather than a decline, in tax revenue under the late Empire. Personally, I do not find a high taxation model for the late Empire plausible, but neither is there any evidence suggesting a sharp decline in tax revenue which could be linked to the break-up of the rural/urban economic model.

<sup>16</sup> Auson. 3, 1 ("de herediolo") gives the impression that the author actually lives on his substantial suburban estate: "haec mihi nec procul urbe sita est, nec prorsus ad urbem...".

<sup>17</sup> For example Sid. Apoll. Carm. 22, 142 ff., an extended description of the extensive villa ("burgus") of Leontius.

<sup>18</sup> Possible interrelations between town and countryside in late Roman Gaul, as well as the evidence of extensive rural residential villas are discussed for example by H. Sivan, *Town and country in late antique Gaul: the example of Bordeaux*, in J. Drinkwater – H. Elton (eds.), *Fifth-century Gaul: a crisis of identity*, Cambridge 1992, 132-143.

the integration of rural and urban economy takes place. It seems plausible to assume that also a city-dwelling elite member would receive basic foodstuffs, and perhaps other everyday products for which no highly skilled artisans are required, from his estates, bypassing the urban market. It is only products and services which need specialised artisans which are purchased on the urban market. This includes products, specific foodstuffs for example, which cannot be produced locally and for which elite members depend on traders who operate on the urban markets. Elite consumption hence is always partly rural and extra-market and partly urban and dependent on the market. If there is really a trend towards more rural residence under the late Empire, this does not change patterns of consumption, products requiring a variety of skilled artisans or which are not available locally must still be purchased on the urban market – and the revenue which allows these purchases must still be raised by selling estate products in the city.

Of course, models of inter-estate trade for luxury items and models for the transformation of villas into artisan villages have been suggested <sup>19</sup>. However, for at least the fourth and fifth century they are not very plausible. Inter-estate trade and artisan villae/villages are neither compatible with the level of overseas long-distance commerce observed – as we will se in the second part of this paper –, nor with the existence of regional, specialised production. Fine African pottery for example is both prized and widespread throughout the Empire. So widespread in fact that its distribution through inter-estate trade is not feasible – every elite member in the Empire would need to have personal trading relations with an African estate owner. The same can be said for overseas trade in general: the late Empire sees a decrease of coastal trade and an increase of maritime trade on direct routes, using larger cargo vessels<sup>20</sup>. It does not seem plausible to associate precisely this progress in maritime trade with a return to more archaic forms of inter-estate trade<sup>21</sup>.

The late Roman elites might be motivated to some extent to diminish their exclusive focus on city life, but if they want to maintain their established patterns of consumption, they cannot leave the urban market – both as sellers of mainly agricultural produce and as buyers of more sophisticated foodstuffs and artifacts.

### c) Some intermediate conclusions on a feudal transformation

The two problems of a feudal transformation model which we have discussed – continuing government expenditure and unchanging patterns of elite consumption – do not necessarily mean that such a transformation can never take place. They demonstrate however, that social, economic and fiscal developments in the fourth and fifth century can better be accounted for by the assumption that an economic model, integrating rural and urban economy, continues to function. The final enabling factor for a feudal transformation model might only be provided by the establishment of the barbarian kingdoms where the land owning elites no longer need to both collect and pay cash taxes. Their consumption of luxury goods would still require a certain degree of exchange on the urban market, but without taxation this level of exchange is perhaps too low to durably sustain the urban market, urbanisation and an urban/rural integrated economic model<sup>22</sup>.

# II) Integrating the economy, a model for late Roman trade

<sup>19</sup> C. R. Whittaker, *Late Roman trade and traders*, in P. Garnsey – K. Hopkins – C. R. Whittaker (eds.), *Trade in the ancient economy*, London 1983, 163-180, cf. 169 ff. Whittaker refuses a model of estate autarky, but strongly insists on the "industrial" production on villa sites, as well as the exchange of luxury goods between estate owners. He concludes that the distinction between "real" traders and the trading agents of estate owners is at best blurred.

<sup>20</sup> G. Tigano (ed.), *Rinvenimenti subacquei a Milazzo e il relitto di Punta Mazza*, Catalogo della Mostra di Archeologia, Merì 1997. Cited in J.-M. Carrié – A. Rousselle, *L'empire romain en mutation*, Paris 1999, 545 f.

<sup>21</sup> I would argue that Whittaker's evidence for inter-estate exchange, mainly based on written source material is more anecdotal than systemic, C. R. Whittaker, *Late Roman trade and traders* cit., 163-180.

<sup>22</sup> Without a system following K. Hopkins' taxes and trade model, also integration of rural and urban economy is impossible – or at least implausible.

## a) Trade in a late imperial socioeconomic context

The argument for a persistence of the economic integration of city and countryside in the late Roman period can be strengthened by having a closer look at trade. Trade having been identified as necessary to maintain elite habits of consumption and thus keeping the elites tied to the urban market which provides a focus for trade. This section therefore will present a set of arguments aiming at a plausible description of the development and the role of trade in the wider socioeconomic context of the later Roman empire.

The later Roman empire here is again understood as only the period resulting from the structural transformations of the third century CE and preceding the definitive breakdown of political unity in the Mediterranean in the late 5th century. This arbitrary limitation in the time-frame of our model for late antique trade does not presuppose that trade necessarily functions in a very different fashion in the periods characterised by a political division of the Mediterranean between the Roman empire and the barbarian successor kingdoms of the West – or even in the 7th century with the presence of a new Arab empire<sup>23</sup>. The arguments for the important role which trade must play in the developed, but preindustrial formations of the Mediterranean world would still be the same. However, the arguments necessary to oppose a diminishing trade model, a model of general economic decline, would be somewhat different for the later period.

As earlier on, my aim here is not to present new findings, either textual or archaeological, on the functioning of late Roman trade, but to place economic exchange within a framework of social, political and economic developments under the later Roman empire. The main purpose is to show that not all possible assumptions on late Roman development are unlimited compatible.

Most notably, the assumption of a socially and politically complex and dynamic late Empire is not compatible with an assumption of declining trade. The point still seems worth making, because the recent positive reevaluation of the late Roman period in political, social and cultural terms has often not been accompanied by a corresponding reexamination of economic models. This does not imply that historians of the "new" later Roman empire necessarily believe that the Empire is primitive in economic terms, but rather that they have not been particularly anxious to check the economic foundations of their new Empire<sup>24</sup>. However, underlining the innovative importance of the emergence of a new, efficiently governed, bureaucratic empire, of an empire integrating Christian culture and Roman traditions, of an empire inventing a new monarchy, is not coherent without showing at the same time that economic development is correspondingly dynamic. And trade is a prime indicator of economic vitality.

The basic requirement for a working model of late Roman trade is for it to be compatible with all the other things we know – or would like to assume – about the later Roman empire. Thus before getting into the discussion of modelling trade, it is necessary to list the factors which appear to plausibly describe the late Roman socioeconomic context and which are relevant for providing a background for trade<sup>25</sup>. It goes without saying that all these factors can be questioned – just as the assumption of dynamic trade in the late Roman period can be questioned. However it needs to be seen if together they do not construct a socioeconomic framework which is globally more persuasive than the objections which can be raised against individual factors of development.

<sup>23</sup> The case for sharply declining trade from the 6th century onwards is made by R. Hodges – D. Whitehouse, *Mohammed, Charlemagne and the origins of Europe*, London 1989, e.g. 52 f. A more complex picture of economic transition with an ancient and a medieval economic mode coexisting for the period 300 to 700 CE is outlined by C. Wickham, *From the ancient world to feudalism*, P&P, 103 (1984), 3-36, especially 22 ff.

<sup>24</sup> An example of a strikingly new perspective on the later Roman empire, but leaving more or less totally aside the question of economic changes, is P. Brown, *The making of late antiquity*, Cambridge (Mass.0 and London 1978. For example: "... this fact [the end of civic paganism] has been linked to the collapse of the traditional economic and social position of the cities in the Roman Empire in the course of the crisis of the third century. [...] I wish to step aside from this body of opinion also. [...] The transformation of urban life in Late Antiquity may have far deeper roots than we had thought." 28 f.

<sup>25</sup> The hypothesis which we have tried to prove in the first part of this paper – continuing integration of rural and urban economy – is an important factor in a model of late Roman trade, but not in itself sufficient for providing a coherent background for a trade model.

Thus, the later Roman empire is a system characterised by a complex state superstructure. More complex indeed than the political system of the high Empire, because it has an expanded and professionalised administrative personnel, as well as a more elaborate imperial court system which underpins the new forms and rituals of the late Roman monarchy<sup>26</sup>. The late Empire disposes of an army comparable, if not superior, in numbers and equipment to the armies of the early Empire. This army is split into smaller units which are garrisoned in a more dispersed manner, but on the other hand, in the form of the *comitatus*, the Empire also has an important element of permanently active and mobile troops following the imperial court. Late Roman emperors maintain an unchanged level of ostentatious expenditure, not only for new palaces – or later churches –, but also for traditional largess like the distributions of the *annona civica* in Rome and Constantinople – and indeed also food distributions in other major cities of the Empire. All this is paid for from taxes administered by the new administration. Some of these taxes may be collected in kind, but Egyptian papyri make it abundantly clear that the ratio between taxes in kind and cash taxes remains stable, and that the late Empire is far away from a simplified fiscal system where the state merely requisitions part of the agricultural produce<sup>27</sup>.

The late Roman system is also characterised by the persistence and expansion of a dynamic class of social and economic elites<sup>28</sup>. The traditional senatorial elite increases in size and hence most probably in aggregate wealth. The municipal elites are more tightly integrated into the system of imperial government, especially tax collection, but precisely because of this they must not, and indeed cannot decline in overall economic importance. The crucial importance of the municipal elites for the later Roman empire is underlined by the fact that contributions which have to be made to the functioning of the imperial state – and which are lamented by contemporaries – are offset by new opportunities for enrichment which are granted and by abuses which are tacitly condoned. This includes both the exploitation of small taxpayers and the – in principle illegal – movement into higher classes of the imperial elite. Finally, with the bureaucratic and ecclesiastic elites, the late Empire has two entirely new groups of social and economic elites.

It is clear that some elite groups may have expanded to the disadvantage of other groups: the bureaucratic elite for example is to a large extent recruited from the municipal elite. It may also be true that the increase in the numbers of elite members is offset to some extent by a decrease in individual wealth: for example some of the new eastern senatorial families are not very rich compared with their western colleagues, and some classes of imperial bureaucrats can be described as economic elite only in the sense that they constitute a class of consumers and not of producers. Overall however there can be little doubt that the later Roman empire has an elite which surpasses the early Empire in aggregate wealth. Apart from material culture, to which we will come with the principal discussion of trade, this is suggested by the change in labour organisation: the expansion of dependent labour in the form of the colonate also requires an expanding class of landowners, or at the very least a class of elite administrators.

Finally, it can be pointed out that the later Roman empire, within the timeframe which we have chosen, is remarkably stable as far as its territory is concerned. It is true that there is no territorial expansion, but neither is there for most of the early Empire. Territorial stability is all the more remarkable as the late Empire is under a lot more military pressure. Its ability to keep the frontier regions stable and to integrate barbarians suggest a high economic and political resilience which would not be possible with an inefficient administration and a weak economic system.

<sup>26</sup> For a recent description of the complexities of late Roman court ceremonial see for example F. Kolb, Herrscherideologie in der Spätantike. Berlin 2001.

<sup>27</sup> See J.-M. Carrié, Observations sur la fiscalité du IVe siècle pour servir à l'histoire monétaire, in, L'"inflazione" nel quarto secolo D.C. Atti dell'incontro di studio (Roma 1988), Rome 1993, 115-154, especially 137 f. Carrié also states that Egypt with a cash tax ratio of only 25% is probably atypical.

<sup>28</sup> There is abundant literature on the topic of the late Roman elites, but not, to my knowledge, a comprehensive treatment which would back up all the propositions made here to serve as a basis for a model of late Roman trade. Some basic concepts of the upward social mobility possible in the late Roman period are summarised by A. Marcone, *Late Roman social relations*, in A. Cameron – P. Garnsey (eds.), *The Cambridge Ancient History*, XIII, Cambridge 1998, 338-370, cf. 363 ff. Or also F. Vittinghoff, *Gesellschaft*, in F. Vittinghoff et al. (eds.), *Europäische Wirtschafts- und Sozialgeschichte in der Römischen Kaiserzeit*, Stuttgart 1990, 161-369, cf. 249 ff. An interesting case study is provided by K. Hopkins, *Social mobility in the later Roman empire: the evidence of Ausonius*, CQ, N.S. 11 (1961), 239-249.

The factors characterising the later Roman empire which have been outlined, overall define a political and economic system which is at the very least comparable, if not superior to the early imperial system.

### b) Conditions and consequences of a diminishing trade hypothesis

Trade in the Hopkins model<sup>29</sup> for the Republican and early imperial period is a function of imperial taxation, i.e. the mobilisation of economic surplus in the form of cash taxes generates a transfer of resources between different parts of the Empire – from centre to periphery – which has to be balanced by corresponding patterns of trade. Tax exports from the central provinces to the periphery are only possible with a corresponding export of goods and an import of revenue, facilitated by a framework of integrated trading networks. To supplement the Hopkins model, a similar system can be applied to the transfer of resources for elite consumption. Since the elites do not normally live on their estates, i.e. do not form a proto-feudal elite as we have already shown, the bulk of estate revenue can only be transferred in the form of cash. Cash which through trading networks has ultimately to be raised on the urban market where elite consumption is concentrated.

Trade thus can be characterised as a system of distribution of economic surplus in an Empire where the principal centres of production do not coincide with the principle centres of consumption – neither regionally nor as far as the division between countryside and city is concerned. Agriculture may be less economically dominant than the primitivist school wants to believe<sup>30</sup>, but this does not put into doubt the fact that the bulk of production in the Roman empire is rural, whereas most of non-subsistence consumption is urban. If there was less trade in the late imperial period, or if trade was declining, this would have significant consequences for the overall economic, social and political makeup of the Empire – consequences which, are not consistent with the factors characterising the late Empire which have just been outlined.

Less trade means in the first instance either less revenue transfer or revenue transfer which is much slower and inefficient. Diminishing trade models<sup>31</sup> do not deny the necessity of transferring economic surplus: centres of consumption are always the army, the imperial court and the city dwelling elites.

Factors which indicate less need for revenue transfer are only secondary, e.g. the creation of smaller military units which can be supported by the production of their immediate surroundings. This remains a secondary factor, on the one hand because of the existence of a large *comitatus* army, and on the other hand because of the clear necessity of military supplies which cannot always be produced by the surroundings of a fort: weapons, uniforms – and indeed army pay in cash. Another factor which would diminish the necessity of revenue transfer is also at best secondary (if we accept the conclusions of the first part of this paper): the emergence of a proto-feudal elite which lives on, or close to, their revenue producing estates. This is most often not technically feasible for the bureaucratic and ecclesiastic elite, and not a choice made by many members of the municipal and senatorial elites.

The solution adopted by diminishing trade models to assure the revenue transfer which clearly is needed, is the postulation of large-scale taxation in kind and of closed estate economies: i.e. the non-market, non-trade-mediated transport of economic surplus from producers to consumers<sup>32</sup>. Since we have said that the later Roman empire is at least as socially and politically complex as the early Empire, i.e. has a comparable or greater consumption of economic surplus, this non-trade revenue transfer would have to be at least as economically efficient as trade-mediated transfer – short of postulating very substantial economic growth for the later Roman empire thanks to which

<sup>29</sup> There is an updated version to the original 1980 publication of the model in: K. Hopkins, *Rome, Taxes, Rents and Trade* cit., 41-75.

<sup>30</sup> The primitivist model for the ancient economy was forcefully restated by M. Finley in 1984 in his chapter *Further Thoughts*: M. I. Finley, *The ancient economy*, 2nd edition, London 1985, cf. 177 ff.

<sup>31</sup> The "diminishing trade school" is summarised by J.-M. Carrié, Les échanges commerciaux et l'État antique tardif, in, Les échanges dans l'Antiquité: le rôle de l'État, 175-211, Saint-Bertrand-de-Comminges 1994, cf. 175 f. and notes.

<sup>32</sup> For example M. Rostovtzeff, *The social and economic history of the Roman empire*, 2nd edition, Oxford 1957, cf. 515 ff.

even an inefficient system of surplus transfer would still allow a sophisticated superstructure. This seems unlikely<sup>33</sup>.

Government consumption first: the problem with taxation in kind is that the political conditions which had prompted the emergence of the taxes and trade model in the late Republican and early imperial periods are still largely the same. Most of the army is still garrisoned in the frontier provinces, and even though important economic growth has occurred there – precisely because of the presence of the army – these provinces are still not able to support the army entirely from their own resources. This statement cannot actually be proven, but it is immensely plausible: if the military budget of the late Empire is perhaps in the region of 80% of total government expenditure, then less than half of the provinces of the Empire cannot raise the necessary taxes – be they paid in kind or in cash. If there is widespread taxation in kind – instead of government purchase paid in cash – meant to supply the army, it necessarily involves the transfer of goods from the inner provinces to the frontiers. This transport is expensive, especially if it involves overland transport<sup>34</sup>. The only solution for this problem is to transform the transport services themselves into taxes, *munera* in fact.

There is of course no doubt that the imperial government adopts this solution from time to time and to a limited extent, but as a global solution for revenue transfer it is not feasible. Transforming commercial transport into transport *munera* would mean that the overall taxes imposed on the population have to be be significantly higher than the actual tax resources consumed by the army in the frontier regions: a non-trade-mediated system of revenue transfer is less efficient than a trade-mediated one. This means that unless there is a very significant percentage of taxable surplus available in the Empire, taxation in kind on a permanent and large scale basis is much less probable than cash taxation and surplus transfer through trade networks.

Meeting the consumption requirements of the Roman elites through a non-trade model is equally implausible. Archaeological evidence leaves no doubt that the late Roman elites continue to consume many goods and products which cannot be produced on their own estates<sup>35</sup>. This does not only concern luxury items like exotic spices, actually coming from outside the Empire, or papyrus which necessarily comes from Egypt, but includes everyday items of consumption, too. Egyptian elites for example import specific Greek and Italian wines, even though their estates are capable of producing, and indeed sell large quantities of local wines<sup>36</sup>.

As for trade generated by taxation and government expenditure, diminishing trade models do not put into doubt the fact that late Roman elites are not a proto-feudal elite, living exclusively on the production of their own estates – plus some very few prestige items. The solution diminishing trade models propose is again non-trade-mediated resource transfer. There are two possible models of inter-estate pseudo-trade: either exchange between different estates of very large landowners or exchange between the estates of different landowners.

The first model is clearly marginal for all exchanges which concern goods traded over long distances: very few members of the late Roman elites – essentially only the western senatorial elites – own a substantial number of distinct estates. But even those estates are normally concentrated on clearly delimited geographical regions, e.g. Italy-Sicily-Africa. This means that the elite landowner producing African fine-ware pottery, Greek wines, Spanish oil and Egyptian papyrus is merely hypothetic<sup>37</sup>.

<sup>33</sup> Concrete evidence of trade-mediated, cash-based economic exchange in late Roman Italy is given for example by S. J. B. Barnish, *Pigs, plebeians and* potentes: *Rome's economic hinterland, c. 350 – 600 A.D.*, PBSR, 55 (1987), 157-185.

<sup>34</sup> R. Duncan-Jones, *The economy of the Roman empire: quantitative studies*, 2nd edition, Cambridge 1982, cf. 366 ff., using figures from Diocletian's price edict, shows the high price of transport of bulk goods by land. Most interestingly for the present discussion, the low cost of transport by sea is dismissed by Duncan-Jones as "unrealistic".

<sup>35</sup> See for example A. M. Small – J. Freed, *S. Giovanni di Ruoti (Basilicata) Il contesto della villa tardo-romana*, in A. Giardina (ed.), *Società romana e impero tardoantico*, II, *Le merci gli insediamenti*, Rome 1986, 97-129. Their studies of ceramic waste sites at the villa show the presence of several types of African and oriental fine wares and transport amphoras

<sup>36</sup> J.-M. Carrié – A. Rousselle, L'empire romain en mutation cit., cf. 546.

<sup>37</sup> Inter-estate exchanges can play a substantial role however for agricultural staple goods. Rathbone for example describes the wine production on an Egyptian property which is both commercialised on the urban market and exchanged with other units of the same owner: D. Rathbone, *Economic rationalism and rural society in third-century A. D. Egypt. The Heroninos archive and the Appianus estate*, Cambridge 1991, cf. 278 ff.

This means that most inter-estate exchange theoretically feasible should be bilateral exchange between different members of the late Roman elites. Even though there are some examples of late Roman letter-writers asking their correspondents to help them procure specific items of consumption<sup>38</sup>, there is not sufficient relevant evidence for a model in which a non-market, non-trade exchange system between members of the late Roman elites dominates. Given the very varied consumption requirements of elite consumers, inter-estate exchange would generate a vast amount of textual evidence of which something more should have to survive. As in the case of taxes in kind, inter-estate exchange does not constitute a rational economic system which can be applied at a large scale and over a long period of time.

Given the implausible consequences of diminishing trade models for the later Roman empire, we have to ask perhaps why they have been proposed. One concrete motivation for diminishing trade models has been the somewhat misleading evidence from ancient shipwrecks on the basis of which the evolution of the volume of maritime trade has been reconstructed<sup>39</sup>. Catalogued shipwrecks show a marked peak for the period 200 BCE to 200 CE. Frequency of shipwrecks for the 3rd century CE is about half of this peak, with even less for the 4th and 5th century. There are in fact less shipwrecks for the 5th century CE than for the 5th century BCE. If this data is taken at face value, it is clearly necessary to develop models for late Roman trade which diminish this trade as far as possible.

However, taking shipwrecks as directly indicative of the volume of trade in the Empire is hardly acceptable, too many obvious implausibilities appear in the data. Why for example should there be more trade in the classical Greek period, with no imperial political superstructure in the Mediterranean, than in the 5th century CE where this superstructure still largely exists? Why also is the decline of trade absolutely steady, even though also pessimistic economic historians of the late Empire generally accept some 4th century economic stabilisation after the famous "3rd century crisis"?

New findings in underwater archaeology<sup>40</sup> show that Parker's catalogue of ships is probably a flawed indicator for the volume of maritime trade in the late Roman period. More wrecks of late Roman large ships, sunk at some distance from the coast, do exist and hence render the wreck argument for a diminishing trade model obsolete. Finding a statistically representative number of late Roman large cargo vessels, sunk on direct routes across the Mediterranean, is of course practically impossible, but the existence of some examples underscores the plausibility of the argument that such wrecks and vessels should exist.

A second motivation for diminishing trade models is the supposed demonetisation of the late Roman economy<sup>41</sup>. Without an adequate supply of a high quality, stable currency trade is supposed to become technically more difficult to conduct and thus has a tendency to diminish. This argument is in fact based on a modernist misunderstanding of the Roman economy and of late imperial "inflation": depreciation of the coinage does occur, but it is in no way rapid enough to trigger genuine price inflation<sup>42</sup>. On the contrary, the depreciation of the silver coinage, plus the creation of a new gold coinage, in fact increase the degree of monetisation of the economy. The solidus takes the place of the high Empire denarius and the depreciated silver coinage provides a convenient medium of exchange for small scale trade which under the high Empire perhaps had not been monetised. If monetisation is a measure for the volume of trade in the Roman economy, then the late Roman period should have rather more than less trade.

<sup>38</sup> The evidence from Ausonius on non-trade exchanges between the estates of various Gallic elite members is summarised by C. R. Whittaker, *Late Roman trade and traders* cit., 163-180, cf. 171.

<sup>39</sup> A. J. Parker, Ancient shipwrecks of the Mediterranean and the Roman provinces, Oxford 1992.

<sup>40</sup> G. Tigano (ed.), Rinvenimenti subacquei a Milazzo e il relitto di Punta Mazza cit.

<sup>41</sup> Described in dramatic terms by M. Rostovtzeff: "The foolish policy of the emperors in systematically depreciating the currency, ... produced violent and spasmodic fluctuations of prices ...". M. Rostovtzeff, *The social and economic history of the Roman empire* cit., 515-516.

<sup>42</sup> See the demonstration by J.-M. Carrié, showing that the depreciation of the coinage in the 3rd and 4th century amounts to nominal, but not price inflation in the late Roman economy. J.-M. Carrié, *Le riforme economiche da Aureliano a Constantino*, in A. Schiavone (ed.), *Storia di Roma*, vol. III,I, *L'età tardoantica*, 283-322, Torino 1993, especially 301 ff.

Finally, some historians like for example Rostovtzeff<sup>43</sup> have been very impressed by what they have perceived as the creation of a directed state economy under the late Empire. State-owned *fabricae*, and guilds of *navicularii* to transport goods. Here too, I would argue, the nature of the late Roman economy has been misunderstood. *Fabricae* as a factor diminishing late Roman trade can be dismissed quite easily, only 35 of them exist all over the Empire<sup>44</sup>.

*Navicularii* on the other hand are more interesting. They provide transport services for the government and thus could be taken as removing private traders from the market. However this is not the case: government transport constitutes only part of the activity of the *navicularii*, in fact only one trip in two years, the rest of the time *navicularii* are allowed to engage in private transport services and private trade<sup>45</sup>. In fact, transport services for the government are a disguised subvention for a privileged social group, securing a minimum basic activity for the *navicularii*.

All this goes to show that not only are the wider socioeconomic consequences and implications of a diminishing trade model not very plausible, but also the supposedly objective observations which seem to support these models must be subjected to reinterpretation.

### c) A plausible model for late Roman trade

In guise of a conclusion for this section I would like to propose a model for late Roman trade which fulfils the requirements of plausibility and consistency with the wider social and economic context of the later Roman empire. A very simple model.

The demand from both private and institutional consumers under the later Roman empire is equivalent, or rather superior, to demand under the high Empire. Demand is not limited to subsistence level products, but encompasses a wide variety of, in part sophisticated, products and artifacts. The principal centres of consumption do not have the same distribution as the centres of production, neither at the level of the Empire – some products only come from one region or a small set of producers – nor at the local level – producers are predominantly rural, consumers predominantly urban. In consequence massive redistribution of resources is necessary.

For both state and elites who constitute the bulk of consumers, non-trade mechanisms of distribution are less efficient than trade and consume more economic surplus. Since economic surplus in a preindustrial economy like the Roman empire is marginal, a reduction of trade in the late Roman period would constitute a luxury which the Empire can not afford or survive.

### **IV) Conclusion**

There are two kinds of conclusion which can be drawn from this discussion. The first concerns the economics of the later Roman empire, the second the plausible representation and analysis of these economics. The first set of conclusions is quite straightforward: rural and urban economies cannot separate in the late Roman period, because consumption requirements, both private and imperial, necessitate their continued integration. Trade is on the one hand the crucial factor which enables the binding of the two economies, i.e. local trade between countryside and city, and on the other hand makes possible the consumption patterns which motivate the integration, i. e. long-distance trade balancing the economic diversity of the provinces of the Empire.

The second set of conclusions is methodological. Our attempts of understanding the interrelations between city, countryside and trade cannot be dissociated from an explicit model of the late imperial socioeconomic, political and even cultural background. Also, even though individual factors of economic development can be identified – the urban economy, the rural economy, urban

<sup>43</sup> M. Rostovtzeff, The social and economic history of the Roman empire cit., 524 f.

<sup>44</sup> For the imperial fabricae see A. H. M. Jones, *The later Roman empire*, Oxford 1964, 834 f.

<sup>45</sup> J. Rougé, *Recherches sur l'organisation du commerce maritime en Méditerranée sous l'Empire Romain*, Paris 1966, 247. Also, *C.Th.* 13, 5, 26 (396 CE) explicitly states that the navicularii could put their ships at the service of private clients, or use them to transport their own merchandise or produce of their estates.

markets, long-distance trade – it is only the identification of the specific interdependent relations between these factors which give plausibility to their individual analysis. It seems methodological more obvious to reconstruct the development of the various elements in question from a plausible model of their interdependent relations, than to attempt to gain a coherent picture of economic interrelations by extrapolating from isolated features of the three elements of the late Roman economy which have been under discussion.

## **Bibliography**

- R. S. Bagnall and B. W. Frier, *The demography of Roman Egypt*, Cambridge 1994.
- S. J. B. Barnish, *Pigs, plebeians and* potentes: *Rome's economic hinterland, c. 350 600 A.D.*, PBSR, 55 (1987), 157-185.
  - P. Brown, The making of late antiquity, Cambridge (Mass.) and London 1978.
- J.-M. Carrié, *Le riforme economiche da Aureliano a Constantino*, in A. Schiavone (ed.), *Storia di Roma*, vol. III,I, *L'età tardoantica*, Torino 1993, 283-322.
- J.-M. Carrié, Observations sur la fiscalité du IVe siècle pour servir à l'histoire monétaire, in, L'"inflazione" nel quarto secolo D.C. Atti dell'incontro di studio (Roma 1988), Roma 1993, 115-154.
- J.-M. Carrié, Les échanges commerciaux et l'État antique tardif, in, Les échanges dans l'Antiquité: le rôle de l'État, Saint-Bertrand-de-Comminges 1994, 175-211.
  - J.-M. Carrié-A. Rousselle, L'empire romain en mutation, Paris 1999.
- P. Dixon, *The cities are not populated as once they were,* in J. Rich (ed.), *The city in late antiquity*, London and New York 1992, 145-160.
- R. Duncan-Jones, *The economy of the Roman empire: quantitative studies*, 2nd ed., Cambridge 1982.
  - M. I. Finley, *The ancient economy*, 2nd ed., London 1985.
- J. Freed and A. M. Small, *S. Giovanni di Ruoti (Basilicata) Il contesto della villa tardo-romana*, in A. Giardina (ed.), *Società romana e impero tardoantico*, II, *Le merci gli insediamenti*, Roma 1986, 97-129.
- R. Hodges and D. Whitehouse, *Mohammed, Charlemagne and the origins of Europe*, London 1989.
- K. Hopkins, Social mobility in the later Roman empire: the evidence of Ausonius, CQ, N.S. 11 (1961), 239-249.
  - K. Hopkins, Rome, Taxes, Rents and Trade, Kodai, 6/7 (1995/96), 41-75.
  - A. H. M. Jones, The Later Roman empire, Oxford 1964.
  - F. Kolb, Herrscherideologie in der Spätantike. Berlin 2001.
- C. Lepelley, *The survival and fall of the classical city in Late Roman Africa*, in J. Rich, *The city in late antiquity*, London and New York 1992, 50-76.
- A. Marcone, *Late Roman social relations*, in A. Cameron and P. Garnsey (eds.), *The Cambridge Ancient History*, XIII, Cambridge 1998, 338-370.
  - A. J. Parker, Ancient shipwrecks of the Mediterranean and the Roman provinces, Oxford 1992.
- D. Rathbone, *Economic rationalism and rural society in third-century A. D. Egypt. The Heroninos archive and the Appianus estate*, Cambridge 1991.
- R. Reece, *The end of the city in Roman Britain*, in J. Rich (ed.), *The city in late antiquity*, London and New York 1992, 136-144.
  - M. Rostovtzeff, *The social and economic history of the Roman empire*, 2nd ed., Oxford 1957.
- J. Rougé, Recherches sur l'organisation du commerce maritime en Méditerranée sous l'empire Romain, Paris 1966.
- H. Sivan, *Town and country in late antique Gaul: the example of Bordeaux*, in J. Drinkwater and H. Elton (eds.), *Fifth-century Gaul: a crisis of identity*, Cambridge 1992, 132-143.
- G. Tigano (ed.), *Rinvenimenti subacquei a Milazzo e il relitto di Punta Mazza*, Catalogo della Mostra di Archeologia, Merì 1997.
- F. Vittinghoff, Gesellschaft, in F. Vittinghoff et al. (eds.), Europäische Wirtschafts- und Sozialgeschichte in der Römischen Kaiserzeit, Stuttgart 1990, 161-369.
- B. Ward-Perkins, *The Cities*, in A. Cameron and P. Garnsey (eds.), *Cambridge Ancient History*, XIII, Cambridge 1998, 371-410.

- C. R. Whittaker, *Late Roman trade and traders*, in P. Garnsey, K. Hopkins and C. R. Whittaker (eds.), *Trade in the ancient economy*, London 1983, 163-180.
  - C. Wickham, From the ancient world to feudalism, P&P, 103 (1984), 3-36.
  - E. M. Wightman, Gallia Belgica, London 1985.