The Female Slave in Roman Agriculture: Changing the Default

by

Ulrike Roth

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Abstract

This thesis deals with slaves. More precisely, it deals with the slave-run agricultural estates in Italy during the period of Roman imperial expansion. The main point to be addressed is that of the relationship between its two main genders: adult male and female agricultural slaves. Whilst scholarship has maintained for almost a century now that male slaves played a significantly more important role in this period than female slaves, this thesis will argue that their economic and social contributions were at least equal. It will further to this argue that the traditional view is largely based on a highly biased and discriminating attitude towards the role of women in the world of work, and on a more general disregard and subsequent unbalanced valuation of women's contributions.

The prevalence of male slaves on Roman agricultural estates is traditionally attributed to their availability for purchase as a result of Rome's intensive warfare. Furthermore, the various labour tasks usually associated with agricultural slaves are typically regarded as male labour domains, especially work in the fields, be it for grain, wine or olive production. To start with, this thesis will question the narrow range of productive activities that were carried out at these estates. By suggesting through examination of the evidence in a non-traditional way the regular occurrence of productive activities that are typically regarded as female labour domains, especially wool and textile production, the door is opened for a fresh look at the evidence for female labour on agricultural estates, ranging from epigraphic material for the management staff, to passages in the literary sources, and finally the application of demographic and economic models that support the propositions derived from the study of the ancient evidence.

Although this thesis title may suggest a descriptive focus on the female slave, it is in fact merely one of analysis: this thesis does not strive to explain the various tasks carried out by female slaves, nor does it aim at the compilation of whatever evidence there may be for female agricultural slave labour. Rather, it aims at questioning a preconceived model of a male-female-relationship that, in current imagination, has huge repercussions on other significant aspects of Roman history. By creating a picture that encompasses slave family life (based on female reproductivity) and high female productivity, traditional views of chattel slavery, based on social deracination and total loss of any liberties, are questioned together with views of economic activity that leaves the Italian (servile) countryside virtually free of a female element.

Acknowledgements

This is an imperfect thesis. Pressures of time and the realities of pursuing an academic career have led to its submission long before reaching maturity. It is based on research carried out over the last two and a half years. In this time, I have acquired numerous debts, both to individuals and to institutions, which I am very happy to acknowledge.

The majority of the work underlying this thesis was undertaken in libraries in Britain and on the European continent: I wish to thank in particular the staff and supporters of the Library of the Roman and Hellenic Societies at the Institute of Classical Studies in London, the Hallward Library Nottingham, The Badische Landesbibliothek Karlsruhe, The Senate House Library, and the British Library in London. I also wish to thank Adrienne Edwards for help and assistance with various administrative queries and problems during my time as a research student in the University of Nottingham. And I wish to thank the British Academy for a generous studentship throughout my first three years of registered doctoral study.

Amongst my fellow postgraduates in Nottingham, thanks are due to Tom Talboy and David Fitzpatrick, not least for making sure that I remained with my feet firmly on the ground; to Chandima Wickramasinghe and Kinuko Hasegawa for sharing many of those cold and long nights in the postgraduate study rooms in the Old Engineering Building with me. Amongst my academic seniors, thanks to Lynn Fotheringham, not only for giving me a roof over my head, but most of all for being there for me whenever I needed it most; to Richard Winton, for having taken an interest in my work – despite my continued lack of appreciation for Thucydides.

Various other individuals have helped, advised, read and commented on parts of this thesis: thanks to John Drinkwater, Margarita Gleba and John Peter Wild for advice with questions on textile production in chapters 2 and 6; to Marco Buonocore, Joyce Reynolds and Benet Salway for their comments on the argument presented in chapter 3; to Simon Corcoran for comments on chapter 5; and to Jane-Marie Collins for discussion of Brazilian slavery.

To those who have seen most if not all of this thesis develop, I feel particularly grateful. I have benefited greatly from the academic advice and mentorship of Dominic Rathbone, who helped shape the argument and its presentation into what, I hope, may be, despite its many imperfections, an acceptable thesis. Above all, however, I wish to thank two people: James Roy, for his courage in letting me choose my own research topic – and much more so for letting me pursue it in my very own idiosyncratic way; and Michael Crawford, for his generosity in sharing a love for a country with me that has become central to this thesis: Roman Italy.

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Ancient History and the Female Slave: Subject Matters

**Interest in the sense of curiosity or desire for knowledge is,
in ordinary usage, a term of individual psychology,
descriptive of a state of mind or feeling,
not sufficient as an explanation of individual behaviour,
totally useless when extended to a society.
Interest must itself be defined and accounted for:
what part of the past and how much of it?
Interest to what purpose, to fulfil what function?**

Moses Finley, 'Myth, Memory and History'

The history of Thucydides is essentially one-sided and incomplete. The intricate details of sieges and battles, subjects with which the historian proper has really nothing to do except so far as they may throw light on the spirit of the age, we would readily exchange for some notice of the condition of private society in Athens, or the influence and position of women.

Oscar Wilde, 'The Rise of Historical Criticism'

It is not surprising that most women feel that their sex does not have an interesting or significant past. However, like minority groups, women cannot afford to lack a consciousness of a collective identity, one which necessarily involves a shared awareness of the past. Without this, a social group suffers from a kind of collective amnesia, which makes it vulnerable to the impositions of dubious stereotypes, as well as limiting prejudices about what is right and proper for it to do or not to do.

Sheila R. Johansson, 'Herstory as History'

Women in representations or interpretations are not, however, merely made invisible in terms of not being present. Their invisibility arises out of their assigned insignificance in terms of the interpretative engagement with the display; that is you don't need to engage with the women to understand what is being said about the past.

Marie Louise Stig Sørensen, *Gender Archaeology*

This thesis is a first, for me and for the topic. It does not seek to replace a previous work or works on the subject, for there are none; nor does it seek to create knowledge, but debate and discussion. The female slave in Roman agriculture is not an obvious choice for anyone seeking to write republican history. The sources are limited, the historical significance and potential doubtful, agrarian history traditionally a domain of the stronger sex. Why seek

her there?

Others have defined their interest in marginalized and subjected groups as an expression of what is essentially personal curiosity. The wish to know what women were doing while men were busy making history is just one example for this.[1] The concurrent concentration on traditional and traditionally defined source groups – extant textual passages, sizeable epigraphic bodies, major archaeological discoveries – went hand in hand with the use of traditional methodologies, especially intensive introspective critique of the literary sources and the inscribed texts: "It was the subject rather than the method that was innovative".[2] Although directed at bringing in the *other*, studies that focused accordingly were not equipped to change the rules of the game for they played the game. As a consequence, republican history, albeit gender conscious today, has essentially remained untouched by the spirit of this age.

This is not a historical surprise. After all, ancient history as a whole, in the country where this thesis has been written, had found its roots in the wider field of classical studies – the pursuit of which had traditionally been a privilege of the better classes. At the time when Oscar Wilde lamented the lack of insight into the role of women in ancient societies, men of letters, like Wilde himself, engaged in the first instance in the study of the classical languages, which then provided the focus for their historical discourse. This focus remained essentially unchanged by the opening up of epigraphic and archaeological evidence through personal visit of ancient sites: the *Grand Tour* became an expression of cultural superiority as was the knowledge of Latin and Greek before, then and now. The predominance of the text particularly in the study of Roman history still in our days, leaving minor exceptions and fashions aside, is the most

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[1] So S.B. Pomeroy, *Goddesses, Whores, Wives and Slaves. Women in Classical Antiquity* (New York 1975), ix.

[2] S. Dixon, *Reading Roman Women. Sources, Genres and Real Life* (London 2001), 5.

obvious relic for the continuation of what is essentially a class-biased history. Today, the bias is still obvious in text-oriented approaches in undergraduate study, especially at the better schools, and in a privileging of philological skills over other research skills, obvious primarily within the current recruitment mechanisms for future professional historians at the junior level: the result of a confusion of a philological field ('Classics') with a historical field ('Ancient History').[3]

A practice of history, however, that subscribes to elitism, be it in the choice and execution of research topics or in the recruitment mechanisms for future professional historians, has essentially remained stuck in structures that left already hundred years age more to ask for than it could answer. It does not come as a surprise that ancient history as a whole has very little to add to any modern discourse, not only within the larger realm of modern society, but even within the more narrow constraints of the historical sciences as such. Very few works of ancient history make a connection to wider historical developments and trends.[4] Given the perpetuous flux of all human practices, this exclusive specialism in both teaching and research is largely responsible for the decline in insightful, wide-reaching historical perspectives. Its place has been taken by small-scale intensive documentary or near-documentary study, essentially antiquarian in nature and hugely unresourceful in method, for that reason alone sincerely antiquated, but nonetheless cherished by a phalanx eager to demonstrate mastery of rewarding behaviour. It is for this reason that the study of topics – however exotic, new or marginal – that remains within this traditional framework is essentially a confirmation of the status quo, set to

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[3] I do not wish to imply by this that history could not be seen as a form of literature.

[4] Attempts to put things ancient into wider historical perspectives often result in compilations of articles from different scholars working on different periods and/or regions: e.g. A. Burguière *et al.* (eds.), *A History of the Family. Volume 1: Distant Worlds, Ancient Worlds* (Cambridge 1996, original French edition Paris 1986)

reproduce the current power structures. As a result. the historian's research interest has more than before become a matter of political decision.

The history of the female slave in Roman agriculture cannot be written from texts; those longing to find substantial textual discussion in it will look in vain. Nor can it be written with a single focus on any one methodology. It is a choice of subject that goes way beyond the wish to *know* – for I don't think we can. What we can do, however, is to lay open and expose some of the processes involved in the marginalisation of the female agricultural slave – then and now – and therewith to challenge existing power structures employed to keep things as they are. Thus, this thesis is essentially a study of the unequal distribution of status and power, and the mechanisms employed to maintain the status quo on a variety of levels – both in Roman Italy and in modern historical writing. By exposing some of the economics involved, the prevailing order of things is disclosed as a default position set by those in power and endured by those powerless. The historical agenda of this thesis, then, is self-evident, not only by virtue of its sub-title.

I do not confine this interest to the practice of professional history alone. In the words of the classicist P.W. Rose, such interest is "[...] an essentially political commitment to change the rules of the game, to intervene in and transform the discourse of [...] scholarship – including its institutional forms – as **part of a broader commitment to transform society in the direction of both greater equality and greater respect for difference**" (my emphasis).[5] Women in general, and working women in particular, have never *been* a minority group. But their *past*, unlike that of their male counterparts, has been subject to marginalised treatment if not outright disregard: the product of

[5] P.W. Rose, 'The Case for not Ignoring Marx in the Study of Women in Antiquity', in N.S. Rabinowitz and A. Richlin (eds.), *Feminist Theory and the Classics* (New York and London 1993), 211-237, at 212.

historical writing. In a world where women's wages and their chances for professional promotion are by and large still lower than those of men, the need to address this imbalance is huge. A group's active formation and mobilisation in the political arena can be strongly influenced by access to or denial of a common social memory. The significance of gaining a history for black Americans in the United States or for feminists in the 1960s and 1970s are two classical examples for the power of reconnecting peoples with their past, the foundation and maintenance of the modern state of Israel, although less often quoted, equally impressive.[6] I do not mean to say by this that political action in the modern world needs a historical precedent, nor that a historical precedent justifies political action. What I do mean to say is, however, that the demonstration of a group's worth in the past can have a positive impact on a group's self-understanding and identity in the present. The recent output in feminist and gender-oriented studies within ancient history have had little impact on the overall scene though, with the question of ordinary women's economic contribution and their remuneration left virtually untouched. The focus has remained on the rich and beautiful, or in any case on those who were in a position to inscribe themselves onto human memory.[7] At this stage, I would like to remain doubtful, if hopeful, how far such histories can help create a consciousness of common experience amongst the *gros* of modern women in the western world who do not share a special position or privilege. A focus on those who did not leave easily recognisable traces behind may on the other hand deliver precisely that.

There is, furthermore, a second aspect that is similarly challenging to traditional ways of writing ancient history, and that is the claim that the study of

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[6] cf. J. Tosh, *The Pursuit of History* (London 2002[3]), ch.1.

[7] e.g. P. Setälä, 'Women and Brick Production – Some New Aspects', in P. Setälä *et al.* (eds.), *Women, Wealth and Power in the Roman Empire* (Rome 2002), 181-201.

women – or in this case the study of the female agricultural slave – changes *all* of the picture, and not just one part of it. To put it differently: a thesis as this maintains that the economic history of the slave-run republican villa estate can only be *fully* understood through the inclusion of women in the argument. Their exclusion, on the other hand, would lead, and indeed has led, to a totally distorted view of the past – as would the exclusion of men. The point is, then, to analyse women (or any other previously marginalized element) not simply for their own sake, and thus essentially in isolation, but within the complex structures that make up ancient and modern societies. Understood in such a way, the study of the female slave in Roman agriculture is an expression of what Sally Humphries termed "commitment to gender as a category of analysis (that) implies, to me, equal interest in both genders."[8] An interest that is aimed at a more balanced picture of the ancient world, a picture essential for the pursuit of good history and a fair representation. This aim, however, cannot be achieved by maintaining the traditional lines of scholarship criticized above and based on what could be termed the three pillars of modern historical research: evidence, autopsy and austerity. In this thesis, their place has been taken by theory, imagination and passion, application of which may easily appear to those who wish to maintain the current status quo of ancient historical writing as walking on wobbly stilts. If that is so, I would like to invite their criticism of the argument presented here and the methodologies used along the lines on which their own research is based.

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[8] S. Humphries, 'Gender and Social Relationships', *Kodai* 8/9 (1997/98), 53-56, at 53.

1.

Thinking Tools: Slavery between Evidence and Models

Of course, like all over-simple classifications of this type,
the dichotomy becomes, if pressed,
artificial, scholastic and ultimately absurd.
But if it is not an aid to serious criticism, neither should it be rejected
as being merely superficial or frivolous;
like all distinctions which embody any degree of truth,
it offers a point of view from which to look and compare,
a starting-point for genuine investigation.

Isaiah Berlin, *The Hedgehog and the Fox*

The productive landscape of Roman Italy: bricks, tiles, timber, stone; wool, cloth, textiles; meat, fruit, vegetables, wine, oil and grain. Three bodies of evidence: archaeology, epigraphy, and literary sources, not all equally rich in information on each of the three main productive areas, but intrinsically biased towards one or the other. The labour force: hardly visible in the sources, largely marginalized, and occluded by the silences cast over them, silences which are the product of a hierarchical order of society and which reproduce this very hierarchy. Modern historical analysis of the agricultural enterprises of the Romans traditionally follows the patterns found in the evidence, either directly through choice of a particular body of source material or indirectly through choice of a particular area of production for study.[1] It thereby avoids the gaps in

[1] e.g. H. Gummerus, *Der römische Gutsbetrieb nach den Schriften des Cato, Varro und Columella* (Leipzig 1906); W.E. Heitland, *Agricola: A Study of Agriculture and Rustic Life in the Greco-Roman World from the Point of View of Labour* (Cambridge 1921); K. Greene, *The Archaeology of the Roman Economy* (London 1986), esp. 67-97; K.D. White, *Roman Farming* (London 1970); D. Flach, *Römische Agrargeschichte* (München 1990); W.V. Harris (ed.), *The Inscribed Economy: Production and Distribution in the Roman Empire in the Light of instrumentum domesticum* (Ann Arbor 1993). For a combination of literary, archaeological and modern comparative evidence see M.S. Spurr, *Arable Cultivation in Roman Italy 200BC-AD100*

the evidence, and much more so the gaps between the evidence. This approach entails grave repercussions for our picture of the rural economy, not least as regards the complexity of agricultural production, but foremost in respect of the agricultural labour force: from peasants to slaves, those predominantly involved in the exploitation of the Italian countryside at first hand tend to be left out of the historical record.[2]

This thesis is about slaves, not about peasants. Not only that, it is about female slaves. If the evidence is indeed fragmentary as regards the servile labour force as a whole, it is almost non-existent with regard to its female component. The problem is partially one of reference. The archaeological evidence can as a rule not tell the observer who had worked or manufactured a specific artefact; it is *by itself* silent over the social mode of production.[3] Exceptions consist in the case of inscribed objects and funerary dedications that identify the maker of an object or announce his or her job title. But epigraphy is not only largely an urban phenomenon; it also advantages the male dedicator.[4] Not surprisingly therefore, there does not exist, as far as I am aware, a single inscriptional identification of a female agricultural slave.[5] However, discussion of the labour force played an important role in the farm manuals of the agricultural writers, and it is with them, and the mode of production which they describe, that this chapter will primarily concern itself. Unfortunately, they do not form a body of evidence comparable in size and content with the plantation

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(London 1986).

[2] For a reconstruction of the peasant economy of ancient Greece see T. Gallant, *Risk and Survival in Ancient Greece. Reconstructing the Rural Domestic Economy* (Stanford 1991).

[3] So already M.I. Finley, *Ancient History: Evidence and Models* (London 1985), 25.

[4] On the sex bias in occupational inscriptions see S. Joshel, *Work, Identity, and Legal Status at Rome: A Study of the Occupational Inscriptions* (Norman and London 1992), 16ff.

[5] I exclude the inscriptional evidence for the management staff, which will be discussed at length in chapter 3, because it is not representative for ordinary slave labourers. There are two inscriptions set up by *familiae rusticae* that would most probably have included females: *CIL* IX

manuals known from the New World: only three treatises from the central period of Roman history have come down to us, spanning more than 200 years in time: Cato the Elder's *De agricultura* for the mid-republic, Varro's *De re rustica* for the late republic, and Columella's *De re rustica* for the early empire.[6] Odd references in a handful of published letters and speeches, plays, poems and legal sources (all composed by the masters) add marginally to this. Source material of a documentary nature, such as farm diaries, logbooks or accounts, has not survived for Roman Italy.

According to the precepts laid out in the agricultural writers, the rural enterprises of aristocratic Romans relied on a system of absentee ownership and the management by slave supervisors of the labour force. A male slave overseer, the *vilicus*, was in charge of most of the agricultural production, a female slave, the *vilica*, supervised domestic and industrial production at the farmstead.[7] While not all estates were consistently worked by a slave labour force, or all workers at all times necessarily of slave status, the agricultural writers are unanimous about the slave status of the permanent labour force that they envisage to work their estates. Yet, their discussion of the labour force is heavily biased towards the male field workers and practically omits the female labour force; this despite the fact that several production processes referred or alluded to would typically be associated with female labour.[8]

3028 (Teate Marrucinorum) and *CIL* IX 3651(Cerfennia).

[6] On the agricultural writers see generally K. D. White, 'Roman Agricultural Writers I: Varro and his Predecessors', *ANRW* I,4, 440-497, and R. Martin, 'Etat present des etudes sur Columelle', *ANRW* II,32,3, 1959-1979.

[7] On the division of the management duties between male and female overseer see specifically Cato, *De agricultura* 5; 143, and Columella, *De re rustica* XI; XII.

[8] The same omission is evident in modern discussions of Roman estate management and labour organization, which without exception reserve only a tiny section to female slave labour, more or less entirely to the *vilica*: e.g. J.-J. Aubert, *Business Managers in Ancient Rome. A Social and Economic Study of Institores, 200BC-AD250* (Leiden 1994), 169-175; N. Brockmeyer, *Arbeitsorganisation und ökonomisches Denken in der Gutswirtschaft des römischen Reiches*

Furthermore, and intrinsically intertwined with this, is the highly selective nature of their treatises in terms of both geography and production types, thus capturing only part of the economic activity carried out in the countryside of Roman Italy. Their choice is agricultural (as opposed to domestic or industrial) production,[9] and not only are they entirely Italocentric, but furthermore their geography of production is biased towards the richer areas of cultivation. More importantly, however, the units of production described by them shaped a system of economic exploitation distinctly different from that originally associated with the Italian countryside and generally subsumed under the term 'peasant economy'. In contrast to the latter, the former can be characterised by five distinct criteria: intensive exploitation of dependent labour, high diversification of productive activity, production of goods for the market, ownership of the means of production by someone other than the labour force, and the maintenance of a villa complex as the centre of production.[10] It is tempting to use the term 'villa economy' as shorthand for this system of economic exploitation of both land and labour, not only because of the

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(Bochum 1968); J. Carlsen, *Vilici and Roman Estate Managers Until AD284* (Rome 1995), esp. 70-80; W. Kaltenstadler, *Arbeitsorganisation und Führungssystem bei den römischen Agrarschriftstellern* (Stuttgart 1978); E. Maroti, 'The *Vilicus* and the Villa System in Ancient Italy', *Oikumene* 1 (1976), 109-124. The only study that focuses on a female slave (namely the farm manageress) is J. Carlsen, 'The *vilica* and Roman Estate Management', in H. Sancisi-Weerdenburg *et al.* (eds.), *De agricultura. In Memoriam Pieter Willem de Neeve* (Amsterdam 1993), 197-205.

[9] A continuum between agricultural, domestic and industrial employment existed in many cases: P. Garnsey, 'Non-Slave Labour in the Roman World', in P. Garnsey (ed.), *Non-Slave Labour in the Greco-Roman World* (Cambridge 1980), 34-47.

[10] Not all five criteria need be present in every unit, but the lack of more than one would disqualify the unit from this characterization. Cf. also the typologies of N. Morley, *Metropolis and Hinterland: The City of Rome and the Italian Economy 200B.C.-A.D.200* (Cambridge 1996), 109, whose stress is put entirely on points 2 and 3, and D.W. Rathbone, 'The Slave Mode of Production in Italy', *JRS* 73 (1983), 160-168, at 161f., who emphasizes all but point 4 made above.

predominance of the architectural remains of the last criterion in the archaeological record: the villa was most of all the point of supervisory control over the extraction of labour, and also, as I will argue, a focus of intensive economic activity.[11]

It needs emphasizing, however, at this early point that, despite this seemingly clear characterisation, a broad variety of villa estates, including diversification of the exploitation of both land and labour, must be assumed. "Villas were not things invented at a given point in time, but things that evolved gradually as part of a wider social and economic evolution. There is no reason to suppose that they formed a distinct and easily definable category to the Romans themselves, and to ask that they should do so to us may well be unreasonable."[12] Individual villa complexes varied in style and layout from one to the other, and not a few offered a welcome retreat for their owners from their busy town lives, representing in many ways an extension of the urban orientation of their owners.[13] Others, however, possessed or even consisted almost entirely of a large working part, the *villa rustica*, providing hardly any form of luxury. Both types are clearly visible in the archaeological record.[14]

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[11] It is on these grounds that I define the villa as the 'centre' of production, not because of issues of geographical location.

[12] J. Percival, *The Roman Villa: A Historical Introduction* (London 1976), 15.

[13] On the synthesis between agricultural exploitation and the life of leisure see N. Purcell, 'The Roman Villa and the Landscape of Production', in T.J. Cornell and K. Lomas (eds.), *Urban Society in Roman Italy* (London 1995), 151-179.

[14] No complete up-to date list of excavated villa sites for the whole of Roman Italy exists, but see the extensive catalogue of non-productive villas by L. Romizzi, *Ville d'otium dell'Italia antica (II sec.a.C.-I sec.d.C.)* (Naples 2001). For an up-to date regional catalogue see the recent study of Basilicata by H. di Giuseppe, 'Insediamenti rurali della Basilicata interna tra la romanizzazione e l'età tardoantica: materiali per una tipologia', in M. Pani (ed.), *Epigrafia e territorio politico e società. Temi di antichità romana IV* (Bari 1996), 189-252. See also still R.C. Carrington, 'Studies in the Campanian *villae rusticae*', *JRS* 21 (1931), 110-130, and M.I. Rostovtzeff, *The Social and Economic History of the Roman Empire*, 2 vols. (Oxford ²1957), II:551-553.

Yet, regarding their economic output, we are almost entirely left in the dark: we still lack a sound understanding of the proportion the villa economy made up of the (equally unknown) total economic activity in the Italian countryside, or of the use of various types of labour at various points in time during the lifetime of individual villas. Nor are we in a position to determine with any degree of confidence the average size of land attached to a villa, or the average number of (slave) labourers.[15]

Despite these many imponderable factors omitted by the evidence, the villa economy soon became a synonym for its most obvious mode of production: the concentrated exploitation of skilled slave labour – and male labour at that.[16] Whilst the early imperial agronomist Columella mentions female slaves occasionally in his treatise, his republican predecessors are almost completely silent over exploitation of female slave labour on the villa estate. And whereas the omission of other items by the republican agronomists did not lead to their erasure from the historical record of that period, the agronomists' virtual neglect of a textual discussion of female slave labour was in contrast

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[15] But see the considerations by P.A. Brunt, *Italian Manpower, 225BC-AD14* (Oxford 1971), 121-130, and R. Duncan-Jones, *The Economy of the Roman Empire. Quantitative Studies* (Cambridge 1974), 327-333 on the size of the agricultural slave labour force and manning ratios, and Duncan-Jones, *op.cit.*, 323-326, and *Structure and Scale in the Roman Economy* (Cambridge 1990), 121-142 on the size of agricultural land units.

[16] The slave mode of production is traditionally seen as a by-product of the villa economy, and both terms tend to be used interchangeably, or become amalgamated under the misleading heading 'villa-system'. But neither did the villa economy rely entirely on slave labour, nor is it correct to reduce the concentrated use of skilled slave labour largely to extensive agricultural exploitation on villa estates. So already M.I. Finley, 'Problems of Slave Society: Some Reflections on the Debate', *Opus* 1 (1982), 201-211, at 209f. For the traditional view see A. Carandini, 'Sottotipi di schiavitù nelle società schiavistiche greca e romana', *Opus* 1 (1982), 195-198, and G. Pucci, 'Il sistema della villa nell'Italia centrale', in A. Carandini *et al.* (eds.), *Settefinestre. Una villa schiavistica nell'Etruria romana*, 3 vols (Modena 1985), I:15-21. For an alternative concept see Rathbone, 'The Slave Mode of Production' (n.10), esp. 167f., who proposes the development of the slave mode of production within urban settings prior to its application to rural enterprises.

quickly understood as evidence (*sic*) for its non-occurrence.[17] In 1978, Keith Hopkins consequently argued that "the Roman writers of treatises on agriculture imply that in the period of expansion agricultural slaves were usually male and celibate."[18] With this, a long tradition in modern scholarship that neglected or even disregarded the female slave in Roman agriculture was brought to a conclusion: the female was finally identified as of negligible economic significance through her virtual disappearance from the historical record. Attempts at resurrection, then and now, almost exclusively concentrated on the sphere of (biological) reproduction, guided by the parameters of Roman imperial history.[19]

It does not surprise one, therefore, that there does not exist a singly study, however small, of the economic role of the female slave in Roman agriculture. Logically, the model of male domination of the villa economy largely holds despite *some* recognition of inherent historical paradoxes: neither peasant nor slave economies known from other times or places can be shown to thrive for any sustained period of time on a single sex labour force; republican Italy and its villa economy in its current representations thus present a historical

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[17] See the comparison between bee-keeping and female labour along these lines made by K.R. Bradley, *Slavery and Rebellion in the Roman World, 140BC-70BC* (Bloomington 1998), 25.

[18] K. Hopkins, *Conquerors and Slaves. Sociological Studies in Roman History 1* (Cambridge 1978), 106.

[19] e.g. T. Frank, *An Economic Survey of Ancient Rome, Vol. V: Rome and Italy of the Empire* (Baltimore 1940), 181; Brunt, *Italian Manpower* (n.15), 143f. and 707f.; G.E.M. de Ste. Croix, *The Class Struggle in the Ancient Greek World* (London 1981), 230-239; K.R. Bradley, 'On the Roman Slave Supply and Slavebreeding', in M.I. Finley (ed.), *Classical Slavery* (London 1987), 42-64; E. Hermann-Otto, *Ex ancilla natus. Untersuchungen zu den "hausgeborenen" Sklaven und Sklavinnen im Westen des römischen Kaiserreiches* (Stuttgart 1994), 250-254; W. Scheidel, 'Quantifying the Sources of Slaves in the Early Roman Empire', *JRS* 87 (1997), 156-169. But note also the complete neglect even of the female slave's reproductive role in the source excerpts collected by T.E.J. Wiedemann, *Greek and Roman Slavery* (London and New York 1981), ch.6.

oddity.[20] Given the state of the evidence, writing the history of the female slave in Roman agriculture cannot be accomplished by following traditional lines of scholarship; the latter would leave the gaps untouched. Other areas of historical inquiry into the ancient world have long attracted interest in cracking the code of silence over marginalized groups.[21] The same is still needed for agricultural slavery in Roman Italy: the female slave can only be found in the gaps, and it is those that therefore need confronting. Evasion does nothing but reconstitute the silences and with it the marginalization of its subjects – still today, 2000 years on.

Thinking Tools

Confrontation of the gaps in the evidence regarding the female slave in Roman agriculture as presented in what follows is based on a preparedness to test new and possibly highly provocative ways of approaching and interpreting the ancient source material. Here, I wish to apply an anthropological model of female economic exploitation on the treatises of the Roman agricultural writers to argue for a) consistent employment and exploitation of female slaves in the villa economy (as opposed to a gradual increase in their employment and exploitation towards the end of the republic), b) the double exploitation of female slaves in the villa economy as producers and reproducers (as opposed to

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[20] This is essentially recognized by Bradley, *Slavery and Rebellion* (n.17), 25-29; *Slavery and Society at Rome* (Cambridge 1994), 58-61; *Slaves and Masters in the Roman Empire. A Study in Social Control* (New York and Oxford 1987), ch.2, esp. 50f. See also Bradley, 'On the Roman Slave Supply' (n.19), and W. Scheidel, 'Frau und Landarbeit in der Alten Geschichte', in E. Specht (ed.), *Nachrichten aus der Zeit. Ein Streifzug durch die Frauengeschichte des Altertums* (Wien 1992), 195-235, at 208.

[21] e.g. S. Johnstone, 'Cracking the Code of Silence: Athenian Legal Oratory and the Histories of Slaves and Women', in S.R. Joshel and S. Murnaghan (eds.), *Women and Slaves in Greco-Roman Culture* (London and New York 1998), 221-235, esp. 222f.

their exploitation predominantly as reproducers), and c) their productive exploitation primarily within non-agricultural productive activities (in contrast to the use of large numbers of female slaves within plantation slave systems of the New World). Although the argument presented in this chapter is purely qualitative in nature – for a first quantitative assessment of the female slave's contribution to the villa economy within the spheres of production and reproduction see chapters 4 and 6 – the tentative conclusion to be offered will picture the female slave as a key player who at the very least carried the potential to outdo her male counterpart in her economic profitability because of her double role in two spheres of economic activity.

The tool to be employed has been thought up by anthropologists working on female economic exploitation and questions of labour division in pre-industrial societies. It explains female economic activity through a model of interdependence between the three factors i) prevalent productive activities, ii) valuation of female fertility, and iii) the observed organisation of childcare. This was succinctly formulated by the American anthropologist Judith Brown already in 1970, who held that "[...] the degree to which women contribute to the subsistence of a particular society can be predicted with considerable accuracy from a knowledge of the major subsistence activity. It is determined by the compatibility of this pursuit with the demands of childcare."[22] The aim lay in an explication of an often observed division of labour between the men and women in pre-industrial societies as well as the predominance of maternal childcare in these societies. The point which the model makes is that of a mutual influence between the three factors just mentioned and the recognition that some productive activities allow for simultaneous childcare, whereas others do not.

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[22] J.K. Brown, 'A Note on the Division of Labor by Sex', *American Anthropologist* 72 (1970), 1073-1078, at 1075. See also L. Benería, 'Reproduction, Production and the Sexual Division of Labour', *Cambridge Journal of Economics* 3 (1979), 203-225, esp. 205-209 and 211f.

Those that do "[...] do not require rapt concentration and are relatively dull and repetitive; they are easily interruptible and easily resumed once interrupted; they do not place the child in potential danger; and they do not require the participant to range very far from home."[23] Since most pre-industrial societies could not afford women's exemption from either the production or the reproduction sphere – both intrinsically significant for the maintenance of the society – their contribution to the productive sphere was thus determined by the organisation of childcare and the prevalent productive activities: activities that allowed for simultaneous childcare would invite female occupation (and discourage organisation of extra-maternal childcare), whilst only the organisation of extra-maternal childcare would allow the women to contribute to activities that did not allow for simultaneous childcare. As a matter of fact, most pre-industrial societies have allocated the rearing of their children primarily to the children's mothers, and simultaneously the performance of productive activities that are incompatible with childcare to their men: typical productive activities that allow for simultaneous childcare include gathering, hoe agriculture, food processing and textile production, while activities that are incompatible with childcare include hunting, fishing and plough agriculture.[24]

This model is derived from observation, i.e. from a methodology that is not accessible to the historian. However, in view of the model's high level of structural predictability, it can provide a tool to fill the gaps in the ancient evidence. The model claims that women who are valued as reproducers and who look after their own children will not be found involved in productive activities that are incompatible with childcare (Figure 1 below). Equally, women who are

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[23] Brown, 'A Note on the Division of Labor by Sex' (n.22), 1075f.

[24] cf. the examples referred to by Brown, 'A Note on the Division of Labour by Sex' (n.22). Maternally organized childcare does not imply sole supervision of children by their mothers only; it does however imply a non-existence of formally organized and established childcare systems away from the mother for most of the (working) day.

valued as reproducers and who are found contributing to activities that are incompatible with childcare will rely on organised extra-maternal childcare during periods of productive activity (Figure 2 below). On the other hand, women who are found contributing to productive activities that are compatible with maternal childcare will most likely be valued as reproducers and childcarers alike (Figure 3 below). This means in turn that knowledge of two factors *generally* allows determination of the third, and knowledge of one factor *sometimes* determination of the other two. As with all ideal types, this model too fails to grasp the totality of (slave) life. In exchange, however, it can provide a coherent accentuation of various typical aspects of (slave) life in Roman Italy and thus supply a framework for the exploration of other bodies of ancient evidence.

Figure 1:

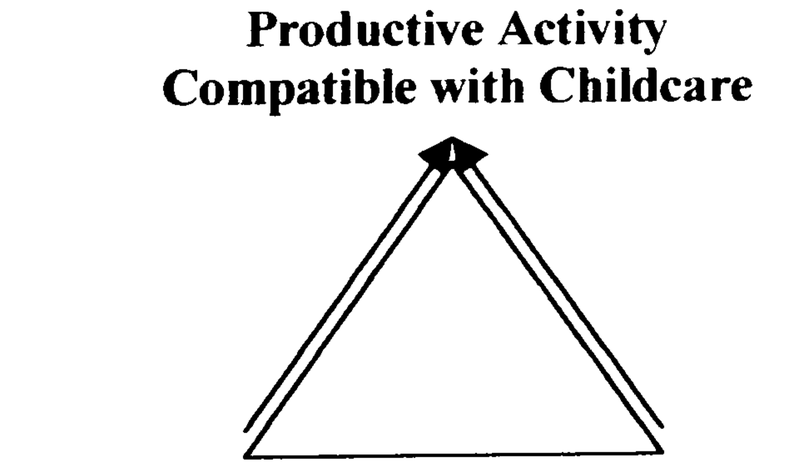


Figure 2:

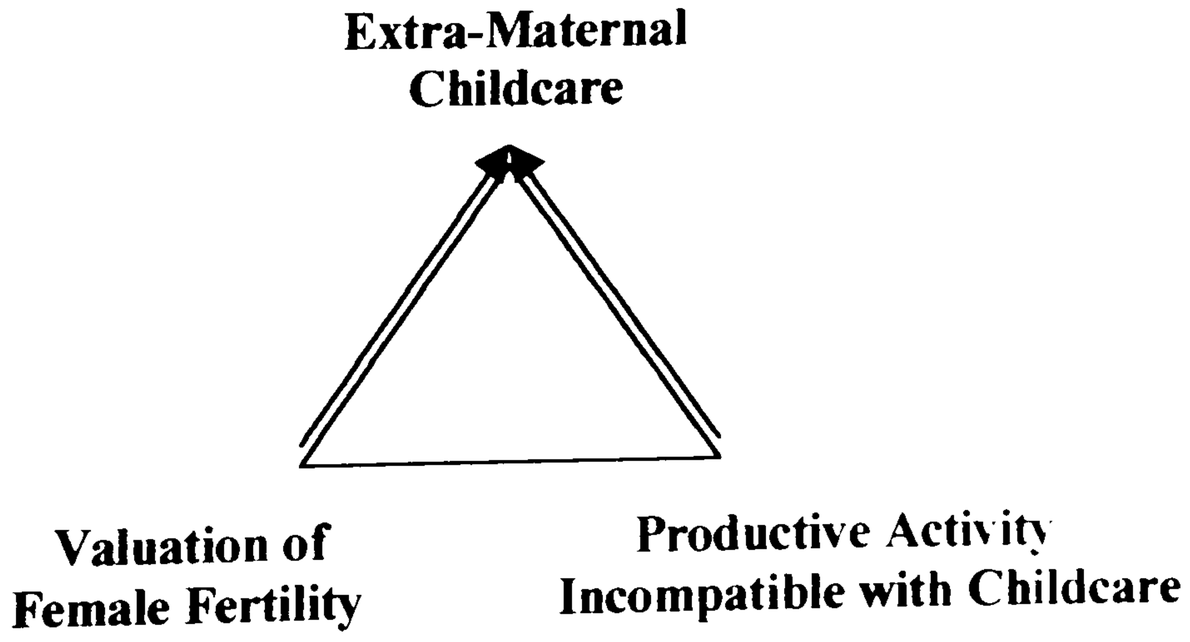
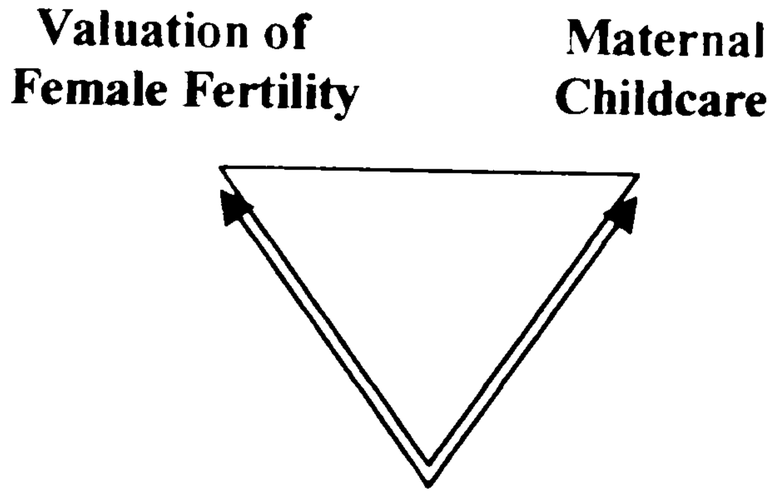


Figure 3:



A modern example

Before turning to the ancient evidence, I would like to test the proposed model on a well-documented case. And I would like to choose a seemingly extreme case: the slave society of the Antebellum South. My reason for this choice lies in the widespread assumption that "[...] only in the United States did the existing slave population reproduce itself [...]"[25] Whether this is correct or not, it is generally accepted today that the slave population of the Antebellum South relied heavily on natural slave reproduction for its maintenance, i.e. that the fertility of the female plantation slave was highly valued. At the same time it can be shown that female plantation slaves contributed widely to the labour tasks on the plantations, many of which entailed (heavy) fieldwork. Thus the work area of the black female plantation slave was not restricted to any specific sphere or area by definition. My interest here, however, lies predominantly with those that were engaged in work in the fields, often at a considerable distance from the domestic quarters. Depending on plantation type and regime, their work could involve similar or indeed the same productive activities that were demanded of male plantation slaves. This apparent lack of a clear division of labour by sex was only questioned when the female slave's reproductive activity interfered with the demands put on her by productive activities. This conflict of

interest is most pronounced in the recommendations of a planter from Georgia who held that "the females, during a state of pregnancy should be exempt from all labor that would have a tendency to injure them, such as lifting heavy burdens, fencing, plowing [...]"[26] The planters' opinion on how to reduce this burden could vary from plantation to plantation. The overseer of the Butcher Estate in South Carolina administered a quantitative reduction of the workload: "The labor of pregnant women is reduced one half, and they are put to work in dry conditions."[27] A combination of a reduction in the amount of work as well as the types of work carried out by pregnant and newly delivered slaves became the rule for good plantation management. In his *Rules for the Government of Overseer*, T.E. Blunt summarises the overall approach in Rule No. 10: "Suckling and pregnant women must be indulged as much as circumstances will allow, and never worked as much as others. Sucklers must be allowed time to suckle children. No lifting or plowing must be required of pregnant women."[28]

As is clear from these remarks, women who were neither pregnant nor newly delivered were as a rule not exempt from heavy labour tasks on the plantation: their exploitation as producers was on a par with their exploitation as reproducers.[29] The productive activities they were set to work at, however, could include activities that were not compatible with childcare by the mothers. If our model works, we would need to find evidence for well-organised extra-maternal childcare away from the place of work of those mothers who were

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[25] M.I. Finley, *Ancient Slavery and Modern Ideology* (London 1980), 130.

[26] N. Bass, 'Essay on the Treatment and Management of Slaves', *Transactions of the Southern Central Agricultural Society of Georgia* (1846-1851), 197.

[27] R. King Jr., 'On the Management of the Butler Estate, and the Cultivation of Sugar Cane'. *Southern Agriculturist* 1 (1828), 523.

[28] T.E. Blunt, 'Rules for the Government of Overseers', *Southern Cultivator* 5 (1847), 61.

[29] Since the sources quoted are partially prescriptive in nature, it must be assumed that not all female slaves would actually have benefited from such reductions in their workload in times of pregnancy.

involved in productive activities that did not allow for simultaneous childcare (see Figure 2 above). The evidence is indeed plentiful. Plantations that exploited their female slaves' productive powers along these lines are often found to demonstrate a well-established system of extra-maternal childcare. A regular feature of such childcare consisted in a specified place or house used as a nursery, and an older female slave to look after the children: "A large house is provided as a nursery for the children, where all are taken at daylight and placed under the charge of a careful and experienced woman, whose sole occupation is to attend to them and see that they are properly fed and attended to [...]"[30] This system allowed a speedy return of newly delivered mothers to their regular place of work which could occur as little as one month after child-birth.[31] Yet, some care was evidently taken to ensure continued early infant feeding by the children's mothers. On some plantations, the mothers returned "[...] to the quarters several times during the day to suckle the infant, which was left in the care of an elderly nurse [...]" and "when the little child (was) two or three months old it (was) carried into the field to the mother, by the child nurse [...]"[32]; on others, the mothers "[...] while nursing (were) kept as near the nursery as possible [...]"[33]

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[30] 'Management of Negroes upon Southern Estates', *De Bow's Review* 10 (1851), 621.

[31] This is attested both by recommendations in plantation manuals, etc. as well as by entries of sick and off days of newly-delivered slaves in the actual plantation log books which were maintained by their supervisors: see R.W. Gibbes, 'Southern Slave Life', *De Bow's Review* 24 (1858), 324 as a typical example for the former, and J. Campbell, 'Work, Pregnancy and Infant Mortality among Southern Slaves', *Journal of Interdisciplinary History* 14 (1984), 793-812, at 806f. for a compilation of evidence from plantation diaries, etc.

[32] Gibbes, 'Southern Slave Life' (n.31), 324.

[33] 'The Duties of an Overseer', *Farmer and Planter* 8 (1857), 139. The lactation practices adopted by black plantation slaves are believed to have followed the practices of their white mistresses (rather than their cultural heritage). These were of the shortest span known at the time for any society, being just under a year, which may have been one of the reasons for the population growth of both the free white and the enslaved black population in the American South: H.S. Klein and S.L. Engerman, 'Fertility Differentials Between Slaves in the United

The emphasis on both the women's productive and reproductive powers was thus supported by the organisation of systems of extra-maternal childcare, whether organised *de facto* by planters and plantation overseers or by slave women networks, the outcome of which consisted in reaping maximum benefit from the women's economic ability for their masters. With this the black female plantation slave became a key figure for the success of this system of slave exploitation. Slave masters in Roman Italy, in contrast, have so far not been viewed as reaping maximum economic benefit from female agricultural slaves: the lack of good evidence, as sufficiently made clear above, has hitherto presented an obstacle too high to be jumped.

The Roman Evidence: Columella, 1st Century AD

It is generally accepted that Columella took the presence of female slaves on rural estates for granted. However, their contribution to the estate's economic performance is primarily located by modern scholars within the reproductive sphere. This is a result of the predominance of the current imperialist model of Roman history that believes the external slave supply to have dwindled away by the beginning of the early empire: internal slave supplies were now needed to maintain the slave population, and this meant female slaves. And indeed, Columella readily informs his readers of his high valuation of his female slaves' reproductive powers: he even goes as far as to advocate a reward scheme for exceptionally reproductive slaves, reaching from exemption from work to the granting of freedom: "To women, too, who are unusually prolific, and who ought to be rewarded for the bearing of a certain number of offspring, I have granted exemption from work and sometimes even freedom after they had

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States and the British West Indies: A Note on Lactation Practices and Their Possible Implications', *William and Mary Quarterly* 35 (1978), 357-374.

reared many children. For to a mother of three sons exemption from work was granted; to a mother of more her freedom as well."[34] Columella clearly valued his female slaves' fertility highly.

This is not all though. Columella would have been foolish to manumit a slave merely for the bearing of a certain number of offspring. Life expectancy in the ancient world was low, and particularly children were prone to be affected, the younger the more so.[35] For the reward to be meaningful, the children would need to reach a reasonably advanced age. Columella does not give this explicitly; yet he does imply a certain period of involvement on the mothers' side: the reward was applicable to those who had not only born children, but reared them.[36] The children's age, however, remains unclarified. Walter Scheidel has argued for them to have been around five years of age; but in order to raise successfully three children to the age of five (at which point their life expectancy would rise noticeably and the rewarding of mothers be

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[34] Columella, *De re rustica* I,8,19: *Feminis quoque fecundioribus, quarum in subole certus numerus honorari debet, otium, nonnumquam et libertatem dedimus, cum complures natos educassent. Nam cui tres erant filii, vacatio, cui plures, libertas quoque contingebat.*

[35] Model life tables usually employed for ancient populations suggest that only two thirds of all newly borns survive to the age of one, and only every other child out of the total of all born alive live beyond the age of five: A.J. Coale and P. Demeny, *Regional Model Life Tables and Stable Populations* (New York 1983). For a graph of child mortality in a specific life table see chapter 6. For a more general take on population studies see J.-N. Corvisier and W. Suder, *La population de l'Antiquité classique* (Paris 2000), esp. 66-111, but note their caution at 18: "Les tables de mortalité sont actuellement un outil de travail indispensable et difficilement remplaçable. Elles permettent de contrôler la vraisemblance des résultats obtenus à partir de nos sources. Mais on soulignera qu'elles ne peuvent donner qu'une image hypothétique car issue de données modernes, et de toute façon approximative des conditions démographiques antiques." For an even more daunting view and the likely underestimation of local and regional variations in model life tables see W. Scheidel, 'Roman Age Structure: Evidence and Models', *JRS* 91 (2001), 1-26.

[36] This has been discussed at length by W. Scheidel, 'Columellas privates *ius liberorum*: Literatur, Recht, Demographie. Einige Probleme', *Latomus* 53 (1994), 513-527, with due consideration of other reward schemes for mothers known from the Roman world.

consequently sensible), six live births were already necessary.[37] The physical, psychological and social investment of the mothers would have been huge. Whatever the correct answer to the question of the children's age is, the mothers seem to have been in charge of their care, as otherwise rewarding them for raising the children would have been pointless.[38] If that was so, however, if the rural estates which Columella had in mind practiced a system of maternal childcare (and there is no indication they didn't), the female slaves' productive activities could only have been exploited within an area of work that allowed for simultaneous childcare. This however would exclude their regular contribution to the main agricultural production processes of the estate, which not only involved activities that put children, and especially toddlers, in high danger (especially, but not only, ploughing), but could force the labourer to range a substantial distance from the villa and thus from the domestic quarters. Columella makes it quite plain that the field labourers should ideally leave the villa at the crack of dawn and only return at sunset; they should be divided in squads responsible for clearly defined tasks out in the fields; and regular labour supervision should be organised to maximise the labour output.[39] Although not

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[37] cf. Scheidel, 'Columellas privates *ius liberorum*' (n.36), 518-525.

[38] The argument by K.R. Bradley, 'Wet-Nursing at Rome', in B. Rawson (ed.), *The Family in Ancient Rome. New Perspectives* (London and Sydney 1986), 201-229, at 202-213 for a prevalence of extra-maternal childcare amongst slaves in large imperial households is restricted to an urban scenario and, although evidence-based, builds in fact on a very small sample of inscriptions.

[39] Columella, *De re rustica* I,9,5-8; XII,1,3; see also XII,1,29 which implies a 12-hour field working day, as well as XII,1,3 and XII,3,7. On the structuring of agricultural slave labour see also the argument by Spurr, *Arable Cultivation* (n.1), 140 against C.A. Yeo, 'The Economics of Roman and American Slavery', *Finanzarchiv* 13 (1952), 443-485. The description of the slave mode of production by C.R. Whittaker, 'Circe's Pigs: From Slavery to Serfdom in the Roman Empire', in M.I. Finley (ed.), *Classical Slavery* (London 1987), 88-122, at 90f. is misleading because of its confusion with chain-gang labour. For a general description of Roman farming techniques see Spurr, *op.cit.*, 23-40 and White, *Roman Farming* (n.1), 173-178. Cf. also Pliny's discussion of servicing widely dispersed fields from a single villa complex: *Epist.* 3.19

all labour tasks were dominated by the use of heavy farm equipment such as the plough, societies that rely on intensive ploughing have been shown to renounce generally on their women's regular contribution to agricultural field labour.[40] Where women are engaged in intensive agricultural labour under such conditions, they can usually be shown to be either wage or forced labourers who rely for child watching for most of the day on organised childcare.[41] Given that the female labour force which Columella had in mind probably practiced a system of maternal childcare, it is unlikely that the slaves were to be found in the field in the way black female plantation slaves were exploited by their masters.[42]

A simple answer to this incompatibility of female labour with agricultural labour as described by Columella could be disregard for women as producers: Columella may have not been interested in exploiting his female slaves' productive activities but concentrated on their value as reproducers only. Ester Boserup has indeed argued that where women do little agricultural work they are valued as reproducers only.[43] This however runs counter to the

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[40] This is not to say that where these parameters apply women are never involved in agricultural activities, e.g. during the harvest, but simply that no society would rely on their women for the bulk of agricultural labour: E. Boserup, *Women's Role in Economic Development* (London 1970). For a development of the argument based on recognition of the significance of childrearing for this specific division of labour by sex see L. Beneria and G. Sen, 'Accumulation, Reproduction, and Women's Role in Economic Development: Boserup Revisited', *Signs* 7 (1981), 279-298, esp. 286f.

[41] Boserup, *Women's Role* (n.40), 50f.

[42] *Pace* Walter Scheidel who maintains that agricultural field labour by Roman slave women "[...] would be in perfect keeping with, and receive ample confirmation from comparative evidence on plantation farming from better-documented slave-societies", and that consequently "we have to conclude that agricultural labour played an essential role in the lives of many slave-women of the Romans": 'The Most Silent Women of Greece and Rome: Rural Labour and Women's Life in the Ancient World, II', *Greece & Rome* 43 (1996), 1-10, at 3. The argument for female field labour is also formulated in Bradley, *Slavery and Rebellion* (n.17), 26.

[43] Boserup, *Women's Role* (n.40), 50.

experience of slavery: where the evidence is available, as in the example of the black plantation slave in the Antebellum South used above, slave women in modern slave societies have as a rule been exploited in both their productive and reproductive abilities. Columella is no exception. In the passage quoted at the outset of this section, he grants leave (*otium*) to unusually prolific female slaves. This does imply their normal occupation with work (*negotium*). And although statements of common sense are dangerous in any historical interpretation, I think the evidence supports throughout K.D. White's contention that "since the working force of slaves represents a heavy capital outlay, no effort must be spared to keep them fully employed, whether on direct production, or on services essential to that production."[44] White, despite being convinced of the existence and exploitation of female slave labour on agricultural estates in the Italian countryside, nevertheless concluded that "concerning the female staff we are almost entirely in the dark."[45] The view need not be as pessimistic.

So far I have simply sought to demonstrate the slave women's high valuation as reproducers by Columella. I have also sought to argue for their exploitation as producers, yet outside the sphere of agriculture proper and without clarifying their probable field of work. Still, in the previous section, I have already alluded to some activities that are highly compatible with simultaneous childcare and that therefore have come to be known as women's chores the world round. Now, it is time to come clean.

The *villa rustica* provided domestic quarters and active working parts in close proximity to each other. Most of the processing of the agricultural produce grown on the farm took place here. In addition to agricultural production processes at the villa complex, a whole range of other activities is reported in our source material. Columella highlights the preparation of food

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[44] White, *Roman Farming* (n.1), 390.

[45] White, *Roman Farming* (n.1), 361.

and the manufacture of wool, cloth and textiles on a daily basis.[46] In periods of bad weather, slave labourers who would normally be engaged in farm work in the open would assist the textile workers.[47] Both areas of work are characterised by highly repetitive activities that could easily be interrupted and resumed at any one point: corn grinding, baking, cooking, the growing, drying, processing and storing of fruits, vegetables and herbs; keeping of chicken and geese; cleansing of fleeces, combing and spinning of wool, weaving and finishing of clothes and cloth; and both areas of work are characterised by their performance in conjunction with other low-intensity occupations.[48] In view of their suitability to combine exploitation of both the mothers' productive and reproductive powers, they presented the ideal occupation for Columella's slave women in agreement with the model laid out above (Figure 1 above). Whilst watching over their children in the safe surround of courtyards or garden areas, the slave women could contribute to the villa's productive performance without much hassle. And although food preparation and processing may have contributed to a larger extent to the actual physical maintenance of the villa's own labour force (as opposed to production for market), the spinning and weaving of textiles could have been a lucrative trade adding hugely to the income of the estate.[49]

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[46] Columella, *De re rustica* XII,1,5; XII,3,3 and 3,8.

[47] Columella, *De re rustica* XII,3,6.

[48] This holds still true for hand spinning in the Mediterranean in the 20th century: cf. the observations of L.M. Wilson, *The Clothing of the Ancient Romans* (Baltimore 1938), 51: "The spinners continue their work while keeping an eye on a few grazing cows or a flock of sheep or geese; or, in the villages, while gossiping with their neighbors along the streets." See also E.J.W. Barber, *The Development of Cloth in the Neolithic and Bronze Age* (Princeton 1991), 283-298, at 289: "[...] domestic spinning, weaving, fiber preparation, etc. have been found the world around for women's chores: they are not dangerous to the children, they can be done at home, and they are repetitious and simple enough to be interrupted and resumed easily around the frequent little crises of child-raising."

[49] See chapter 6 for a quantitative assessment of market-oriented textile production at villa estates. I do not mean to imply with this that a labourer's productive value depends on use value *or* exchange value production, and follow in this L. Beneria, 'Accounting for Women's Work',

Yet, these activities not only allowed the women to contribute substantially to the productive performance of the estate, they were a prime tool of early slave socialisation. For while the children received the best of care and attention, namely that by their own mothers, they would have been included in the production process from a very early age, helping at first with auxiliary tasks, but increasingly in the main production activities. Female slave labour thus organised reaped maximum labour exploitation from both mothers and children.[50] It prepared the children for their lives as slaves in terms of both mentality and the training needed to perform labour tasks that could be asked of them as adults: their 'apprenticeship' was complete.[51]

I do not wish to imply by this that food preparation and textile production were the only two areas of female labour on rural estates.[52] But this is not the place for a comprehensive treatment (however badly needed). The purpose of this section lies, in contrast, in locating the female slave within a specific *type* of productive activity (namely that compatible with childcare), and her subsequent presentation consistent with both the evidence provided by the 1st century AD agronomist Columella and the model of female economic exploitation described above. It should be interesting for future work to seek a more complete picture. Areas of industrial activity, such as (small-scale) tile and pot production, although virtually omitted by Columella, seem yet another area

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in L. Benería (ed.), *Women and Development. The Sexual Division of Labor in Rural Societies* (New York 1982), 119-147, and 'Accounting for Women's Work: The Progress of Two Decades', in N. Visvanathan *et al.* (eds.), *The Women, Gender and Development Reader* (London 1997), 112-118.)

[50] *Pace* Ste. Croix, *The Class Struggle* (n.19), 231 who maintains that female slaves involved in childbearing and childcare were of a lower productive value to their masters.

[51] I presume the majority of boys to have been trained up for field labour once they joined the adult male slaves. On the notion of an informal apprenticeship, a 'vocational kindergarten', in textile production see also Barber, *The Development of Cloth* (n.48), 289.

[52] But note the prevalence of these two productive areas for female slave labour also in the legal sources: Digest 33.7.12.

for female labour given its high potential for simultaneous childcare by the mothers: the archaeology of early imperial estates may help us further in this. [53] Regardless of whether we will be able to locate the female slave in areas of production other than the ones highlighted here following Columella's lead, their contribution to productive activities at early imperial villa estates seems certain. Economic potential and significance of the women's activities will be discussed in chapters 2 and 6.

The Roman Evidence: Varro, 1st Century BC and Cato, 2nd Century BC

It is widely accepted that female slaves were introduced into the villa economy towards the end of the republic, albeit in small numbers. On the one hand, the introduction of female slaves then is understood as a reaction to the upheavals and uprisings of badly treated male first generation slaves at the end of the 2nd and the beginning of the 1st century BC with the aim of increasing slave acceptance of their lot through the existence of slave family life; on the other hand, it is understood as a first sign of a dwindling external slave supply (which provided the main point of departure for the traditional argument set in early imperial times).[54] The republican agricultural writers, Cato and Varro, appear at first glance to support this gradual development, leading to the exploitation of female slaves in noticeable numbers in imperial times and so neatly fitting into the larger imperialist model: whilst Cato virtually neglects references to slave women other than the *vilica*, Varro not only alludes repeatedly to female slaves, but stresses their significance as family partners for male slaves, in the context of both agriculture and pastoralism. The women "[...] keep the herdsmen more

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[53] A prevalence of women in (industrial) household production has been suggested by D.P.S. Peacock, *Pottery in the Roman World: An Ethnoarchaeological Approach* (London and New York 1982), ch.2 and 3.

[54] This summarized in Bradley, *Slaves and Masters in the Roman Empire* (n.20), 50f.

easily with the herds, and through their offspring enlarge the slave labour force and increase the benefit of herding."[55] Similarly, the foremen at the villa should be given "[...] partners from among their fellow slaves to bear them children; for by this means they become more reconciled and more attached to the place."[56] Varro's approach has generally been viewed as the result of preferential treatment of the more privileged slaves or in any case of a selected few, and hence as a minor feature of slave life in the late republican countryside.[57] However, Varro is adamant that maintenance of family life is normal for all those "[...] who stay all the time on the *fundus*, because they have a female fellow-slave at the villa, and the Venus of herdsmen looks no farther than this", and even mentions that "those who tend the herds on the pastures and in woodlands and not at the villa, but shelter from the rains in makeshift huts, [many have thought it advisable] to send along women who follow the herds and prepare food for the herdsmen, and settle them down."[58] Whether all herdsmen benefited from regular family relations with female slaves or only some, it is clear, I think, that Varro considers slave women a normal feature of the villa. Given the ease with which he takes for granted the women's presence at the villa as well as family relations amongst herdsmen, I would find it very

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[55] Varro, *De re rustica* II,1,26: "*Sed do etiam in hominibus posse novenarium retineri numerum, quod in hibernis habent in villis mulieres, quidam etiam in aestivis, et id pertinere putant, quo facilius ad greges pastores retineant, et puerperio familiam faciunt maiorem et rem pecuariam fructuosiorem* (my translation).

[56] Varro, *De re rustica* I,17,5: *Praefectos alacriores faciendum praemiis dandaque opera ut habeant peculium et coniunctas conservas, e quibus habeant filios. Eo enim fiunt firmiores ac coniunctiores fundo* (my translation).

[57] So W.V. Harris, 'Towards a Study of the Roman Slave Trade', *MAAR* 36 (1980), 117-140, at 119f.

[58] Varro, *De re rustica* II,10,6: "*Quod ad feturam humanam pertinet pastorum, qui in fundo perpetuo manent, facile est, quod habent conservam in villa, nec hac venus pastoralis longius quid quaerit. Qui autem in saltibus et silvestribus locis pascunt et non villa, sed casis repentinis imbres vitant, iis mulieres adiungere, quae sequantur greges ac cibaria pastoribus expediant eosque assiduiores faciant, utile arbitrati multi* (my translation).

odd if he didn't show the same attitude towards his regular agricultural labour force; [59] clearly, he assumes the presence of children (of both sexes) on the estate.[60] In contrast however to Columella, Varro does not write however tentatively on the system of childcare practised or the labour demands put upon these female slaves (apart from what he said in relation to those women who follow the herds during their pastoral movements). Where to go from here?

The rural economy of Roman Italy was rarely subject to drastic change: methods of agricultural production were largely similar between the mid republic and the early empire (and beyond); and so was the overall set-up of the villa estate. Whilst Columella happened to mention the slave women's engagement with non-agricultural activities, his republican predecessors had not chosen to do so. Yet, both admit, if only by way of implication, the same or similar non-agricultural infrastructure of their villa estates: Cato takes for granted textile production on a *fundus* otherwise oriented in agricultural terms at production of wine or oil, and recommends more specifically the establishment of two looms at any newly built villa – enough to keep fifteen textile workers busy.[61] Varro is less specific, but nonetheless gives away the possibility of employing highly trained textile and weaving experts on his estates (as well as the exploitation of other non-industrial trades).[62] Both republican writers, then, knew of textile production as a typical feature of the kinds of villa estate they had in mind. And both republican writers, I suggest, envisaged *that* production

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[59] So already R. Martin, 'La vie sexuelle des esclaves, d'après les *dialogues rustiques* de Varron', in J. Collard (ed.), *Varron, Grammaire antique et stylistique Latine* (Paris 1978), 113-126, at 115-117.

[60] Varro, *De re rustica* II,10,1: "*[...] cum in fundis non modo pueri sed etiam puellae pascant* " while on the *fundus* not only boys but even girls tend the flocks" (my translation). Susan Treggiari proposes *villae rusticae* even as 'nurseries' for domestic urban slaves with children: 'Questions on Women Domestics in the Roman West', in M. Capozza (ed.), *Schiavitù, manomissione, e classi dipendenti nel mondo antico* (Rome 1979), 185-201, at 189.

[61] Cato, *De agricultura* 2,7; 10,5; 14,4.

process fuelled by exactly the kind of labour force that Columella had more explicitly in mind for it: female slaves. Neither of the two republican writers felt any need to specifically mention this; after all, as Varro only too readily tells us, their treatises set out to concentrate on agriculture proper, and not, as many effectively interpret them, as comprehensive accounts of the full production range of the villa economy: "'First', remarked Scofa, 'we should determine whether we are to include under agriculture only things planted, or also other things [...] For I observe that those who have written on agriculture, whether in Punic, or Greek, or Latin, have wandered too far from the subject' [...] 'For by (their) reasoning we should have to embrace other things quite foreign to agriculture; as for example when you have numerous weavers on the *fundus* and weaving establishments, and other crafts.' 'O.K.', said Scrofa, ' let us separate from our discussion on agriculture whatever anyone wishes to exclude [...]'"[63] One of the items to be excluded from the discourse was the non-agricultural labour force, including the female slaves.

We come back at this point to the issue raised right at the beginning of this chapter: the production range of the productive landscape of Roman Italy, and that of its villa economy. By maintaining the divisions and omissions laid out in the ancient evidence, modern scholarship has continued to reduce the economic potential of the villa economy and with it also that of the female slave. Varro's slave women were obviously valued as reproducers, and given the likely production range at late republican villa estates including the prevalence of textile production, their exploitation also as producers seems

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[62] Varro, *De re rustica* I,2.21.

[63] Varro, *De re rustica* I,2,12f. and I,2,21: *Scrofa, Prius, inquit, discernendum, utrum quae serantur in agro, ea sola sint in cultura, an etiam quae inducantur in rura, ut oves et armenta. Video enim, qui de agri cultura scripserunt et Poenice et Graece et Latine, latius vagatos, quam oportuerit. [...] Nam sic etiam res aliae diversae ab agro erunt adsumendae, ut si habet plures in fundo textures atque institutos histonas, sic alios artifices* (my translation).

certain to me. The same, I suggest, applied to Cato's mid-republican estates, despite his complete textual disregard of the female slave in both her productive and reproductive capacity. His insistence on looms and wool production cannot sensibly be explained in any other way. Whilst weaving can be a male profession, spinning never is;[64] and he would be a fool who tried to construct an argument that sees Cato's male field hands turn the distaffs and spindles at the end of their (field) working day. Once however female labour is recognised in an area that allows for simultaneous childcare, the labourers' exploitation also in their reproductive capacity seems equally certain (Figure 3 above). Thus, seen from an anthropological point of view, no differences are noticeable as regards the exploitation of female slaves on rural estates in the treatises of the Roman agricultural writers, both qualitatively and quantitatively. From Cato to Columella, female slaves formed a permanent part of the villa economy to which they contributed in both their productive and reproductive capacity: instead of progression and transformation, there was consistency and continuity in the servile Italian countryside during the period of imperial expansion. The strength of the argument here formulated will eventually depend on its consistency with other bodies of evidence; the theoretical framework provided through it, however, should supply a starting point for a fresh approach. Already, the economic role of the female slave in Roman agriculture appears firmly determined by the spheres of economic exploitation that equally defined her modern counterpart in the slave society of the Antebellum South: although set to work in different areas of work, they were valued as producers and

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[64] L. Larsson Lovén, 'Images of Textile Manufacture in Funerary Iconography', in M. Polfer (ed.), *L'artisanat romain: évolutions, continuités et ruptures (Italie et provinces occidentales)* (Montagnac 2001), 43-54; 'LANAM FECIT - Woolworking and Female Virtue', in L. Larsson Lovén and A. Strömberg (eds.), *Aspects of Women in Antiquity* (Jonsered 1998), 85-93; 'Male and Female Professions in the Textile Production of Roman Italy', in L. Bender Jørgensen and C. Rinaldo (eds.), *Textiles in European Archaeology* (Göteborg 1998), 73-78.

reproducers alike, as workers and mothers, and thereby subjected to the most complete form of slave exploitation.

2.

Archaeology and Female Slave Labour: Spinning a Different Story

Archaeology is a continuous struggle to excavate
our own preconceptions and unacknowledged assumptions.

Mike Parker Pearson, *The Archaeology of Death and Burial*

How does one trace slaves in the archaeological record? How could the material remains add to our understanding of slave life and slave identity? And how could it be used to challenge views on slavery derived from other source groups? In various regions and periods, excavation of slave quarters or whole slave plantations has vastly added to our picture of slave life.[1] In Roman Italy, on the other hand, interpretation of archaeological artefacts is hugely hampered by the difficulty of status identification: where such identification of status is not possible through other means, the material remains often remain silent too. Within urban contexts, identification of servile status in the archaeology is sometimes aided by inscriptional evidence, especially within funerary and commemorative structures: the large suburban columbaria that came into use already in the late republic have brought forward a wealth of evidence for the study of *familiae urbanae*.[2] In rural contexts, however, epigraphic evidence is regularly slim, providing at best documentation for some selected few – ordinary farm slaves are virtually extinct from the epigraphic record: two

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[1] For a compilation of various approaches in different geographical areas and chronological periods see P. Mitchell (ed.), 'The Archaeology of Slavery', *World Archaeology* 33.1 (2001). For an example of a single plantation see B.J. Heath, *Hidden Lives: The Archaeology of Slave Life at Thomas Jefferson's Poplar Forest* (Charlottesville and London 1999).

[2] The most recent study is K. Hasegawa, *Roman Domestic Slaves and Freedmen of the Statilii and other Roman Households from the Epitaphs in the Columbaria* (Unpublished PhD Thesis University of Nottingham 2003).

funerary stones set up by *familiae rusticae* – the sum total of inscriptional remains of the servile countryside.[3]

Within the realm of archaeology proper, attempts to deduce servile status from the material remains proved to be somewhat limited over the last century, generally lacking in originality and persuasion: the focus remained solidly set on endeavours to allocate servile status in accordance with the level of execution of architectural structures, especially domestic quarters. Structural categories to deduce servile status of the inhabitants of rural villa estates were first developed by Michael Ivanowitch Rostovtzeff in 1926, and have been essentially repeated since despite some criticism.[4] For most of the 20th century, the archaeological material at hand for the historian of slavery or that of the rural economy of ancient Italy continued to be restricted to the kind of architectural structures that allowed for little else. Change, however, occurred during the last part of that century. The story is easily told.

In 1969, there began, under the directorship of Molly Cotton, excavation, in the countryside near Capua, of the architectural remains of a late-

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[3] *Familiae Rusticae/Fundi*: *CIL* IX 3028 (Teate Marrucinorum) and *CIL* IX 3651 (Cerfennia). The lack of epigraphic evidence for ordinary rural slaves cannot be put in relation to their number: R. Samson, 'Rural Slavery, Inscriptions, Archaeology and Marx', *Historia* 38 (1989), 99-110. For epigraphic remains of agricultural slaves with a high status see chapter 3.

[4] M.I. Rostovtzeff, The *Social and Economic History of the Roman Empire* (Oxford 1926), 30f.; 496f.; 503-505 ([2]1957: 551-553); R. C. Carrington, 'Studies in the Campanian "Villae Rusticae"', *JRS* 21 (1931), 110-130; J. Day, 'Agriculture in the Life of Pompeii', *Yale Classical Studies* 3 (1932), 166-208; W.L. Westermann, *The Slave Systems of Greek and Roman Antiquity* (Philadelphia 1955), 106f.; K.D. White, *Roman Farming* (London 1970), ch. XIII; F.H. Thompson, *The Archaeology of Greek and Roman Slavery* (London 2003), ch. 3 and 4. J.J. Rossiter, *Roman Farm Buildings in Italy* (Oxford 1978), esp. ch. III and IV, and Appendix A, diverts slightly from this approach by focusing on aspects of size rather than socio-economic categories, and in this follows B. Crova, *Edilizia e tecnica rurale di Roma antica* (Milan 1942). For a criticism of the overall approach to the archaeology of slavery and the Italian countryside see D.W. Rathbone, 'The Italian Countryside and the Gracchan "Crisis"', *JACT Review* 13 (1993), 18-20, at 19.

republican villa site, known to modern scholars as the Posto villa. The excavation, under the auspices of the British School at Rome, was soon to be complemented by yet another investigation into the archaeology of the economy in the Ager Falernus: this time, under the dual directorship of Cotton and Métraux, there was resurrected large parts of a villa complex that, although more lavish in style and layout than the one at neighbouring Posto, provided similar insights into the agricultural pursuits of aristocratic Romans in the Francolise area: San Rocco. Both villas, originally built around or just after the turn from the second to the first century BC, were working farms, equipped with numerous structures that, still today after almost two millennia, provide ample evidence for agricultural exploitation and processing at the farmstead itself: threshing floors, oil presses, grain mills, dolia, etc. Both villas went out of use in the course of the second century AD, and neither left any other trace behind beyond those that belong to the realm of archaeology proper.[5]

The Francolise villas were the first of their kind in Italy that were excavated with the techniques of modern archaeology as then known. Publication followed swiftly from the actual work on the ground, including extensive documentation of both the impressive structural remains of domestic and farm buildings, as well as less spectacular small finds, from worked bone to loom weights. The potential of the Francolise excavations was huge for the study of the social and economic history of late republican and early imperial Italy; they provided a wealth of information that previously excavated republican villas in the Italian countryside, mainly those in the Bay of Naples, could not supply.[6] The majority of these had been subject to excavation when both the archaeological techniques and excavation standards were hugely

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[5] For Posto see M.A. Cotton, *The Late Republican Villa at Posto, Francolise* (London 1979); for San Rocco see M.A. Cotton and G. Métraux, *The San Rocco Villa at Francolise* (London 1985).

[6] So already White, *Roman Farming* (n.4), 418f. For lists of villas excavated prior to those at

different to what they were in the second half of the 20th century. Although duly listed in any subsequent study of the villa economy, some of them hardly filled a single page in the *Notizie degli Scavi* or similar publication. Despite this discrepancy, so obvious with hindsight, the limited and often haphazard recording of material then did not stop previous generations of scholars from deducing far-reaching social and economic conclusions. Rural villa sites in Western central and southern Italy, surrounded by rich Italian soil, soon became used to document the rise of oleo- and viticulture in the late republican period on an increasing number of middle and large size estates that were controlled from a central villa complex. With this, the door was open for an uncritical acceptance of the social mode of production proposed for this kind of economic enterprise on the basis of the literary source material by traditionally trained and traditionally working ancient historians, namely that of the male slave labour force. Since Rostovtzeff's *Social and Economic History*, those interested in either the economic or agrarian history of Roman Italy, or both, pictured the rise of the villa economy as documented by the discovery of suburban and rural sites, as a corollary of a countryside that become exceedingly worked by sizeable groups of male agricultural slaves, readily supplied by Rome's warfare during the period of imperialist expansion.[7]

Once this concept had settled in the heads of myriads of ancient historians, excavations like those in the Ager Falernus were simply amalgamated into it. The urge to employ archaeological evidence in the construction and confirmation of this historical model went so far as to use what set out as a training excavation of a lavish villa estate in South Etruria in the 1980s to produce a model for the state-of-the-art slave-run villa estate, showing

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Francolise see the relevant sections in the studies listed in n.4 above.

[7] This view is brought to perfection in K. Hopkins, *Conquerors and Slaves. Sociological Studies in Roman History 1* (Cambridge 1978), ch.I.

all the credentials allegedly typical for the republican period, most of all a predominantly male slave labour force: Settefinestre, so named by the excavators because of the seven structures built into the south wall of the garden area, soon became the archaeological hallmark for the type of rural enterprise described by the republican agronomists Cato and Varro.[8] Although critical historical discussion of possible modes of production ensued already during the period of excavation, the only aspect that was seriously questioned was that of the labourers' status, and more specifically that of the ratio between free and slave, all of which were of course regarded as male. Dominic Rathbone succinctly used his impressions from the first few seasons as the backdrop for an argument that unmasked the purely slave-run estate as one of a relatively low profitability, thus breaking a lance for the compatibility not only of slave and free labour at predominantly slave-run estates, but also for an economic reciprocity of estates of various sizes, and with it for the compatibility of slave and peasant farming in the Italian countryside, or in any case in the Ager Cosanus.[9] The discussion however remained thus essentially guided and restricted by the kind of archaeological evidence that was already available less than a century ago, namely hard architectural structures, especially living quarters and agricultural processing plants, and other implements for the processing of agricultural produce.[10] It also remained essentially guided and

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[8] A. Carandini *et al.* (eds.), *Settefinestre. Una villa schiavistica nell'Etruria romana*, 3 vols. (Modena 1985); on motives for and early developments of the excavation see A. Carandini and T. Tatton-Brown, 'Excavations at the Roman Villa of "Sette Finestre" in Etruria, 1975-9. First Interim Report', in K. Painter (ed.), *Roman Villas in Italy. Recent Excavations and Research* (London 1980), 9-43.

[9] D.W. Rathbone, 'The Development of Agriculture in the 'Ager Cosanus' in the Republican Period: Problems of Evidence and Interpretation', *JRS* 71 (1981), 10-23. See already M. Frederiksen, 'The Contribution of Archaeology to the Agrarian Problem in the Gracchan Period', *Dialoghi di Archeologia* IV/V (1970/1), 330-357.

[10] The obsession with architectural remains for living quarters, the so-called slave *cellae*, is still prevalent today: Thompson, *The Archaeology of Greek and Roman Slavery* (n.4), ch.2 and 3.

restricted by the kind of information on workforce matters which the Roman agricultural writers were prepared to debate in their treatises: the interplay between hired free and owned slave labour featured in both Cato's *De agricultura* and Varro's *De re rustica*, the latter in fact telling us only too readily that all agriculture was carried out by men free or slave, or indeed both.[11] What the literary sources chose not to discuss also remained left out of the modern debate; after all, so we are still told, "any discussion of the archaeological evidence for slaves in Italian agriculture in the last two centuries of the Republic must start from the literary sources [...]"[12]

The use of archaeology, then, to trace the agricultural slave was essentially predetermined by models of agricultural production obtained from the study of highly selective literary source material.[13] This became most explicit when Andrea Carandini, the excavation director at Settefinestre, argued for the introduction of female slaves into the labour force at the villa estate during the second phase of the estate, i.e. around the time when Columella composed his agricultural manual: "Sicuramente in Catone e forse anche in Varrone si ha una schiavitù prevalentemente maschile, dove solo chi dirige o sorveglia ha la possibilità di metter su famiglia, mentre Columella prevede incentivi generalizzati per le schiave prolifiche e ciò fa pensare che anche gli schiavi comuni si fossero andati organizzando per nuclei familiari."[14] In contrast

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The continued acceptance of 'male-gendered' artefacts (relating to agricultural production that required male field labour) as archaeological indicators for the villa economy is similarly most visible in what is still the most recent survey article on Italian agriculture in the *Journal of Roman Studies*: E. Curti, E. Dench, J.R. Patterson, 'The Archaeology of Central and Southern Italy: Recent Trends and Approaches', *JRS* 86 (1996), 170-189.

[11] Cato, *De agricultura* 1,3; 5,4; 144,3; 145,1f.; 146,3; Varro, *De re rustica* I,17,2f.

[12] Thompson, *The Archaeology of Greek and Roman Slavery* (n.4), 79.

[13] These, in turn, were only to often interpreted from the point of view of models of agricultural production and slave exploitation that would not stand a close critical assessment: for a typical example see Appendix 1 below.

[14] See A. Carandini, *Schiavi in Italia. Gli strumenti pensanti dei Romani fra tarda repubblica e*

to his republican predecessors Cato and Varro. Columella reserved the odd passage for discussion of female slave labour, which was duly used by those historians in favour of the imperialist model of the rise and decline of slavery as conclusive evidence for the linear development of female economic activity at rural estates.[15] The so-called new slaves' quarters of the imperial phase at Settefinestre were now evidence for living quarters of whole slave families: quarters from the previous phase, although hardly different in shape and size, miraculously did not fit this category.[16] No other kind of material evidence was used by the excavators to document the female slave; nor did the alleged arrival of large numbers of women and children at Settefinestre in this phase create a pattern different to the previous one, created by men only, in the archaeological record. Thus, the archaeology itself was not asked to tell its own story -- or in any case to question any preconceived historical conclusions. This lack of critical assessment of the evidence at hand, however, has had some grotesque implications for the study of the agrarian history of Roman Italy.

Agriculture, Productive Units and their Archaeological Record

Problems that arise from the point of view of archaeology with the traditional view on the development of female economic activity in the course of Roman imperialist expansion are especially prominent at one level: that of the archaeological record of the female on slave-run estates. Within the archaeology of the countryside of republican Italy, women (and children) have generally been playing less significant roles than men, so much so that the stories that

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medio impero (Rome 1988), 202-204, at 200f.

[15] Columella, *De re rustica* I,8,5; I,8,19; XII,3,6; XII,3,8.

[16] Carandini, *Schiavi* (n.14), 150-152 and 197-200, and *Settefinestre* (n.8), I:152-166. Similarity in size and layout of old and new slave *cellae* were also noted by Thompson, *The Archaeology of Greek and Roman Slavery* (n.4), 99.

were told implied more often than not that they need not take account of them. In contrast to other periods and topics where "it is the understanding of their presence that has changed, not the acknowledgement of their existence",[17] the history of the transformation of Italy from a peasant to a slave society virtually denied the female (slave) *any* role: she was literally not seen. Whilst both architectural and agricultural implements at villa estates were regularly employed as evidence for male (slave) labour, a supposed lack of archaeological evidence for female (slave) labour led to outright denial of her existence, not least because tracing the female in the archaeological evidence has been at best a matter of general debate: the assumption, however, that only particular types of archaeological evidence can serve for the study of gender (and thus for the discovery of women and men in the archaeological evidence) has repeatedly been shown to being misguided.[18] Within the study of the archaeology of Italy, Ruth Whitehouse categorically reinforced that if "[...] we adopt a very broad definition of the term gender, to refer simply to categories of femaleness and maleness, whatever form they may take, gender systems probably occur universally in human societies. If this is the case, then we should *always* be looking for gender and we should be looking *everywhere* for possible

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[17] M.L.S. Sørensen, *Gender Archaeology* (Oxford 2000), 26.

[18] e.g. for classical archaeology by I. Morris, 'Remaining Invisible: The Archaeology of the Excluded in Classical Athens', in S.R. Joshel and S. Murnaghan (eds.), *Women and Slaves in Greco-Roman Culture. Differential Equations* (London and New York 1998), 193-220, at 193-197. See more generally S. Brown, 'Feminist Reserarch in Archaeology: What Does It Mean? Why Is It Taking So Long?', in N.S. Rabinowitz and A. Richlin (eds.), *Feminist Theory and the Classics* (New York and London 1993), 238-271, and E. Scott, 'Introduction: On the Incompleteness of Archaeological Narratives', in J. Moore and E. Scott (eds.), *Invisible People and Processes: Writing Gender and Childhood into European Archaeology* (London 1997), 1-10. For an overview of recent developments in gender archaeology and a critique of traditional archaeology see Sørensen, *Gender Archaeology* (n.17), ch.3 and 4. For an overview of the range of theoretical approaches taken in various disciplines towards the issue of gender in archaeology see S.M. Nelson and M. Rosen-Ayalon (eds.), *In Pursuit of Gender. Worldwide Archaeological Approaches* (Walnut Creek, Lanham, New York, Oxford 2002).

information about it. In other words, any kind of patterning in the archaeological record potentially may be interpreted in terms of gender. What is necessary is not to search out particular types of evidence, but rather to feed gender into our understandings of past societies, so that it forms part of our interpretative frameworks."[19] In line with gender-oriented approaches, and in contrast to traditional approaches, the argument pursued in what follows is based on the crude assumption that if it is possible to see the male in the archaeological record, the same must go for the female. Moreover, it claims intellectual consistency in its approach to male and female gendered artefacts, which is only too often missing in traditional approaches to the ancient economy.

The archaeological record of the female on slave-run estates

The traditional view of the slave-run villa estate presupposes a linear development of female economic activity during the period of imperialist expansion. Chronologically speaking, this means that female economic activity should have risen dramatically between say 200 BC and 100 AD, with a clear peak in the last of these three centuries. Virtually no female economic activity would have been prevalent at the beginning of this time span, whilst we should be able to witness some substantial – although so far unspecified – economic activity due to the inclusion of noticeable numbers of slave women towards the end of it. None of this is visible on the ground though.

If slave women were kept with a view to their contribution to the natural reproduction rate of the slave population as generally maintained within the traditional model, their ability to contribute to the productive activities of the estate would have been determined by both the system of childcare that was

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[19] R. D. Whitehouse, 'Exploring Gender in Prehistoric Italy', *PBSR* 69 (2001), 49-96, at 53.

practiced at the estate and the range of productive activities. I have argued in the previous chapter that this would have limited their productive performance predominantly to activities that were carried out at or close to the actual villa complex. I argued furthermore that given the economic infrastructure of villa estates, textile production would have figured at a noticeable degree amongst these activities, especially the spinning and weaving of wool. Although neither end products nor the main means of textile production tend to survive the passage of time, both loom weights and spindle whorls stand *some* chance of survival, especially if made out of sturdier materials such as stone, clay, bone or lead. Even though attribution of artefacts to a specific period is not always possible, it is notable that none of the three sample estates referred to above, which have been so happily used to evidence the male-dominated slave-run estate, produces an archaeological record of textile implements in the republican period that is substantially different to that produced in later phases of these estates. Posto, which has so far failed to produce any spinning equipment, shows six loom weights in total, all made of clay, five of which are unstratified, all of which are different in weight and (conical) shape.[20] San Rocco, in contrast, shows evidence for spinning through the discovery of one spindle whorl in the destruction layer, plus evidence for weaving by way of seven loom weights, once more of various weights and (conical) shapes. Interestingly enough, the majority of these, five in total, were found in the infill of a terrace that documented the end of Phase I at San Rocco, and thus the republican period; they stem, in other words, all from the first period of habitation at San Rocco, i.e. from around 100BC to 30BC. A sixth relatively large weight was attributed to the first part of Phase II (up to AD50), and the seventh weight to the final destruction layer.[21] Settefinestre, on the other hand, produced a total of

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[20] Cotton, *The Late Republican Villa at Posto* (n.5), 58 and 76.

[21] Cotton and Métraux, *The San Rocco Villa* (n.5), 162 and 257-259.

eight weights and one spindle whorl in its archaeological record, starting with Phase I and ending with Phase VI in the mid empire.[22]

What is particularly striking in the first instance about this evidence is the excruciatingly small number of implements overall, a typical feature, however, for most sites not struck by sudden destruction.[23] In the second instance, however, it is the lack of any obvious change or development in the use of textile implements, as visible in the archaeological record over the period in question, which asks for comment: it seems there was no increase in textile production in this period, and thus no increase in the number of female slaves. The three examples are of course isolated; but that did not stop previous generations from employing them in their quest for the male-run estate. In support of the claim made here, however, there is, to the best of my knowledge, no evidence from early to mid-imperial occupation phases at rural villa estates throughout the Italian peninsula that would suggest a general shift of practice in textile production from that documented in earlier periods. With the steady increase in survey and excavation work going on in the Italian countryside for over half a century now, we can be hopeful to acquire more detailed and less isolated data for rural villa sites, not only in some selected geographic areas. The Tiber Valley Survey completed, and publication forthcoming, more sophisticated guesses should be possible as to the number of estates of various sizes in this area and their development over time, which may provide a useful tool for comparison with patterns observed in other areas, as well as stimulation for further work in this field.[24] Yet, survey cannot replace excavation, and the

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[22] Carandini, *Settefinestre* (n.8), II: 69f.

[23] Yet, even sites struck by sudden destruction can produce surprisingly small numbers of textile implements as for instance in the case of Pompeii: W. Jongman, *The Economy and Society of Pompeii* (Amsterdam 1988), 161-165.

[24] H. Patterson, 'From Villas to Castles: The Late Antique and Early Medieval Landscapes of the Tiber Valley', Paper delivered at the Accordia Research Meeting, London March 5th 2002.

argument presented here so far ultimately depends on comparison with as many site reports as possible: the outlook, however, is grim, with only a single area being recently documented: the Basilicata, right in the south of Italy.[25] Once more catalogues of villa sites like this one exist for other regions, the question of textile implements in the material remains can be treated with a much wider geographical scope in mind than what is possible here. My guess, however, is that the pattern found in the few examples we currently have of well-excavated villas will not be changed dramatically by further data coming to light: the question that remains is that of its interpretation.

Economic Potential and Archaeological Evidence

The archaeological evidence for textile production, in combination with the considerations made above on the archaeological record of the female, does at the very least *not* suggest any change in female economic activity in the period in question. However, given the limited scope of the evidence at hand, allocation of economic significance is difficult. A handful of loom weights could simply be, as the excavators of the San Rocco villa consider, evidence for "[...] the duty of the overseer's wife [...]"[26], since it is impossible in this case to calculate the original number of looms from the surviving sample. Detailed, if speculative, assessment of numbers of looms depends on a reasonable number

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For preliminary reports see H. Patterson and M. Millett, 'The Tiber Valley Project', *PBSR* 66 (1998), 1-20, and H. Patterson, *et al.*, 'The Tiber Valley Project: The Tiber and Rome Through Two Millennia', *Antiquity* 74 (2000), 395-403. For a first report on fieldwork in a specific area within the Tiber Valley see H. di Giuseppe, M. Sansoni, J. Williams, R. Witcher, 'The *Sabinensis Ager* Revisited: A Field Survey in the Sabina Tiberina', *PBSR* 70 (2002), 99-149.

[25] H. di Giuseppe, 'Insediamenti rurali della Basilicata interna tra la romanizzazione e l'età tardoantica: materiali per una tipologia', in M. Pani (ed.), *Epigrafia e territorio politico e società. Temi di antichità romana IV* (Bari 1996), 189-252.

[26] Cotton and Métraux, *The San Rocco Villa* (n.5), 54.

of weights and is not possible with extremely few finds.[27] Hence, allocation of economic significance can in most places not be derived from the archaeological evidence by itself; for this, either substantial documentary evidence or economic models need to be employed.[28] Lacking both, I simply wish to outline in this section various economic possibilities to which the discussion could be directed without stretching the evidence to extremes.[29] In view of the material situation, there is then no doubt that the following speculations are in the first instance nothing but an exercise in possibilities. Yet, since collection of data, both archaeological and historical, can be prompted by theoretical debate, its final purpose lies in the stimulation of sensitivity towards potentially relevant material.[30]

Traditionally, small numbers of finds of textile implements have been allocated to the economic activity of an extremely circumspect number of people, if not to a single person only as at San Rocco. Even in the case of Posto, where the economic activity of women already in the late republican phase was recognised in principle by the excavators, its economic significance was denied. Ironically, recognition of the women's existence at Posto was made once only, namely in relation to the *missing* spindle whorls, i.e. the fact that no spinning equipment was excavated. None of the actual finds merited the women's mention.[31] This need not be the case. Given that it takes on average ten to

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[27] For calculation of a minimum number of original looms from surviving weights, the base width of the (conical) weights is multiplied by their number and then divided by the medium estimated length of a loom, before being divided by two to account for the two sets of natural shed (personal comment Margarita Gleba).

[28] cf. the argument by M.I. Finley, *Ancient History: Evidence and Models* (London 1985), 25.

[29] Lack of both evidence and persuasive models has already been lamented by W. Jongman, 'Wool and the Textile Industry of Roman Italy: A Working Hypothesis', in E. Lo Cascio (ed.), *Mercati permanenti e mercati periodici nel mondo romano* (Bari 2000), 187-197.

[30] See the similar considerations for classical Greek archaeology advanced by Morris, 'Remaining Invisible' (n.18), 194.

[31] Cotton, *The Late Republican Villa at Posto* (n.5), 76.

twelve hours to spin the thread for a single hour of weaving, not accounting for preparation or finishing, even highly restricted evidence for spinning and weaving may be an indication for the economic activity of a female labour force that is not different in number to that usually imagined for the male field labour force of a republican estate. Of course, no single kind of artefact is ever unambiguous in its gender status. Loom weights, and more generally weaving as a profession, are found in association with men, at least in imperial times.[32] It is thus possible that evidence for weaving on rural estates could be associated with male weavers.[33] The argument constructed here however largely depends on the communal nature that textile production in pre-industrial societies usually assumes;[34] since it can take up to a dozen spinners and wool workers to keep a single loom busy, it is thus irrelevant for any wider historical considerations on female slave labour whether the weaver may have been male or not, assuming exclusively female spinners and woolworkers: evidence for spinning, such as spindle whorls, is predominantly associated with females in the Roman world.[35] Thus, employment of a male weaver or weavers on a rural estate would in fact support any claim for highly productive spinning female labour.[36] So, a single loom's capacity could well have stretched between quite considerably separated extremes. This range can easily be determined between a

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[32] See L. Larsson Lovén, 'Male and Female Professions in the Textile Production of Roman Italy', in L. Bender Jørgensen and C. Rinaldo (eds.), *Textiles in European Archaeology* (Göteborg 1998), 73-78.

[33] So probably Varro, *De re rustica* I,2,21.

[34] So E.J.W. Barber, *The Development of Cloth in the Neolithic and Bronze Ages* (Princeton 1991), 294.

[35] See Larsson Lovén, 'Male and Female Professions' (n.32); see also her work on 'Images of Textile Manufacture in Funerary Iconography', in M. Polfer (ed.), *L'artisanat romain: évolutions, continuities et ruptures (Italie et provinces occidentals)* (Montagnac 2001), 43-53, at 47.

[36] Thread could of course be purchased; but I follow Cato, *De agricultura* 2,7 who assumes home production.

low estimate and a high estimate:

a) Low estimate of economic potential

This model assumes the pursuit of textile production by a single person, presumably the *vilica*, as evidenced by the kind of archaeological material typically found on republican and early imperial estates. It assumes furthermore that the *vilica* would not put all her productive energies into textile production, but merely as much as women in the ancient world would reasonably be expected to invest as a minimum, i.e. around 3.5 hours/day (on an annual basis).[37] The total number of hours invested over a whole year would thus be 1277.5. If the *vilica* worked entirely by herself as is typically assumed, the total numbers of hours available to her for textile production would roughly divide into just over 1000 hours of spinning and around 250 hours of weaving. Wool is typically spun at a speed of 100 metres per hour, thus producing just over 100000m of thread per year in our model. I shall assume for ease of argument that this thread was woven into basic but decent adult tunics which require around $3m^2$ of cloth and which can be tailored on the loom. The weaving of $1m^2$ of fabric requires around 3000m of thread, i.e. 1500m for the warp and 1500m for the weft. The 100000m of thread would thus produce around $33.5m^2$ of fabric, or 11 tunics.[38]

b) High estimate of economic potential

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[37] On this estimate of daily engagement in textile production see K. Carr, 'Women's Work: Spinning and Weaving in the Greek Home', in D. Cardon and M. Feugère (eds.), *Archéologie des textiles des origins au V^e siècle* (Montagnac 2000), 163-166, and L. Larsson Lovén, 'LANAM FECIT – Woolworking and Female Virtue', in L. Larsson Lovén and A. Strömberg (eds.), *Aspects of Women in Antiquity* (Jonsered 1998), 85-95.

[38] All technical figures taken from Carr, 'Women's Work' (n.37). I assume single ply for both warp and weft due to the lack of evidence for woven doubly ply in the Roman world: J.P. Wild, *Textile Manufacture in the Northern Provinces* (Cambridge 1970), 45, confirmed by personal comment, June 2003.

This model assumes the pursuit of textile production by a sizeable group of ten females (in accordance with the considerations made above) as evidenced by the kind of archaeological material typically found on republican and early imperial estates. It assumes furthermore that these women would not put all their productive energies into textile production, but what could reasonably be described as a part-time investment in a pre-industrialised society, i.e. around eight hours per day (on an annual basis). (Assuming a generous eight-hour-sleeping period per day, this represents only half their waking hours which need not be concentrated in the middle of the day as working days in large parts of the modern world are currently structured.) Thus, the total number of hours invested over a whole year is somewhere around 29200. This divides roughly into 26766 hours of spinning, and 2433 hours of weaving. The spinning would produce 2.676600m of thread. This works out as roughly 892m^2 of fabric. The total number of tunics produced would then be 297.

The excavators at Posto went further than that: they considered the possibility that the evidence at hand could indicate a multiple number of looms at any one time.[39] Given that Cato recommended the establishment of two looms for a villa estate, the archaeological evidence at Posto and elsewhere could readily fit into the Catonian recommendations.[40] The consequences for our model of high economic potential are easily spelt out: the total number of tunics estimated above would be subject to multiplication by the estimated number of looms. An estate as that envisaged by Cato could easily produce around 600 tunics per annum.

Neither model has minimised or stretched the archaeological evidence on which it is based in any significant way. The differences in terms of economic output

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[39] Cotton, *The Late Republican Villa at Posto* (n.5), 76.

[40] Cato, *De agricultura* 14.2.

are, however, huge (from 11 tunics in the low potential model to 600 in the high potential model). The archaeological evidence by itself cannot indicate realisation of either low or high economic potential. Yet, in view of the potentially significant impact on our historical imagination that the choice of either model incurs, the decision needs to be well founded in historical considerations that lie outside the evidential sphere in order to avoid a circular argument. Any rushed conclusions like those of the excavators of Settefinestre are doomed to show a bias: they allocated very little economic significance to the textile implements – not however on grounds of their limited numbers or wider economic considerations, but solely on grounds of an interpretation of the literary sources (*sic*) that understands textile production as insignificant for the functioning of the villa estate.[41]

The question of significance applies also, at least in theory, to most male gendered artefacts. Yet, although we are in no position to determine with any degree of confidence land units attached to villa estates, or agricultural production levels achieved, hypotheses about the productivity of (male) field labour have been readily forthcoming with what could be described as a relatively high economic potential, admittedly with the view to provide "[...] suggestions, not conclusions."[42] This has even led to construction of a sizeable male labour force where the records of the means of agricultural production at a villa site are virtually missing.[43] Given the limitations of the evidence for historical interpretation in general, the ease with which historians have been prepared to allocate high economic potential to male labour, and the concurrent

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[41] cf. Carandini, *Settefinestre* (n.8), II:69.

[42] Rathbone, 'The Development of Agriculture' (n.9), 11, and K.D. White, 'The Productivity of Labour in Roman Agriculture', *Antiquity* 39 (1965), 102-107.

[43] As in the case of some Campanian villas where the "[...] scanty information furnished by the [excavation] reports [...] often amounts to nothing at all": Carrington, 'Studies in the Campanian "Villae Rusticae"' (n.4), 110.

reluctance to allocate virtually any economic potential to female labour is disturbing: the choice entirely that of the historian. Vis-à-vis the scale that textile production in Roman Italy must have achieved,[44] the overall reluctance to attribute economic significance to what are largely female-gendered artefacts is thus incomprehensible. This gender bias – for it is nothing but that – has kept our historical imagination in check even where sizable deposits of artefacts suggest quite readily large-scale textile production at a villa estate.[45] Whilst caution over an adequate 'exchange rate' between numbers and/or volume of surviving source material and its interpretation as regards scope and scale of economic production is due and appropriate, its unbalanced application to male and female gendered artefacts has led into an intellectual dead-end for the writing of economic history.

The dead end is created by an incompatibility of two observations: on the one hand the general appreciation of the substantial economic scope and scale that textile production (i.e. labour and time investment) would have achieved; and on the other hand a persistently minimalist economic interpretation of textile implements in the archaeological record. If, as seems to be the case, only a fraction of the original means of production has survived the passage of time, if a huge, albeit unknown number of spindle whorls, loom weights, etc. has been reduced over two millennia to a smallish number of archaeological artefacts, then it is intellectually inconsistent to interpret small finds *by way of default* as evidence for economically insignificant activity.

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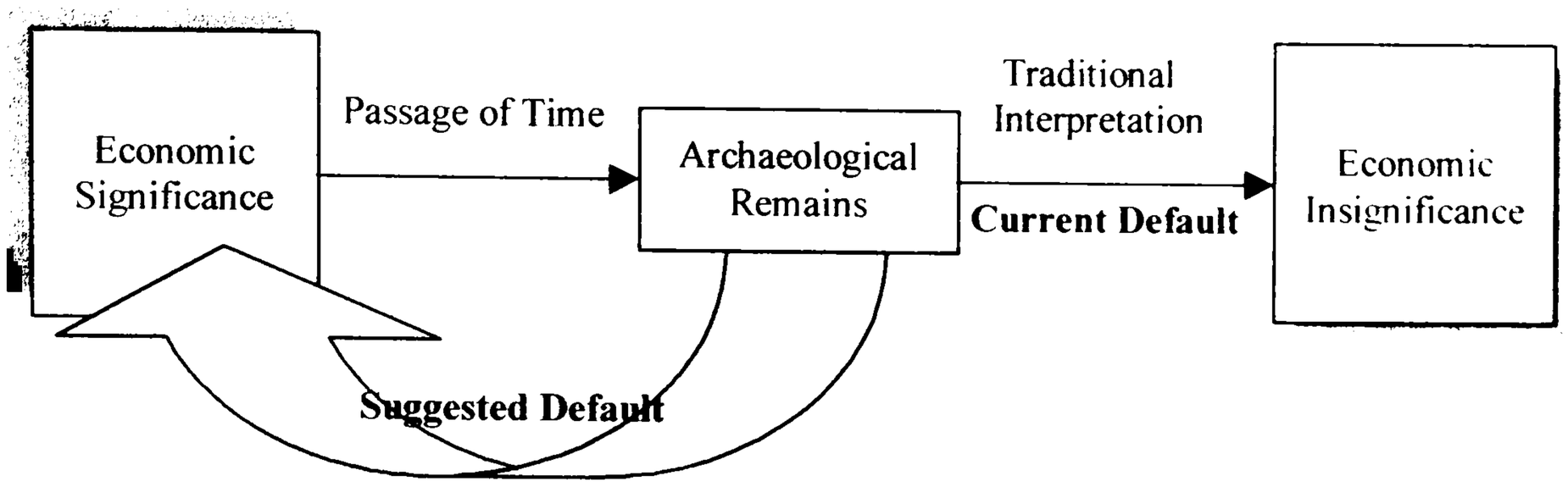
[44] cf. the considerations by Jongman, 'Wool and the Textile Industry of Roman Italy', (n.29), 187ff.; see also the quantitative considerations for the textile demands of the Roman army in Britain alone made by J.P. Wild, 'The Textile Industries of Roman Britain', *Britannia* 33 (2002), 1-42, at 31f.

[45] e.g. in the case of the Hellenistic villa site at Gravina di Puglia, which produced more than 500 loom weights and numerous other textile implements: V. Tatton-Brown, 'Loomweights, Bobbins, and Spindle-Whorls', in A.M. Small (ed.), *Gravina. An Iron Age and Republican Settlement in Apulia*, 2 vols. (London 1992), II:218-226.

whilst *a priori* recognising the substantial economic significance of textile production. A default position that is intellectually consistent with this recognition would on the contrary relate these artefacts to this economic significance (Figure I).

Figure I:



There is nothing provocative or original about the default position suggested here. It should in fact be rather familiar to most. After all, it is the very default applied for over a century now to the archaeological remains traditionally attributed to male labour. Today, there is intellectually and historically no good reason why the evidence for textile production presented in this chapter should not be read against the androcentric grain. Where such reading could lead in quantitative terms as regards possible levels of productivity and profitability of rural estates will be discussed in the concluding chapter of this thesis. The point here was simply to break a lance for an interpretation of archaeological artefacts that takes account of the economic potential of the female slave: the story *could* be different from that traditionally spun.

Identification of economic potential also requires recognition of its implications for the social make-up of the labour force: instead of a labour force that consists virtually only of men, in a scenario with high economic female potential as suggested here, male and female adult slaves would probably match each other in number. The kind of slave *familiae* traditionally imagined for

imperial *villae rusticae*, as for instance those of the later phases at Settefinestre, which show a roughly equal number of male and female slaves, would need moving backwards into the republican period with all that goes with it.[46] It is pure irony that those studies that denied small samples of textile implements on republican estates economic significance, in fact showed the way ahead with their attribution of textile production to the duties of *vilicae*: for nowhere do the republican writers Cato or Varro refer to spinning and weaving as duties of the *vilica*; Columella, in contrast, does – and he does so with due reference to other slaves employed in textile production. In fact, it is clear from Columella's remarks that *his* ideal *vilica* would by and large only supervise those actually engaged in it: the actual work was not done by her. She joins them, if at all, only after wool had been spun and prepared for weaving. The image of the weaving *vilica*, then, comes from Columella, and is not Catonian or Varronian. If one wants to borrow it for earlier periods, the textile workers that are under the *vilica*'s supervision and that do the bulk of the work need to come along too.[47]

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[46] Carandini, *Schiavi* (n.14), 203.

[47] Columella, *De re rustica* XII,3,3; 3,6; 3,8.

3.

Inscribed Meaning: The *vilica* and the Villa Economy

Historical story-telling, like all other kinds,
employs the four primary figurative devices known as tropes [...]
Troping means turning or steering the description
of an object, event or person away from one meaning,
so as to wring out further different,
and possibly even multiple meanings.

Alun Munslow, *Deconstructing History*

The slave-staffed estates described by the Roman agricultural writers Cato, Varro and Columella possessed a clear management structure that imposed an indisputable hierarchy. At the head of each individual estate or *fundus* stood a farm manager, the *vilicus*, who took the place of the absentee landowner and carried out business on his behalf. His duties were largely of an administrative and supervisory nature, including the recording of all tasks performed on the estate, the arranging of sales and purchases of both products and equipment, and the supervision at the highest level of virtually all transactions and production processes on the farmstead.[1] The *vilicus* was not the only person on the farmstead who carried out managerial duties. The *vilica*, a housekeeper, or in more modern terms a farm manageress, was also regarded by the agronomists as a permanent member of staff. Her duties lay largely within the economic activities that were carried out at the villa, and she was under regular supervision through the *vilicus*. Cato lists her in his inventories for both an olive grove and a vineyard and subsequently devotes a whole chapter to her professional and social duties.[2] Varro only mentions her in passing but also

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[1] See for a modern synopsis of the *vilicus*' work duties J.-J. Aubert, *Business Managers in Ancient Rome. A Social and Economic Study of Institores, 200BC-AD250* (Leiden 1994), 169-175, and J. Carlsen, *Vilici and Roman Estate Managers until AD284* (Rome 1995), 70-80.

[2] Cato, *De agricultura* 10; 11; 143.

clearly takes her presence for granted.[3] Columella's description of the *vilica*'s duties is by far the most extensive we have and has considerably influenced the modern picture.[4] According to their precepts, the *vilica*'s duties were extensive, stretching from the overall maintenance of the villa, the organization of provisions and cooked meals for the slave *familia*, the general care and guardianship of the labourers, to the supervision of a whole range of domestic and industrial activities carried out at the farmstead. On the kind of estates envisaged by the agronomists, both the *vilica* and the *vilicus* had firmly separated spheres of activity, and each a substantial workload of their own.

Despite description of work areas and duties of both *vilica* and *vilicus* in the agricultural treatises, the attention they have received by modern scholars has been highly imbalanced: whilst the *vilicus* has attracted profound treatment in a number of studies, the *vilica* has been viewed in the shadow of her male counterpart, with only a single article in print that is exclusively devoted to her role.[5] The imbalance, however, is not only one of size. The *vilica*'s work is regularly described as of an auxiliary nature and discussion of her economic significance consequently rather perfunctory.[6] This underestimation of the *vilica*'s economic role is, I believe, directly connected to the assumption of an institutionalised personal relationship between *vilicus* and *vilica*, which defines her professional role ultimately through her personal relationship to this male slave. Traditionally, they have been viewed as 'husband' and 'wife' by students of Roman slavery,[7] an image which seems strongly supported by the literary

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[3] Varro, *De re rustica* I,18.

[4] Columella, *De re rustica* XII.

[5] For studies on the *vilicus*' role see n.1 above, for a study on the *vilica* see J. Carlsen, 'The *vilica* and Roman Estate Management', in H. Sancisi-Weerdenburg *et al.* (eds.), *De agricultura: in memoriam Pieter Willem de Neeve* (Amsterdam 1993), 197-205, at 198-201.

[6] This point also made by Carlsen, 'The *vilica*' (n.5), 197, n.2 (with earlier bibliography).

[7] A legally accepted marriage could obviously not have existed amongst slaves, but this issue is irrelevant for the point to be made here. Equally, I do not want to enter here the debate about

sources, and which has become solidly embedded in the modern picture of the management structure at the *villa rustica*: "[...] *vilicae* were chosen by their masters and married without their consent to the *vilici*, who were also slaves."[8] As 'wives' of *vilici*, *vilicae* have in our historical imagination virtually lost any professional justification in their own right, and the title they carry has generally become understood as of an associative nature. There are, however, some problems with this view: first, an institutionalized 'husband'-and-'wife' relationship between *vilicus* and *vilica* does not find unanimous support in the ancient evidence; second, any such interpretation cannot be easily brought into line with modern knowledge of Roman farm management and the villa economy. In what follows, then, I will argue for a limited occurrence of personal relationships between *vilicus* and *vilica* in republican and early imperial times. In other words, I will propose that the *vilica* was only rarely the 'wife' of the *vilicus*, but that both usually had partners from amongst their fellow slaves. Furthermore, I will suggest that the title '*vilica*' possessed primarily a professional dimension (and not predominantly a personal one), giving the woman who carried it achieved (rather than associative) status. Ultimately, I will argue that it is only on recognition of the *vilica*'s managerial role in her own right, that not only her economic significance can be discerned, but also the full economic potential of the villa economy.

The shape in which this argument is presented may be unusual: it is

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freed or free-born *vilici*, for which see H.C. Teitler, 'Free-Born Estate Managers', in H. Sancisi-Weerdenburg *et al.* (eds.), *De agricultura: in memoriam Pieter Willem de Neeve* (Amsterdam 1993), 206-213.

[8] A. Fraschetti (ed.), *Roman Women* (Chicago and London 2001), 1 (Originally published under the title *Roma al femminile* (Rome and Bari 1994). This is also categorically stated in the most recent studies on Roman estate management without giving specific source references: Aubert, *Business Managers* (n.1), 177, n.204: "The concubine of the *vilicus* is called *vilica* in agricultural treatises [...]"; and Carlsen, 'The *vilica*' (n.5), 197: "It is clear from the use of the term *vilica* in the legal and literary sources that the title normally indicated the bailiff's wife."

that sometimes chosen for children's adventure books, but never before, as far as I am aware, within the writing of ancient history. It allows readers (including examiners) maximum choice in their proceeding in both text and imagination in that, at the end of each section, they will have to decide which way they wish to proceed, thus creating, at least in a most literal meaning, multiple readings. This is not just an idée fixe. For, on the one hand, this approach may allow us to question scholastic knowledge formation by giving the reader more control: more importantly, however, it will force readers to question their own biases in approaching the ancient evidence (*Which evidence? Which body of evidence first, which one last?*), and the hierarchies in which they have grouped this evidence in their heads. Equally, it will question readers' approaches to the writing of ancient history as a whole: whether they prefer starting off with a good look at some evidence, or whether they wish to contemplate historical considerations first; whether they value the evidence over historical models or *vice versa*; and finally, whether they think if or how far the chosen order of research can influence its outcome. More generally, this approach is based on the conviction that all history is based on decision-making, consciously and subconsciously, and that it should be worthwhile for all historians to come clean with themselves about the choices they tend to make. Choices that, as in the case of the *vilica*, can be crucially determinant for any historical conclusion arrived at. Whether this experiment will be successful depends in the first instance on the readers' preparedness to take part in this *spiel* – for this is the first decision to be made. So, as this section draws to an end, the time has come to take a look at the options (listed in alphabetical order):

04) Legal Dealings *or* The *vilica* in the Digest. 77-83

05) Managing the Managers *or* Slavery and Roman Estate Management. 83-89

Sections 02-04 deal in detail with specific bodies of evidence (epigraphic, literary and legal), and thus represent those areas that have traditionally been given priority in any treatment of Roman farm management, and in particular in any treatment of the *vilica*'s role therein. Questions of slave and estate management are addressed both in sections 01 and 05: the former with a wider view of the villa economy than in the kind of approach that any one specific view of the *vilica*'s role allows (or denies), the latter focusing more on concrete aspects of slave staff management. The alphabetic order in which they are listed here is aimed at disturbing the traditional default of research even for those readers who are not game enough to play by putting first what may otherwise be clad in the dress of a conclusion. Game's up whenever readers decide they have seen enough to make up their minds. Let's play.

01 *Creating Possibilities* or *The vilica and the villa economy*

What if the *vilica* was not the *vilicus*' 'wife'? What if she gained her title, like the *vilicus*, through her professional role? Keith Bradley, in his list of slave jobs in Columella, lists the *vilica* (as the only woman) with the (professional) rendering "wife of *vilicus*" (whilst the *vilicus* is rendered "bailiff").[9] But if the *vilica*'s 'job' was not, as I argue, to be somebody's 'wife', but the managerial head of a productive unit, how come her professional significance was so easily overlooked by previous generations of scholars? Moreover, how come previous studies of Roman estate management and the villa economy created quite happily what could be described as a historical picture that was full of

[9] K.R. Bradley, *Slavery and Society at Rome* (Cambridge 1994), 60.

persuasion – despite ignoring the significance that I wish to allocate the *vilica*? The answer to both questions is essentially one and the same: a limited (and limiting) focus.

Rural estates in Roman Italy are predominantly seen from the point of view of agricultural production, i.e. from those activities that are directly related to the cultivation of the ground. This was already the case with our Roman agricultural writers, although Varro, and even more so Columella after him, included in their treatises *some* discussion of non-agricultural activities that were carried out at or near the farmstead, yet without due attention for industrial activities.[10] The latter have also largely dropped out of any modern conceptualisation of the villa economy in Roman Italy (whilst finding repeated significance in discussion of villa economies outside Italy where the literary sources are rather slim): the result of acceptance of the pattern produced by the literary sources.[11] Scholars with a focus on these have thus been limiting the potential not only of the *vilica*, but also that of the villa economy. Focus on agricultural production, on the other hand, became synonymous with a focus on the *vilicus* and the male field labour force, and has indeed assumed virtual exclusivity.[12] Attempts to break with the focus on the male have been equally

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[10] e.g. Varro, *De re rustica* I,2,21ff.; Columella, *De re rustica* XII,1,5; XII,3.

[11] Discussion of non-agricultural production at villa estates is rife where the literary evidence is often completely missing and study consequently relies on archaeological material as is the case for instance in Roman Britain: K. Branigan and D. Miles (eds.), *The Economies of Romano-British Villas* (Sheffield 1989), esp. the contributions by K. Branigan, 'Specialisation in Villa Economies', 42-50, and M. Todd, 'Villa and Fundus', 14-20.

[12] e.g. H. Gummerus, *Der römische Gutsbetrieb nach den Schriften des Cato, Varro und Columella* (Leipzig 1906); W.E. Heitland, *Agricola: A Study of Agriculture and Rustic Life in the Greco-Roman World from the point of View of Labour* (Cambridge 1921); E. Maróti, 'The *Vilicus* and the Villa System in Ancient Italy', *Oikumene* 1 (1976), 109-124; W. Kaltenstadler, *Arbeitsorganisation und Führungssystem bei den römischen Agrarschriftstellern* (Stuttgart 1978); D.W. Rathbone, 'The Development of Agriculture in the 'Ager Cosanus' in the Republican Period: Problems of Evidence and Interpretation', *JRS* 71 (1981), 10-23, and 'The Slave Mode of Production in Italy', *JRS* 73 (1983), 160-168, reviewing A. Giardina and A.

doomed to produce a largely restricted view because of a continued acceptance of the primary role played by the literary sources (and their traditional interpretation).[13] Ironically, this focus is most pronounced where one would expect it the least: in treatment of the only other large body of evidence: the *vilici* inscriptions. Jean-Jacques Aubert, in his epigraphic study of Roman estate management and estate managers, concludes his discussion of female farm managers and their description as 'wives' of *vilici* by referring readers to a study by René Martin titled '*Familia rustica*: les esclaves chez les agronomes latins', which, as the title suggests, is based on (and restricted to) the literary evidence provided by the agricultural writers.[14] This is particularly puzzling if one looks at the development that the evidence available for study has gone through over more than a century now: Henri Wallon, in what is the first serious treatment of ancient slavery by modern scholarship, had available for study in 1847 the literary sources as known to us today, plus twelve *vilici* attested epigraphically.[15] Aubert, in contrast, had available to him 201 (male) *vilici*, four *subvilici*, and five *vilicae* attested epigraphically in 1994.[16] Study of these

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Schiavone (eds.), *Società Romana e produzione schiavistica*, 3 vols. (Rome and Bari 1981); K.D. White, 'The Productivity of Labour in Roman Agriculture', *Antiquity* 39 (1983), 102-107; M.S. Spurr, *Arable Cultivation in Roman Italy 200BC-AD100* (London 1986); Aubert, *Business Managers* (n.1); Carlsen, *Vilici* (n.1); C. Schäfer, *Sklaven und Freigelassene in wirtschaftlichen Führungspositionen* (Mainz forthcoming).

[13] e.g. Carlsen, 'The *vilica*' (n.5); R. Günther, 'Matrona, *vilica* und *ornatrix*. Frauenarbeit in Rom zwischen Topos und Alltagswirklichkeit', in Th. Späth and B. Wagner-Hasel (eds.), *Frauenwelten in der Antike. Geschlechterordnung und weibliche Lebenspraxis* (Stuttgart and Weimar 2000), 350-376, at 362-365.

[14] Aubert, *Business Managers* (n.1), 177; R. Martin, '*Familia rustica*: les esclaves chez les agronomes latins', in *Actes du colloque 1972 sur l'esclavage* (Paris 1974), 267-297.

[15] H. Wallon, *Histoire de l'esclavage dans l'antiquité* (Paris 1847, reprinted Paris 1988), 408ff. Although Wallon evokes the concept of a *vilicus-vilica*-'marriage', he remains ambiguous on this issue throughout. His only allusion to the concept, at 408, leaves plenty of room for interpretation: "En tête de la hiérarchie est le régisseur (*villicus*), et la femme qui lui a été donnée comme épouse pour l'aider [...]"

[16] Aubert, *Business Managers* (n.1), 445–462.

independent of any preconceived conceptualisation based upon another body of source material should have created possibilities, rather than limiting the already limited focus even further. In view of the wealth of the epigraphic evidence – throughout empirical in nature – the choice made traditionally in prioritising a few scraps of literary evidence – predominantly prescriptive in nature – is highly problematic at best for the writing of history, be it of the Roman or any other period.

Study of individual aspects of industrial production in the countryside of Roman Italy, especially but not only tile and brick manufacture, has long been questioning traditional ideas of subordinate roles of women on the managerial level: there, women have been fully recognised in their roles as *officinatrices* – then and now.[17] Given the potential for industrial production at rural villa estates, it is not at all far fetched to see the *vilica* in charge of such a productive unit. The example of textile production, foregrounded in the previous two chapters and to be exemplified again in the final chapter of this thesis, may only be one of many industrial activities that contributed significantly to the overall economic performance of villa estates. It is also not far fetched to see rural estates by way of default equipped and set up to engage in both agricultural and industrial production.[18] This would explain why all agricultural writers felt obliged to mention the *vilica*; it would also explain why they did so in a rather perfunctory way: her professional location away from

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[17] e.g. T. Helen, *Organization of Roman Brick Production in the First and Second Centuries A.D. An Interpretation of Roman Brick Stamps* (Helsinki 1975), 112f. and more recently P. Setälä, 'Women and Brick Production – Some New Aspects', in P. Setälä *et al.* (eds.), *Women, Wealth and Power in the Roman Empire* (Rome 2002), 181-201.

[18] A continuum between agricultural and industrial production is evident elsewhere in the Roman world: P. Garnsey, 'Non-Slave Labour in the Roman World', in P. Garnsey (ed.), *Non-Slave Labour in the Greco-Roman World* (Cambridge 1980), 34-47. See also Columella, *De re rustica* XII,1,5 and XII,3,7 for use of agricultural surplus labour in productive activities carried out under the supervision of the *vilica*.

those activities associated with the cultivation of the ground forbid anything but a brief sketch of either her managerial role or the unit(s) of production under her supervision in a treatise designed to debate things agricultural. Furthermore, such industrial activities need not have been carried out throughout the whole year. Seasonal occupation is well attested in both legal and literary sources, especially with regard to rural estates, and so are double allocations of managerial duties, at least outside the rural sphere.[19] And Columella was quite clear about the non-sedentary nature of the *vilica*'s professional role, just as he knew of the importance not only of those activities carried out *in agris* (under the supervision of the *vilicus*), but also of those carried out *intra villam* (under the supervision of the *vilica*).[20]

If, then, we are prepared to view the *vilica* as a farm manageress with changing spheres of supervision, and if, furthermore, we are prepared to view rural villa estates as centres of diversified productive activity way beyond the narrow constraints of agriculture proper, study of the productive landscape of Roman Italy can create new possibilities for the study of the economy and society of Roman Italy as a whole. Compatibility of agricultural and industrial production on a larger scale than typically assumed; compatibility of slave and non-slave labour in the Italian countryside; compatibility of male and female (slave) labour at rural villa estates – to name but a few of the points in desperate need of further study and investigation. The *vilica* can provide a key for this. Yet, this will not be the case if she is continuously seen as a lesser adjunct to her male counterpart and dependent in her professional status on any personal relationship she may have had. Given the current state of the evidence, it is unlikely that both literary and epigraphic source material will be of much help

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[19] For seasonal compatibility see Digest 33.7.25.1 and Vitruvius, *De architectura* II.3,2. For managerial double allocations see Digest 14.3.13.pr.

[20] Columella, *De re rustica* XII.3,8f. (see also *De re rustica* XII.46.1 and XII.50.1 for seasonally caused changes in the *vilica*'s work load), and *De re rustica* XI.2.72.

to capture the full complexity of rural (slave) life. The archaeology of villa estates, on the other hand, is still being underused – or in any case generally subjected by a majority of historians to a limited and limiting focus on the most obvious architectural structures.[21] Usage of the discipline outside the Italian heartland has in contrast produced highly stimulating results for the study of villa economies.[22] One of the reasons why this has not been the case in Roman Italy is the single associative meaning usually given to the title *vilica*. If, at the very least, the title could *also* be seen as carrying achieved status, the *vilica*, and with her the villa economy, could be subject to new readings and meaningful interpretations.

02) *Inscribed Meaning* or *Epigraphy and* vilici rustici

The epigraphic evidence for Roman *vilici* consists of 194 inscriptions that mention a *vilicus* in Roman Italy and Sicily, but only six that mention a *vilica*.[23] Only a fraction of these, however, actually refer to their partners, generally in the form of a commemoration. The total number of inscriptions that provide positive clues towards the determination of the personal relationships of *vilici* and *vilicae* is hence reduced to 45 (or only 33 if one discounts those that clearly were not *vilici rustici*), including three of the six *vilicae* inscriptions. Table 1 (below) lays out the employment of the various terms used for the partners of the 44 (male) *vilici* in these inscriptions and the percentages they form of the

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[21] See chapter 2 above, especially n.4.

[22] cf. n.11 above.

[23] An almost complete list of these inscriptions from Roman Italy and Sicily can be found in J.-J. Aubert, *Business Managers* (n.1), 442-462, who counts a total of 201 *vilici* and five *vilicae* identified clearly in the inscriptions known to him. The only addition that needs to be made is an inscription from Corfinio which mentions both a *vilica* and a *vilicus*: M. Buonocore, 'Nuovi testi dall'Abruzzo e dal Molise (Regiones II et IV)', *Epigraphica* 58 (1997), 231-265, at 241-244.

total number; Table 2 (below) does the same for the three *vilicae* whose partners are mentioned in the inscriptions. The majority, as can easily be seen from these tables, refer to the *vilicus'* partner simply as *coniunx*, *conserva* or *contubernalis*, while two of the three *vilicae* who mention their partners refer to them by the title of *vilicus*.

Table 1: An asterisk (*) behind an inscription indicates that the *vilicus* is not a *vilicus rusticus*.

Term used	**Inscription/s**	**Percentage of total number of inscriptions (44 = 100%)**
Coniunx	*CIL* V 7852* *CIL* VI 8495* *CIL* VI 8495* *CIL* VI 8669 *CIL* VI 8672 *CIL* VI 8676* *CIL* VI 9987 *CIL* VI 9988 *CIL* VI 10163* *CIL* VI 32461 *CIL* VI 37827 *CIL* VI 37829 *CIL* IX 59* *CIL* IX 820 *CIL* IX 3651 *CIL* X 1749 *CIL* X 1751 *CIL* XIV 198 *CIL* XIV 199 *AE* 1959, 300 *AE* 1966, 106 *AE* 1968, 110a *Eph. Ep.* VII 1247	23 = 52.3%
conserva	*CIL* IX 2485 *CIL* IX 3446 *CIL* XI 4422 *CIL* XIV 2726	4 = 9.1%
contubernalis	*CIL* V 4503* *CIL* VI 8759 *CIL* VI 33733* *CIL* VI 37828	4 = 9.1%
uxor	*CIL* V 8650* *CIL* X 3964*	2 = 4.5%
vilica	*CIL* X 5081(?) *Epigraphica* 1997, 241ff.	2 = 4.5%

Partner identified by other means	*CIL* VI 4431 *CIL* VI 4435* *CIL* X 1750 *CIL* XI 1231* *CIL* XIV 2751 *AE* 1977, 87 *AE* 1978, 80 *AE* 1980, 229 *NSc* 1923, 369	9 = 20.5%

Table 2:

Term used	**Inscription/s**	**Percentage of total number of inscriptions (3 = 100%)**
vilicus	*CIL* X 5081 (?) *Epigraphica* 1997, 241ff	2 = 66%
Partner identified by other means	*CIL* XI 871	1 = 33%

The quantitative view is impressive for only a single inscription identifies the partner of the *vilica* beyond doubt as the *vilicus*. This inscription, currently in the museum yard of the Museo Archeologico di Corfinio, was only published in 1997, and hence could not be taken into account by any of the supporters of an institutionalised *vilicus-vilica*-'marriage' for their studies. It is a huge (1.96m high) funerary *stela* that was set up by the *vilicus* Felix (and his sons Phaedimus and Felix) to his partner Veneria, herself the *vilica* of an Attia Galla, and to their son Firmus.[24] The provenance is uncertain, but since the title '*vilica*' is only known in an agricultural context,[25] it must be viewed as evidence for a 'husband-and-wife' management team on an agricultural estate.[26] Whilst this

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[24] Buonocore, 'Nuovi testi' (n.23), 241-244: *Dis Man(ibus) / Veneriae / Attiaes Gallaes / vilicae et Firmo / filio eius Felix vilic(us) / coniugi cum Phaedimo / et Felice filis posit.*

[25] Aubert, *Business Managers* (n.1), 461, regards the only republican *vilica* inscription we have to be possible evidence for the occupation of a *vilica* outside the proper agricultural sphere, but even so, this would not exclude her occupation at a villa estate. The inscription is a graffito on a terracotta lamp that came from the Esquiline cemetery: *CIL* I² 504 (Rome): *Statia vilic(a) nostra*. His point is made more explicit in 'Workshop Managers', in W.V. Harris (ed.), *The Inscribed Economy. Production and Distribution in the Roman Empire in the Light of 'instrumentum domesticum'* (Ann Arbor 1993), 171-181, at 178, n.50.

[26] I would like to remain doubtful towards an interpretation of the epitaph as evidence for a family tradition in estate management and the implication of ascriptive status inherent in the

epitaph represents a clear inscriptional identification of a *vilica* as the 'wife' of a *vilicus*, it is nevertheless notable that the *vilicus* Felix found it desirable to inscribe both his partner's professional title ('*vilica*'), as well as the frequently employed '*coniunx*' in order to clarify their personal relationship. It seems as if neither the professional, nor the personal 'title' by itself would have been a clear indication for the other meaning.[27]

In addition to this funerary commemoration, there may indeed exist another inscription that implies the 'marriage' of the *vilica* and the *vilicus* mentioned therein. The inscription, formerly in the possession of Clemente Visocchi, now at the German Archaeological Institute in Rome, originates probably from Atina. It had been set up by a freedman and a freedwoman both announcing their freed status through the inscription, but also providing information about their professional positions.[28] Neither Gaius Obinius C.l.Epicadus, nor Trebia Gaiae l.Aprodisia is titled *vilicus* or *vilica*, but the use of the verb *vilicare* in the 3rd person plural leaves little doubt that both assumed the respective positions.[29] Since they have set up the inscription together after having worked the estate for a substantial amount of time, it might be perceived as overly critical to doubt their personal relationship, but such doubt has been declared.[30] And indeed, it is not uncommon for unrelated *colliberti* to set up epitaphs together, especially if they had close working ties, which clearly was the case between Obinius Epicadus and Trebia Aprodisia.[31] In how far working

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vilici profession as suggested by Buonocore, 'Nuovi testi' (n.23), 243f.

[27] cf. also *CIL* III 5611 (Noricum: Mattighofen).

[28] *CIL* X 5081 (Atina): *C(aius) Obinius C(aii) l(ibertus) / Epicadus / Trebia C(aiae) l(iberta) Aprodisia / hic vilicarunt / annos XIIII*. Cf. Carlsen, *Vilici* (n.1), 97f., n.320.

[29] cf. the same use of the verb in this context in *AE* 1906, 100.

[30] Aubert, *Business Managers* (n.1), 150 is hesitant in accepting the personal relationship between the two, but leaves the possibility open.

[31] On the practice of freedmen and *colliberti* commemorating their working relationships on stone see M.B. Flory, 'Family in *Familia*: Kinship and Community in Slavery', *AJAH* 3 (1978),

relationships (and subsequent desire to put up a common commemoration) were reinforced by personal relations is in most cases impossible to know. As is clear from the inscription, Obinius Epicadus and Trebia Aprodisia were freedman and freedwoman of two different people (yet we may want to speculate that their former masters were a couple themselves):[32] but this need not speak against their working on the same estate, nor necessarily against their personal relatedness. Hence, whilst there is no positive evidence for the latter, it is not impossible to think that we may have another piece of evidence for a 'husband-and-wife'-team as the farm managers on the estate. Together with the inscription from Corfinio, this however is the sum total of (relatively) secure identifications of *vilicae* as 'wives' of *vilici* in the inscriptional record.

What may arise from the study of these two inscriptions, however, is the pride these slaves and freedmen took in announcing their professional titles on stone. Such pride was not an isolated phenomenon. On the basis of a study of epitaphs from Rome that mention *contubernales*, Susan Treggiari has been able to show that amongst the group of servile commemorators a strong desire to declare one's status through job titles must have been evident. She concludes that "[...] jobs, where mentioned, are of the more desirable type [...] Slaves with jobs like these were more likely to want to mention them on their inscriptions."[33] The same, one would expect, was the case with *vilici rustici* – male and female. Yet, if it was reasonable as the traditional view holds "[...] to

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78-95, at 80-87, and S. Joshel, *Work, Identity, and Legal Status at Rome. A Study of the Occupational Inscriptions* (Norman and London 1992), 134ff.

[32] I do not understand why Carlsen, *Vilici* (n.1), 97f. changes the reading and hence translation of the inscription which is perfectly legible (cf. the picture in Carlsen, *ibid.*). According to his reading, Obinius Epicadus and Trebia Aprodisia were freedman and freedwoman of one and the same person, that is Gaius Obinius. Of course, Obinius Epicadus was the freedman of Gaius, but Trebia Aprodisia was freed by a woman, which is indicated by the reversed letter C after her name on the inscription.

[33] S. Treggiari, '*Contubernales* in *CIL* 6', *Phoenix* 35 (1981), 42-69, at 47.

identify these women with the *vilica* as described by the Roman agricultural writers",[34] we would in the light of the evidence presented here need to conclude that *vilicae* were an exception. While individual commemorators may have had reason to neglect the mentioning of their professional titles, it seems on the whole unlikely to me that practically all the women that appear as partners of the *vilici* in the inscriptions from Table 1 would not have wanted their titles to be mentioned had they been *vilicae*. This almost complete lack of any identification of the *vilici*'s *contubernales* as *vilicae* is difficult to integrate into a picture of a status-oriented society like Roman Italy. Becoming a *vilica* was after all one of the rare opportunities for a female (agricultural) slave to be well above her fellow slaves. There does not exist any good reason to have been modest about this. The lack of these women's desire to inscribe their title on stone (or for that matter the lack of their partners to do so) appears inexplicable within this wider view of the epigraphic habit displayed by slaves and freedmen. If inscriptions were used by these sections of society to display public status, and clearly they were, then it seems most logical to conclude that these women's status lay in its most literal sense in their relationship to a *vilicus*, made sufficiently clear through the range of titles chosen for them which make obvious their personal relationship. In other words, these women's status was truly associative, and it is in this dimension that they were commemorated.

Of course, *vilicae* did inscribe their title on stone: the three inscriptions from Table 2, plus three others which do not refer to partners make this sufficiently clear.[35] Next to the already discussed inscriptions from Atina and Corfinio, the third *vilica* inscription that mentions a partner provides additional information on the issue at question. The inscription comes from Mutina and

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[34] Carlsen, 'The *vilica*' (n.5), 198.

[35] *CIL* I² 504 (Rome); *CIL* V 7348 (Forum Vibii); *CIL* X 5081 (Atina); *CIL* XI 356 (Ariminum); *CIL* XI 871 (Mutina); *Epigraphica* 58 (1997), 241ff. (Corfinium).

was set up by the partner of the *vilica* Nice, himself called Dama, a slave of a Statullus.[36] Whilst Dama does not choose to use any of the typical terms for one's partner as employed in most of the inscriptions listed in Table 1, it seems fairly safe to assume their relationship because of the nature of the dedication.[37] What is not clear from the text is whether Nice was a *vilica* in her own right (while being the *vicaria* of either Dama or someone else), or whether she temporarily replaced and/or assisted (or was to replace) an existing *vilica* as the latter's *vicaria*.[38] Both readings are possible, but whatever may have been the case, it suffices for the present purposes to state the obvious: Nice's partner is not titled *vilicus* (or given any other professional title) in the inscription. Bearing the findings of Treggiari in mind when comparing the Mutina epitaph with the inscriptions from Corfinium and Atina, it does not convey the same pride in job and title from the male as in the latter two. All things considered, I would like to suggest that Dama was not a *vilicus*, and hence Nice not the partner of any such person. If we view Nice as a *vilica* in her own right, and that is my preferred reading of the inscription, this however would imply that Nice was either at the head of a managerial unit (and that no *vilicus* existed), or that the *vilicus* had his own personal set-up with a different partner.[39] If however we view Nice as the *vicaria* of the *vilica*, with the possible inclination of assisting or replacing the latter either temporarily, or completely after her retirement, then Nice's personal relationship to Dama may well come into conflict with the

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[36] *CIL* XI 871 (Mutina): *Vivit / v(ivus) / Dama Statulli / Nicini vilicae / vicariae suae / et suisque / p(edes) q(uadrati) XII.*

[37] If Nice was simply Dama's *vicaria* (and not his partner), a possible rendering of the text, it would represent an unusually emphatic notification of a master's (i.e. an *ordinarius*') obligation (if that is what is was) to ensure his slave's burial, even if she was a *vilica*.

[38] The latter suggested by Carlsen, 'The *vilica*' (n.5), 202.

[39] On the possibility of a female at the head of a managerial unit see the considerations by Aubert, *Business Managers* (n.1), 140f. Cf. also the examples given by Carlsen, 'The *vilica*' (n.5), 204 with regard to two inscriptions from Regio VIII and Regio IX respectively, which

concept of a *vilicus-vilica*-'marriage', a point elaborated in section 05 below.

Whatever the precise answer as regards the personal relationships of our six Italian *vilicae* known through inscriptions may be (and we can only be certain in one case), their extremely small number may throw doubt on my contention that *vilicae*, just like other slaves and freedmen, were proud and ready to inscribe their title on stone. After all, they only represent a fraction of the total number of inscriptions that mention a *vilicus* – one of the reasons why the *vilici*'s *contubernales*, etc. from Table 1 above are by preference viewed as *vilicae*: the six inscribed *vilicae* don't seem to be enough evidence for well over three centuries of Roman slave farm management. This, however, is too superficial an approach. The sex ratio in occupational inscriptions is at best highly biased: roughly only one out of seven individuals of servile provenance who is mentioned by name and occupation/professional title in the much larger group of epigraphic material from Rome is a woman.[40] Furthermore, *vilicae* were found in substantially fewer trades than *vilici*: a *vilicus* could be in charge of mines and metal workshops, amphitheatres, libraries, tax collection, public finances, and much more.[41] And the bulk of the epigraphic evidence on *vilici* stems from these areas. At best, only twenty-seven of the 202 *vilici* known to us through these inscriptions suggest an agricultural or rustic occupation of some sort, but not necessarily employment at a *villa rustica*. At least 74 imply a positive identification with one of the non-agricultural work areas listed above.[42] This much wider application of the title *vilicus* would have had a huge

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may be evidence for female farm manageresses at the head of a managerial unit.

[40] See Joshel, *Work, Identity, and Legal Status* (n.31), 16ff.

[41] For a list of the fields in which *vilici* were employed according to the epigraphic evidence see Aubert, *Business Managers* (n.1), 173ff.

[42] I follow the identifications in Aubert, *Business Managers* (n.1), 173f. and 445-461. The abundance of non-Italian evidence given by him only further supports the wider employment of the term. The *vilicus* known through the Corfinio inscription is included in the 'rustic' section for reasons made explicit above (see also n.25 above).

impact on the original number of inscriptions, and subsequently on those available for study today.

In addition to these, there is a large group of *vilici* inscriptions that do not allow any form of professional identification either way. These embrace half of the *vilici* known to us, i.e. 101 in total (see Chart 1 below). I find it however difficult to follow Jean-Jacques Aubert in his suggestion that the "lack of specification may suggest that a *vilicus* was attached to an agricultural estate [...]"[43] Of these 101 inscriptions fourteen are dedicated to the god Silvanus, mainly from Rome, containing seventeen *vilici*.[44] We do not know enough about the cult of this rustic god, but it seems unlikely that all these dedications in the city would have been set up by *vilici rustici* who happened to be in charge of a suburban estate just outside Rome and who were all equally devoted to the cult of this deity. And Peter Dorcey has shown that the cult, while having rustic roots, had by the empire become a means for town dwellers to express a sentimental nostalgia for the countryside;[45] this should not exclude the group of *vilici* who were amongst the god's most devoted followers in urban centres.[46] None of this excludes a strong following and a continuation of the cult in the countryside. Two of the inscriptions (from Furfo and Trebula Mutuesca) stem from a rural context, and they may be evidence for such a continuation.[47] But the remaining fifteen *vilici* are difficult to associate with the countryside, and it

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[43] Aubert, *Business Managers* (n.1), 443.

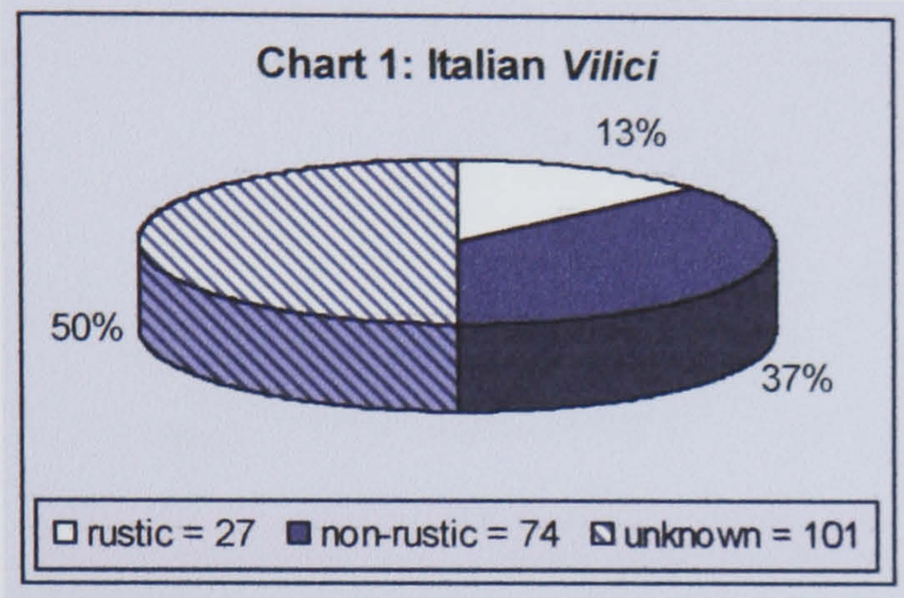
[44] *CIL* VI 586; 615; 619; 662; 664; 666; 679; 696; 31010; 36823 (all Rome); *CIL* IX 3517 (Furfo); *CIL* IX 4664 (Aquae Cutiliae); *CIL* IX 4877 (Trebula Mutuesca); *CIL* XI 6947 (Luna).

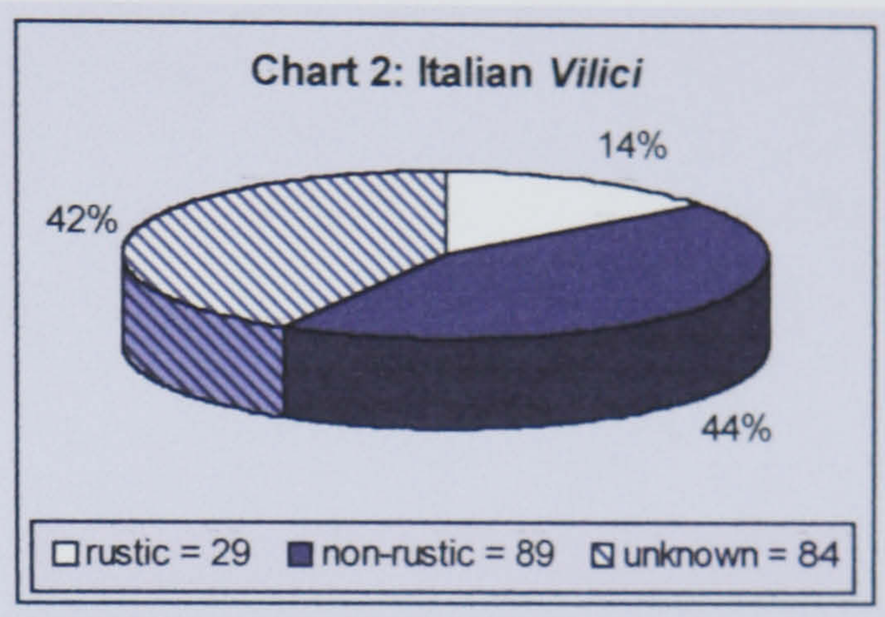
[45] P.F. Dorcey, *The Cult of Silvanus. A Study in Roman Folk Religion* (Leiden 1992).

[46] Dorcey, *Cult of Silvanus* (n.45), 119 goes as far as stating that "Silvanus ranks as the most popular deity among *vilici*, but most of these are from Rome or other Italian cities, and may never have lived on a farm." Cf. also Dorcey's negative assessment of the god's bearing of a *vilicus* epithet: 'Silvanus *Vilicus*?', *ZPE* 79 (1989), 293-295.

[47] For a discussion of rural sanctuaries which held agricultural land under the management of *vilici rustici* see J. Carlsen, '*CIL* X 8217 and the Question of Temple Land in Roman Italy', in J. Carlsen *et al.* (eds.), *Landuse in the Roman Empire* (Rome 1994), 9-15.

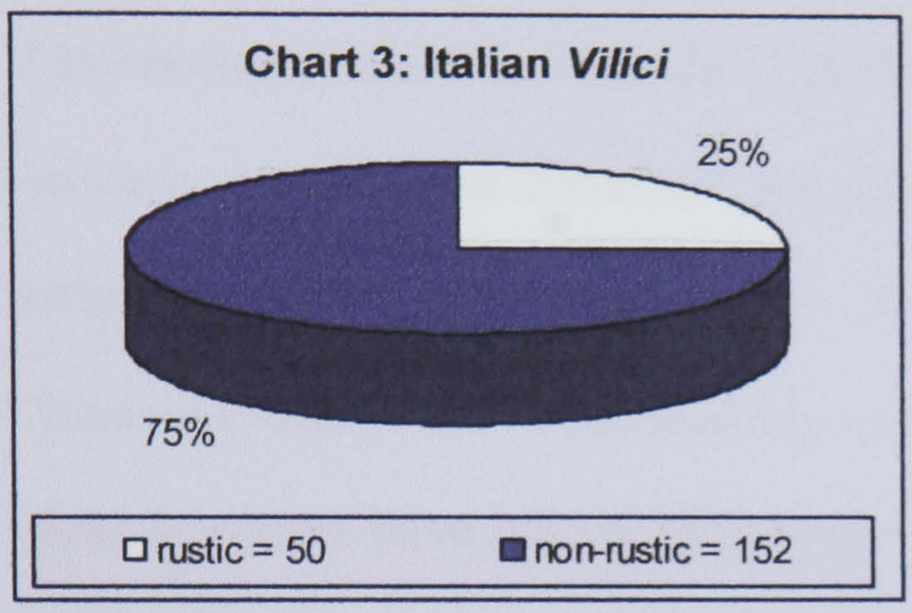
seems they were *vilici urbani*, rather than *vilici rustici*. Thus, in the lack of any occupational specification, it makes in my view more sense to put these fifteen *vilici* tentatively into a context of urban professions, and to view them as yet another group of servile and/or lower class distinction in the cities that adhered to what was originally an agricultural cult (see Chart 2 below).

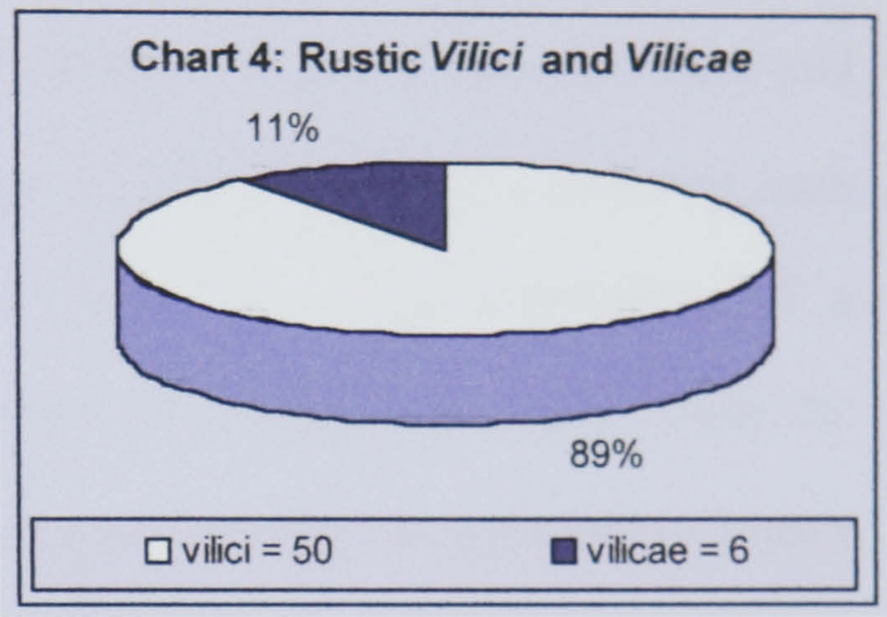




The subsequent ratio between *vilici* from a rustic, non-rustic and unknown professional context as suggested in Chart 2 is to my mind likely to be still very generous with those that have been subsumed under the rustic section and the unknown rubric. Yet, even as it stands, this allows at best only for 113 *vilici rustici* – and this would need to be based on the improbable assumption that not only all 29 *vilici* that have been placed into the rustic section do belong there, but also that all those with an unknown professional derivation actually derive from an agricultural context. From a statistical point of view, the group of unknown professional provenance should divide into rustic and non-rustic occupations according to the ratio evident between these two groups. The result suggests a majority of 152 *vilici urbani* as opposed to a meagre 50 *vilici rustici* (see Chart 3 below). This would provide a total of 56 Italian *vilici rustici* (including the six *vilicae*) known through the epigraphic material. The sex ratio still seems extreme at first sight with 89% *vilici* and only 11% *vilicae*, i.e. roughly eight *vilici* to one *vilica* (see Chart 4 below). But this is in perfect keeping with the slightly weaker bias inherent in the much larger group of occupational inscriptions known from the city of Rome as referred to above. It

seems that the total number of *vilici rustici* known to us from the epigraphic evidence is not so large after all, and the discrepancy between the number of inscriptions mentioning a v*ilicus* and those mentioning a *vilica* not completely implausible or surprising. Thus, there is no need to 'search' for more *vilicae* than those six that are already known to us.





To regard, in contrast, all the *contubernales*, etc. mentioned in the *vilici* inscriptions from Roman Italy and Sicily as *vilicae* not only causes serious problems with our understanding of the epigraphic habit displayed by slaves and freedmen, it would also create a pool of *vilicae* that is much larger than what we should expect to find epigraphically. Far from suggesting an institutionalised personal relationship between *vilici* and *vilicae*, the epigraphic evidence presented here throws grave doubts upon any such concept. The *vilici* and *vilicae* mentioned therein appear as a rule married to someone other than a slave farm manageress or manager.

03 *Labour of Love?* or *The* vilica *in the Literary Sources*

Columella was quite certain: The *vilicus* "should be given a woman companion to keep him within bounds and yet in certain matters to be a help to him."[48] This woman is usually identified with the *vilica*, the slave farm manageress, who

[48] Columella, *De re rustica* I,8,5: *Sed qualicumque villico contubernalis mulier assignanda est,*

consequently became an adjunct to the *vilicus* in our historical imagination. Her job was that of the loving 'wife', there to help when help was needed. But is this the only interpretation that the literary sources allow? Columella is anything but clear about this himself. He provides in total two passages that invite discussion of his farm managers' personal relationship, the longer of which is placed in the chapter on the *vilica*'s duties.[49] Although the latter owes much to Xenophon's *Oeconomicus* and the ideal of a perfect division of labour between man and woman as expressed therein,[50] the concept of *vilicus* and *vilica* assisting each other in the management of the estate within the ideal constraints of a 'husband'-and-'wife' relationship only finds full application once: when the field labourers have left the villa in the morning, the *vilica* is reminded to keep a watchful eye on any one who may have slipped the attention of her *contubernalis*.[51] Columella does not identify this *contubernalis* as the *vilicus*, but this is the usual reading, which is largely influenced by the backdrop supplied in a previous passage. Here, *vilicus* and *vilica* are reminded of their (personal) duties, and the *vilica*'s ideal character traits described: "she ought also to have sound health and neither have an ugly appearance nor on the other hand be very beautiful; for unimpaired strength will suffice for long vigils and other toils, and ugliness will disgust her mate (*contubernalis*), while excessive

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quae contineat eum, et in quibusdam rebus tamen adiuvet.

[49] Columella, *De re rustica* XII.

[50] On Xenophon's influence on Columella see S.B. Pomeroy, *Xenophon* Oeconomicus: *A Social and Historical Commentary, with a New English Translation* (Oxford 1994), ch.3.

[51] Columella, *De re rustica* XII,3,7: "*Illud vero etiam in perpetuum custodiendum habebit, ut eos, qui foris rusticari debebunt, cum iam e villa familia processerit, requirat, ac siquis, ut evenit, curam contubernalis eius intra tectum tergiversans fefellerit, causam desidiae sciscitetur, exploretque utrum adversa valetudine inhibitus restiterit, an pigritia delituerit.*" She will also have to be perpetually on the watch, when the slaves have left the villa, and seek out those who ought to be doing agricultural work outside, and if anyone, as sometimes happens, has managed to skulk indoors and escape the vigilance of her mate, she must inquire the reason for his laziness and find out whether he has stayed behind because bad health has prevented him

beauty will make him slothful. So (*itaque*) care must be taken that our bailiff (*vilicus*) is not of a wandering nature and does not avoid his wife's company (*contubernium*), and that, on the other hand, he does not waste his time indoors and never far from her embraces."[52] Whilst Columella avoids once more direct identification of *vilicus* and *vilica* as each other's partners, this has been the modern interpretation. Yet, if one was to set this passage into the context of the first mention of the *vilicus*' *contubernalis* in Book I quoted right at the outset of this section, this interpretation becomes less certain. There, Columella merely described the *benefits* for the *vilicus* from his relationship; now, when instructing the *vilica* on her personal *duties*, he puts in a quick word as regards the *vilicus*' *duties* towards *his* relationship – a point he forgot to make originally. The emphasis then would not be on a reciprocal reading of the instruction to both *vilicus* and *vilica*, but on a complementary one: just as the *vilica* ought to do this, that and the other, so too the *vilicus* in order to ensure the smooth running of *his* relationship. With this interpretation, however, any identification of a *vilicus-vilica*-'marriage' in Columella disappears in thin air.

Columella's republican predecessors are no help in any resurrection of the concept in question. Cato's only remark regarding the personal relationship between *vilicus* and *vilica* does not describe the *vilica* as the *vilicus*' 'wife' by necessity, but is put in conditional form: "If the master has given her [=the *vilica*] to you [=the *vilicus*] as wife [...]"[53] This was correctly pointed out by Jesper Carlsen who states that according to Cato "[...] they might be, but were not inevitably, married."[54] Varro, on the other hand, does not provide any

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from working or whether he has hidden himself through idleness."

[52] Columella, *De re rustica* XII,1,1f.: "*Nam illibatum robur et vigiliis et aliis sufficiet laboribus: foeditas fastidiosum, nimia species desidiosum faciet eius contubernalem. Itaque curandum est, ut nec vagum villicum et aversum a contubernio suo habeamus, nec rursus intra tecta desidem, et complexibus adiacentem feminae.*"

[53] Cato, *De agricultura* 143.1: "*Si eam tibi dederit dominus uxorem* [...]".

[54] Carlsen, 'The *vilica*' (n.5), 197. I do not understand why Carlsen writes in his more recent

explicit reference to either the *vilicus*' or the *vilica*'s partner at all, but merely ponders over the benefits of slave families on the *fundus* and the provisioning of foremen (*praefecti*) with partners in general.[55] Outside the agricultural writers, things don't look much better either: a handful of references mention a *vilica*,[56] but none of these also mention a *vilicus*, or any other partners. One of these, however, draws on circumstances that support the notion that the title of the *vilica* was primarily of a professional nature: Martial, in one of his epigrams, explores the scenario of sexual exploitation of slaves by their masters with the example of a *vilica rustica* and her master Linus.[57] We are not informed if the *vilica* has a partner amongst her fellow slaves, but as Linus himself is present on the estate, it appears that he does not require a *vilicus* in his stead; the *vilica* has obviously received her title in her own right. The same conclusion is also applicable to a fragment of a *togata* by T. Quinctius Atta, which refers to both the title of *vilicus* and *vilica*, but again puts a personal relationship between male and female *vilici* into question: the brief question "Does your father work as a *vilicus*, **or** is your mother a *vilica*?" (my emphasis) keeps separate the professional roles of *vilicus* and *vilica* from their personal arrangements.[58] References to male *vilici* include more readily mention of partners or personal set-ups. Plautus' *vilicus* Olympio from the play *Casina* is well known for his endeavours in arranging marriage with the house slave of the same name. Nowhere in the play is Casina referred to as a prospective *vilica*, but repeatedly

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study that "[...] Cato [...] mention(s) the *vilica* as the wife of the bailiff [...]": *Vilici* (n.1), 92.

[55] Varro, *De re rustica* I,17,5. On the subordination of *praefecti* under *vilici* see Aubert, *Business Managers* (n.1), 180.

[56] Juvenal, *Saturae* XI,65; Martial, *Epig.* I,55,11; IV,66,11; IX,60,1; X,48,7; XII;18,19.

[57] Martial, *Epig.* IV,66,11f.

[58] cf. O. Ribbeck, *Scaenicae Romanorum poesis fragmenta, vol.II: Comicorum fragmenta* (Lipsiae ^{2}1873), 163: "*Pater vilicatur tuus an mater vilica est?* (my translation). But see also Carlsen, 'The *vilica* (n.5), 197f. who sees the fragment in support of a 'husband'-and-'wife' relationship between *vilicus* and *vilica*.

as future wife (*uxor*) of the *vilicus*.[59] What is more, interpretation of Casina as future *vilica* would require us to believe that Olympio's farmstead functioned quite happily without a *vilica* until Olympio had found love – unless, of course, a *vilica* was really only the *vilicus*' 'wife'.[60] Even in the high empire a *vilicus* was not expected to be married to a *vilica* (or *vice versa*). The fictional *vilicus* in Apuleius' *Metamorphoses*, probably written in the late 2nd century AD, was indeed married, but not only is it clear from the storyline that his 'wife' was not involved in his business activities, but also that he was in full charge of all household activities by himself; no *vilica* seems to have been called for.[61] However one wants to interpret in detail the various passages referring to *vilici* and *vilicae*, they do not once mention them as personal partners by necessity. In fact, not a single passage knows of any specific *vilicus*-*vilica*-'marriage'. Seen as a whole body of evidence, the literary sources have very little to offer for construction of the concept of a *vilicus*-*vilica*-'marriage'.

04 *Legal Dealings* or *The vilica in the Digest*

There are only two mentions of a *vilica* in the Digest, and two further passages

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[59] Carlsen, 'The *vilica*' (n.5), 203, is of a different opinion. He sees the future role of Casina as *vilica* confirmed in the allusions to her future child-bearing. There is to my knowledge no evidence that justifies any qualification and hence identification of the *vilica* as a 'breeding machine'.

[60] I do not want to exclude the possibility that depending on size and production type not every farmstead needed both a *vilicus* and a *vilica*. But Olympio was undoubtedly looking for a (sexual) partner, not a new member of staff.

[61] Apuleius, *Metamorphoses* VIII: "*Servus quidam, cui cunctam familiae tutelam dominus permiserat suus, quique possessionem maximam illam in quam deverteramus villicabat, habens ex eodem famulitio conservam coniugem, liberae cuiusdam extrariaeque mulieris flagrabat cupidine* / There was a servant whose master had entrusted him with the stewardship of his entire household and who acted as overseer of that extensive holding where we had stopped for the night. He was married to another servant in the same household, but was passionately in love with a free woman who lived outside the estate."

that mention a *vilicus*' partner. In the latter two, the *vilicus*' partner is not given any professional title at all, but is simply referred to as his *contubernalis*, not allowing for a positive identification of these women's professional role.[62] On the other hand, one of the passages that names a *vilica* clearly identifies her also as the personal partner of the farm manager, the *vilicus* Severus.[63] Yet, identification is made through reference outside a professional context: the *vilica* is also titled *Severi contubernalis*, a pleonasm if *vilicae* were usually 'married' to *vilici*, and in that case essentially unnecessary – unless the professional title would not transfer, as I argue, the meaning carried by the personal signifier. The remaining other passage offers very little else, in fact, and contrary to general opinion, nothing at all. It falls into the section of the *instrumentum fundi*, and the specific issue addressed by the lawyers is that of

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[62] Digest 32.41.5: "*Concubinae inter cetera his uerbis legauerat: fundum in Appia cum vilico suo et contubernali eius et filiis dari volo: quaesitum est, an nepotes quoque vilici et contubernalis eius testator ad concubinam pertinere voluit. respondit nihil proponi, cur non deberentur* / A testator had left a legacy among others to his concubine in these words: 'I wish her to be given my farm in Appia with its manager and his partner and their children.' The question was whether the testator had wished the grandson of the manager and his partner to belong to the concubine also. He replied that there was no reason given why they should not." (Text and translation here and later taken from *The Digest of Justinian*. Latin text edited by Th. Mommsen with the aid of Paul Krueger. English translation edited by A. Watson, 4 vols. (Philadelphia 1985), unless otherwise stated.)

Digest 50.16.220.1: "*Sed et Papirius Fronto libro tertio responsorum ait praedio cum uilico et contubernali eius et filiis legato nepotes quoque ex filiis contineri, nisi uoluntas testatoris aliter habeat: filii enim appellatione saepe et nepotes accipi multifariam placere* / But Papirius Fronto says in the 3rd book of his Replies that if an estate with a *vilicus* and his *contubernalis* and their sons is legated, grandsons born from these sons are also included unless the intention of the testator was otherwise; for there are all sorts of reasons for grandsons often being included in the designation 'son' (correcting the translation in the Watson edition).

[63] Digest 40.5.41.15: "*Herede filio suo ex asse instituto libertatem dedit in haec uerba: 'December dispensator meus, Seuerus uilicus et Uictorina uilica Seueri contubernalis in annos octo liberi sunto [...]* / A man instituted his son as sole heir and made a grant of freedom in these terms: 'My clerk of accounts, December, my bailiff, Severus, and Victorina, my housekeeper and Severus' *contubernalis*, are to be free after eight years [...]"

the determination of the legacy of an estate, in particular as to what may count as part of the *instrumentum fundi* legated in the will. Agreement over the right methodology was not easily achieved in this matter as the list of lawyers quoted from Alfenus, Trebatius and Labeo, to Pegasus and Neratius indicates – and is still not settled in our days.[64] The passage, then, lists the *vilica* with many others that form part of the *instrumentum*.[65] Oddly enough, the *vilica*'s inclusion appears to be conditional she is only to be considered part of the *instrumentum* if she assists her 'husband' in his duties: *si modo aliquo officio virum adiuuet*. Keith Bradley labels the *vilica* from Digest 33.7 as the *vilicus*' 'wife', although the Digest offers no identification of the 'husband' in question.[66] Jesper Carlsen simply concludes that the *vilica* "[...] is considered as part of the *instrumentum fundi* like other members of the *familia rustica* [...]"[67] The lawyer Siro Solazzi goes even further in his equation of the *vilica* with the *focaria* (who is listed together with the *vilica*), and logically includes her amongst the *instrumentum instrumenti*, i.e. amongst the items provided for the benefit of the *instrumentum*, but not directly for the operation of the *fundus*.[68] Henceforth, the *vilica* is not

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[64] See the survey of modern approaches by U. John, *Die Auslegung des Legats von Sachgesamtheiten im römischen Recht bis Labeo* (Karlsruhe 1970), 1-7.

[65] Digest 33.7.12.5: "*Trebatius amplius etiam pistorem et tonsorem, qui familiae rusticae causa parati sunt, putat contineri, item fabrum, qui uillae reficiendae causa paratus sit, et mulieres quae panem coquant quaeque uillam seruent: item molitores, si ad usum rusticum parati sunt: item focariam et uilicam, si modo aliquo officio uirum adiuuet: item lanificas quae familiam rusticam uestiunt, et quae pulmentaria rusticis coquant* / Trebatius further thinks that a baker and barber, intended to serve the needs of the rural household, are included; likewise, the mason, who is intended to repair the villa, and the women who cook bread and look after the villa; likewise, the millers, if they are intended for use on the estate; likewise, the kitchen maid and the steward's wife, provided she assists her husband in some duty; likewise, the woolmakers who make clothes for the rural household and those women who cook relishes for the rural slaves."

[66] K.R. Bradley, *Slavery and Society at Rome* (Cambridge 1994), 59.

[67] Carlsen, 'The *vilica*' (n.5), 197.

[68] S. Solazzi, 'Il rispetto per la famiglia dello schiavo', *SDHI* 15 (1949), 187-192, at 190f. (also published in *Scritti di diritto romano VI* (Naples 1972), 576-581, at 579): "La preoccupazione di

anymore understood as playing an essential role in the production processes herself, but merely as a means to enhance the economic performance of those who are considered a vital component of economic activity at the *fundus*: male slaves, including in particular, but not only, the *vilicus*. This reading of the professional role of the *vilica* presents a climax of the traditional reading of the relationship between *vilicus* and *vilica* in its androcentric perversion – for not only is the *vilica* defined in the private dimension as dependent on her male counterpart, but also in the public dimension: her job is ultimately defined through the *vilicus*, and in fact directed at him. Do we have to follow this reading?

Modern knowledge of the *instrumentum fundi* in republican times, especially as regards the human resources, does not entirely depend on the legal sources, but also on the agricultural writers. Cato and Varro are in agreement that the slave labour force which is kept on a farm for the purpose of agricultural production there was part of the *instrumentum fundi*.[69] It is in particular Cato's lists of agricultural slave labourers that are of specific interest for an understanding of the *instrumentum fundi* in this period. In these, Cato states very clearly that both *vilicus* and *vilica* (amongst other slaves) form an integral part of the *instrumentum* of an olive grove or a vineyard.[70] Of course,

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non separare la donna dal suo uomo Trebazio non la sentiva di certo, quando esigeva che anche la *focaria* del *vilicus* prestasse un lavoro utile al suo *contubernalis* e perciò indirettamente al fondo cui il *vilicus* sopraintende [...] Perchè sia compresa nel legato non fa mestieri che la *focaria* copra un *officium* speciale e distinto da quello che è insito nella sua qualità di *focaria*. Nel loro buon senso pratico i giuristi romani riconoscevano che il servo, *vilicus* o no, ha bisogno per motivi naturali e sociali di una compagna; il servo è necessario al fondo, la *focaria* al servo: di conseguenza la *focaria* è *instrumentum instrumenti*."

[69] Cato, *De agricultura* 10,1f.; 11,1ff.; Varro, *De re rustica* I.17,1.

[70] A. Steinwenter, *Fundus cum instrumento. Eine agrar- und rechtsgeschichtliche Studie* (Wien and Leipzig 1942), 26 advocates a narrow interpretation of the republican concept of *instrumentum*, which excludes the (slave) labourers from it on the basis of Cato's use of the verb *instruere* instead of the noun *instrumentum*. I follow however the argument by John, *Die*

agronomists and lawyers may differ in their understanding of, or approximations to, reality: Arthur Steinwenter consequently allows himself to question whether the Roman lawyers were equipped at all to know economic conditions well enough, or indeed, whether it was in their interest to sketch these as realistically as possible.[71] But if the agricultural writers viewed the *vilica* as part and parcel of the estate's *instrumentum*, how come this would have slipped the attention of the lawyers? Well, I don't think it has.

Other passages in the Digest suggest inclusion of the *vilica* in her own right amongst the *instrumentum fundi* in perfect agreement with the description of her professional tasks offered in the agricultural writers.[72] The passage in question, however, appears to deny the *vilica* this right through the odd addition that makes her inclusion dependent on assistance provided to her 'husband'. The passage lists a whole range of other people who did not directly qualify to be reckoned amongst the *instrumentum fundi*, but who, because of the significance of their contribution for the smooth running of the market-oriented

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Auslegung des Legats (n.64), 8-12 who regards the verb as sufficiently strong to include in, and define the *instrumentum fundi* by, the items listed thereafter, including the human resources.

[71] Steinwenter, *Fundus cum instrumento* (n.70), 9.

[72] This is most pronounced in Digest 33.7.8: "*In instrumento fundi ea esse, quae fructus quaerendi cogendi conseruandi gratia parata sunt, Sabinus libris ad Uitellium euidenter enumerat. quaerendi, ueluti homines qui agrum colunt, et qui eos exercent praepositiue sunt is, quorum in numero sunt uilici et monitores: praeterea boues domiti, et pecora stercorandi causa parata, uasaque utilia culturae, quae sunt aratra ligones sarculi falces putatoriae bidentes et si qua similia dici possunt. cogendi, quemadmodum torcularia corbes falcesque messoriae falces fenariae quali uindemiatorii exceptoriique, in quibus uuae comportantur. Conservandi, quasi dolia, licet defossa non sint, et cuppae* / Sabinus states plainly in his books on Vitellius that those things are included in the *instrumentum* of a farm which are provided for the producing, gathering, and preserving of the fruits. Thus, for producing, the men who till the soil and those who direct them or are placed in charge of them, including stewards and overseers, also domesticated oxen and beasts kept for producing manure, and implements useful in farming, such as plows, mattocks, hoes, pruning hooks, forks, and similar items. For gathering, such things as presses, baskets, sickles, scythes, grape-pickers' baskets in which grapes are carried. For preserving, such things as casks, even if not set in the ground, and tuns."

productive activities at the *fundus*. i.e. towards the maintenance of both the labour force and the means of production, were also regarded as part of the estate's *instrumentum*: a baker, a barber, a mason, women who make bread and look after the villa, millers, a kitchen-maid. A *vilica*. The clash is obvious: a number of (slave) labourers – and the estate manageress. The string of titles that otherwise combines solely menial labour is clearly broken by the inclusion of the *vilica*. There can be little doubt that the *vilica* also contributed to the maintenance of the labour force just like the other slaves listed here; yet, her primary duty was defined differently. She was heavily involved in the organisation of numerous activities at the villa, including processing of harvested fruit and its preservation.[73] What makes matters worse is her close association with the *focaria*; given the nature of the professional role allocated to the *vilica*, namely supervisory, this combination is truly awkward.[74] The *focaria*, on the other hand, fits perfectly into the string of jobs listed. As kitchen-maid, the woman carrying this title would have been one of the lesser female slaves on the estate and her inclusion into the *instrumentum fundi* only on fulfilment of certain conditions comprehensible.[75] *Focariae*, unlike *vilicae*, would not have directly contributed to production for market. How to explain this inconsistency?

The answer, I think, lies in the text. The grammatical verb structure which follows the phrase containing *focaria* and *vilica* is in the singular. It thus

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[73] So Cato, *De agricultura* 143 and Columella, *De re rustica* XII.

[74] An interpretation of the title *vilica* as the professional term for a female weaver or textile worker as offered by E.M. Schtajerman, *Die Krise der Sklavenhalterordnung im Westen des römischen Reiches* (Berlin 1964), 32 lacks support in the sources.

[75] cf. same use of the title in Digest 33.7.15pr.; 33.7.12.6; Pauli *Sent.* 3.6.37. *Pace* Solazzi, 'Il rispetto per la famiglia dello schiavo' (n.68), who describes the *focaria* as the general term for a (male) slave's concubine because of its confusion with the usage of the term for a soldier's concubine in imperial times (for which see P. Meyer, 'Die *focariae militum*', Hermes 32 (1897), 484-487).

differs in its choice of number from that chosen elsewhere in the text: relative clauses elsewhere agree in number with the number of agents to which they relate: the baker and barber are followed by a plural, the mason by a singular. Although grammatically not incorrect, the singular behind both the *focaria* and the *vilica* seems an odd diversion from the rule. If the singular was meaningful, i.e. if the conditional clause was to refer to one person only, the choice made by Keith Bradley and Jesper Carlsen creates a bizarre scenario: for if we view Digest 33.7.12.5 as evidence for a *vilicus-vilica*-'marriage' (and thus relate the condition to the *vilica*), the *focaria* becomes included into the *instrumentum fundi* outright, whilst the *vilica* only just gets in on grounds of her personal relationship. At this point, I think it more reasonable to side with a group of scholars who discarded '*et vilicam*' as a later gloss from the text for these reasons.[76] Recognition of the *vilica* as an interpolation solves both linguistic and historical problems attached to her inclusion in the text. And although interpolation hunting has gone out of fashion, there is to my mind no better explanation for the many inconsistencies and contradictions which the text presents as it is.[77] This however leaves us with virtually no evidence at all in the Digest that suggests construction of a widely dispersed concept of a *vilicus-vilica*-'marriage'.

05) *Managing the Managers* or *Slavery and Roman Estate Management*

[76] B. Kuebler and R. Helm, *Vocabularium Iurisprudentiae Romanae, Vol.I, Fasc.II* (Berlin 1898), 225, and E. Levy and E. Rabel, *Index Interpolationum quae in Iustiniani Digestis inesse dicuntur, Tomus II* (Weimar 1929), 286. The gloss was also suspected by Solazzi, 'Il rispetto per la famiglia dello schiavo' (n.68) who however concludes in an equation of *vilica* and *focaria*, which has been heavily criticized: John, *Die Auslegung des Legats* (n.64), 23, n.55.

[77] On the development of 'interpolation hunting' within Roman law studies, and a critical assessment of its dip in recent years see D. Johnston, 'Justinian's *Digest*: The Interpretation of Interpolation', *Oxford Journal of Legal Studies* 9 (1989), 149-166.

Good estate management was crucial for a smooth and successful running of the rural enterprises of aristocratic Romans. Next to the organisation of the labour force itself, organisation and management of those that would keep an eye on the former was highly significant. After all, the managerial tasks of both *vilicus* and *vilica* were manifold, including on the one hand the management of the slave *familia*, and on the other hand the management of the estate itself. Management of the labour force was of great importance amongst the duties ascribed to farm managers by Cato.[78] Personal characteristics and the professional training needed in a *vilicus* in order to exercise good estate management were key issues for Columella.[79] In Keith Bradley's words, Columella's description implies "[...] that although he should be prepared for the post from boyhood a slave should not be appointed as farm bailiff (*vilicus*) before the age of thirty-five, so great were the prior knowledge and experience needed for such an important position."[80] Columella's ideal may not have found much of an echo in real life: he calls the bailiff that he has himself constructed the '*vilicus perfectus*',[81] and he is frightfully aware of cheating *vilici*, as well as of *vilici* who lack the basic skills to perform their duties well.[82] Yet, it is clear that the profession required a certain amount of knowledge and expertise. As the *vilicus*, so the *vilica* should be selected and prepared for her future task according to the kind of precepts laid out by Columella.[83] If, at the same time, *vilicus* and *vilica* were meant to form a household unit as traditionally maintained, their personal relationship(s) may easily come into gross conflict with their professional obligations: *contubernium* held with other slaves prior to

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[78] Cato, *De agricultura* 5.

[79] Columella, *De re rustica* I,8; XI,1,3-29.

[80] K.R. Bradley, *Slavery and Society at Rome* (Cambridge 1994), 68.

[81] Columella, *De re rustica* XI,1,12.

[82] Columella, *De re rustica* I,7,6f.; I,8,4. Cf. also Cicero, *Pro Plancio* 62.

[83] Columella, *De re rustica* XII,1,1-3.

their appointment to the position of farm managers would need to be dissolved. families split up, children left behind.

Take the case of the *vilica* Nice, herself partner of Dama Statulli who commemorates her in a funerary inscription.[84] Jesper Carlsen, a supporter of the concept of an institutionalised *vilicus-vilica*-'marriage', sees Nice merely as the *vilica*'s *vicaria*, and more specifically as her assistant or future replacement.[85] This interpretation of the inscription is not impossible – but it is incompatible with the concept in question, which Carlsen holds simultaneously. For if Nice was to replace the present *vilica* after her retirement, her relationship to Dama would be in conflict with any new relationship that the job may bring with it. Now, 'divorce' amongst slaves because of professional separations appears to be evident in some commemorative inscriptions from Rome, and these seem to stress the masters' final word even in matters of slave personal affairs.[86] Yet, the writings of the agronomists display a very different attitude. The provisioning of slaves with partners was rooted very clearly in the hope that it may settle the slaves more onto the estate and make them feel more at home and attached to the place.[87] This does not gel well with any intended separations by the masters. A passage in the Digest confirms this attitude towards family relationships amongst agricultural slaves: in the case of (male) slaves being legated in a will as part of the *instrumentum* of an estate, the lawyers rule that their 'wives' and children ought to be legated, too, for it was inconceivable that their former master wanted to impose such a harsh separation.[88] But if job and title of slave

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[84] *CIL* XI 871 (Mutina): *Vivit / v(ivus) / Dama Statulli / Nicini vilicae / vicariae suae / et suisque / p(edes) q(uadrati) XII* (cf. also n.36 above).

[85] Carlsen, 'The *vilica*' (n.5), 202.

[86] S. Treggiari, '*Contubernales* in *CIL* 6', *Phoenix* 35 (1981), 42-69, at 61f. This view further developed in S. Treggiari and S. Dorken, 'Women with Two Living Husbands in *CIL* 6', *LCM* 6.10 (1981), 269-272.

[87] Varro, *De re rustica* I,17,5; II,1,26; II,10,6. Columella, *De re rustica* I,8,5.

[88] Digest 33.7.12.7: "*Uxores quoque et infantes eorum, qui supra enumerati sunt, credendum est*

estate managers went with a specific relationship, such disruption and separation would have been unavoidable. If steady personal relationships amongst agricultural slaves were as a rule viewed positively by the masters – and clearly they were – it seems inconceivable that managerial slaves should not have benefited from such a security in their lives. Thus, it seems to me more logical to presume that both professional and personal allocations remained unchanged upon the promotion of one's partner to the management level at the *villa rustica*. This however would imply a management structure that was not based on, or that did not incline to specific personal relationships.[89]

Alternatively, take the case of Festus, the slave of Ti.Catius Caesius Fronto, known to us through two inscriptions: in one Festus titles himself *vilicus*, in the other *actor*.[90] Both inscriptions were set up by Festus himself, and

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in eadem uilla agentes uoluisse testatorem legato contineri: neque enim duram separationem iniunxisse credendus est / It should also be held that the testator wanted the wives and children too of those enumerated above, if they live in the same villa, to be included in the legacy; for it is not credible that he would have imposed a harsh separation." (Text and translation here and later taken from *The Digest of Justinian*. Latin text edited by Th. Mommsen with the aid of Paul Krueger. English translation edited by A. Watson, 4 vols. (Philadelphia 1985), unless otherwise stated.)

[89] I do not want to exclude that geographical separations between slave partners may have occurred in individual cases upon a partner's professional promotion. But again, there is no strong reason to propose that any such (long-)distance relationships were necessarily doomed to termination. Evidence from the New World is full of material documenting long-distance relationships between slaves from different plantations (and different masters). It also vouches for the masters' efforts to restrict their slaves' (sexual) relationships to amongst the slaves on the same estate. The latter may be the modern parallel to Varro's recommendations for providing his foremen with partners specifically from amongst their fellow-slaves: Varro, *De re rustica* I,17,5. On the modern evidence see D.G. White, *Ar'n't I a Woman? Female Slaves in the Plantation South* (New York and London 1985), 76 and 153ff. On the same phenomenon amongst urban slaves in ancient Rome see M.B. Flory, 'Family in *Familia*: Kinship and Community in Slavery', *AJAH* 3 (1978), 78-95, at 82. Columella, too, knows of slaves wandering off the estate for reasons other than their masters' business: *De re rustica* I,8,7; I,8,12f.; XI,1,23f.

[90] See *CIL* IX 3571: *L(ibero) p(atri) Festus Cati Frontinis vil(icus)*, and *CIL* IX 3579: *Caesiae*

come from the Pagus Fificulanus. It seems therefore plausible to suggest that Festus was promoted from the management position of *vilicus* on an individual estate to the role of *actor*, and thereby assumed supervisory control over more than one estate.[91] Caesia Nymphe, Festus' partner, mentioned in the second inscription, is not identified by any professional title. Was she already Festus' partner during his time as *vilicus*, had she been the *vilica*? And if so, are we to believe that she lost her professional title upon Festus' promotion to a different position? Or are we to believe that whoever was Festus' partner during his time as *vilicus* remained in the position of *vilica* but was allocated a new partner, i.e. the new *vilicus* who would have taken over from Festus?

In a comparable case from Noricum, Jesper Carlsen has suggested a similar promotion from *vilicus* to *actor* of Urso, mentioned in the inscription as partner of the *vilica* Flora.[92] The suggestion however depends entirely on the concept of a *vilicus-vilica*-'marriage' – and clashes with it at the same time: for if we ought to identify Urso as former *vilicus* purely on grounds of his (continued) relationship to the *vilica* Flora as Carlsen proposes, we are subsequently left in the dark as to the functionality of this concept regarding the personal set-up of Urso's successor as *vilicus*: he could obviously not be 'married' to the *vilica* Flora who was still with Urso, now *actor*. The central issue underlying all three examples is an incompatibility of the concept of a *vilicus-vilica*-'marriage' with the practicalities of estate management. Appointments to and promotions from management positions at rural estates

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Ursillae / vixit a(nnos) XXII / Secundo / Ti. Caesi Fronto/nis arcar(io) / Caesia Nympe / et Festus act(or) / filiae piissimae et gene/ro posterisque suis / et sibi / p(osuerunt).

[91] This promotion is also suspected by Aubert, *Business Managers* (n.1), 454 and 469, and was indeed assumed by Mommsen in *CIL* IX. On the duties of the *actor* see Aubert, *op.cit.*, 186-196.

[92] *CIL* III 5616 (Noricum: Rothof): "*D(is) M(anibus) / Flora vilica / Urso actori marito caris/simo o(bito) an(norum) XLV / et Iucundo / socro e(t) Succ ess(a)e socr(a)e pie ntissimis et / sibi viva fecit / et Successus f(ilius) parentib(us) pientissimis*". Cf. Carlsen, 'The *vilica*' (n.5), 203f.

would have caused major family upsets if they entailed specific personal relationships. The concept of a *vilicus*-*vilica*-'marriage' thus depends on a view of a 'husband'-and-'wife' slave management team that lacks support in the evidence.

A distinction between *vilicus* and *vilica* on the household level is also implied by Cato in his *De agricultura* when providing separate grain rations to both *vilicus* and *vilica*.[93] The separate allocation is puzzling if the two formed regularly a 'husband'-and-'wife'-team – and a household unit. In that case, it would have been much easier for Cato to provide a single (if larger) ration for the *vilicus* (which would have also covered the *vilica*), and which is the model used for the grain allocations for his other management staff. Cato's account is of course an ideal treatment and not a realistic study. But if *vilici* were ideally meant to receive separately so as to support two distinct household units, where does this leave us with the concept of a (not less ideal) *vilicus*-*vilica*-'marriage'?

Other grain ration schemes known for Roman Italy work equally on the assumption that (named) recipients would share their allocations with their (male and female) dependants; they were supporting whole families, not individuals. The grain dole for citizens in republican Rome was no exception: Cicero tells us that this was set at five *modii* per month and recipient, i.e. the head of a citizen family.[94] The grain rations allocated to *vilicus* and *vilica* would, if believed to support one household only, be in excess of what was given out to whole families at the dole in Rome by around one *modius*. I do not want to exclude the possibility that agricultural slaves were better looked after than many would suppose, but I find it difficult to believe that their basic grain allocation was intended by Cato the Censor to exceed a citizen's. Attempts of Roman slave masters to save on rations by manumitting slaves with the view to

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[93] Cato, *De agricultura* 56.

[94] Cicero, *In Verrem* II,5,52. See also Polybius VI,39,13.

enlist them in the grain dole at Rome as new citizens supports the argument presented here that sees a similarity in distribution principle and overall ration size between slaves and free grain recipients.[95] An allocation of rations for individuals within the same household unit as proposed by way of implication through the concept of a *vilicus-vilica*-'marriage', in contrast, lacks any historical precedent in Roman Italy. Cato's food rationing scheme, then, mentions *vilicus* and *vilica* separately in order to provide for two separate household units, the one of the *vilicus* and the other of the *vilica*. The distinct ration scheme only makes sense if the *vilica* was not as a rule part of the *vilicus*' household, and if further to this, she assumed her title in her own right based upon the importance of her professional role.[96] Hence, food management, just like appointment structures, at rural estates renders the maintenance of the concept of an institutionalised personal relationship between *vilicus* and *vilica* very difficult. Instead, aspects of slave staff management at the highest level propose *vilicus* and *vilica* as two distinct professional roles that complement each other, but that were not laid out to overlap in the personal sphere: "*Vilicus* and *Vilica* make a pair – an asymmetrical pair, but still a dyad."[97]

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[95] See Dion. Hal. 4,24,5 and Suetonius, *Augustus* 42,2.

[96] The concept of grain rations as a sign of a slave's professional role is discussed at length by A. Bürge, '*Cibaria*: Indiz für die soziale Stellung des römischen Arbeitnehmers?', in M.J. Schermaier and Z. Végh (eds.), *Ars boni et aequi. Festschrift für Wolfgang Waldstein zum 65. Geburtstag* (Stuttgart 1993), 63-78. Cf. also chapter 4 below, especially pp. 125-128.

[97] J. Henderson, 'Columella's Living Hedge: The Roman Gardening Book', *JRS* 92 (2002), 110-133, at 122.

4.

Food for Thought: Family in Cato's *familia rustica**

Who plants a vineyard and eats not of its fruit?
Or who feeds a flock and drinks not of the milk?

1 Corinthians 9:7

In one of his most famous essays, Max Weber used the *De agricultura* of the elder Cato to paint a grim picture of army-style slave barracks where no family life could be sustained.[1] This view was reinforced and taken to extremes by Keith Hopkins who argued in 1978 that "the Roman writers of treatises on agriculture imply that in the period of expansion agricultural slaves were usually male and celibate" since "providing a single male with food cost substantially less than a family [...]"[2] Women, and with them children, were thus viewed as an economically superfluous luxury item, one that would only incur costs. In contrast to their male counterparts, female slaves were not seen as being able to contribute to an estate's income. Whilst imperial slave *familiae* on rural estates coped with a highly diversified demographic make-up, including family members of all sexes and ages, republican slave *familiae* allegedly failed to produce an equally supportive infrastructure. The differences in demographic behaviour between republican and imperial slave *familiae* as currently maintained have best been illustrated by Andrea Carandini on the example of

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* An earlier version of this chapter appeared under the title 'Food Rations in Cato's *De agricultura* and Female Slave Labour' in the journal *Ostraka* 11.1 (2002), 195-213.

[1] M. Weber, 'Die sozialen Gründe des Untergangs der antiken Kultur', *Die Wahrheit* 6 (1896), 57-77 (tr. in M. Weber, *The Agrarian Sociology of Ancient Civilizations* (London 1976), 389-411).

[2] K. Hopkins, *Conquerors and Slaves. Sociological Studies in Roman History 1* (Cambridge 1978), 106.

the villa estate at Settefinestre in Etruria.[3] The difference in formula worked out by Carandini contrasts an ideal type for ordinary slave families consisting of one adult male, one adult female and two children (1:1:2) in the imperial phase with an ideal type consisting of one single adult male slave (1:0:0) in the republican phase.[4] One of the strongholds for this view has been and still is the issue of food and grain rations on villa estates. In a recent contribution on the diet of agricultural slaves, Francesco de Martino maintains that the rations provided by their masters were barely sufficient for the average republican slave labourer without having to feed a family, too.[5] Essentially, this view has never been challenged; but can it still be maintained? I shall argue that Cato himself took the presence of women slaves and family relations between his slaves for granted, and that, if read carefully, the *De agricultura* indeed reveals their presence.

The question is not new. But because of the nature of the evidence there does not seem to be agreement amongst ancient historians as to the occurrence, regularity or frequency of female slaves on a republican *villa rustica*. Most recently, Keith Bradley has stressed the presence of women on these estates. While he suggests that "[...] Cato, and his peers who composed his audience, fully expected women and children, including infants, to be present on the kinds of estate he wrote about [...]"[6], he does not offer any justification for his assumption, neither from the point of view of maintenance costs, nor from that of labour demands: he leaves open how – and how far – those women and children could be sustained and what their economic roles

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[3] A. Carandini, *Schiavi in Italia. Gli strumenti pensanti dei Romani fra tarda repubblica e medio impero* (Rome 1988), 109-224.

[4] See Carandini, *Schiavi in Italia* (n.3), 155 and 203.

[5] F. de Martino, 'Sull' alimentazione degli schiavi', *La Parola del Passato* 48 (1993), 401-427.

[6] K.R. Bradley, *Slavery and Rebellion in the Roman World, 140BC-70BC* (Bloomington 1998), 26.

were. The argument constructed in this chapter will focus on the issue of maintenance costs, and in particular on the question of food provisioning of agricultural slaves. More to the point, I will argue that the food provisioning envisaged by Cato in his *De agricultura* was set up to feed whole slave families of the type usually idealised by modern scholars for imperial estates. With this, Hopkins' negative conclusions as regards the feasibility of feeding whole slave families will be discarded as a superficial and highly biased reading of the evidence at hand. In thus seeing a consistency in the employment of female slaves on rural estates throughout the period of imperial expansion, the argument provides a continuation from that presented in chapter 1. It develops this argument further by attempting to quantify the relationship between male, female and child slaves on a republican villa estate.[7] In this it is highly deductive in approach and depends at large from the author's historical imagination. Even so, the point of departure is Cato's own recommendations for the rationing and distribution of regular grain and food allowances. In the *De agricultura*, he proposes the following allowances to be distributed thus:[8]

Text:

Familiae cibaria. Qui opus facient per hiemem tritici modios IIII, per aestatem modios IIII S, vilico, vilicae, epistatae, opilioni modios III, conpeditis per hiemem panis P.IIII, ubi vineam fodere coeperint, panis P.V, usque adeo dum ficos esse coeperint, deinde ad P.IIII redito.

Translation:

Food for the *familia*: for those who do farm work four *modii* of wheat in winter.

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[7] For a first attempt to quantify this relationship see my article 'Food Rations in Cato's *De agricultura* and Female Slave Labour', *Ostraka* 11.1 (2002), 195-213.

[8] *De agricultura* 56. It is open to discussion whether all members of the *familia* are considered to have been enslaved. I believe however the permanent labour force – in whom I am interested – to have consisted of slaves.

and in summer four and a half. The farm manager, the farm manageress, the foreman, and the shepherd should receive three. The *conpediti* should have a ration of four pounds of bread through the winter, increasing to five when they begin to work the vines, and dropping back to four when the figs ripen. (My translation.)

He also stipulates for wine, olives, oil and salt to be distributed amongst the workers, yet with less emphasis on the various different types of recipients just mentioned:[9]

Text:

Vinum familiae. Ubi vindemia facta erit, loram bibant menses tres; mense quarto heminas in dies, id est in mense congios II S: mense quinto, sexto, septimo, octavo in dies sextarios, id est in mense congios quinque; nono, decimo, undecimo, duodecimo in dies heminas ternas, id est in mense amphoram; hoc amplius Saturnalibus et Conpitalibus in singulos homines congios III S; summa vini in homines singulos inter annum Q.VII. Conpeditis, uti quidquid operis facient, pro portione addito; eos non est nimium in annos singulos vini Q.X ebibere.
Pulmentarium familiae. Oleae eaducae quam plurimum condito. Postea oleas tempestivas, unde minimum olei fieri poterit, eas condito, parcito, uti quam diutissime durent. Ubi oleae comesae erunt, hallecem et acetum dato. Oleum dato in menses uni cuique S.I. Salis uni cuique in anno modium satis est.

Translation:

Wine for the *familia*: When the vintage has been completed, let them drink *lora* for three months. For the fourth month let them have a *hemina* a day, that is 2.5 *congii* a month; in the fifth, sixth, seventh, and eight months a *sextarius* a day, that is 5 *congii* a month; in the ninth, tenth, eleventh, and twelfth months 3 *heminae* a day, that is an amphora a month. At the feasts of the Saturnalia and the Compitalia, issue also 3.5 *congii* per person. Total wine per person and year:

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[9] For wine see *De agricultura* 57, for olives, oil, vinegar and salt see *De agricultura* 58.

7 quadrantals. For the *conpediti* add proportionally to the work they do. Ten quadrantals of wine for a single person is not too much in a year.
Relish for the *familia*: Store all windfall olives you can, and later the mature olives that will give very little oil. Issue them sparingly and make them last as long as possible. When they are used up, give *hallec* and vinegar, and a *sextarius* of oil a month per person. A *modius* of salt a year per person is enough. (My translation.)

Although no woman other than the *vilica* is mentioned in these food allocations, Bradley, believing in the existence of female slaves on republican estates, concludes that "Cato recommended a monthly ration of four *modii* of wheat **for each slave** [my emphasis] in winter and four and a half *modii* in summer."[10] One can hardly imagine that Cato envisaged the slave women, children and infants whom Bradley has in mind queuing up for rations, especially as these were clearly given out to fieldworkers only (*qui opus facient*), which, as I have argued in chapters 1 and 2, would not have been the women's domain. It doesn't surprise one, then, that Bradley admits that "[...] some historians believe that this allowance provided more than a single individual's minimal needs",[11] thus implying that those women and children did not queue up for own rations after all, but that they benefited from someone else's. However, Bradley makes no attempt to explain how the distribution could have been organised between the various members of the slave *familia*. This is unfortunate, especially because Bradley relies in his brief nutritional consideration of these grain rations entirely on the work of Robert Etienne, who does not assume the presence of women other than the *vilica* (who receives her

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[10] Bradley, *Slavery and Rebellion* (n.6), 51.

[11] Bradley, *Slavery and Rebellion* (n.6), 52. K.D. White, *Roman Farming* (London 1970), 361, also takes the presence of women and children for granted and concludes in my opinion correctly that "these large bread or corn rations were meant to include the family as well", but does not tell us how he reached this conclusion.

own ration) on a Catonian estate.[12] The question thus remains: do these food rations support the view of a purely male labour force or do they rather imply the presence of (otherwise virtually unmentioned) female and child slaves?

Preliminaries

Before indulging in quantitative analysis of food allocations and food supplies on a republican *villa rustica*, a couple of preliminary points concerning gender roles and social stratification in classical antiquity on the one hand, and idiosyncrasies of nutrition studies on the other are called for.

Women as a rule did not possess a *persona* in the public sphere of the Roman world. The special position of priestesses, Vestal Virgins, etc. does not alter the general picture. Women could not vote, nor would a woman's name appear in the lists of recipients of corn doles, wheat issues, etc.[13] Some large agricultural estates in the ancient Near East and Roman Egypt appear to have developed a sophisticated remuneration scheme for their workers, including women and children, which suggests payment in kind, e.g. by way of food rations, directly to individual workers of either sex.[14] Yet, no comparable

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[12] R. Etienne, 'Les rations alimentaires des esclaves de la "familia rustica" d'après Caton', *Index* 10 (1981), 66-77. The study on the significance of grain in the ancient diet, including some calculations on the food rations in Cato, by L. Foxhall and H.A. Forbes, 'Σιτομετρεία: The Role of Grain as a Staple Food in Classical Antiquity', *Chiron* 12 (1982), 41-90 (esp. 62-65) is not cited by Bradley. The more recent calculations by M. Prell, *Armut im antiken Rom. Von den Gracchen bis Kaiser Diokletian* (Stuttgart 1997), 101-105 do not offer any new insights.

[13] There has been some controversy about the interpretation of an inscription found in Bulgaria, which seems to imply that a woman was enlisted in the *plebs frumentaria* (or that a second list for women existed). The inscription is however of such a peculiar nature that further evidence is essential for a generalization. For the inscription see *ILS* 9275; for an interpretation of women as recipients of state wheat in their own right see D. Van Berchem, *Les distribution de blé et d'argent à la plèbe romaine sous l'empire* (Geneva 1939), 42f.

[14] For the ancient Near East see the Persepolis Fortification texts which deal with rations distributed to slave and non-slave workers in Achaemenid Persia from the 6th to the 4th century

evidence has been discovered for Roman Italy. Rather, it seems, the structure of food allocations we know of for the Roman world, and especially of grain allowances, supports without a single exception the idea of male recipients only: food allocations in the republic (such as the dole in Rome) were received by the male member of a citizen family. This however did not exclude women or other dependents benefiting from these rations as the named recipient would have shared his allocation with them; the same structure is also visible in the army.[15] Thus, even though there is no explicit mention of women labourers (excluding the *vilica*) in Cato's food rations allocations, the lacuna by itself does not demand the negative conclusion as to their presence chosen by a majority of scholars. If anything it seems doubtful to me that issues relating to well-established social order in antiquity would easily be prone to change and variation, nor that slaves would have been stratified differently to free people.

Nutrition studies, on the other hand, are subject to extremely speedy modification and change. As with all life sciences, development of techniques and apparata can change knowledge and methodologies in the field at a rate virtually unknown in the human sciences. The use and usability of calorie conversion tables and calorific quantifications as will be employed in what follows consequently depend on the currently prevailing state of research. The kind of calorific calculations to be carried out here would have produced

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BC. For a recent discussion in English, as well as an interpretation of these rations lists as defining special types of workforces, see M. Brosius, *Women in Ancient Persia, 559-331 BC* (Oxford 1996), 123-182. For Roman Egypt see the Zenon Archive which documents rations given to slaves of the gift estates of Philadelphia in the 3rd century BC, and T. Reekmans, *La sitométrie dans les Archives de Zenon* (Bruxelles 1966) for discussion.

[15] For food allocations in the Roman republic see Polybius VI.39,13; Cicero, *In Verrem* II.5,52. For modern interpretations of these see Foxhall/Forbes, 'Σιτομετρεία' (n.12), 62-65; P. Garnsey, *Famine and Food Supply in the Graeco-Roman World. Responses to Risk and Crisis* (Cambridge 1988), 213f.; P. Garnsey and D. Rathbone, 'The Background to the Grain Law of Gaius Gracchus', *JRS* 75 (1985), 20-25; G. Rickman, *The Corn Supply of Ancient Rome* (Oxford 1980), 156-197 (esp. 173).

different results as little as a decade ago, and will no doubt change again within the coming decade. To give just one example: bread as listed in 1978 with a calorie content equalling the one to be used in the following calculations, i.e. 240 calories per 100g, has been shown by the very same institute producing this figure as of a calorie content of 194 calories per 100g in 1989/90.[16] Has our way of making bread changed so dramatically within a decade? Hardly so. What we are witnessing here is the result of the speedy development in food analysis which regularly turns today's achievements into yesterday's junk. The development seems even more drastic when one looks at the analyses of roughage such as pectin (which one finds in apples): while listed with 0 (*sic*) calories per 100g in 1978, its calorie content rose to 283 calories per 100g by the early nineties. This change is simply due to the fact that nutritionists realised sometime in the eighties that our intestines can absorb the energy provided through this food group, which was not before recognised.[17] This is admittedly an extreme case, but not an exception, in addition to which the natural variation in foods must not be overlooked either. As a rule of thumb these variations in calorie content range within 20% of the standard figures given by calorie tables. In addition to this, we still lack understanding of variations in ancient foods (in comparison with modern foods), as well as their susceptibility to change due to transportation, preservation, or any other form of processing. Thus, all figures employed in this chapter are merely understood as rough approximations and do not claim any final certainty.

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[16] S.W. Souci et *al.*, *Die Zusammensetzung der Lebensmittel, Nährwerttabellen 1978*. Deutsche Forschungsanstalt für Lebensmittelchemie (Stuttgart 1978), and S.W. Souci *et al.*, *Die Zusammensetzung der Lebensmittel, Nährwerttabellen 1989/90*. Deutsche Forschungsanstalt für Lebensmittelchemie (Stuttgart 1989).

[17] For the level of calories in roughage see Souci, *Nährwerttabellen 1978* and *1989* (n.16). See also U. Pollmer, A. Fock, U. Gonder and K. Haug, *Prost Mahlzeit! Krank durch gesunde Ernährung* (Köln 1994), 20-24.

Quantifying supply and demand

In the first instance, the supplies of foods available to the slaves need to be quantified as far as possible. To start with, Cato's allocations will be rendered into calorific figures. Modern scholars have in fact converted the grain rations almost identically. Robert Etienne bases his calculations on a ratio of 100g of processed wheat to 240 calories; Lin Foxhall and Hamish Forbes use the calorie content suggestions by the FAO of 332 calories per 100g hard wheat and 334 calories per 100g soft wheat. Etienne's *esclave ordinaire* consequently receives an average of 2959 calories per day throughout the year, whereas Foxhall and Forbes keep separate their estimated 2964 calories per day during winter and 3334 calories per day during summer.[18] Both studies work with calorie conversion tables produced in the late 1970s/early 1980s; the figures would differ slightly if based on calorie conversion tables produced today, almost a quarter of a century on. However, in order to facilitate the following calculations, and because of the lack of any precise figures for reasons made clear above, I have rounded all figures up or down. My calculations for the energy content of Cato's grain rations are thus: 26 kg of wheat during winter and 30 kg of wheat during summer (if one *modius* of wheat equate roughly 6.5 kg, and four *modii* are recommended for the workers during winter and four and

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[18] Cf. Etienne, *Rations* (n.12), 69f.; Foxhall/Forbes, 'Σιτομετρεία' (n.12), 63-65 and 88. Their figures work out roughly the same, as the 332/334 calories of 100g wheat as used by Foxhall/Forbes come down to 250 calories per 100g bread, i.e. processed wheat, and is hence close to Etienne's 240 calories for the same amount. Both studies work (effectively) on the assumption that Cato's food rations were supplied to single male workers. Etienne explicitly states that he considers the *vilica* to be the only woman on the farm. Foxhall/Forbes use in their calorie tables solely figures applying to males (and thereby imply the same). See also P. Garnsey, 'Mass Diet and Nutrition in the City of Rome', in W. Scheidel (ed.), *Cities, Peasants and Food in Classical Antiquity* (Cambridge 1998), 226-252, at 229f. on the issue of calorie conversions.

a half during summer).[19] If one sets the energy content of wheat at 330 calories per 100g, then the monthly calorie provisions are 85800 and 99000 respectively, which break down to 2820.8 and 3254.8 calories per day, the average being just over 3000 calories.

The wine rations prove trickier as we do not know the quality and the exact quantity supplied to the slaves. Afterwine (*lora*) was supplied to the slaves for a duration of three months after the vintage (no measurement indicated). For the rest of the year the allocations were as follows: 2.5 *congii* for one month equalling 8.19 litres; 5 *congii* per month for a duration of four months equalling 16.38 litres per month; one amphora or 7.5 *congii* per month for a duration of four months equalling 24.57 litres per month.[20] In addition to this, further allocations are provided for on the Feast of the Saturnalia (3.5 *congii* per person equalling 11.46 litres) and the same amount for the Feast of the Compitalia. Overall this works out at 194.91 litres for the whole year equalling just over half a litre per day (excluding the unspecified amounts given after the vintage).[21] In my calculations of the wine's calorific contents I follow Etienne's assumptions and allow for a high level of acidity and a low level of alcohol, resulting in a moderate calorie content. This is set at 30 calories per 100ml, which provides a daily total of just over 150 calories (not including the unspecified amounts given after the vintage). The total daily intake so far, accounting for grain and

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[19] It is interesting to note that Cato supplies his slaves with *triticum* and not with one of the cheaper and less nutritious cereals as typically associated with slave rations: A. Bürge, '*Cibaria*: Indiz für die soziale Stellung des römischen Arbeitnehmers?', in M.J. Schermaier and Z. Végh (eds.), *Ars boni et aequi. Festschrift für Wolfgang Waldstein zum 65.Geburtstag* (Stuttgart 1993), 63-78, at 63-69.

[20] The text does not speak of monthly distributions, but I agree with E. Brehaut, *Cato the Censor. On Farming* (New York 1933), 78 that the allowances would be far too small if thought of as covering the whole of the winter and summer season.

[21] A. Dalby, *Cato on Farming. De Agricultura. A Modern Translation with Commentary* (Totnes 1998), 141f., points out that none of the manuscripts contain the yearly totals as given by most editions.

wine rations, would be 3000 + 150 = 3150.

Olives were issued for an unspecified amount of time (until the supply run out) and without determining the amounts but clearly in a rather economical fashion. They were expected to be replaced by fish pickle (*hallec*) and vinegar (*acetum*) within the course of the year. Olive oil was provided on a monthly basis totalling just over half a litre.[22] To start with the olive oil, then, 100ml contain around 1000 calories. The rations provided by Cato are about 500ml, i.e. 5000 calories per month, hence just over 150 calories per day. Further allowances must be made for the olives, the *hallec* and the *acetum*. It must also be taken into consideration that the *conpediti* were entitled to rations that were in some respects higher (though this may well imply a reduction in accessibility to and distribution of other foods). It is difficult to quantify the energy content of these other allowances as no amounts are supplied. A handful of olives, however, can provide a substantial amount of energy, with average values for 100g ranging between 150 and 350 calories. Hence, and again to keep figures simple, I will allow for 150 calories per day. A daily energy breakdown of a full set of rations, including grain, wine and olives, etc., would, then, have been just over 3000 + 150 + 150 + 150 = 3450 calories, or roughly 3500 calories. It is notable, however, that both the wine and the olive and salt allocations lack the more specific indication of recipients, which the grain allocations show.[23]

This was not all though. In addition to these rations, Cato presumed the *vilica* to have food ready cooked for the *familia*.[24] Unfortunately, he does not inform us of the ingredients of these cooked meals, nor of their regularity.

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[22] Dalby, *Cato* (n.21), 143 translates correctly with "a pint of oil each month". The Loeb translation is misleading as it implies that the oil is only provided as a replacement for the olives and hence not given throughout the whole year.

[23] I think it possible to argue that the wine, as well as the relish, was given out to each individual slave, male and female. Yet, for reasons of academic self-denial, I have kept the quantification of food rations focused on the male field labourers.

[24] *De agricultura* 143,2. See also Plutarch, *Marcus Cato* 3,2.

Influenced by evidence from the Antebellum South where up to two cooked meals per day are documented on plantations where cooked food was provided, I would assume that Cato envisaged each member of the *familia* to receive at least one portion of cooked food per day (probably consumed at a common meal).[25] Varro, on the other hand, perceived the main kitchen area generally as a place of permanent coming and going as if to imply slaves' own food preparation there.[26] This may indicate that approaches to cooked meals were not uniform in the republican period. Yet, Cato is quite certain: and I imagine the kind of meals he had in mind to have consisted of simple peasant food such as porridge, bean stews, etc. or whatever else was seasonally available, and many of the recipes at the end of Cato's handbook may reflect these meals. Columella in any case stresses the importance of barley porridge and cooked beans for the slaves' meals.[27] A passing reference in the Digest further emphasizes the significance of barley for the slaves' diet. Ulpian, in the section on legacies of stores, states that in addition to grain and vegetables held in store on a farm, any barley kept for the use of the *familia* or the pack animals is to be included in the legacy.[28] Given the probable simple contents of these meals (and in order to keep the figures once more simple), the energy content of these cooked meals is set at 300 calories per person and day: this should not stretch the evidence unnecessarily as more than one meal or more than one helping per person and day is surely possible.

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[25] On the modern evidence see J.O. Breeden, *Advice among Masters. The Ideal in Slave Management in the Old South* (Westport/CT 1980), ch.7: Food. On the notion of common meals taken by the *familia rustica* see also Columella, *De re rustica* I,8,12.

[26] Varro, *De re rustica* I,13,2.

[27] Columella, *De re rustica* II,9,16ff. and X,1,100ff.

[28] Ulpian 33,9,3: "*Siue autem frumentum siue quid leguminis in cella penuaria habuit, penoris legato continebitur, sed et hordeum siue familiae siue iumentorum gratia*". For the importance of barley see also K.D. White, 'Food Requirements and Food Supplies in Classical Times in Relation to the Diet of the Various Classes', *Prog.Fd.Nutr.Sci.* 2 (1976), 143-191, at 164ff.

What is more is that it is highly likely that Cato's slave workers helped themselves to smaller (or larger) amounts of these foods as and when available on the farm. After all, Cato only describes the foods *given* to the workers and most obviously does not talk about their real consumption. Furthermore, Cato's list need not be comprehensive: he may not have listed all rations given out to slaves – and differences may have occurred from estate to estate. Plutarch, in his *Life of Crassus*, touches in passing upon the rations of soldiers. While we are used to seeing soldiers' rations in the light of Polybios' report who only tells us of the wheat given to the soldiers, it is interesting to note Plutarch's statement that "[...] when the rations were distributed to the soldiers after the crossing of the river, lentils and salt came first [...]"[29] There is no reason to doubt the additional information in Plutarch, and one may wonder what else was given to the soldiers of which we are not told. The same problem may be the case with Cato's recommendations, which are, unfortunately, the only ones we have for slave provisions. Yet, besides the kind of foods rationed to slaves, other foods need to be taken into consideration too. In fact, Cato shows that he is aware of the accessibility of other farm produce to the workers: the rations of bread as described in the opening quotation were quickly reduced when the slaves acquired (sufficient) access to other foods, e.g. when the figs were ripe: *usque adeo dum ficos esse coeperint, deinde ad P.IIII redito*. This is a clear sign that other foods were available and expected to be consumed by the slaves: even Cato himself did not expect slaves to feed on just bread and wine.[30] Cato's statement receives endorsement from Pliny the Elder. He informs us in his *Naturalis Historia* that figs make an excellent bread substitute "[...] inasmuch

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[29] Plutarch, *Crassus* 19.5 and Polybios VI,39,13.

[30] One could argue that the ripening of the figs is seen as a pure time indication, as for instance is the blossoming of the pear trees (*De agricultura* 131 and 149,1); but one would then also need to use the beginning of the work in the vineyard in this sense and dislocate it completely from the need for and access to food supplies.

as Cato, as if laying down a law as to the proper rations for agricultural labourers, prescribes that they are to be reduced in quantity during the time when the figs are ripe."[31] Similarly, hog and corn rations known to be distributed to plantation slaves in the Antebellum South have been shown to constitute only part of the slaves' daily food intake – even though these were often the only items mentioned in the manuals and diaries maintained by the plantation. While these rations made up the bulk of the slaves' diet, other foods including fruits, vegetables and dairy products were given to the slaves when seasonally available. They were not included in the ration lists since they could either not be provided throughout the whole year or were unsuitable for storage. In view of Cato's own instructions, the same or a very similar system appears already visible in Roman times.[32]

Access to other foods would, of course, have depended on the availability of such produce on the individual estate. To demonstrate the availability of various other foods on a Catonian farm, I have collated the evidence for vegetables, pulses, fruits and nuts as mentioned by Cato in his *De agricultura*. The following list is not exhaustive; only those food items that were considered fit for human consumption are included. Consequently, crops which were specifically grown for fodder have been excluded; the same applies

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[31] Pliny, *Naturalis Historia* XV,21,82.

[32] The debate on food rationing within the study of modern slavery is centred around the methodology of the assessment of quantity and (calorific and nutritional) quality of these additional foods. For an approach with an extremely positive conclusion on quantity and quality of slaves' diets see R.W. Fogel and S.L. Engerman, *Time on the Cross. The Economics of American Slavery* (Boston and Toronto 1974), 109-115. But see also the reply of R. Sutch, 'The Care and Feeding of Slaves', in P.A. David, H.G. Gutman, R. Sutch, P. Temin, G. Wright (eds.), *Reckoning with Slavery. A Critical Study in the Quantitative History of American Negro Slavery* (Oxford 1976), 231-301. In spite of the academic debate over methodology, it is however generally accepted that foods were supplied in addition to the rations, which is well documented in planters' and overseers' handbooks and letters. For a compilation of such evidence see Breeden, *Advice amongst Masters* (n.25), 89-113.

to emergency foods and foods used for medical purposes. such as snails. even though they are considered a delicacy in some countries today.[33] As a rule. these food items are given under a general heading (including mentioning the whole plant/tree and fruit) rather than listed with all the various varieties referred to in the text; so Cato's five types of apples/quinces appear simply under the general description 'Apple', etc.

FIGURE I

Food item	**References** *De agricultura*	**Calorific value per 100g**[34]
1.Vegetables		
Asparagus (*corruda/asparagus*)	6,3f; 149,2; 161	25
Beet (*beta*)	158,1	35
Cabbage (*brassica*)	156,1ff.: 157; 158	25
Fennel (*feniculum*)	117; 119; 127,1	30
Fenugreek (*faenum graecum*)	27; 35,1; 37,1	25
Garlic (*allium*)	48,3; 70,1; 71; 132,2	150
Greens (*holus*)	149,2	20
Kohlrabi (*colis rapicius*)	35,2	35
Leek (*porrum*)	47; 70,1	25
Radish (*raphanus*)	6,1; 35,2	15
Rape (*rapa*)	5,8; 6,1; 35,2; 134,1	35
Turnip (*rapum*)	35,2	35
2. Pulses		
Beans (*faba*)	27; 35,1; 37,1f; 54,2; 60; 70; 90; 134,1; 136; 138	100
Chickpeas (*cicer*)	37,1	50
Lentils (*lens*)	35,1; 116; 132,2; 158,1	100
Vetch (*vicia*)	27; 35,1; 37,1f; 54,2ff.; 60; 109; 156,3	75

[33] Some of the foods mentioned by Cato are referred to as suitable for animal as well as human consumption; these are included above. Foods which are described as flavourings and seasonings such as poppy seeds, oregano or thyme, although important from a nutritional point of view, have been excluded since they would not have contributed much to the slaves' calorific intake.

[34] Many of the foods known to Cato are unknown to us today or only faintly resemble a modern equivalent. Hence, and for the reasons already noted above, the calorific values attached to them are purely a rough guideline. For modern food tables see for instance S.W. Souci *et al.*, *Die Zusammensetzung der Lebensmittel. Nährwerttabellen 1994.* Deutsche Forschungsanstalt für Lebensmittelchemie (Stuttgart 1994) or any other publication by one of the official bodies.

3. Fruits

Apple (*malus*)	7,3; 40.1: 41,1; 48,2f: 51: 126: 127.1: 133,2; 143,3	35-75
Fig (*ficus*)	8,1; 27; 28,1;30; 31: 37,5: 40.1: 41.1: 42; 50,2; 51; 56; 94,4: 101: 133,2	55
Pear (*pirus*)	7,4; 40,1; 41,1; 48,2f; 143,3: 149.1	30
Plum (*prunus*)	133,2	30

4.Dried Fruits and Nuts

Dried Figs (*fici aridae*)	99; 143,3	275
Dried Pears (*pirum aridum*)	7,4; 143,3	200
Dried Raisins (*uuas passas*)	7,2; 143,3	250
Dried Sorbs (*sorua*)	7,4; 143,3	250
Nuts (*nucleus, et al.*)	8,2; 17,2: 28; 31; 48,2: 51; 133.2	550

The variety of these foods would easily be increased if one added references from other authors or by the archaeological evidence on vegetables and fruits known for republican Italy. Whilst it is clear that Cato did not expect every farm to have the complete range of vegetables and fruits available, he does make a point of mentioning that particularly the suburban farm should have a well-planted garden, especially if it was the only farm one possesses.[35] Yet, the growing of vegetables, etc. was not necessarily restricted to a specified garden area; modern images of large-scale mono-cultural farming do not apply to the ancient world. It was perceived as perfectly normal in antiquity – as to a large extent in the Mediterranean still today – to wed a variety of crops to each other. Cato himself recommends certain forms of intercultivation, a perfectly sensible agricultural practice, which is firmly supported by the archaeological evidence.[36] Excavations of a vineyard in Pompeii suggest not just the growing of various fruit trees between the vines, but also of vegetables, beans and even

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[35] *De agricultura* 8.

[36] *De agricultura* 6,1ff.; 33,3; 37,1f.; 50,2. For an account of the structural advantages of polycropping see H.A. Forbes, 'We Have a Little of Everything: The Ecological Basis of Some Agricultural Practices in Methana, Trizinia', *Annals of the New York Academy of Sciences* 268 (1976), 236-250.

olives.[37] Certainly some of these foods would have been grown for the market. on some estates more than on others. Yet, it would be unreasonable to assume that the slaves did not have access to them, nor that a large amount would not have been consumed on the farm itself, especially as it must have been the slaves themselves who grew these vegetables. herbs, etc., and who had ready access to them when working the vines, the olive trees or the wheat fields.[38] The abundance of pulses and fruits as suggested by the above table. in particular of beans and figs, is impressive and seems to me indicative of their significance as food.[39]

As well as foods *grown* on the farm, there is an abundance of references in the *De agricultura* to other foodstuffs *produced* at the farmstead. which were certainly available at least in smaller quantities also to the *familia*. Milk, cheese, honey and eggs are mentioned frequently.[40] And the *vilica* is reminded to keep many hens and a good supply of eggs, as well as a well-stocked storeroom.[41] Some of the work animals used on the farm could easily end up as food on the table too. These animals as mentioned by Cato include

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[37] See W.F. Jashemski, 'The Discovery of a Large Vineyard at Pompeii: University of Maryland Excavations, 1970', *AJA* 77 (1973), 27-41.

[38] T. Frank, *An Economic Survey of Ancient Rome*, 6 vols. (Baltimore 1933), I:162f. believes that the vegetables were grown exclusively for the slaves. While he underestimates the farm's economic activity with regard to the sale of its produce, it is nevertheless interesting to witness the automatic assumption of the (slave) labour force's feeding on the farm produce (and in particular on the vegetables grown there) by this American author.

[39] The prevalence of figs is also attested in the paintings found in and around Pompeii. Cf. J. Day, 'Agriculture in the Life of Pompeii', *Yale Classical Studies* 3 (1932), 166-208, at 176.

[40] For milk see *De agricultura* 86; 87; 150,1; for cheese see 75; 76,2ff.; 78; 79; 82; 84; 85; 88; 121; 150,1; for honey see 76,3ff.; 77; 78; 79; 80; 82; 84; 85; 95; 127,2; 156,4; 157,14; for eggs see 71; 75; 84; 85; 88; 106; 143,3. The repetitive nature of large parts of *De agricultura* explains to a certain extent the recurrent mention of some items, but cannot alone be held responsible for the frequent occurrence of some matters and the neglect of others.

[41] *De agricultura* 143,3.

oxen, horses and donkeys, mules and asses.[42] Other animals that were mainly kept for their secondary products complement this list: sheep and cattle, goats, hens and geese. The last are not just praised for their eggs, but are force-fed for their meat.[43] Whilst they are certainly raised for the market, it is easy to imagine some disappearing before market day. The American sailor James Riley provides us with a vivid and revealing eye-witness report of slave life in 19th century Morocco after his own enslavement. Having been able to view things from the inside, he exclaims that even though the slaves were generally well treated, they showed no hesitation in secretly milking the camels, and were in his judgment always prepared to "[...] steal anything they can get at to eat or drink from their masters or indeed anyone else."[44] Agricultural slaves in the Roman republic need not have been different to that; after all, Cato never explains any incident leading to the punishment of slaves; Columella however clearly sees dishonesty and untrustworthiness as reasons, and theft of food and drink seems not at all far-fetched as one of the possible reasons for this.[45] Modern reactions to theft of food and drink by plantation slaves that culminated in reduction of food rations could thus easily have had ancient precedents.[46]

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[42] Horsemeat cannot be documented as a feature on the menu in ancient Italy, even though consumption is known today in some parts of the European continent. Beef, too, was not considered a delicacy in Cato's time, but the possibility of its consumption by the lower classes must be taken into consideration. For regional differences and changes over time regarding preferences in meat consumption see J. André, *L'alimentation et la cuisine à Rome* (Paris 1961), 137-151.

[43] *De agricultura* 89.

[44] J. Riley, *Loss of the American Brig "Commerce", Wrecked on the Western Coast of Africa in the Month of August 1815* (London 1817), 400.

[45] Columella, *De re rustica* I,8,16 and I,9,4. The only reference to punishment in Cato is *De agricultura* 5,2, but without any indication of the offence committed.

[46] A good modern illustration is given in the account of James Henry Hammond who like many other planters in the American South thought it fit to cut the regular meat allowances of his slaves even in the case of pure suspicion of theft: D.G. Faust, *James Henry Hammond and the Old South: A Design for Mastery* (Louisiana 1982), 69-104.

Apart from fruits of the land and those food products *made* at the farmstead, other food items could have added to the slaves' diet. Although Cato does not tell us much about the consumption of meat other than in the context of the Feast of the Saturnalia and the Feast of the Compitalia, Columella recommends even the rearing of fowl on the farm since they "enrich the family kitchen and table by providing rich fare."[47] Whether Cato supplied *his* slaves with such culinary treats must remain open. References to the keeping of swine in the *De agricultura* could be read accordingly, and this could also apply to fish farmed on the estate, although, no doubt, their primary purpose lay, once more, in production for market.[48] Yet, the raising of small animals for consumption and sale finds support in the archaeological evidence, especially, but not exclusively, in the Bay of Naples.[49] The same applies to finds of butchered or even split bones indicating the consumption of marrow, which must be regarded as an additional source of fat and protein.[50] And the only republican villa estate for which we have a well-documented record of faunal remains, namely that of Botromagno in Gravina di Puglia, clearly indicates consumption of meats by the labourers.[51] Whatever Cato's view may have been on this issue, the archaeological evidence – where we have it – supports the notion of meat consumption by the (servile) labour force at rural estates; how

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[47] Columella, *De re rustica*, VIII,1,2.

[48] For pigs see *De agricultura* 7,3; 102; 134ff.; 139; 141f.; 150,2; 158,1; for fish see *De agricultura* 88 and 120.

[49] e.g. Day, 'Agriculture' (n.39), 173ff.

[50] How far bone marrow was a choice or an emergency food – and the implications for accessibility to slaves – cannot be answered here. The Pompeii excavations seem to suggest the first, while in other parts of the empire marrow does not appear as of great importance. See for Pompeii Jashemski, 'Vineyard' (n.37), 38ff.; but see A. Grant, 'The Animal Bones', *Excavations at Fishbourne, 1961-1969* (London 1971), 377-388 (esp. 381) for a more sceptical view with regard to marrow consumption. The references for meat and meat products in Cato are *De agricultura* 83; 88; 121; 132,2; 134; 158,1; 162,1ff.

[51] J. Watson, 'The mammals', in A.M. Small (ed.), *Gravina. An Iron Age and Republican*

this consumption was organized, by way of rations, free desired or undesired access by the slaves, or by way of *peculium* allowances, will be questioned in depth in the following chapter. For the present purposes it is sufficient to state that meats and meat products appear as part of agricultural slaves' total food consumption.

A whole range of other foods has as yet not been taken into consideration being at the other end of the scale to farm produce, and that is wild foods. The only two explicitly mentioned by Cato are the wild varieties of asparagus and greens (see Figure I above), though he does instruct the *vilica* to preserve wild fruits.[52] No doubt a selection of fungi, berries and herbs would have grown on or close to the farm. The Mediterranean is still today a well-known area for mushroom pickers, and the Romans evidently valued certain varieties. Fish and game as additional sources of meat would also have been available. Even though Cato only writes about woodpigeons, and this not in relation to the slaves, game birds and small game animals can be expected to have added to the slaves' diet occasionally:[53] for the American South it now seems widely accepted that "in addition to food distributed to them, slaves supplemented their diet, in varying degrees, through hunting and fishing as well as with vegetables grown in the garden plots assigned to them."[54] As should have become clear, various types of food other than bread, wine and olives were available on a republican farm. Of course, these would have been subject to seasonal availability, and although quantification in calorific terms seems impossible in any positivist way, given the range they encompass, it seems that

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Settlement in Apulia, 2 vols. (London 1992), I:ch.8.

[52] Cato, *De agricultura* 143,3.

[53] Cato, *De agricultura* 90.

[54] Fogel and Engerman, *Time on the Cross* (n.32), 111. See also David, *Reckoning with Slavery* (n.32), 281f. On the importance of wild foods for the ancient peasant diet see J.K. Evans, 'Plebs rustica II', *AJAH* 5 (1980), 134-173, at 138ff., and J.M. Frayn, 'Wild and Cultivated Plants: A Note on the Peasant Economy of Roman Italy', *JRS* 66 (1975), 32-39.

a substantial amount of the slaves' daily requirements could have been satisfied by these.

The slaves' energy requirements have been calculated in what follows on the basis of the minimal supplies needed to maintain one's body weight and to perform physical labour.[55] All the figures are calculated as daily averages for the whole year. Seasonal fluctuations of labour intensity on the farm resulting in higher and lower energy requirements at different points of the year are covered by these averages (like the varying supplies of energy provided by the rations and other seasonally available energy sources). There is no doubt that people's energy requirements also change within the course of their lifetimes and that a fixed figure would not represent these changes; but the figures used here should allow for a certain amount of variation and for the sake of the argument there is a need for such an artificial average. The figures are all located towards the bottom range of modern recommendations for active persons, but also clearly within them.[56] The daily calorie requirement for an adult male slave is therefore set at 3000; the daily calorie requirement for an adult female slave at 2000; the daily calorie requirement for a young child (under the age of six) who is largely dependent on his or her parents with regard to food at 1500; and the daily calorie requirement for a male child in his early teens at the same level as the male adult, being 3000. Although these figures are, as just mentioned, located towards the lower end of modern recommendations for active people, they are up to 40% higher than the minimum requirements as used by other scholars working on classical antiquity;[57] they base their extremely low figures on the

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[55] See for modern recommendations W.P.T. James and E.C. Schofield (eds.), *Human Energy Requirements – a Manual for Planners and Nutritionists* (Oxford 1990); WHO, *Energy and Protein Requirements, WHO Technical Report Series 724* (Geneva 1985); FAO, *Handbook on Human Nutritional Requirements* (Rome 1981).

[56] See T. Gallant, *Risk and Survival in Ancient Greece. Reconstructing the Rural Domestic Economy* (Stanford 1991), 63 for a chart of typical energy requirements.

[57] Garnsey, 'Mass Diet and Nutrition' (n.18), 229ff. works with an estimate of 1625-2012

assumption that the acquisition of sufficient amounts of food was for the majority of people in the ancient world a struggle, one which was often lost. As a consequence, malnutrition and hunger formed a permanent feature amongst the poorer sections of society. This is no doubt correct. It is however a fallacy to equate an agricultural slave of an aristocratic master with a free, but poor peasant. Cato instructs his *vilicus* very clearly not to let the slaves go hungry.[58] And it makes sense to propose that the majority of masters would have had some interest in maintaining the labour ability of their workers not just at the bare minimum.

The masters' concern with their slaves' health (and consequent labour ability) is clearly visible in modern plantation owners' manuals. A planter from South Carolina wrote in 1857 that "great care should be taken that the negroes should never have less than their regular allowance; in all cases of doubt, it should be given in favor of the largest quantity [...] None but provisions of the best quality should be used."[59] An overall awareness of the different diets of free, but poor European labourers and black slaves is demonstrated in the

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calories per person/day. Comparative evidence from the Greek world even seems to imply an undernourishment of servants and slaves as a regular feature. See for instance Thuc.4,16 reporting the provisions for the attendants of the Lakedaimonian troops in the late 5th century BC which were only half as much as what their masters received. Modern scholars of the Greek world have consequently used very low figures for their calorific calculations. So most recently S. Hodkinson, *Property and Wealth in Classical Sparta* (London 2000), 369-398, who works with figures as low as 2000 calories per adult male/day and 1467-1667 calories per adult female/day (of which the higher figure represents the breast-feeding woman). Children of either sex over the age of 7 are accounted for with 1460-2047 calories/day (of which the higher figure represents the 16-19 year old male), and those under the age of 4 with 1000 calories/day due to the fulfillment of large quantities of their daily requirements through breast-feeding. Whilst these figures equal only about two thirds of the rations known for the citizen, Hodkinson nevertheless concludes that they might still be "somewhat generous".

[58] *De agricultura* 5,2.

[59] P.C. Weston, 'Management of a Southern Plantation', *De Bow's Review* 22 (1857), 38-44, at 40.

journal contribution of a planter from Virginia: "The most important subject to attend to in the management of negroes is to give them a sufficiency of food. I have heard many comparisons made between negro slavery and the operative classes of old countries to prove that too much meat was given them. But it is no argument to a humane master to starve and half clothe his slaves because the poor Irish are naked and get meat only once a week. I am clearly of the opinion that a half starved hireling in Russia, Germany or Great Britain exhibits to his employer the most degrading attitude that one portion of the species ever stood toward the other, and I do not believe that any lesson can be learned from them either beneficial to the Virginia slave or his master [...] I believe that there are extremely few masters who starve their slaves to actual suffering; in fact, I am unacquainted with any such."[60] There is no doubt that some slaves were not fed properly, and that the diet of possibly a majority may not have been well balanced. Yet, the average adult plantation slave in the modern world was not underfed by masterly intention. Any picture of the ancient world that supposes the opposite would require a serious amount of justification – and some good evidence. I'd much rather suggest that the little we know from the ancient world is in agreement with the picture we have from more recent times. Having thus settled issues of food supply and energy demands, the question still remains as to how the available food was distributed and how many people the rations were expected to feed.

Calculating the familia servi

On the basis of the calorific considerations made above, in terms both of demand and supply, this section aims at calculating a typical family size that the rations recommended by Cato aimed at supporting. In accordance with the

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[60] 'Management of Slaves, etc.', *Farmers' Register* 5 (1837), 32f.

above, I will base these calculations on the assumption that the average slave worker whom Cato had in mind did not live on wheat alone.[61] This assumption is also in agreement with modern accounts of the ancient peasant diet, which suppose cereals to have constituted up to 65-70%, fruits, pulses and vegetables 20-25%, and oils, meat and wine 5-15%.[62] Of course, any such schematization is conjectural and has been criticized as such.[63] What we can say is that a large part of the energy supply was made up of cereal products, and that vegetables (in various forms) played a significant role in total consumption. However, the main point to be made here in respect of agricultural slaves is that cereals do not appear to have made up all the solid foods consumed; certainly not in the light of the evidence provided by Cato's account. His figures will be used as a starting point for the following calculations, but, in line with the strong support for other foods consumed by slaves, I hope to show that one could – if not ought to – go beyond them. It needs to be stressed that these calculations are not based on any known case from the ancient world, nor do they imply that food consumption amongst agricultural slaves in the 2nd century BC would have been exactly like it – if only we had more evidence. Rather, they are offered as models that are constructed in part from information derived from Cato's work and in part from knowledge derived from modern comparative material.

If the rations then were thought of as a single male slave's allocation as generally maintained, the 3500 calories available through them would already exceed the daily minimal requirement of the slave by 17%, thereby creating a positive daily balance of 500 calories. Adding the 300 calories provided by the

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[61] Foxhall/Forbes, 'Σιτομετρεία' (n.12), 64 argue that "these low status slaves seem to have been given little to eat except bread and wine."

[62] These estimates are best displayed in Gallant, *Risk and Survival* (n.56), 68. Cf. also Foxhall/Forbes, 'Σιτομετρεία' (n.12), 51-65.

[63] So, for instance, by P. Garnsey, *Food and Society in Classical Antiquity* (Cambridge 1999), 19.

vilica's meal this figure would rise to 27%, giving a total of 3800 calories (Model case A1 below). This is a highly unlikely situation. If on the other hand one were to assume that the rations made up the cereal, wine and olive parts of the diet, i.e. a total of 75-80% as in modern estimations of peasant diets as just quoted, then the remaining 20-25% of the slaves' daily calorie intake would be 875-1166 calories. This would increase the total energy supply (including the *vilica*'s meal as part of these 20-25%) of the single male slave worker to somewhere between 4375-4666 calories (equalling 145-155% of his daily needs), which is even more unlikely (Model case A2 below).

	Model case A1: ♂	**Model case A2: ♂**
Daily requirement	3000 (100%)	3000 (100%)
Calories from rations	3500 (117%)	3500 (75-80%)
Balance +/-	500 (17%)	875-1166 (20-25%)
Vilica's meal	300 (10%)	(included in above)
TOTAL:	3800 (127%)	4375-4666 (145-155%)

It is notable that various scholars agree that the rations are a generous allocation if considered to be for one person. Ernest Brehaut, writing in the 1930s, regards the rations as "[…] a liberal allowance even for a man at hard work". Keith Bradley summarises his general observations on the issue by saying that "[…] the coarse rations described may be considered reasonable if not generous […]". In the light of Cato's otherwise suspected meanness this seems rather odd. Peter Garnsey explains these large rations through a connection between labour demands and energy requirements (without however providing tables for annual energy needs and supplies). He suggests that "[…] active workers receive more food. This was a rule of thumb even to mean old Cato. The rations he served his slaves reflected the labour demands he was making on them." The same line of argument had already been followed by Kenneth Dover White who believed that the rations were "[…] carefully graded according to the output of

energy required, not only as between heavy manual workers and those in less energy-consuming occupations. but the chain-gang slaves, engaged in the heaviest manual operations of digging and trenching, receive a basic ration of bread superior to that given to the legionary soldiers."[64] Even these latter approaches fail to explain the still comparatively high energy supplies available if calculated over the whole year. Moreover, a modern study of the labour demands and the labour distribution of Mediterranean farmers through the whole year suggests that the peak of man-hours falls in the winter season, i.e. from October until January.[65] Even though man-hours invested do not necessarily relate directly to the energies required, this questions, at least in the first instance, attempts to explain higher rations in the summer entirely from the point of view of higher energy requirements. Although it is clear from Cato's own remarks that the bread rations given to the *conpediti* were initially graded according to the labour demands made upon them, yet the reduction in their rations is based on grounds other than energy requirements: their period of increased bread rations started with the digging of the vineyard, i.e. late winter, but it ended with the availability of other foods, e.g. figs, the quality of which – as of other fruit and legumes – as bread substitutes has already been mentioned above.[66] It seems, simple explanations clash with Cato's reasoning.

The rations of the other slaves are by no means easier to explain with the traditional approach. The reduction at the end of the summer excludes the olive harvest and possibly even the grape harvest (or at least some of the vintage processes) from the period of increased food supplies.[67] However, it could be

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[64] cf. Brehaut, *Cato the Censor* (n.20), 78; Bradley, *Slavery and Rebellion* (n.6), 51f.; Garnsey, *Food and Society* (n.63), 110; White, 'Food Requirements' (n.28), 164.

[65] This proves true even if one excludes the man-hours involved in olive production. See the annual labour distribution table based upon modern Greek peasants as drawn up by K. Greene, *The Archaeology of the Roman Economy* (London 1986), 87.

[66] See also n.30 above.

[67] Cato does not explicitly state any dates for either harvest, but if his contract for the lease of

argued that Cato did not perceive his slave labour force as being regularly involved in the harvests of these two cash crops anyhow: the contracts for lease or sale of both harvests and fruits exclude the ordinary slave labour force on the farmstead from these activities.[68] Whether or not this was the case, there is no reason to exclude the possibility that their rations were influenced by reasons similar to those applicable in the case of the *conpediti*, i.e. by a combination of labour demands *and* food availability. Despite Cato's silence on this issue, it is notable that Columella stresses the significance of high-energy foods, which are specifically available during winter, for ordinary slave labourers, such as dried figs and dried legumes.[69] However one decides to look at this, the rations appear inexplicably high if seen as allocations for a single male farm slave. Given Cato's well-documented shrewdness even with regard to his own nutritional needs, it seems more than odd that he would have broken the habit of a lifetime when it came to the nourishment of his agricultural slaves.[70] Therefore I suggest that the rations are based on more than just one person's minimum requirements. But how many?

The next model consists of two adult slaves, one of either sex, i.e. a male slave and his female partner. The energy available to them from a single set of rations is the 3500 calories. These are divided between the two so that both receive a similar percentage intake of these foods, and also so that the figures are once more round. The 2000 calories given to the male slave

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winter pasturage is anything to go by then summer would have finished by the 1st September. This timing may exclude the vintage from the summer season: *De agricultura* 149. See for the opposite view however Pliny, *Naturalis Historia* XVIII,69,280 who clearly includes the grape harvest in the summer season.

[68] This is most pronounced in the contract for the letting of the olive gathering, which obliges the contractor to furnish 50 workmen, but also implied in Cato's other model contracts: *De agricultura* 144; 145; 146; 147; 148.

[69] See Columella, *De re rustica* XII,14,1 and VII,9,8.

[70] Cato's Spartan attitude towards food and maintenance arrangements, especially when on

represent 66% of his daily requirement, the 1500 calories for the female slave 75%.[71] The negative balance is 1000 calories in the case of the male (=33%) and 500 calories in the case of the female (=25%), which gets reduced by the energy provided by the *vilica*'s meal to 700 (=23%) and 200 (=13%) respectively. This lies well within the modern estimates for the ancient peasant diet which see up to 25% being made up by vegetables, fruits and the like – which is as shown above what these slaves would have had access to. The total amount of calories this family unit would need to find beyond what had been given to them is just under 1000 calories (700 + 200 = 900), or less than 20% of their total needs as a family unit (Model case B below). In the light of the foods available on a *villa rustica* this should not be too difficult for the couple to achieve.

Model case B:	♂	♀
Daily requirement	3000 (100%)	2000 (100%)
Calories from rations: 3500	2000 (66%)	1500 (75%)
Balance +/-	1000 (33%)	500 (25%)
Vilica's meal	300 (10%)	300 (15%)
Outstanding:	700 (23%)	200 (10%)

The next logical step in this scenario is the question of offspring. If the couple had a child, the figures would obviously change. The next model case consists of such a small nuclear family comprising a male as well as a female adult slave and one child under the age of 6. (The figures cover times of pregnancy and breast-feeding.) The considerations are the same as in Model case B, with an emphasis on providing enough energy for the child, which would in my view have been in the interest of the parents once they had decided to raise this child.

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campaign, is reported throughout by Plutarch, *Cato Maior*.

[71] Garnsey, *Food and Society* (n.63), 100-112, stresses a probably unbalanced distribution of the foods available within the family unit, favouring the males in the family. Yet, he admits that a fair food distribution is not necessarily an equal one.

It becomes very clear here that the parents would have found it difficult to feed this child through to maturity unless they either acquired additional access to other foodstuffs or renounced a substantial part of their own diet. The calories available to this family unit through a single set of rations would leave them needing to find another 3000 calories elsewhere (1500 + 1000 + 500 = 3000). Taking away from this the calories provided by the *vilica*'s meal, the total outstanding would be 2100 calories (1200 + 700 + 200 = 2100). In other words: the additional energy requirement practically doubles for the family unit in order to raise this child, and the amounts to be made up elsewhere by the parents as individuals rise to 40% for the male and 35% for the female, or just over 30% for the family unit as a whole (Model case C1 below).

Model case C1:	♂	♀	♂/♀
Daily requirement	3000 (100%)	2000 (100%)	1500 (100%)
Calories from rations: 3500	1500 (50%)	1000 (50%)	1000 (66%)
Balance +/-	1500 (50%)	1000 (50%)	500 (33%)
Vilica's meal	300 (10%)	300 (15%)	300 (20%)
Outstanding	1200 (40%)	700 (35%)	200 (13%)

The energy levels to be made up by additional food sources might appear very high at first glance and I have therefore provided an alternative calculation in order to demonstrate what would happen if this slave family failed to access additional food sources according with their requirements. Here, by reducing the calorie amount outstanding for both parents to the same total as above (Model case B), i.e. to 900 calories (600 + 300 = 900) the adult slaves would receive in total 2400 and 1600 calories respectively, equalling 80% of their daily requirement (Model case C2 below).

Model case C2:	♂	♀	♂/♀
Outstanding	600 (20%)	300 (15%)	as in C1
TOTAL of option	2400 (80%)	1600 (80%)	as in C1

The daily energy intake of the parents is admittedly far from being ideal in this alternative case, but also far from being unrealistic. Peasants at all times have fed and lived on even less than the calories suggested by this model.[72] From a nutritional point of view a reduction in energy at the point of highest demand for the woman, i.e. during pregnancy and early infant feeding, is certainly more than just unfortunate. But the human body is known to cope with extreme situations and the ability to draw on reserves built up prior to the time of demand is well attested. In our case the woman's capacity to mobilise the amino acid reserves in her muscles in order to produce energy in this acute situation would prove crucial. Failure to utilise these reserves would lead to an early abortion. Yet, while it is highly significant for infant survival that the lactating mother can release these energy reserves, we know amazingly little about the processes involved in this. That the female body has however in the course of evolution acquired the ability to make use of intracellular adaptations that allow reproduction even under extreme circumstances of malnutrition and undernutrition of the mother is beyond dispute, and the above model is therefore realistic.[73] Yet, I am not at all convinced that the slaves could not have made up their full requirements simply by scrounging and additional food gathering. The range of non-rationed foods as laid out above would have contributed substantial amounts to their diet; after all, 'picking' while being 'on the job' must not be underestimated. A brief glance at the above calorie table for foods mentioned by Cato himself (Figure I) makes it appear far from impossible for the slaves to have supplemented their diet to a high degree in this way as and when these foods were seasonally available. Patronage at this low socio-

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[72] Evidence gathered in Gallant, *Risk and Survival* (n.56), 63-67.

[73] cf. W.A. Stini, 'Reproduction and Undernutrition, an Example of a Fundamental Human Adaptation', in M. Chapman and H. Macbeth (eds.), *Food for Humanity. Cross-Disciplinary Readings* (Oxford 1990), 124-132.

economic level, too, cannot be ruled out, although any additional supplies of food and extra helpings by the *vilica* (or anyone else in control of the food stores and the kitchen) would not have been accessible to all slaves.[74] *Peculium* allowances as briefly mentioned in the previous section could have extended to the right of slaves to keep some hens or chickens, if not a couple of sheep, as well as the growing of vegetables on their 'own' piece of land. The benefits towards the slaves' diets, and thus family lives, could have been quite immeasurable and will be discussed in depth in the following chapter. To sum up at this point however: a sizeable amount of food sources other than those rationed to slaves seem not only available, but clearly of a nutritional potential to support nuclear slave family life. What might emerge from this is the observation that an individual's diet would have changed in the course of his or her life, giving (incidentally) a changing significance to the various types of his or her calorific and nutritional demands at the various stages of his or her life. The significance of vegetables, pulses, etc. seems overall decisive, and the contribution of this food group to the diet of the lower class rural population (or at least of rural slaves) might have been underestimated by modern scholars.

But what of the additional supplies of protein and minerals needed in particular by pregnant and lactating women and by infants and young children? If anything, this model supports the idea that slaves could not just have fed on wheat alone, which could not provide fully for their nutritional requirements.[75]

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[74] Cato is silent on additional helpings, but see Columella, *De re rustica*, XI.1.19. Patronage in general as well as in regard to the rural poor is a much debated issue in modern scholarship; see for instance A. Wallace-Hadrill (ed.), *Patronage in Ancient Society* (London 1989), especially P. Garnsey and G. Woolf, 'Patronage of the Rural Poor in the Roman World', 153-170. But there is a lack of an assessment of patronage amongst (rural) slaves in spite of the evidence for it.

[75] Garnsey, 'Mass Diet and Nutrition' (n.18), 229-235 discusses the nutritional content of a predominantly wheat based diet. He points out that cereals in general provide an adequate source of calcium and iron, but admits that the special needs of women in their childbearing

It is somewhat ironic though that the importance of vegetables and dry legumes (as sources of calcium and vitamin C) and pulses in general, especially lentils and beans (as high in iron and protein), will have benefited the slaves who were forced to feed on these food stuffs by necessity to a much larger extent than other groups in society. The general ignorance of the connection between these foods and good health was only one of the reasons why especially pulses were despised by the better-off in society as the 'poor man's meat'.[76] The question of a diet's nutritional adequacy for persons of different genetic make-up as postulated by students of modern slavery cannot be discussed within ancient world studies at present since we simply do not know enough about the gene-pool of Roman society in general and Roman slaves in particular.[77]

Both scenarios as pictured in Model case C imply however that the slave couple would have needed to find up to 3300 calories per day in addition to the foods given them by way of rations and cooked meals if they wanted to raise a second child while the first child still needed their full (nutritional) support. Success would have depended entirely on the couple's access to such other sources as described above. Again, as with my thoughts expressed on the availability of additional foods in relation to the one-child-family, I do not think this an impossibility. Yet, for the more sceptical reader, I have provided an alternative scenario in which an increase in family size would be more than feasible, at least in nutritional terms. By taking speculation a step further, I have drawn up a model case in which the slave couple had managed to raise a male child to an age that would allow him to join those *qui opus facient*, i.e. to an age when the son would become a full field labourer: somewhere around the age of

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years pose a problem with any such one-sided food intake.

[76] See P. Garnsey, 'The Bean: Substance and Symbol', in W. Scheidel (ed.), *Cities, Peasants and Food in Classical Antiquity* (Cambridge 1998), 214-225.

[77] For the modern debate see K.F. Kiple and V.H. King, *Another Dimension to the Black Diaspora: Diet, Disease and Racism* (Cambridge 1981), 79-94.

ten could be a reasonable point in the life of a young male agricultural slave that marked that transition from childhood to adulthood.[78] This, however, would entitle him in turn to a full set of rations in his own right. Thus, the energy supply available to the family unit through rations would double to a total of 7000 calories per day (Model case D below).

Model case D:	♂	♀	♂	♂/♀
Daily requirement	3000 (100%)	2000 (100%)	3000 (100%)	1500 (100%)
Calories from rations: 7000	2300 (76%)	1400 (70%)	2300 (76%)	1000 (66%)
Balance +/-	700 (24%)	600 (30%)	700 (24%)	500 (33%)
Vilica's meal	300 (10%)	300 (15%)	300 (10%)	300 (20%)
Outstanding	400 (14%)	300 (15%)	400 (14%)	200 (13%)

Under the circumstances sketched in this model, the foods supplied to the family unit by way of rations could provide all family members with the bulk of their daily requirements. Only about 15% of an individual's needs (or just over 1000 calories in total for the family unit) are outstanding and would need to be made up by those additional foods that played such a crucial role in Model case C1. This would have caused but little problem. In fact, what emerges from this is that the family as a productive unit are better off in this constellation than in any of the previous ones. It would have been in the interest of the family to assume this position as early as possible. Additional food supplies available to the family, which are now not needed anymore to satisfy their energy needs, could be turned into more durable resources by way of trade and barter, and thus form a source of wealth and status. Although I do not wish to imply that they would have been able to analyse and schematise their position in any way near what has been presented here – the privilege (or disadvantage) of the modern

[78] Where age differentiation is documented, the ancient evidence seems to suggest an even earlier transition between childhood and manhood. The prices for adult slaves in Diocletian's prices edict of the early 4th century AD start at the age of 8; in the Greek world the young male

scholar – it seems doubtful to me that they would not have been able to realise the benefits that two lots of rations could bring: the meaning of the modern term 'breadwinner' gains a different perspective altogether. Those who may be sceptical about the implications this may have had for any girls born into the family so-to-speak prematurely, i.e. before a male child had reached maturity as a farm worker, are reminded of the androcentric tendency in some modern Western countries to preserve a 'family-line' through its name in male off-spring only, even where male off-spring is lacking in a generation by re-issuing the now lost family name as a middle name in future generations with male off-spring, but not in female off-spring, thus effectively discriminating the female family members: rien ne change? For some it may seem unlikely from a demographic point of view that an ancient family would or could want to raise another child after a ten-year-gap and the abortion and/or the exposure and infanticide of children born meanwhile.[79] But the scenario imagined here only serves as a model, one that aims at demonstrating the possibility of family life from a nutritional point of view.

Further scenarios are possible, but I think that the principle should have become clear through the cases set out above. As mentioned before, none of this is based on any known case from the ancient world. Much rather is it thought of as a working hypothesis that will need testing against the available evidence and

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Spartiate left his home at the age of 7.

[79] Exposure and infanticide of a child do not rule out the care, love and affection of the parents towards any of their children raised before or after. Mark Golden suggests, in my opinion correctly, that "among the Greeks and Romans too, exposure of newborns could coexist with, and even be caused by, care for other children." The motivations of modern women for early termination of pregnancies are largely due to the women's decision "[...] to postpone childbirth until they are better able, financially or emotionally, to raise a child", and not so much to a general desire not to have children: 'Did the Ancients Care When their Children Died?', *Greece & Rome* 35 (1988), 152-163, at 158f.

other theories. While suggesting the existence not just of female slaves but even of family life amongst slaves, the framework created by these scenarios implies also that there was a clear limit to the size of family a male agricultural slave could possibly sustain: the small nuclear slave family with at least one male offspring represents the ideal not only from the point of view of the energy resources available to the family but also from that of social standing and advancement within the *familia rustica*. To look at it from the other side: by controlling the rations of food supplied to agricultural slaves the masters possessed a powerful means of social control. This however was in a bizarre way linked to a higher level of autonomy amongst agricultural slaves with regard to their family lives than hitherto suspected. By merely controlling the availability of food the masters did not need to enforce a strict regime of supervision in order to maintain the desired slave population size on their estates. As it were, they could leave the final choice to the slaves. Whether *they* decided to raise the optimum in children or only one (or none) was not dictated by the masters;[80] yet, the framework of this infrastructure would work to the benefit of the latter as most obviously they had no interest in raising any unneeded and therefore costly surplus of labour. After all, Cato himself tells us clearly what the economic guidelines for running the ideal farm were: "Remember that a farm is like a man – however great the income, if there is extravagance but little is left."[81] The slaves themselves however would have had a strong interest in close family ties and mutual support, which might not necessarily have confined themselves within close blood relationships. Admittedly, one could argue that under such conditions the single male slave worker would have been better off avoiding any familial relationships: but I

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[80] I do not mean by this that the slaves' choice to raise a child was free in a modern sense; a high rate of infant deaths and early abortions must be assumed and would very often have been the decisive factor in any 'family planning'.

[81] *De agricultura* 1,6.

agree with the sociologist Orlando Patterson who points out that "the instinct to reproduce usually triumphs over despair".[82] Surely, Roman agricultural slaves in the period of expansion were not thought of as being celibate. At least, it seems evident to me that Cato did not think so. Men, women and children were present on Catonian villa estates. And they would all have contributed their share to the various labour tasks on the farm.

Cato's ration scheme, then, was set up to maintain a *familia rustica* with natural, if limited, family ties amongst its members. There is no reason to think that Cato purposefully set out to 'create' a mixed labour force; it appears much more logical to assume that the picture of a male dominated slave system that is exclusively in need of replenishment from the outside is a modern creation, one that has never managed to capture reality in the ancient world, before or after Cato. Logically, Cato and his peers were nowhere near the kind of obligation to purchase new slaves as frequently as has generally been assumed on grounds of the male-only model. An attempt to quantify this obligation, i.e. to calculate a natural reproduction rate of a Catonian *familia rustica* will be made in the final chapter of this thesis. Already however it seems fair to stipulate that the acquisition and maintenance of a servile agricultural labour force in the 2nd century BC was not exclusively dependent on the successful subversion of other peoples. Plutarch could have been right after all in seeing the fear of an external threat to the sovereignty of Rome and the problems arising from her own domestic shortcomings as the reason for Cato's famous "Carthage must be destroyed."[83]

Finally, a few remarks must be made on the different rations assigned to the *vilicus*, the *vilica*, the overseer and the (head) shepherd. I do not follow the

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[82] O. Patterson, *Slavery and Social Death. A Comparative Study* (Cambridge/Mass. 1982), 133.

[83] Plutarch, *Marcus Cato*, 27,1.

prevailing view that their lower rations are simply based on a lighter work load, i.e. that they represent the lower physical needs of these specially mentioned members of the *familia* compared to the average slave worker.[84] This approach cannot persuade primarily because it fails to explain why a slave of higher status would effectively receive less than any of the lower status slaves. Additionally, the *vilicus* is advised by Cato to engage in all aspects of the farm work on a regular and frequent basis, even though it must be said that he is advised not to tire himself out; it has also been pointed out by Jean-Jacques Aubert that the demands on the *vilicus* would not give him much time to participate in the actual farm work: his functions are clearly of a more administrative and managerial nature.[85] Yet, this supports the notion of his superiority over the other slaves even further. Thus, while his physical needs may well have been lower than those of the average slave worker, he is ranked much closer to the master than he is to the slaves; even the master's friends are meant to be his, too.[86] He is the master's agent acting on his behalf but with full competence. To conclude that he was given less food because he needed less does not fit a status-oriented society. Surely, the masters themselves would not have renounced food because their physical activity did not demand it.

If one looks at the four types of slaves that did receive lower rations the obvious characteristic they all share is their special position of control. While the *vilicus* is in control of all the farm activities and the other slaves in general, the *vilica* controls the kitchen and food-stores, the *epistates* the other workers and specific labour activities, and the *opilio* the pasture activities including animals and men. They also have in common direct access to food: the *vilicus* administers all the buying, selling and lending processes, the *vilica* is

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[84] So Bradley, *Slavery and Rebellion* (n.6), 51f., and Garnsey, *Food and Society* (n.63), 110.

[85] *De agricultura* 5,4f. See J.-J. Aubert, *Business Managers in Ancient Rome. A Social and Economic Study of Institores, 200BC-AD250* (Leiden 1994), 172.

[86] *De agricultura* 5.2.

in charge not only of the kitchen but also of the processing, i.e. cooking and preserving of many foods, the *epistates* monitors the grape vintage, grain milling, etc. and the *opilio* would naturally be in charge of the milk and meat produce deriving from his herds.[87] Hence, their access to other foods was far wider than that of the average slave worker. I would therefore like to suggest that the reason for providing them with smaller rations was not so much due to their lower physical activity (which is debatable anyway) as to different possibilities of fulfilling their calorific and nutritional needs, i.e. access to and control over more of the more valued food items. This was in essence already recognised by Lin Foxhall and Hamish Forbes who pondered over the possibility that "[...] their diet consisted of proportionally less grain and more of the more desirable foodstuffs such as oil, cheese or meat", without however drawing any final conclusions.[88]

The fact that the *vilica* received a grain ration as a woman in her own right can be explained within the wider context of farm management. She is usually regarded as the *vilicus*' 'wife', and indeed this may be the case. But to judge from Cato's only comment on this matter, this need not necessarily be so.[89] However one wants to interpret the few scraps provided by the agricultural writers, the epigraphic evidence as presented in the previous chapter strongly supports the notion that a *vilica* may be married to someone other than a *vilicus*. In any case, if the *vilica* had in all cases been the *vilicus*' wife, there would have

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[87] cf. *De agricultura* 5; 143. The references for the *epistates* and the *opilio* are not as explicit but the range of their control can be deduced from many indirect hints, i.e. the size of the sheep flock (100 animals; *De agricultura* 10,1) or the instructions for the various processing mechanisms (such as those for the vintage; *De agricultura* 23).

[88] Foxhall/Forbes, 'Σιτομετρεία' (n.12), 63.

[89] Frank, *Economic Survey* (n.38), I:166 simply translates '*vilica*' as 'wife'; and this is still the generally prevailing view, despite the inadequacy of the evidence. Against this view see Cato, *De agricultura* 143,1, who regards, the *vilicus*-*vilica*-'marriage', as discussed at length in chapter 3, as only one possibility.

been no need for Cato to specifically mention her in the food rationing list: he could have simply provided the *vilicus* with a larger ration. From the description of the *vilica*'s workload in the agricultural writers, it is apparent that her job was clearly distinguished from that of the *vilicus*. At the same time, it was of utmost importance for the smooth running of an agricultural estate: she was in charge, as remarked above, of the majority of those processing and preserving activities that were carried out at the villa and she was thus directly linked to processes that belonged to the sphere of agriculture proper – quite unlike some of the other female slaves.[90] Her presence was of the essence for the estate and this was made clear also through allocation of her own rations. In the case of the *vilicus* and the *vilica* being in a family relationship with each other as was undoubtedly the case with the imperial 'husband'-and-'wife' management team from Corfinio,[91] their supply of food available through the grain rations as well as through other sources would double, and this could well have encouraged a development towards 'husband'-and-'wife' management teams by preference. Here, too, food may have been a subtle means of social control by which the masters ensured desired family formations.

Future 'family planning'

The most obvious shortcoming of Cato's work for our purposes is its prescriptive nature. We do not know whether he really fed his own slaves according to his recommendations, nor can we be sure that other landowners followed these instructions. If anything, I would find it at least difficult to imagine that they were as tight as Cato was. If a passage in one of Seneca's

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[90] Cato, *De agricultura* 10,1; 11,1; 143, and Columella, *De re rustica* XII,3,6ff.

[91] M. Buonocore, 'Nuovi testi dall' Abruzzo e dal Molise (Regiones II et IV)', *Epigraphica* 58 (1997), 231-265, at 241-244; cf. chapter 3 above.

letters is anything to go by, the average monthly wheat allocation for an urban slave may have been five *modii*.[92] This is up to 25% more than Cato's recommendations for his agricultural labour force, and since it is probable that the physical demands on urban slaves were lower than those on their rustic counterparts, this may well provide further support for Cato's meanness. On the other hand, this may be evidence for the better balanced diet of agricultural slaves who, as argued above, would make up their full calorific requirements by other foodstuffs.[93] Yet, no matter how much exactly each field labourer, etc. was given in forms of rations, and no matter how far approaches to slave maintenance taken by the masters were homogeneous or highly diversified: the main point is that Cato's attitude underlying his recommended ration scheme reveals the presence of women and children, and family life as a whole, on republican villa estates.

Given the state of the (preferred) evidence, literary and epigraphic, further insights regarding practices adapted by various estates and masters are highly unlikely to come forward. However, archaeological remains still offer huge scope for further study. The discovery of various plant crops and the analysis of the structure of ancient farming in general has aroused interest amongst archaeologists for some time now, and the same applies to Roman farm buildings; yet, the study of what used to be called "the slave mode of production" is clearly lagging behind in this respect. If Rossiter[94] was correct in suggesting that the imperial villa under the agency of L.Claudius Eutychus at Boscotrecase shows best what slave quarters were like, this might well support some of the points made above: nine small rooms measuring roughly $6m^2$ are

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[92] Seneca, *Epist.* 80.7.

[93] A better and richer diet of agricultural slaves may be what Plautus alludes to when he implies that the *villa rustica* is the better place for the bringing-up of (slave) children: *Casina* 254ff.

[94] J.J. Rossiter, *Roman Farm Buildings in Italy* (Oxford 1978), 40-48.

generally regarded as the slaves' *cellae* of the type Cato refers to.[95] The size of these rooms is not large by modern western standards, but can only too easily be imagined to have housed small slave families. Each of the *cellae* had a small hearth next to the entrance. This might explain why the average slave worker who was tied into a family unit was not given bread (as were the *conpediti*) but wheat; it might also imply that bread was not, as generally assumed, the standard way of consuming cereals.[96] But I am also and especially thinking of the study of human remains, i.e. skeletal analysis, and in particular the examination of osteological patterns of health and disease, which is on the whole still a *desideratum* for the Roman world. While some work has been carried out on the detection of nutritional deficiencies through the study of hypoplastic defects in the tooth enamel of skeletons found on various Italian sites, there is still a lack of a positive study of nutritional status in general, as well as of the reconstruction of activity patterns.[97] Any such undertaking would without doubt prove worthwhile and form a necessary corrective to our knowledge of gender specific labour and eating patterns of the ancients in general, and of Roman agricultural slaves in particular. The opportunities offered by molecular archaeology have not been explored in this field at all.

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[95] *De agricultura* 14,2.

[96] Porridge, barley stews, etc. are less time consuming in their preparation than is the making and baking of even coarse bread.

[97] Skeletal analysis, of this kind, of North American Indian burial grounds, leading to a re-reading of gender-specific eating and working patterns, has strongly influenced if not changed our understanding of these peoples in opposition to the literary tradition maintained by the Indians themselves: S.E. Hollimon, 'Sex, Health, and Gender Roles among the Arikara of the Northern Plains', in A.E. Rautman (ed.), *Reading the Body. Representations and Remains in the Archaeological Record* (Philadelphia 2000), 25-37. The study of tooth enamel is however somewhat ambiguous as the deficiencies cannot tell us beyond doubt in which period of the individual's life span they were experienced, and they are often thought to be due to malnutrition in childhood. See also I. Morris, *Death-Ritual and Social Structure in Classical Antiquity* (Cambridge 1992), 70-102 on the possibilities and limitations of ancient bone analysis.

Gene analysis leading to the determination of the nutritional content of ancient wheat (or any other plant remains with a sufficiently complete DNA) will most certainly enhance our understanding of crop productivity and human nutrition. Leaving the specific aspect of food and nutrition behind, sex determination and the unravelling of family relationships between individuals seem in desperate demand in the light of our otherwise inconclusive evidence.[98] The most likely hindrance at present is the lack of adequate samples. DNA analysis has not as yet become accepted practice within archaeology. However, when DNA analysis is conducted properly and standards are followed that ensure usable specimens the results are valuable. Therefore, the continued development of the technique can only be of benefit to the study of the ancient world in general and the question addressed above in particular.[99]

The historian of Roman slavery may rightly wonder where sufficiently large samples that would allow us to make statements about rural slaves and their family relations would come from anyhow. But it is exactly these questions inspired by the techniques offered by modern science that can show us the way ahead: no one has ever seriously asked how the rural population and agricultural slaves in particular disposed of their dead. Formal cremations were expensive, but to assume that the poorer or in any case lower status parts of

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[98] This seems not impossible. Even though the technique is still being developed and most of the research has as yet remained unpublished, the molecular biologists working at UMIST/Great Britain suspect that "the range of variable sequences in the human genome is such that it should be possible to study all levels of kinship – siblings, parent-child, cousins and extended family groups": T.A. Brown and K.A. Brown, 'Ancient DNA and the Archaeologist', *Antiquity* 66 (1992), 10-23, at 18. For a promising pilot project of DNA analysis on archaeological remains from classical antiquity see T.A. Brown, K.A. Brown, C.E. Flaherty, L.M. Little, A.J.N.W. Prag, 'DNA Analysis of Bones from Grave Circle B at Mycenae: A First Report', *ABSA* 95 (2000), 115-119.

[99] On the peculiarities of excavations of skeletons for DNA analysis see R. Sallares, 'Molecular Archaeology and Ancient History', in J. Wilkens, D. Harvey and M. Dobson (eds.), *Food in Antiquity* (Exeter 1995), 87-100.

society would not have found a way to mourn and bury their deceased relatives at all would be a rash conclusion. The *columbarium* that was found under a suburban villa in Boscoreale during excavations at the end of the 19th century contained 32 *loculi* in addition to two larger grave-spots and two busts on a slightly higher ground level.[100] It is of course impossible to prove that the *loculi* were for the agricultural slaves who formed the *familia* at the villa. But Werner Eck has suggested recently that the bulk of uninscribed *loculi* in urban *columbaria* were set up by the masters for the burial of their slave *familia*, and the same may well be true for their rural slaves.[101] Whether one will be able to find a burial ground or tomb that can be identified as that of a slave or slaves and that would lend itself to a study of family relationships, seems admittedly very uncertain; but one cannot find if one doesn't look.[102]

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[100] cf. the excavation report by M. Della Corte, 'Scavi eseguiti da privati nel territorio Pompeiano', *Notizie degli Scavi* 18 (1921), 415-467, at 421-423. The report is somewhat unclear, and it should be worthwhile to check the original notes made at the time of excavation (if they still exist), if not even to attempt re-excavation.

[101] W. Eck, 'Aussagefähigkeit epigraphischer Statistik und die Bestattung von Sklaven im kaiserzeitlichen Rom', in P. Kneissl and V. Losemann (eds.), *Alte Geschichte und Wissenschaftsgeschichte. Festschrift für Karl Christ zum 65. Geburtstag* (Darmstadt 1988), 130-139.

[102] The possibilities of any such identification have been considered by Sallares, 'Molecular Archaeology' (n.99), 91 with reference to the find of a female slave in North Africa who still wore the slave collar.

5.

To Have *and* To Be … Or Why Breadwinning Isn't Everything

All animals are equal. But some animals are more equal than others.

George Orwell, *Animal Farm*

How much could a slave own? What did his possessions consist of? And what were a slave's possessions for? In Roman Italy, some slaves owned monies enough to engage in business, others even owned their own slaves, or indeed both. The imperial slave Musicus, administrator of the Gallic treasury of the province of Lugdunensis on behalf of his master the emperor Tiberius Caesar Augustus, was commemorated upon his death by sixteen slaves of his own, some of whom were engaged in business activities themselves.[1] Nemesianus, the bookkeeper of one of the procurators of the province of Dacia, built a temple entirely out of his own monies,[2] while the imperial biographer Suetonius reports an unnamed slave who had 'bought' himself the job of a cash dispensator for the spectacular sum of one million sesterces.[3] Another such slave cash dispensator called Rotundus was said to have owned a silver bowl weighing 500 grammes that required the establishment of a brand-new workshop for its production; Rotundus' own slaves were reported to own another eight silver bowls of half that weight again.[4]

It is irrelevant whether one wants to believe in the historical authenticity of the stories told about these slaves. What is relevant is that they could only be told because it was not impossible for a slave in Roman Italy to

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[1] *CIL* VI, 5197.

[2] *AE* 1913,50.

[3] Suetonius, *Otho* 5,2.

[4] Pliny, *NH* 33.145.

accumulate such wealth. Less lavish cases can easily be found, too. The town house slaves of the mid-republican Roman politician Cato come to mind: part of their monies was spent on purchasing younger slaves in order to train them and sell them at a higher price as skilled slaves.[5] The returns would have been nowhere near the splendour experienced by the imperial slaves named above; yet, these, too, are a very good example of slaves' self-initiated economic activity, aimed at the accumulation of property. However, no matter at what level slaves engaged in business activities, either on their own initiative or as their master's agent, in order to increase their private property, they required, at least in republican times, their masters' permission to maintain own property. Such property is usually referred to as their *peculium*, a term which is generally applied to possessions allowed to anyone who was under somebody else's *potestas*, be they free or slave.[6] An overall concern with private property held by anyone under somebody else's *potestas* can be discerned from the significance it has been given in the legal sources. The Digest, the collection of legal material commissioned by the emperor Justinian, reserves a whole chapter for the question of *peculium*, and one for the legacy of *peculium*.[7] According to the late-republican jurist Tubero, *peculium* was defined as the slave's property, kept in an account separate from the master's, but with his or her explicit permission.[8] While the *peculium* belonged legally to the master, it was *de facto* the property of the slave. It was not restricted to a certain type of property, but could consist of both land and movables, including other slaves.[9] Moreover, the

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[5] Plutarch, *Marcus Cato* 21.7.

[6] See W.W. Buckland, *The Roman Law of Slavery* (Cambridge 1908), 196-198 and W. v. Uxkull, 'Peculium', *RE* XIX.1 (1937), 13-16. For a treatment of the development of the concept of *peculium* in Roman times see I. Żeber, *A Study of the* peculium *of a Slave in Pre-Classical and Classical Roman Law* (Wroclaw 1981), ch.3.

[7] Digest 15.1 and 33.8; cf. also 40.7.

[8] Digest 15.1.5.4; cf. also 15.1.4.2. The same holds true for *vicarii*: Digest 15.1.4.6.

[9] Digest 15.1.7.4.

slave was allowed to increase the *peculium* through his or her own economic agency,[10] which could, as we have seen above, lead to enviable affluence and prosperity. *Peculium* was thus a legal concept that was socially sanctioned.

Modern conceptualisations of private property allowances to slaves have largely focused on the type of examples given above, preserved in both literary and legal sources, as well as through epigraphic evidence, and on the economic and legal aspects relevant to an understanding of trade and finance in imperial Rome.[11] As a result, the function of such allowances, leaving aside minor individual gifts from master to slave, has been seen in an expansion of the master's business activities by enabling "[...] the law to develop a series of rules making the slave an agent pledging his master's credit in dealings with third parties [...]"[12] The benefit for the slave was the chance to "[...] accumulate a sizeable fortune, which, with permission, could be used to purchase his freedom."[13] A consequence of this text-based approach to the issue of slave *peculium* is a virtual neglect of its discussion outside the world of business and law. This, however, has produced a fundamentally one-sided picture of private property allowances to slaves, which, as I hope to demonstrate, is also largely responsible for a distorted view of slavery itself. I have argued in the previous chapter for the existence of family life on the basis of an accessibility of various food sources to agricultural slaves, including but clearly going beyond what was given to them in the form of grain and wine rations. In what follows, I will develop this argument by focusing on the one

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[10] Digest 15.1.27; 15.1.39; 15.1.40; 15.1.49.

[11] e.g. W.L. Westermann, *The Slave Systems of Greek and Roman Antiquity* (Philadelphia 1955), 83; J. Crook, *Law and Life of Rome* (London 1967), 188-191; A. Kirschenbaum, *Sons, Slaves and Freedmen in Roman Commerce* (Jerusalem and Washington/DC 1987), 31-88; A. Watson, *Roman Slave Law* (Baltimore and London 1987), 90-101; D. Johnston, 'Peculiar Questions', in P. McKechnie (ed.), *Thinking Like a Lawyer* (Leiden 2002), 5-13.

[12] Crook, *Law and Life* (n.11), 189.

[13] Westermann, *The Slave Systems* (n.11), 83.

aspect of slave allowances that had the potential to match, if not outdo, the significance of grain allowances for the maintenance of family life amongst agricultural slaves: the *peculium*. Concepts of slave life based on images of total or near total restriction of family ties will thus continue to be challenged, as will be the neglect of the female slave, by seeing the *peculium*'s aim and function in the maintenance of family life: to have *was* to be.

The concept of peculium *in agriculture*

Since Max Weber's assertion that, with the exception of the *vilicus*, the slave farm manager, "the great mass of [agricultural] slaves had no *peculium* just as they had no monogamous relationship",[14] discussion of *peculium* amongst agricultural slaves has been kept at an absolute minimum. It is now, however, generally accepted that agricultural slaves could hold *peculium*, even though it is commonly seen as of negligible importance – economically, legally and socially.[15] This is hardly surprising as the references to slave *peculium* in the agricultural writers are few and far between: Cato in his *De agricultura* does not mention *peculium* once; the early imperial gentleman farmer and man of letters, Columella just once in passing in the preface to Book VI of the *De re rustica*.[16] Yet, there is a curious moment when, despite this general silence, the late republican politician, scholar and agronomist, Marcus Terentius Varro, alludes

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[14] Max Weber, 'Social Causes of Decline of Ancient Civilizations', in R.I. Frank (tr.), *The Agrarian Sociology of Ancient Civilizations* (Bristol 1976), 389-411, at 398. The original article in German appeared as 'Die sozialen Gründe des Untergangs der antiken Zivilisation', *Die Wahrheit* 6 (1896), 57-77.

[15] cf. R.G. Barrow, *Slavery in the Roman Empire* (London 1928), 77f. and 88; N. Brockmeyer, *Antike Sklaverei* (Darmstadt 1979), 84; Kirschenbaum, *Sons, Slaves and Freedmen* (n.11), 32ff.; Weber, 'Social Causes' (n.14), 389; Żeber, *A Study of the* peculium *of a Slave* (n.6), 54.

[16] Columella, *De re rustica* VI, Preface 4.

twice to the significance of *peculium* for the slaves' own maintenance:[17]

De re rustica I,2,17: *[...] servis peculium, quibus domini dant ut pascant* / the *peculium* for the slaves, which the master gives them so that they can pasture [...] (my translation).

De re rustica I,19,3: *in hoc genere semivocalium adiciendum de pecore [...] quae solent esse peculiaria pauca habenda, quo facilius mancipia se tueri et assidua esse possint* / under this section of inarticulate equipment is to be added [...] the few animals that are kept as the slaves' *peculium*, which makes it easier for them to maintain themselves and to be more diligent (my translation).

Ownership of cattle (including sheep, goat and ox) stood at the beginning of the development of the concept of *peculium*, and both ancient authors and modern commentators have always been aware of the "[...] agricultural and, more precisely, animal-raising genesis" that is inherent in the etymology of the word *peculium*.[18] No other group of animals has provided man with a wider range of products than cattle, especially sheep. The latter have been known to furnish nomadic pastoralists with "[...] all their needs including housing (from felt to fabric) and even transport."[19] Agricultural slaves of a more sedentary nature could have exploited cattle in a variety of ways. During the animal's lifetime, blood and milk can provide essential nutriments for human consumption, and both raw products can be relatively easily turned into more durable products, e.g. black pudding (blood), cheese, yoghurt and butter (milk), all important winter foods. In a less direct way, dung could have been used to fertilize arable land, thus enabling more successful fruit and vegetable growing. Varro holds this as a reason for the popularity of sheep as *peculium* allowances amongst those slaves who held arable; yet, he admits that they were also the preferred

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[17] Other references to slave *peculium* by Varro are *De re rustica* I,17,5ff. and II,10,5.

[18] See Żeber, *A Study of the* peculium *of a Slave* (n.6), 10, also for the ancient evidence.

[19] M.L. Ryder, *Sheep and Man* (London 1983), 712.

kind of animal amongst those who did not keep cattle predominantly for the sake of their manure.[20] The range of products for human consumption derived from the live animal was virtually unmatched. In addition to which, the fleece of sheep was a prime raw product in Roman Italy for the manufacture of clothing, which could, by way of trade and barter, also be turned into consumables.[21] After the animal's death, meat, fat and bone (marrow) enriched the table; skins, horns and guts supplied the raw materials for clothing and utensils, which, like the fleece, could be utilised as a means of exchange. All these products are well attested in both ancient and modern comparative evidence.[22] Unlike other animals, sheep, goat or ox are not known to have served any other function than that of a *Nutztier*, and accordingly, the grant of cattle and pasture land (or pasture rights) to agricultural slaves by their masters should be understood within the context of providing for subsistence. The problem that arises from this observation is its inconsistency with modern views of slave diets and maintenance.

The physical maintenance of slaves is today usually seen as the master's obligation, a view that is largely based on inferences from legal sources and our knowledge of (food) rations that were provided to agricultural slaves on a regular basis.[23] Modern studies of ancient slave diets work on the assumption that agricultural slaves fed on such rations alone, and that it was in particular provisions of grain that secured a slave's diet: 'bread winning' was

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[20] Varro, *De re rustica* I,19,3. "*In eo numero non modo qui prata habent, ut potius oves quam sues habeant curant, sed etiam qui non solum pratorum causa habent, propter stercus.*"

[21] Female wool-workers are attested as trading out of their *peculium*: Digest 15.1.27; Plautus, *Mercator* 524f.

[22] cf. J.M. Frayn, *Sheep-Rearing and the Wool Trade in Italy during the Roman Period* (Liverpool 1984), ch.8, and Ryder, *Sheep and Man* (n.19), 712-739.

[23] Cato, *De agricultura* 56-58; 142; 143,3; Columella, *De re rustica* II,9,16ff; VIII,1,2; X,1,1; XI,1,19; Digest 34.1. On the masters' obligation to provide (some) food and clothing to slaves see also Seneca, *Benef.* 3,21,2.

almost everything.[24] It is notable however that none of the passages that mention food rations in the ancient writers show either a concern for the slaves' daily needs, or enforce in any way the notion that these needs were fully satisfied through such rations. What they do enforce is the master's obligation to provide *some* allowances in respect of food and clothing. The only quantifiable information in our sources for agricultural food rations in Roman Italy is supplied by Cato: the slaves' main allocations consisted of monthly grain rations, on average 4 to 4.5 *modii* of wheat for ordinary field workers, 3 *modii* for each of the farm managers and foremen.[25] If "food-giving operated to establish and maintain status differentials",[26] the smaller rations to the higher status slaves subvert the view that these slaves fed and relied on nothing but their monthly allocations. Attempts to explain this with the lower physical needs of managerial slaves, as made by Keith Bradley and Peter Garnsey, remain unsatisfactory precisely because they ignore the significance of social status in Roman Italy.[27] Instead, it seems more plausible that the rations formed only part of the total allowance assigned to them by their master, and that in particular higher status slaves could expect to have access to other food sources in accordance with their status.[28]

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[24] e.g. R. Etienne, 'Les rations alimentaires des esclaves de la "*familia rustica*" d'après Caton', *Index* 10 (1981), 66-77; L. Foxhall and H.A. Forbes, 'Σιτομετρεία: The Role of Grain as a Staple Food in Classical Antiquity', *Chiron* 12 (1982), 41-90, at 62-65; F. de Martino, 'Sull' alimentazione degli schiavi', *La Parola del Passato* 48 (1993), 401-427; M. Prell, *Sozialökonomische Untersuchungen zur Armut im antiken Rom. Von den Gracchen bis Kaiser Diokletian* (Stuttgart 1997), 98-105.

[25] Cato, *De agricultura* 56.

[26] G. Woolf, 'Food, Poverty and Patronage: the Significance of the Epigraphy of the Roman Alimentary Schemes in Early Imperial Italy', *PBSR* 58 (1990), 197-228, at 215.

[27] K.R. Bradley, *Slavery and Rebellion in the Roman World, 140BC-70BC* (Indiana 1998), 51f.; P. Garnsey, *Food and Society in Classical Antiquity* (Cambridge 1999), 110.

[28] Foxhall/Forbes, 'Σιτομετρεία' (n.24), 63 argue that "it is not possible to answer this question [of the lower rations] from the information provided by Cato"; of course, Cato does not provide the type of information that allows for a positivist approach.

A closer look at the evidence for these slaves' diets and life styles supports this suggestion. Columella's *vilicus* is encouraged to bestow largesse on the most industrious slaves and invite them to his table (*sic*) – none of which would be possible had he less food available than them.[29] Varro expresses similar concerns; his foremen and overseers are to be particularly looked after as regards property allowances:

De re rustica I,17,5: *Praefectos alacriores faciendum praemiis dandaque opera ut habeant peculium et coniunctas conservas, e quibus habeant filios.* / The foremen are to be made more zealous by rewards, and care must be taken that they have property of their own, and mates from among their fellow-slaves to bear them children."

As I have argued in the previous chapter, Columella's *vilicus* and Varro's foremen would have found it extremely difficult to sustain families, or indeed anyone other than themselves, on the Catonian ration scale. Given that Varro is very explicit with regard to the existence of family life amongst his *praefecti*, and that the same can be said for Cato's and Columella's *vilici* slaves, this requires explanation.[30] If *vilicus* and *vilica* formed a household unit, they would have benefited from a double allocation of rations. They were, however, not necessarily partners.[31] In any case, even a double allocation would only provide the household unit with a little bit over 4000 calories per day, hardly enough to feed children too. In the case of Varro's *praefecti*, there is no reason to assume such a double allocation of grain rations anyhow. This however would leave such managerial slaves with just over 2000 calories per day, plus the little that was given to them in the form of olives and wine, to feed themselves, their partners and any children they may have had. Unless other food sources were

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[29] Columella, *De re rustica* XI,1,19.

[30] Cato, *De agricultura* 143.1; Columella, *De re rustica* I,8,5; XII,1,1f.; 3,7.

[31] cf. Cato, *De agricultura* 143, and the argument presented in chapter 3 above.

available to them, the maintenance of a partner and children would have proven to be impossible. A sensible explanation for this riddle is in my view the proposition of regular and deliberate access to other sources of nourishment, in particular the holding of cattle as the slaves' *peculium*. This would be in perfect agreement with the link made by Varro himself between slave family life and *peculium* allowances; it is not in agreement with modern conceptualisations that understand slave family life and the holding of *peculium* by agricultural slaves as two separate entities.[32]

We do not of course know how far Cato's ration scheme represented a wide-spread approach amongst *domini*, or whether it underwent changes and development over time, possibly resulting in larger allocations for managerial slaves by the time of the late republic and early empire. It is however of a similar order of magnitude to the grain allocations made to the recipients of cheap or free grain, the *plebs frumentaria*, in the late republic, which were not understood as the recipients' full provisions, but could reasonably be described as *Zubrot*, often assisting in the support of whole families. A similarity in distribution principles between slave rations as recommended by Cato and the grain available from the dole in Rome seems corroborated by (the alleged) attempts of some masters to reduce their burden of grain provisioning through freeing their slaves with the view to enlisting them as citizens into the *plebs frumentaria*.[33] There, eligibility would have been restricted to male freedmen only, who would put the grain received towards the maintenance of dependents – as, I suspect, they had done before manumission. If the similarity in the distribution principle discerned here is correct, this further supports the notion

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[32] e.g. A. Carandini, *Schiavi in Italia. Gli strumenti pensanti dei Romani fra tarda Rebubblica e medio Impero* (Rome 1988), 33 who maintains on the basis of the evidence provided by the agricultural writers that the managerial slaves "[...] possono vivere accoppiati (con una *conserva*), avere figli **e anche un peculio**" (my emphasis).

[33] cf. Dion. Hal. 4.24.5; Suetonius, *Augustus* 42.2.

gained on the basis of the nutritional and social considerations made above that slaves – just like the *plebs frumentaria* – were not principally expected to feed on allocated rations alone, but that, in particular, *vilici* slaves, *praefecti*, and generally slaves who were at the head of a managerial or productive unit could rely on the grant of *peculium* which was directed, as Varro tells us, towards their more adequate support. Such allowances would in the first instance provide them with the additional nourishment essential for their physical maintenance and that of a family. It also established a basis for patronage and the concurrent display of status.[34]

Yet, not only higher status slaves benefited from private property allowances. Property allowances could also be made available to those amongst the hands who excelled the others at work. Such rewards may in fact have been used as incentives to raise the overall morale of the labour force as recommended by Varro:

De re rustica I,17,7: *Studiosiores ad opus fieri liberalius tractando aut cibariis aut vestitu largiore aut remissione operis concessioneve, ut peculiare aliquid in fundo pascere liceat, huiusce modi rerum aliis [...]* / By treating the slaves more liberally as regards food or clothing, or by giving them leave from work or permission to keep something of their own on the *fundus*, or other things of this kind, they are made more eager for work [...] (my translation).

It is not at all clear from Varro's remark how many of the hands would have benefited from extra free time or the right to keep their own animals, etc. Other comparative ancient evidence that could directly qualify Varro's statement is missing. If however we use these considerations in conjunction with the food rations suggested by Cato for field labourers (*qui opus facient*), this may allow

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[34] This is supported by allusions in the literature to managerial slaves' easy access to a sufficiency of food and fuel: e.g. Horace, *epist.* 1.14; Plautus, *Casina* 254ff. On this theme see also O. Hiltbrunner, 'Der Gutsverwalter des Horaz (epist. 1.14)', *Gymnasium* 74 (1967), 297-

some interesting suggestions. Although their rations were substantially larger than those given to managerial slaves, they may have been just enough to feed a (male) slave and a partner, but would have made the sustenance of a family extremely difficult. Traditionally, Cato's field hands have been viewed as "male and celibate" – as indeed generally agricultural slaves in the period of Roman expansion,[35] thereby avoiding issues raised by nutritional considerations. But as shown in the previous chapter, the calorific contents of their food rations are in excess of the physical needs of a single person, which can be explained as an indication for consumption of a single ration by more than the named recipient. Yet, in order to raise children and enjoy family life, additional food sources would have been essential. If, as I propose, slave grain rations in Roman Italy followed the same distribution principle as the grain dole at Rome, it is unlikely that ordinary female slaves received rations in their own right, thereby adding to what was available to the family unit. Basic daily meals may have been provided for all slaves in a communal kitchen.[36] Additional amounts were accessible through scrounging, gathering or picking 'on the job', as well as through gifts or additional helpings from the managerial slaves. But a grant of private property in the form of cattle and land could have exceeded any irregular, seasonal or unreliable provisions. The holding of *peculium* by ordinary male slave labourers may – in analogy to the benefits derived from *peculium* allowances by their managerial counterparts – not just have increased their personal comfort through an enriched diet and improved status, but could have provided a reliable basis for family life. On the other hand, reduction of a slave's *peculium* allowance (in the same way as a cut in his rations),[37] or indeed

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314, at 314.

[35] K. Hopkins, *Conquerors and Slaves. Sociological Studies in Roman History 1* (Cambridge 1978), 106.

[36] Cato, *De agricultura* 143.2; cf. also Plutarch, *Marcus Cato* 3.2.

[37] Phaedrus, *App.* 18.6 plays on the fear of a slave of experiencing not only a cut in, but a total

his inability to secure *peculium*, would have had direct repercussions not only on his belly, but also on his dependants. Masters like Pliny, who was well aware of the importance of a reliable slave labour force, may have had regular recourse to *peculium* allowances to all slaves to increase their preparedness for work along the lines suggested by Varro, whilst others could have stuck to appropriate awards for managerial and especially industrious slaves only.[38] Thus, the masters' choice could set the framework for the forms of family life possible amongst the individual members of their slave *familia*.

But what would have been the preferred approach? The ancient literary sources are mute on the different measures that were adopted by the masters. At the same time, the debate on slave personal production in modern slave societies may serve as a cautionary tale for any rushed generalisation either way. There, property allowances are known that stretched from a couple of chickens to the availability of substantial arable. Differences can be documented in terms of both time and region, and slaves were known either to enjoy a few fresh eggs, or to rely for their maintenance exclusively on their own produce. Differences were even notable between different plantations in the same production area, and indeed on individual plantations.[39] I perceive it therefore as unlikely that a single scheme of private property allowances to agricultural slaves in Roman Italy was operated. It is however notable that despite this lack of unity in the modern evidence, slave *peculium* in an agricultural context can be demonstrated

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removal of his rations.

[38] Pliny, *Epist.* III,19,7.

[39] For the Antebellum South see J.O. Breeden (ed.), *Advice amongst Masters. The Ideal in Slave Management in the Old South* (Westport/CT 1980), ch.17; for Brazil see C.F.S. Cardoso, 'Escravismo e dinâmica da população escrava nas Américas', *Revista de Estudos Econômicos* 13.1 (1983), 41-54; A. Barros de Castro, 'A economia política, o capitalismo e a escravidão', in J.R. de Amaral Lapa (ed.), *Modos de produção e realidade brasileira* (Petrópolis 1980), 67-108; for the Caribbean see the compilation of articles titled 'Subaltern Autonomy: Social and Economic Culture', in V. Shepherd and H.McD. Beckles (eds.), *Caribbean Slavery in the*

to always relate to the slaves' physical maintenance, albeit on a variety of levels. I cannot, however, see how the literary evidence – ancient or modern – could be used to provide a more complete picture of the occurrence of slave personal production in the ancient world. For this we will have to turn elsewhere.

Faunal remains, slave diets and peculium *allowances*

If, as I argue, agricultural slaves had access to *peculium* allowances that supplemented their diet, archaeological evidence that can be identified as food remains on slave-run villa sites carries the potential to add to our understanding not only of the diets of agricultural labourers, but also of the processes involved in slave maintenance. Yet, faunal remains on villa sites have not been utilised in the reconstruction of ancient slave diets at all; instead, these have been discussed exclusively on the basis of the literary sources.[40] Since the latter concentrate almost entirely on the types of foods given to slaves, they can only be employed for a partial representation of ancient slave diets. If on the other hand one could utilise food debris as, at the very least, an indication for villa inhabitants' consumption, this may open up new ways of looking at slave maintenance. The available evidence, however, is limited, especially regarding food debris that allow conclusions on diets. In view of the *peculium* type postulated here, namely cattle (or other small animals) and (access or right to) land, mammal bones appear to be traceable most easily in the archaeological record. Yet, the recording of mammal bones in published excavation reports is restricted largely to the past two decades, often reduced to sections on 'worked bone' or 'bone objects'. The resulting sample of republican and early imperial

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Atlantic World (Kingston 2000), 712-783.

[40] cf. n.24 above.

villa estates in Roman Italy that allow intra-site analysis of (butchered) mammal bones between clearly defined architectural structures thus consists of two only, one obviously related to the story of slave labour in Italy, the other less so: Settefinestre in Etruria and Botromagno in Apulia.[41] In both cases, however, the archaeological evidence for consumption of foods other than those associated with a bread-and-wine diet by the inhabitants is plentiful and highly suggestive.

a) Settefinestre: During the early imperial phase of the villa at Settefinestre in Etruria, meats and animal products appear to have been a regular dietary item: substantial remains of (butchered) animal bones were found in most parts of the villa. The huge sample of 1518 bones/bone fragments divides into 70% pig bones, 17% sheep and goat, and 13% ox. The abundance of pig bones supports the excavators' suggestion that the villa was increasingly used for intensive pig-breeding.[42] The consumption of pork by the villa inhabitants is suggested by finds of butchered pig bones virtually all over the main domestic areas, including the central living area (*pars urbana*), the entrance courtyard, the turreted garden, and the so-called new slaves' quarters.[43] These, however, showed a much higher percentage of (butchered) sheep/goat and ox bones than the higher status parts of the villa, which produced predominantly evidence for a pork-rich meat diet.[44] This has not gone unnoticed: the excavators employ the osteological evidence in their reconstruction of the slaves' diet in this period. They conclude that meat consumption was a regular dietary feature for the villa

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[41] I rely on the site survey by A. King, 'Diet in the Roman World: A Regional Inter-Site Comparison of the Mammal Bones', *JRA* 12 (1999), 168-202, at 192.

[42] A. Carandini *et al.* (eds.), *Settefinestre. Una villa schiavistica nell'Etruria romana*, 3 vols. (Modena 1985), II:182-188.

[43] cf. King, 'Diet in the Roman World' (n.41), 172.

[44] cf. King, 'Diet in the Roman World' (n.41), 169-173; 'Villas and Animal Bones', in K. Branigan and D. Miles (eds.), *The Economies of Romano-British Villas* (Sheffield 1988), 51-59, at 52f.; and more generally 'I resti animali; i mammiferi, i rettili e gli anfibi', in Carandini, *Settefinestre* (n.42), III: 278-300.

slaves, which is then seen in contrast to a largely meat-free diet as allegedly imposed by Cato: "Si può inoltre osservare che il regime alimentare privo di carne proposto da Catone per gli schiavi (Cat. 56-58) non era seguito a Settefinestre e che, nonostante sia impossibile valutare la quantità di carne che gli schiavi consumavano, le ossa rinvenute nei nuovi alloggi servili provano che ne consumavano diverse qualità."[45] Once the realms of the excavation report were left behind, however, so was the significance of the archaeological findings: although admitting that "e tuttavia verosimile che gli schiavi consumassero anche legumi, uova, formaggio e forse anche carne", Andrea Carandini continued to reconstruct the diet of agricultural slaves in the period of expansion predominantly on the basis of the evidence provided by Cato.[46] Given the wealth of osteological evidence at Settefinestre it would not have required much *fantasia* to take matters beyond the narrow constraints of the literary sources.

Although lacking any spatial analysis for its faunal remains, the rural villa site of San Giovanni di Ruoti in Lucania, also engaged in intensive pig-breeding, provides an interesting correlation. The evidence for meat consumption during the early imperial phase has been given due attention with regard to the occupants' diet: next to remains indicating consumption of pork (and butchery of pig bones), sheep and goat remains make up the vast majority of the animal bones attributed to diet.[47] Because of the lack of spatial analysis at San Giovanni, the excavators restrain themselves from allocating social status to the villa inhabitants, but present an undifferentiated pattern for individual

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[45] King, 'I resti animali' (n.44), 284; cf. also Carandini, *Schiavi* (n.32), 204f.

[46] Carandini, *Schiavi* (n.32), 154-157, at 155.

[47] cf. M.R. MacKinnon, 'The Faunal and Plant Remains', in A.M. Small and R.J. Buck (eds.), *The Excavations of San Giovanni di Ruoti*, 3 vols. (Toronto, Buffalo, London 1994, 1997, 2002), III: 28ff. and 83-123.

consumption.[48] The estimated occupation size of the villa is at its maximum 20 to 30 persons.[49] Given the overall simple structures of the newly built early imperial villa site, directed at agro-pastoral exploitation, it appears reasonable to consider the intensive use of slave labour at San Giovanni di Ruoti.[50] Villa and farm could have been owned by a mostly absentee landlord who had left the actual running and working of the farm largely to slaves. Alternatively, San Giovanni could be viewed as a Rostovtzeffian 'real farm house', i.e. a "modest, spacious and clean [villa], built for the use of a well-to-do farmer who probably lived in his villa all the year round", and who employed a small (slave) labour force.[51] The suspected number of workers, in conjunction with the villa size, seems to rule out the possibility of traditional peasant family farming. Whichever of the two interpretations offered here one prefers, the evidence for a meat-supplemented diet by the villa inhabitants adds to the impression gained from the spatial and temporal analysis of the faunal remains at Settefinestre that support the notion of meat consumption by agricultural slaves in this period. It is notable in this context that the excavators appear puzzled by the fact that whilst "some degree of pastoralism took place [...] it was probably practised on a relatively small scale and over short distances judging by the limited numbers of sheep and goats in the herds. The fact that individuals were killed at all stages of development and apparently throughout the year, since there is no distinctive pattern of seasonal slaughter-based aging profiles, further suggests that

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[48] The evidence largely consists of remains from a group of middens spread over the villa site, which does not allow for the kind of spatial attribution to specific domestic areas (and their inhabitants) as in the case of Settefinestre: MacKinnon, 'The Faunal and Plant Remains' (n.47), 28.

[49] So J. Freed, *Late Roman Pottery from the Site of San Giovanni di Ruoti* (Unpublished PhD Thesis University of Alberta 1982), quoted in MacKinnon, 'The Faunal and Plant Remains' (n.47), 111.

[50] On the site see generally Small, *The Excavations* (n.47), I: ch.6.

[51] M.I. Rostovtzeff, *The Social and Economic History of the Roman Empire*, 2 vols. (Oxford

pastoralism was not practised on any grand scale. Presumably mature sheep and goats were kept for wool, milk, and ultimately meat, while lambs and kids provided solely meat."[52] It is not at all impossible to see in this the workings of *peculium* (in the form of sheep and cattle) that would have been exploited by the slaves in as many ways as possible.

Intra-site analysis of (butchered) mammal bones (or any kind of food remains for that matter), however, has as yet not become standard practice in order to deduce social divisions on villa sites. Anthony King's data-base of settlement sites for which (unworked) bone remains have been documented by the excavators, includes only a single republican villa for the whole of Roman Italy: Botromagno near Gravina di Puglia.[53]

b) Botromagno: The site has, as far as I am aware, not been brought into relation with agricultural slavery at all. What is interesting in this context is the division between the various animal bone types found in the higher status villa (Site CA) and the much less luxurious architectural structures in its vicinity. At the Hellenistic villa, "[...] sheep appear to have been less important", whilst "the bone remains found on the other sites show the same predominance of sheep, and approximately the same proportion of other domestic animals as there had been in the previous period", which, so the excavators, "suggests that the changes in the economy were not as drastic as has sometimes been supposed."[54] Given its location in what by the time of Cato had started to become popular winter pastures for the flocks of aristocratic Romans, both in coexistence and in competition with the flocks of local aristocracies, the notion

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[2]1957), II:564.

[52] MacKinnon, 'The Faunal and Plant Remains' (n.47), 122.

[53] King, 'Diet in the Roman World' (n.41), p.192. Cf. A.M. Small *et al.*, 'Excavations on Botromagno, Gravina di Puglia, 1992: Interim Report', *Echos du Monde Classique* 37 (1993), 339-347.

[54] A.M. Small (ed.), *Gravina. An Iron Age and Republican Settlement in Apulia*, 2 vols.

of an exploitation of slave labour, linked to pastoral economies in Roman times, is, I think, not at all far-fetched, especially as the construction of both the villa site and the adjacent structures, containing basic agricultural buildings and groups of simple courtyard houses, followed swiftly the purposeful demolition of the previous structures.[55] The excavators prefer to read the reconstruction and the luxurious features of the actual villa site as evidence for the activities of a local aristocrat.[56] Yet, they surmise that this rich landlord "[...] may also have owned the simpler houses [...] where his labourers are likely to have lived", thus stipulating that "[...] the dislocation of the traditional population that these developments must have entailed [...] must have been extensive."[57]

Whatever ethnic background this landlord and his labourers may have had, the structure of the site speaks for an economic dependence of the outbuildings on the villa site – and with it, I would like to propose, a dependency of the inhabitants of these buildings on the inhabitants of the villa complex. Slaves in Roman Italy need not have had a Roman master, nor is there any reason to believe that the Romans were the first in Italy to exploit servile labour in an agricultural or pastoral context.[58] If the labourers' servile status is accepted, the food debris in the lower status buildings at Botromagno support the notion of a meat-supplemented diet of dependent agricultural labourers. The distinction in the age distribution discerned for the killed animals which was found at the various sites at Botromagno could then, in turn, be employed to suggest the workings of *peculium*.[59] The average age of killed caprines was over

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(London 1992), I:17.

[55] Small, *Gravina* (n.54), 15f.

[56] Small, *Gravina* (n.54), 15.

[57] Small, *Gravina* (n.54), 18.

[58] On the notion of servile and dependant labour arrangements in ancient Italy that are 'non-Roman' see already N. Terrenato, '*Tam Firmum Municipium*: The Romanization of Volaterrae and its Cultural Implications', JRS 88 (1998), 94-114.

[59] On the mammal bones at Botromagno see generally J. Watson, 'The mammals', in Small,

three years, which. if consumed, was unlikely to have resulted in a culinary delight for anyone used to eating lamb.[60] Food debris from a rubbish pit at the actual site of the Hellenistic villa complex shows in contrast preferred consumption of lamb, which made the excavators conclude that "it (was) possible, therefore, that F202 [the rubbish pit] contained waste from a more privileged diet compared to the remaining faunal remains at the site."[61] The owners of the villa would have been able to choose prime meats for their diet, possibly through a stable surplus production. Their labourers, on the other hand, would not have been in such a privileged position. They may only have had access to meat when the animals had outlived their original purpose, i.e. the period of production of so-called secondary products, milk and wool in particular. Lamb would only have been available if a surplus of newly born animals occurred that were not needed for the maintenance or the increase of the flock, or as a means for trade and barter. And a slave with sheep as his *peculium* would have been foolish not to exploit the majority of his animals fully before benefiting from any carnivorous goods there may have been.

The problems of historical interpretation posed by these examples are self-evident: the material remains demand the telling of a different story from that traditionally offered on the basis of the literary evidence. There is, of course, no proof that the inhabitants of the *cellae* in Settefinestre, the villa at San Giovanni or the outbuildings in Botromagno were slaves, just as there is no proof for the intensive exploitation of a servile labour force at either place, or for that matter in the countryside of Roman Italy in general. Those who demand such proof will eventually have to manufacture a picture of the Italian

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Gravina (n. 54), ch. 8.

[60] Watson, 'The mammals' (n.59), 95f.

[61] M.R. MacKinnon, 'The Faunal Remains', in A. Small *et al.* (eds.), 'A Pit Group of c.80-70BC from Gravina di Puglia', *PBSR* 62 (1994), 243-257, at 248.

countryside without the agricultural slave.[62] In its place, archaeological evidence for a meat-supplemented diet at republican and early imperial villa sites should, in my view, be put in relation to the villa's inhabitants, including slaves, and thus used for a deconstruction of previously offered accounts of ancient slave diets, with their restricted evidential base. If Anthony King is right with his suggestion that "[...] animal bones from villa sites [...] mostly represent food debris", that in other words "[...] it is far easier to draw conclusions on diet from the bones, than it is on the husbandry systems used",[63] the labourers' diet at Settefinestre, San Giovanni and Botromagno was supplemented by (mature) meats that could have derived, at least in part, from their own holdings. However, then, one wants to decide upon the social status of these labourers, it seems certain that their diet did not merely consist of grain and wine, but was enriched by animal and meat products (and whatever else we have failed to trace as yet). The three examples are, of course, isolated, and allow only extremely limited speculation about the kinds of calorific returns that they may have produced. But if one is prepared to view the countryside of republican and early imperial Italy as a landscape of intensive servile exploitation, which I am, the traditional view of a monotonous wheat-based slave diet will necessarily crumble away with more evidence of this type being unearthed (and documented): bread(winning) wasn't everything. The slaves' contribution to their own maintenance through the institution of *peculium* could then provide a conceptual framework for their access to meat (and other food) products: a tempting synthesis in its inclusion of all bodies of available evidence. Furthermore, slaves' use of both agricultural and pastoral sources to satisfy their nutritional and physical needs would fit in well with the wide-

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[62] In agreement with D.W. Rathbone, 'The Slave Mode of Production', *JRS* 73 (1983), 160-168, at 162.

[63] King, 'Villas and Animal Bones' (n.44), 51.

spread combination of both sources by ancient populations in Italy, with reasons of risk-spreading and the possibility of a more complete and resourceful exploitation of the land as obvious stimuli.[64] The repercussions of a new understanding of ancient slave diets along these lines on our view of family life amongst members of a slave *familia* have briefly been sketched above, and are pretty self-evident at best: food means life, and slaves' access to more and more diversified foods than hitherto suspected translates into larger and more diversified slave family units than traditionally associated with agricultural slavery in Roman Italy: to have (*peculium*) was to be (a slave family).

Peculium *and family relations*

The suggested relationship between *peculium* allowances and family life may not always just have been causal in nature: cohabitation could coincide with domination, and *peculium* could thus have been identical with family relations. This phenomenon has long found discussion within urban contexts, but has largely been ignored elsewhere.[65] There is, however, an inscription from Mutina in Italy that may suggest the same occured within an agricultural context.[66]

Vivit / v(ivus) / Dama Statulli / Nicini vilicae / vicariae suae / et suisque (sic) p(edes) q(uadrati) XII
Dama, the slave of Statullus, to his *vicaria*, the *vilica* Nice, and to his loved ones
XII square feet

The inscription was set up by Dama, the slave of Statullus, to his partner Nice, a

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[64] See E. Dench, *From Barbarians to New Men. Greek, Roman and Modern Perceptions of Peoples from the Central Apennines* (Oxford 1995), 116-125.

[65] e.g. N. Baba, 'Slave-Owning Slaves and the Structure of Slavery in the Early Roman Empire', *Kodai* 1 (1990), 24-35; Barrow, *Slavery in the Roman Empire* (n.15), 102f.; E. Hermann-Otto, *Ex ancilla natus*. Untersuchungen zu den "hausgeborenen" Sklaven und Sklavinnen im Westen des römischen Kaiserreiches (Stuttgart 1994), 221-225, esp. n.49.

[66] *CIL* XI 871 (Mutina).

vilica, and Dama's *vicaria*. The title *vilica* is, in analogy to the title *vilicus*, widely attested – both by epigraphic and literary sources – in the rural and suburban context of republican and early imperial villa estates. It is not, however, and in contrast to the title *vilicus*, attested in urban or public contexts, but remains within the context of the villa economy as sufficiently made clear in chapter 3 above.[67] If the *vicaria* Nice, then, was in her role as *vilica* engaged in agricultural production at a rural farmstead, her relationship of dependence on her fellow slave Dama, in conjunction with their relationship as partners, would speak for the coincidence of cohabitation with domination.

In recent discussions of this inscription, Nice is interpreted as the *vicaria* of the *vilica*, rather than the *vicaria* of her partner Dama who set up the epitaph for her.[68] This interpretation and translation, which understands the stone set up by Dama to his Nice, the *vicaria* of a *vilica*, and to his loved ones, may well be influenced by the overall reluctance of modern scholars to discover the coincidence I have postulated within agricultural slavery. Yet no matter whose *vicaria* Nice was, the inscription speaks for the existence of sub-ownership structures in any case. Sub-ownership structures amongst agricultural slaves are further corroborated by the relevant legal material, which knows of slaves owned both by *vilici* slaves and by ordinary farm slaves.[69] I do not want to exclude the possibility that Nice was in fact the *vilica*'s *vicaria*, and not her

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[67] On the duties of *vilica* and *vilicus* see generally J.-J. Aubert, *Business Managers in Ancient Rome. A Social and Economic Study of Institores, 200BC-AD250* (Leiden 1994), esp. ch.3; 'Workshop Managers', in W.V. Harris (ed.), *The Inscribed Economy. Production and Distribution in the Roman Empire in the Light of "instrumentum domesticum"* (Ann Arbor 1993), 171-181, at 178, n.50); J. Carlsen, *Vilici and Roman Estate Managers until AD284* (Rome 1995), ch. II and III.

[68] e.g. Aubert, *Business Managers* (n.67), 141 and 461; J. Carlsen, 'The *vilica* and Roman Estate Management', in H. Sancisi-Weerdenburg *et al.* (eds.), *De agricultura: in memoriam Pieter Willem de Neeve* (Amsterdam 1993), 197-205, at 202. See also chapter 3 above, especially pp. 68-70 and 85f.

[69] Digest 20.1.32 and 33.7.12.44.

partner's. But if a male slave was to secure *de facto* possession of his partner, the couple could experience a security in their family life at a level otherwise unknown for slaves. Children born from the relationship would become part of the male slave's *peculium*, his *vernae*. Regardless of the legal right of ownership, which at all times remained with the *dominus*, it was customary for the *peculium* to go with the *ordinarius* in case of sale or any geographical movement of the slave.[70] This principle permitted continuation of family life thereafter; it was also applicable in case of manumission.[71] Thus, the family unit could be maintained without having to purchase the freedom of partner or children. Here, the *peculium* provided not merely the basis for slave family life, as in the case of allowances in the form of animals and land, but could be co-extensive with it.[72] The masters, on the other hand, never lost control over their property due to the juridical framework that regulated slave possessions. At the same time, they benefited from a shift of responsibility, because the obligation to provide for regular food and clothing allowances for these women and children was not theirs anymore, but the duty of the *ordinarius*.[73] He, however, would have benefited from additional (wo)manpower that could be employed in care for his *peculiaria*. Thus, ownership of (female) slaves by (male) slaves made good economic and social sense – both for slaves and masters. I would therefore not be surprised if this principle had been widely disseminated within agricultural slavery of the republican and early imperial period, despite the meagre evidence for it.

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[70] Varro, *De re rustica* II,10,5.

[71] Digest 15.1.53.

[72] So already Barrow, *Slavery in the Roman Empire* (n.15), 102f.

Given the largely agricultural nature of *peculium* allowances that we can discern from our sources within a rural context. it is unlikely that agricultural slaves ever matched the wealth and splendour of their urban counterparts. *Peculium* allowances in an agricultural context were not directed at the accumulation of excessive wealth, for the master or the slave. Rather, they represented a means by which the masters increased the exploitation of their slaves through the shifting of maintenance duties in a variety of ways and at a variety of levels. This shift, however, could allow those slaves who benefited from it greater freedom and control over their own lives, thereby setting and reinforcing status differentials amongst the individual members of the *familia rustica*. Yet, if *peculium* allowances were widespread phenomena, repercussions on the mode of agricultural production at the *fundus* and on slave identity would occur, way beyond those of individual significance. If slaves worked their own land or grazed their own animals, their relationship to the means of production was defined differently than if they didn't – regardless of the question of legal ownership.[74] This concept was heavily employed by Marxist scholarship and projected onto changes in the late Roman empire, which allegedly faced a crisis of slavery as a result of and in conjunction with what appeared to these scholars as a weakening of the separation between the means of production and the slave workers; the *peculium* made the slave "[...] wirtschaftlich unabhängiger, und auch seine Verantwortlichkeit in geschäftlichen Angelegenheiten nahm zu".[75] With this, the *peculium* became a central issue for the debate of the status of agricultural slaves within Roman imperial society as a whole.

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[73] See H. Erman, *Servus Vicarius. L'esclave de l'esclave romain* (Lausanne 1896), 433.

[74] This is in principle recognised by Y.-G. Cha, 'The Function of *Peculium* in Roman Slavery during the First Two Centuries A.D.', in T. Yuge and M. Doi (eds.), *Forms of Control and Subordination in Antiquity* (Leiden, New York, København, Köln 1988), 433-436, at 435f.

[75] cf. E.M. Schtajerman, *Die Krise der Sklavenhalterordnung im Westen des römischen Reiches*. Tr. from the original Russian by W. Seyfarth (Berlin 1964), 107 (original publication Moscow

If, on the other hand, agricultural slaves only just survived on their rations and the produce of their own labour, as is generally presumed for slaves in the period in question here, they may well not have felt much of a difference between working for their master or working for themselves – regardless of the size of any *peculium* allowances they may have had. This may have crucially influenced their ability to develop an economic identity of their own. However, there is clear evidence in our ancient sources that some agricultural slaves acquired an economic identity of their own: they even managed to trade out of their own *peculium*.[76] Columella is well aware of slaves leaving the *fundus* in order to pursue their own business, and he explicitly warns the *vilicus* to stay away from any fair, as indeed not to engage in any speculative business transactions.[77] Depending on size and location, the estate itself could have functioned as a centre for trade, thus reducing the need to leave the *fundus* in order to engage in business.[78] That Columella is averse to his slaves' business activities in their own right is a good analogy for the many slave masters in the modern world who questioned the benefits of slave personal production. However, whilst the wealth of evidence from the modern world allows documentation of both positive and negative attitudes towards slave personal production extremely well, there is no obvious ancient counterpart to Columella's negative approach of his slaves' self-initiated economic activity.[79] However, Varro, like Columella, knows of slaves' business on the borders of the estate or, in any case, of slaves leaving the *fundus* for various reasons,

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[76] Digest 15.57.2 and 15.58.

[77] Columella, *De re rustica* I,8,7; I,8,12f.; XI,1,23f.

[78] Cato recommends holding auctions on the estate: *De agricultura* 2,6f. See on the significance of villas as centres of trade and economic activity also the argument by C.R. Whittaker, 'The Consumer City Revisited: The *Vicus* and the City', *JRA* 3 (1990), 110-117, esp. 115ff.

[79] cf. n.39 above for the modern evidence.

without commenting negatively.[80] Whatever the masters' overall stance may have been, the fact is that Columella and Varro were aware of business activities carried out by slaves – whether they liked it or not. Their testimony for slaves' economic activity in their own right seems to me indicative for the occurrence of slave personal production and access to *peculium* on republican and early imperial villa estates. Yet, the range of social and legal structures dominant in the various modern slave societies, and the highly diversified attitudes and practices that these societies demonstrate towards *peculium* allowances should caution the student of ancient slavery once more against any rushed generalisation. This time, as regards the dissemination and significance of *peculium* allowances and slave personal production in Roman Italy; the much more so since no master was obliged to furnish his or her slaves with *peculium* allowances. Hence, in theory, individual slave personal production and or subsequent business activity in Roman Italy could have been en- or discouraged depending entirely on the view of the individual master, thereby creating a rather irregular pattern. Yet, no master stood outside society.

In a study of 44 slave holding and slave societies that provided sufficient statistical data, Orlando Patterson has been able to demonstrate that on a world-wide scale slave societies which recognise *peculium* in their laws and sanction it socially tend to allow generously for personal production by the slaves, whilst societies that reject *peculium* in law and society are more inclined to restrict slave personal production and to provide for the slaves instead by way of direct allocations and ration schemes.[81] The only obvious dividing criteria between slave societies that recognise *peculium* and those that don't lie in the prevailing mode of subsistence: the more menial the tasks performed by the

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[80] Varro, *De re rustica* I,13,2; I,15,1; I,16,5.

[81] O. Patterson, *Slavery and Social Death. A Comparative Study* (Cambridge MA and London 1982), 182-186.

slaves were, and the more directly they found themselves under the supervision of their masters, the lower their access to *peculium* and personal production. In contrast to fishing communities, which represent the extreme end of societies that do not sanction *peculium* allowances, Patterson concludes that "in pastoral societies, on the other hand, slaves were usually kept as agricultural specialists and often left for long periods on their own. There was an urgent need to motivate them to work on their own, and the *peculium* with its prospects of eventual self-redemption was always the best way of doing so."[82]

The literature, both ancient and modern, on slave *peculium* in Roman law and society is vast, a brief glimpse of which was given at the beginning of this chapter. Despite minor disagreements documented by it, slave *peculium* in Roman Italy was undoubtedly a well-established and recognised legal concept, typical, as Patterson argues, for agro-pastoral societies that relied heavily on skilled slave labour. If we trust the accounts of the agricultural writers and the relevant sections in the legal sources on farm workers and slave labourers, specialisation of labour went hand in hand with the evolution of agricultural estates that were largely slave run and organised.[83] Thus, viewed within this sociological framework, the meagre evidence, literary, epigraphic and archaeological, for *peculium* allowances amongst agricultural slaves in Roman Italy appears to represent merely the tip of a so-far undiscovered iceberg. Although unity of individual approaches appears unlikely, *peculium*, it seems, was a permanent fixture for this form of exploitation, allowing for substantial personal production and economic activity – regardless of what some doubting Thomases like Columella thought about it.

Modern discussion of issues relating to the internal economy of slavery and in particular its modes of production is well advanced in work carried out

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[82] Patterson, *Slavery and Social Death* (n.81), 186.

[83] cf. K.D. White, *Roman Farming* (London 1970), 377-383.

on Brazilian and Caribbean slavery: the issue upon which scholars are divided. however, is "whether this activity [slave personal production] constituted a 'peasant breach' in the slave system or was simply a continuation of the slave mode of production [...]"[84] The development of a proto-peasantry is here seen not only in the slaves' responsibility and care for the production of their own foods, but also in any subsequent business activities that may have grown out of their own food production, e.g. independent trade and marketing of the kind Columella complained about. Discussion of "[...] the desire and ability of slaves to grow and market their own food"[85] within histories of Roman slavery is not entirely missing. The accounts of the 1st Sicilian slave revolt, preserved in the synopses of the 9th and 10th century Byzantine historians who reworked previous texts, took, however, a single extreme approach: they did not allow for the slaves' contribution towards their own diet to be pictured as an acceptable form of slave maintenance, let alone as a sign of an emerging peasant identity, but solely as the result of utter slave exploitation. Because the masters "[...] gave them the least possible food and clothing [...] most of the slaves were forced to provide for their own livelihood by becoming bandits."[86] The same reasoning is applied again to the happenings across the Strait of Messina: "The Italians", we are told here, "who also owned large numbers of slaves, had already made their slave herdsmen so accustomed to the loose controls over them that the slave owners did not need to provide the slaves with any necessary supplies for living, but rather simply allowed them to engage in acts of banditry."[87] What these accounts try and fail to come to terms with is the

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[84] S.B. Schwartz, *Slaves, Peasants, and Rebels. Reconsidering Brazilian Slavery* (Urbana and Chicago 1996), 83; providing also an overview of recent trends in Brazilian slavery studies.

[85] Schwartz, *Slaves, Peasants, and Rebels* (n.84), 8.

[86] Diodorus Siculus 35.2.2; translation taken from B.D. Shaw, *Spartacus and the Slave Wars. A Brief History with Documents* (Boston and New York 2001), 81.

[87] Diodorus Siculus 35.2.27; translation taken from Shaw, *Spartacus* (n.86), 8.

concept of slave maintenance that Patterson identified as predominant in agro-pastoral societies. In contrast, the imperial lexicographer Festus had no problems with the concept of self-supporting slaves when defining the nature of pastureland: "A *saltus*", writes Festus, "is where there are forests and pastures, with houses to enable their exploitation; if some small part of the *saltus* is cultivated to feed the shepherds or watchmen, that fact does not take away the name of *saltus*."[88] The background of this definition lies, I suspect, in complaints about and quarrels with (slave) herdsmen using (public) land, reserved for the pasturing of cattle, to grow food on some part of it, thus distracting from its intended purpose as animal pasture. This could have been the case in Sicily, too. And it is easy to see how such acts of apparent embezzlement could be portrayed as banditry. After all, the use of large tracts of *ager publicus* for the pasturing of the large flocks of wealthy Roman landowners was not unrelated to the suppression of the free local peasantry. Yet, despite the fact that the slaves had the ability to grow, and possibly even market their own food, the extent to which these slave herdsmen both in Sicily and Italy used their own *peculiaria* to add to their *peculium* by way of trade and barter is, interestingly enough, left unquestioned by the evidence.

Nonetheless, what is most notable on the whole is the occurrence of the slave rebel-to-be predominantly in contexts of agro-pastoral exploitation of slave labour.[89] Future discussion of slave personal production (in the ancient world) needs to take account of the link between self-supporting slaves and (large-scale) slave rebellions. At present, rebellious slaves are seen from the

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[88] Festus 392L: *saltus est, ubi siluae et pastiones sunt, quarum causa casae quoque; si qua particula in eo saltu pastorum aut custodum causa aratur, ea res non peremit nomen saltui.* I am grateful to Michael Crawford for having drawn my attention to this passage and for the English translation.

[89] Even the rebellion that was sparked off in the gladiatorial school in Capua thrived essentially from the support of great numbers of agricultural slaves.

point of view of Roman imperialism and its materialisation in the form of large groups of maltreated and neglected first-generation slaves of the same ethnic and linguistic backgrounds.[90] In view of the lack of any slave uprising comparable in size to the Sicilian and Italian revolts in modern slave societies where the features of ethnic sameness and maltreatment of slaves were a given, this historical explanation leaves much unanswered. The argument constructed in this chapter for a widespread dissemination of *peculium* amongst agricultural slaves and the location of its primary function within their maintenance process is aimed at questioning precisely the preconceptions of modern (and ancient) scholarship traditionally employed within the study of ancient slavery that lead to such inconsistencies. Thus, the presentation of the interrelationship between food, status and the *peculium* of agricultural slaves offered here aims not only to rethink the economic and social aspects of slave diet and upkeep, but much more so slave life and slave identity in general, as well as the organisation of a system of economic exploitation that shaped what was to become known as one of the five slave societies of historical times: Roman Italy.

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[90] So recently Shaw, *Spartacus* (n.86), 9f.: "A large proportion of the slaves acquired by the owners of the farms and ranches in Sicily in the first half of the second century B.C. came from the eastern Mediterranean. [They] shared common linguistic, cultural, and religious backgrounds. Moreover, since many of them had not been born into slavery, they also shared the memory of freedom. These factors contributed to their willingness to communicate with each other and to entertain the possibility of armed resistance to enslavement." See already M.I. Finley, *Ancient Sicily to the Arab Conquest* (London 1968), ch.11, esp. 138, and K.R. Bradley, *Slavery and Rebellion in the Roman World, 140BC-70BC* (Bloomington 1989), 41-45, and most recently F.H. Thompson, *The Archaeology of Greek and Roman Slavery* (London 2003), ch.8.

6.

Transforming Italy: Figuring out a Republican Ideal

"But do you not see, as a student of the natural world,
what a plausible matchmaker nature is,
almost a pimp of her own charms?
Do you imagine there is any creature on land or sea
that is not most attracted by its own kind? [...]
Is it any wonder then if nature has taught man
in the same way to think nothing more beautiful
than their own kind?
And this is the reason that we think
gods resemble human beings..."

Cicero, *On the Nature of the Gods* I,77

Cicero was right. Not in denying or defending the human nature of the gods, but in realising that man tends to project images of the unknown from a mental matrix.[1] Historians do precisely the same. However wide our historical imagination may stretch, it is essentially determined (and limited) by the historian's mental set. This, in turn, is shaped by our past experience, and "the resulting dilemma may be stated, for my present purposes, in the form of the proposition that the models and preconceptions in terms of which we unavoidably organise and adjust our perceptions and thoughts will themselves tend to act as determinants of what we think and perceive. We must classify in order to understand, and we can only classify the unfamiliar in terms of the familiar."[2] Such familiarity is rooted in both the society's and the individual's experience, thus allowing for innumerable versions. It follows that it is our very own criteria and interests – be they political, intellectual or else – that keep our historical imagination in check. There is, then, a

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[1] The above translation is taken from M. Beard, J. North, S. Price, *Religions of Rome. Volume 2: A Sourcebook* (Cambridge 1998), 37.

[2] Q. Skinner, *Visions of Politics. Volume I: Regarding Method* (Cambridge 2002), 58f. I see this principle applicable to all kinds of history, from economic history to the history of ideas.

danger for the latter to project meanings onto things past that are not only more akin to our own (modern) perceptions than to the historical period or theme in question, but even historically impossible. However, beyond the creation of the historically impossible – the true domain of fiction – the historian's subjectivity should make us rejoice rather than despair: for if total objectivity was possible to the virtual exclusion of subjectivity, all we could do as historians is to find out *wie es eigentlich gewesen ist*. Textual representations of *wie es eigentlich gewesen ist*, however, are essentially wishful expressions of the antiquarian's mind, and may, even if they were possible, have very little to add to any modern political or social discourse; the latter, however, is the ultimate function of the writing of history.

The image of a model slave population in the republican period, and its repercussions on our view of the transformation of Italy from a peasant to a slave society envisaged in what follows underlies the same constraints. It is guided by this historian's way of looking at things – and thus differs from previously offered versions by necessity. It is based on a view of the slave-run villa estate of the republican period that differs hugely from that generally drawn on.[3] Women and children, and with them slave family life, play an intrinsic part in it. It should not come as a surprise that it has been thought up by a young female historian at the beginning of the 21st century; what should surprise is that it took so long.[4]

Visions of the development of agricultural slavery in the republican period that have informed conceptualisations of the transformation process are

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[3] Namely that of the male dominated slave estate, full of oppression and bar any sentiment, familiarity in personal interaction and normality of daily life.

[4] Equal recognition of the contributions of both sexes to economy and society has been on the academic agenda of the history profession since the eruption of issues of equality between the sexes in modern western society in the late 1960s. Oddly enough, the most persuasive modern account of the transformation of Italy that disregards the female as an economic agent is that by K. Hopkins, *Conquerors and Slaves. Sociological Studies in Roman History 1* (Cambridge 1978), ch. 1, published precisely at the height of feminist study and at the beginning of the use of gender as a means of historical analysis.

largely based on a disregard of the female slave as a valuable economic agent. I have, in contrast, argued in chapters 1, 2 and 3 for the female slave's productive significance and value within republican agriculture. Based on such recognition of female slave labour, I will in this chapter attempt to make sense of the quantitative impact of female slaves on the slave economy of republican Italy, in terms both of reproduction and production. This introduction of the female into the history of agricultural slavery, both in qualitative and quantitative terms, is intended as a contribution to the ongoing discussion on due recognition and representation of all sexes and genders in societies and economies, past and, most of all, present. It is thus open to criticism to reacting more to modern issues and interests than to ancient ones.

A model slave population

Varro disagreed with Cato. In his view, no standard figure could be given for the right number of slaves on either an olive grove or a vineyard: managerial slaves needed to be treated separately; labourers calculated according to the labour requirements; a farm in Liguria was different to a farm in Gaul, and size and soil quality of one's farmland could easily change the labour requirements even within the closest of vicinities. But Cato was not interested in any of this. His idea was to give a rough guideline of the right order of magnitude for the prospective young aristocratic Roman landlord. Rather than providing for all eventualities, Cato created the first model slave population known for the ancient world.[5] Needless to say, chances are slim that the Catonian model ever found full realisation. But this is precisely the nature of ideal types: they do not exist. Instead, if they are any good, they capture reality in a highly stereotyped way, thus ignoring individual, local, or periodical differentiations. In lack of diversified documentary evidence,

[5] See Cato, *De agricultura* 10 and 11, and the comments by Varro, *De re rustica* I,18.

however, such models may be all the historian can work from, and in this, he or she is in not much of a different position than Cato was, or for that matter Varro: neither of the two would have had access to any statistically sound body of source material documenting the development of rural estates across Italy. In fact, Cato is not interested in anything but olive groves and vineyards, and this not even throughout the whole of Italy, whilst Varro admittedly shows a slightly wider concern. Nonetheless, it is notable that Varro does not criticise Cato on grounds of sample size or typology, but merely on grounds of method.

In what follows I intend to create a model slave population of the republican villa estate based on Cato's. I shall wilfully ignore differential needs as they may have applied, but will follow Cato's lead in establishing an ideal type. For this purpose, no distinction will even be made between the slave population of an olive grove or a vineyard, and thus, in accordance with Cato's rough calculations and estimations of the size of the field labour force, the number of labourers set at 15, without due reference to the various (professional) slave types there may have been.[6] Based on the argument for female labour in the previous chapters, an equal number of female slaves will be assumed, thus providing for 15 couples. The main question I attempt to answer in this section is that of the scale at which the presence of female slaves would have contributed to the fertility[7] of the slave population (as part of the population's economic activity). So, the

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[6] Cato's ideal slave population embodied 13 named slave labourers (including managerial slaves) for an olive grove, and 16 for a vineyard: *De agricultura* 10 and 11: "This is the proper equipment for an oliveyard of 240 iugera: An overseer, a housekeeper, 5 labourers, 3 teamsters, 1 muleteer, 1 swineherd, 1 shepherd – a total of 13 persons [...] This is the proper equipment for a vineyard of 100 iugera: An overseer, a housekeeper, 10 labourers, 1 teamster, 1 muleteer, 1 willow-worker, 1 swineherd – a total of 16 persons [...] / *Quo modo oletum agri iugera CCXL instruere oporteat. Vilicum, vilicam, operarios quinque, bubulcos III, asinarium I, subulcum I, opilionem I, summa homines XIII [...] Quo modo vineae iugera C instruere oporteat. Vilicum, vilicam, operarios X, bubulcum I, asinarium I, salictarium I, subulcum I, summa homines XVI.*"

[7] 'Fertility' is used in this chapter throughout to mean reproductive achievement as opposed to reproductive potential.

preliminary question is: what would have happened once our young Roman aristocrat had bought himself a farm as recommended by Cato, and subsequently 'stocked' the villa with *strumenti pensanti*? How would the original slave population have changed over time? And subsequently: how would the slave population's fertility and mortality have interacted to change its size and age structure?

There is no need for fancy models to state that a same sex labour force as regularly attributed to Cato, would have failed to contribute to its fertility and would have consequently left our aristocrat in need to replace 100% of the original slave population through external sources over the years.[8] Figure I (below) shows the demographic behaviour of such a purely male labour force over a 50-year-interval based on Coale-Demeny Model Life Table West Level 0 (with a life expectancy at birth of 20 years: $e_o = 20$). The choice of Life Table is not influenced by wide reaching demographic or historical considerations, but merely on grounds of academic self-denial: Model Life Table West Level 0 provides the highest level of mortality of all Life Tables and thus presents the most severe check for any argument in favour of a population's fertility.[9] Although stable population theories subscribe at best to a highly abstract "view from above",[10] this has been further reinforced here by having renounced on the elaborate kinship universes that are meanwhile available since the advent of computer simulations for demographic behaviour at the micro level: the argument is simple, and so is its presentation.[11] The cut at the age of 65 is influenced on the one hand by the lack of mortality figures in the chosen Model Life Table for males over the age of 65, and

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[8] 'External sources' means all sources other than the fertility of the existing slave population.

[9] cf. A.J. Coale, P. Demeny, B. Vaughan, *Regional Model Life Tables and Stable Populations* (New York 1983).

[10] I borrow this term from G. Santow, 'Sex and Death: Old Cliché, New Reality', *European Review* 10.4 (2002), 501-512, at 507.

[11] For an example of a sophisticated microsimulation for Roman family and kinship structures see

on the other hand by the notion that the slaves' labour ability would have increasingly fallen during this last period of their lives (and replacements necessary).

The age brackets are conventionally set at five-year-intervals. The first column gives the age bracket, the second the number of slaves alive at the beginning of the relevant age bracket, and the last column the death rate (as a percentage) applicable to each age bracket. The figures in parentheses represent the nominal number of deaths in an age bracket according to the original number of survivors at the beginning of the age bracket and the applicable death rate. I have renounced on any rounding of figures in these calculations, but always given up to two digits after the decimal point. The model works with the best-case scenario of a villa estate that has been newly stocked with a group of slaves in their prime working years, i.e. with young adults. As is easily obvious from Figure I, almost a third of the original male slave population would have been dead by the time the surviving slaves reached their late 30s, and more than half of the original slave population by the time these survivors reached their late 40s. However, the need for replacements may not have been acutely felt during the first decade of the life of the estate, but would undoubtedly have made itself known quite severely after the first fifteen years.

This period of relative stability could have been prolonged if internal replacements filled the gaps as could have been the case on a mixed-sex farmstead through natural reproduction. Figure II (below), for which the same considerations apply as made above for Figure I, shows the demographic behaviour of a group of fifteen females in Model Life Table West Level 0. Although the mortality rates for males and females are not identical, the differences are virtually negligible in our simulation; they are mainly due to the greater mortality rate of males in the higher age brackets. Taken as a whole, our adult slave population of fifteen males and

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R.P. Saller, *Patriarchy, Property and Death in the Roman Family* (Cambridge 1994), 43-69.

fifteen females produces a demographic pattern of mortality that would witness a quarter of the original slave population seize to exist by their early 30s: a third by their late 30s; half by their mid to late 40s; a mere quarter still alive by their late 50s/early 60s, but only four to five slaves in their mid-sixties.

Figure I: *Male Slaves*

Age bracket	*Slave Numbers*	*% dying if e_o=20*
15-19	15	6.8% (1.02)
20-24	13.98	8.6% (1.20)
25-29	12.78	10.0% (1.27)
30-34	11.51	12.0% (1.38)
35-39	10.13	14.7% (1.48)
40-44	8.65	18.5% (1.60)
45-49	7.05	22.4% (1.57)
50-54	5.48	25.7% (1.40)
55-59	4.08	30.3% (1.23)
60-64	2.85	35.0% (0.99)
65	1.86	N/A

Figure II: *Female Slaves*

Age bracket	*Slave Numbers*	*% dying if e_o=20*
15-19	15	7.7% (1.15)
20-24	13.85	9.5% (1.31)
25-29	12.54	11.3% (1.41)
30-34	11.12	13.2% (1.46)
35-39	9.65	15.3% (1.47)
40-44	8.17	17.0% (1.38)
45-49	6.79	19.1% (1.29)
50-54	5.49	21.9% (1.20)

55-59	4.29	25.3% (1.08)
60-64	3.21	26.0% (0.83)
65	2.38	N/A

Assuming, then, that our fifteen male and fifteen female slaves would have formed fifteen couples, it is on the other hand not at all inconceivable that fifteen child slaves would have populated the farmstead within a year or two. How many of these, however, would have lived to an age where they could have fully replaced an adult slave, i.e. to our starting age of fifteen (not underestimating the labour ability of children of ages below that)? Figure III (below) shows the demographic behaviour of said fifteen child slaves from birth to the age of fifteen. No distinction has been made between male and female children, because the differences in the mortality rates between male and female children are negligible for our purposes. It is notable that due to the extremely high mortality rate in the first year of life, and the still high mortality level up to the age of five, out of the fifteen children born to our slave population, only 6.38 would reach the age of fifteen. Although this is less than half the child slaves originally born, and may therefore not seem a significant figure, it is in fact very close to the concurrent figure of losses amongst the adult slave population during this period of time: 7.36 (3.87 females and 3.49 males). This however would mean that our ideal slave population could virtually self-sustain itself within its first generation with as little as one child born per slave couple.

Figure III: *Child Slaves (Both Sexes)*

Age Bracket	*Slave Numbers*	*% dying if* $e_o=20$
0-1	15	31.95% (4.79)
1-4	10.21	27.05% (2.76)
5-9	7.45	9.1% (0.67)

10-14	6.78	5.95% (0.40)
15	6.38	N/A

Birth and survival of further children would improve the situation. On the basis of the argument constructed on grounds of nutritional considerations in chapter 4 for a typical survival rate of two children per couple to the age of five, Figure IV (below) shows the demographic behaviour of thirty child slaves (i.e. two per couple) from the age of five onwards until the age of fifteen. Once more, and for the same reasons as given above, no distinctions have been made between male and female children. Thus, the mortality rate applied is the mean between the mortality rates of males and those of females in the relevant age brackets.

Figure IV: *Child Slaves (Both Sexes)*

Age Bracket	*Slave Numbers*	*% dying if e_0=20*
5-9	30	9.1% (2.73)
10-14	27.27	5.95% (1.62)
15	25.65	N/A

Out of the thirty child slaves that survived to the age of five, a large majority, i.e. over 85% of the original number would have made it through to an age where they could have fully replaced an adult slave. Thus, the natural decrease in our model slave population as shown in Figures I and II above would have been counteracted by natural replenishments providing well above three quarters of the replacements needed to maintain the original adult slave population size (i.e. 25.65 new adult slaves replacing 30 original adult slaves). Given that the mortality rates applicable on the first two age brackets, i.e. from birth to the fulfilled forth year of life, translates into a slim 50% chance of survival to the age of five for all children ever born, this means a minimum of four children born to each original slave couple to

achieve these results. The corresponding time investment is difficult to tax: four successful births, plus a weaning period of up to one year for each child, require around 60 months, i.e. five years (four pregnancies of nine months each and three weaning periods of one year less 33% of each to account for the premature deaths of the corresponding number of children during the weaning period in accordance with the mortality rates proposed by Model Life Table West Level 0).[12]

So, if we assume as a minimum a five-year-interval between the two children that a couple may successfully rear to the age of five, the original slave population as a whole would in our simulation have produced 25.65 child slave survivors (CSS) to the age of fifteen at a point when only 10.22 of the slave population's original members had been lost, i.e. roughly twenty years after the establishment of the villa estate and at the beginning of age bracket 35-39 in our model. Even if we assume a ten-year-interval between the two successfully reared children as implied by the argument in chapter 4, the 25.65 CSS would still manage to exceed the number of 13.18 original adult slaves lost after the now necessary 25-year-period from the establishment of the villa estate to produce these CSS. If further to this, we discount those CSS who by the time their younger brothers and sisters had reached full physical maturity (i.e. the age of fifteen) had themselves lost their lives, if, in other words, out of the total of 25.65 CSS, 50% were subject to the mortality rates of the two age brackets covering the decade from years 15-24 (and ignoring sex differentials), our original slave population would after a quarter of a century still prove itself vastly successful in its natural reproduction with a total of 23.64 (i.e. 12.82 plus 10.82) CSS between the ages of

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[12] A shorter weaning period is recommended by Soranos, but it is generally assumed that periods between six to twelve months would have been typical amongst a large section of Roman society: A. Dierichs, *Von der Götter Geburt und der Frauen Niederkunft* (Mainz 2002), 109-111. Shorter weaning periods are also known for the Antebellum South: H.S. Klein and S.L. Engerman, 'Fertility Differentials Between Slaves in the United States and the British West Indies: A Note on Lactation Practices and Their Possible Implications', *William and Mary Quarterly* 35 (1978), 357-374.

fifteen to twenty-five, replacing 13.18 original adult slaves. In other words, at this point in the life of the estate, the slave labour force could benefit from a surplus in (wo)manpower, or the master from the sale of any unnecessary or unwanted (wo)manpower. The farmstead would be populated by a total of around forty adult slaves between the ages of fifteen to forty, and, applying the same considerations for childbirth and child survival as above for the children of the original adult slave population, well over twenty children born in the meantime to the second-generation-slaves. Allowing for additional children born to our original group of slaves, some of which would have stood a chance of survival especially once one or more of the children raised to maturity had left the family unit or brought in additional food supplies, the farmstead could easily have been populated after just twenty-five years from the establishment of the estate by well over twice the number of slaves as it was originally, splitting almost equally into adults of various ages (from the age of fifteen) and children of various ages (up to the age of fifteen).

In the light of this enormous reproductive potential, it would appear foolish if the slaves' master did not ensure suitable conditions that would foster a successful slave reproduction. Issues of early death of one or two parents, or simply infertility and impotence amongst the existing slave population would need to be taken care of. The sparse accounts on slave management in the ancient world leave much to answer concerning the replenishment of a group of slaves through their master's intervention though. The little we have, however, shows an overall concern for a regular assessment of slave numbers on one's estate with the view of providing replacements as and when necessary.[13] Thus, I would suspect regular (e.g. annual) replenishments of slave labourers through external sources on a small scale similar to the restocking of farm animals or farm equipment. These could balance out the natural rate of decrease amongst the adult slaves and ensure

[13] e.g. Cato, *De agricultura* 2,2; Petronius, *Satyricon* 53.

furthermore stability of family life and child care: a small price to pay it seems in exchange for a group of largely home-bred slaves. The masters (or their estate managers) may well have made their decisions on an ad hoc basis: it appears doubtful to me that they developed or imposed any long-term strategies towards the maintenance of their labour force. They may in fact not have been aware of their slaves' overall fertility rate. What they should have been aware of, however, is the substantial contribution to the maintenance of the slave population in the form of own replacements that their slaves could have produced if accordingly looked after.

The scenario is of course an artificial one. It has ignored and purposefully overlooked issues of disease, destruction, or any biological, social and economic interferences. Demographic population simulations based on Model Life Tables have, even at the crudest level, recently come under severe attack even from some of their most devote practitioners for precisely those reasons: chances are high, they underestimate the devastating effect of any major crises.[14] There can't be any doubt that republican Italy was prone to crises of various natures: civil, social and slave wars would have affected large tracts of the Italian countryside; the impact of pests and disease, though theoretically recognised, are virtually immeasurable for us at present.[15] Any of these could have wiped out an existing slave population one way or another at any given location. But this is not the concern of this chapter. The point to be made here is that of the impact which the presence of female slaves could have had on the feasibility of slave family life amongst agricultural slaves from a demographic point of view. The figures as they are may

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[14] So W. Scheidel, 'Roman Age Structure: Evidence and Models', *JRS* 91 (2001), 1-26.

[15] But see for early and late empire W. Scheidel, *Death on the Nile. Disease and the Demography of Roman Egypt* (Leiden, Boston, Köln 2001); *Measuring Sex, Age and Death in the Roman Empire: Explorations in Ancient Demography* (Ann Arbor 1996), ch.4: 'Seasonal Mortality in the Roman Empire', and B.D. Shaw, 'Seasons of Death: Aspects of Mortality in Imperial Rome', *JRS* 86 (1996), 100-138.

underestimate the need for external replenishments of an existing slave population under extreme circumstances, but they vouch for the existence of slave family relations at a significant scale and for the high potential of successful slave natural reproduction in any given slave population. None of this, however, would have been possible without the female slave.

It is essentially irrelevant for my purposes whether 50, 60 or 75% of an existing slave population would have been replenished through internal or external sources. What is relevant is the recognition of the slave family as the standard set for the types of estates described by the agricultural writers. Cato's model slave population was based on this set as much as was Varro's, and Columella's after him. This did not need special mention. Everyone would have known, including our young Roman aristocrat. What needed mentioning where exceptions, alterations, and special cases: the female slave was neither. Her textual oblivion was motivated by her factual normality, as was that of the child slave: both however made a significant contribution to the slave population's economic performance.

There can't be any doubt that the specific set up at any one place would have been influenced by a variety of factors providing for uncountable facets of the theme. After all, the purpose of this section was not to propose the mixed-sex slave estate as the only possible solution; rather, its aim lies purely in making a claim for a change in default: in place of the male-dominated farmstead that has haunted modern scholarship now for almost a century, a farmstead populated with men, women and children ought to be taken as the starting point for future analysis and debate of agricultural slavery in the period of imperial expansion, and with it the nuclear slave family as the standard unit that shaped the slave population of rural Italy.[16] Where better evidence is or may come available, this ideal type will

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[16] *Pace* K.R. Bradley, *Slaves and Masters in the Roman Empire. A Study in Social Control* (New York and Oxford 1987), who, in ch.2, denies that slave family relations could form a crucial part of

have to bend; but in the lack of any such, there is no good historical or intellectual reason to refute it. The proper equipment for a slave-run republican and early imperial estate was, then, a roughly equal number of male and female adult slaves together with their children. *Quo modo praedium quod primum siet instruere oporteat. Homines XV, mulieres XV, nec his venus familiaris longius quid quaerat.* Voltaire's Candide would irrefutably have recognised this as the best of (slave) worlds; Varro, on the other hand, would no doubt have deeply disapproved of it.

From Peasants to Slaves

The mid- and late republic was a period of considerable change, largely, albeit not only, in its mode of agricultural exploitation, virtually throughout the Italian peninsula. What had started off as a countryside almost exclusively worked by family groups of free Italian peasants, is seen by modern scholars in the form it had taken by the late republic as an economy based on the intensive exploitation of large groups of deracinated agricultural slaves. This transformation, symbolised in the expropriation of noticeable sections of the free peasantry from the land through the growth and spread of the so-called slave mode of production, has left a lasting mark on modern demographic conceptualisations: crudely speaking, the general consensus, now for over 100 years, interprets the demographic effect of the middle and large size slave-run estates as a steady decline of the free rural population.[17]

This thesis deals with slaves, not with free people. Therefore it is not my aim, here, to provide yet another account of the transformation process and its meaning for the study of the population of republican Italy. The traditional view as briefly sketched above has long been receiving due criticism from the point of view of archaeology, and more recently also from that of theoretical demography:

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the slave experience because of their susceptibility to disruption by masterly intention.

[17] For a brief recent overview of the discussion see N. Morley, 'The Transformation of Italy, 225-28BC', *JRS* 91 (2001), 50-62.

it is a commonplace now that previous studies may have overemphasized the negative impact of the slave mode of production on the demographic development of the free population in the two centuries before the end of the republic.[18] What I wish to provide, however, is a new angle to the question of slave-versus-free labour in the republican countryside, an angle that, I believe, may have a bearing on the overall picture of the transformation process of republican Italy, and that, needless to say, is based on the argument for female slave labour made in the previous chapters.

There is, then, a serious flaw in modern attempts to conceptualise the changes in population density and forms of labour that may have affected the Italian countryside in the republican period. This flaw was already fully developed in its quantitative form and set into the larger demographic theme in Keith Hopkins' *Conquerors and Slaves*: based on Columella's figures for the cultivation of a piece of arable, Hopkins concludes that "this suggests that the same area of land could support either twenty free colonists' families, comprising some eighty men, women, and children or just eight adult male slaves."[19] Although others were less optimistic regarding the man-power saving involved in the change from peasant to slave farming, the main point of error remained the same: Dominic Rathbone still argued for a lower profitability of traditional peasant farming compared with the exploitation of slave labour, although not on grounds of labour productivity, but on grounds of labour organisation; yet, as Hopkins before him, Rathbone viewed a villa's labour force, in contrast to the peasant family, as virtually exclusively male. His model for the permanent slave labour force that could have been exploited at a villa like that of Settefinestre in Etruria comprised twenty people in total: "1 'vilicus', 1 'vilica', 13 vineyard workers, 2 for the

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[18] e.g. D.W. Rathbone, 'The Development of Agriculture in the 'Ager Cosanus' during the Roman Republic: Problems of Evidence and Interpretation', *JRS* 71 (1981), 10-23; Morley, 'The Transformation of Italy, 225-28BC' (n.17).

olives, 1 swineherd, 1 shepherd and 1 for good luck".[20] Both Rathbone and Hopkins, and with them the economic history of the slave-run villa estate as it stands today, assumed the female as an insignificant and essentially unproductive economic agent – either explicitly or by way of implication. What one is subsequently left with is a picture of the Italian countryside which, at varying degrees depending on the researchers' preference, suffers from the effects of heavy depopulation and a simultaneous masculation of the labour force in its change from peasants to slaves. In other words, one ends up with what has more generally been criticised as "[...] the all-too-familiar idea that the only people who do any work in the Mediterranean countryside are male."[21] Women and children, as Hopkins had made sufficiently clear, only cost.[22] What, however, happens if we introduce the productive female slave into the type of equations figured out by these scholars?

One of the problems with agricultural labour is its high seasonal fluctuativity. A Catonian-type olive grove or vineyard would at times of peak labour demands, e.g. during or just after the harvest, require three times the number of casual labourers than throughout the rest of the year. It is therefore not surprising that Cato seems to imply harvests to be let out to external buyers who supplied the labourers; he does, however, also contemplate the possibility for the harvest to be taken care of by the slaves of the villa, including the post-harvest activities (e.g. the storing) for up to one year.[23] The problem with the latter scenario is that an estate that was fully equipped in terms of *man*power to cope with all agricultural activities even at peak times, would for most of the year carry

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[19] Hopkins, *Conquerors and Slaves* (n.4), 107.

[20] Rathbone, 'The Development of Agriculture' (n.18), 12, n.10.

[21] L. Nixon, 'Review of: P. Horden and N. Purcell, *The Corrupting Sea. A Study of Mediterranean History* and F. Braudel, *The Mediterranean in the Ancient World*', *JRS* 92 (2002), 195-197, at 196.

[22] Hopkins, *Conquerors and Slaves* (n.4), 106.

[23] cf. the various model contracts in Cato, *De agricultura* 144-148.

a largely unproductive labour force. In concrete terms, a *familia* comprising some twenty male slaves for a vineyard of 100 *iugera* as that imagined by Rathbone for Settefinestre, although numerous enough for the agricultural labour required for most of the year, would need to be assisted by another forty casual labourers during those times of peak labour demands, thus tripling the labour force. If those additional forty labourers were permanently resident on the estate, i.e. if they formed part of the permanent slave *familia*, this increase in numbers of labourers would also lead to an increase in the size of the estate in order to maintain this larger labour force from the land, assuming as Rathbone does that self-sufficiency was not only an ideal but a reality. If before, the twenty slaves could be sustained, as Rathbone calculated, from a piece of wheat- and legume-bearing arable of 120 *iugera* – thus forming a total estate size of roughly 250 *iugera*, i.e. 100 in vines, 120 for the slaves' food, and another twenty or so for vineyard materials – the additional forty slaves would raise the size of land for the slaves' food crops by another 240 *iugera* – and thus the total estate size to roughly 500 *iugera*.[24] The profitability of an estate thus equipped was, if viewed from a purely androcentric perspective as traditionally done, relatively low because of the high level of unproductivity of the agricultural labour force for most of the year. The profit figures calculated by Rathbone, in *sestertii* (assuming production of some 2340 amphorae of wine at 10 HS each and a depreciation value per male slave of 100 HS per year) are thus:

Estate value (500 *iugera*)	500,000
Sale of wine	23,400
Amortization of 60 slaves	6,000
PROFIT	17,400 = 3.5% of estate value

The result of this model is a view of the exclusively slave-run estate as that of a

[24] All these figures taken from Rathbone, 'The Development of Agriculture', (n.18), 12-15.

commercial enterprise with a relatively low level of profitability. Compared with an estate that makes use of free hired harvest labourers at peak times in addition to the permanent slave labour force of twenty male slaves – achieving a profit level in relation to the estate size of 7.2%, or with an estate that makes exclusively use of free hired labour throughout and that does not employ any slaves at all – achieving 8.6% profit of estate value, or with an estate fuelled by métayage – achieving 7.3% profit of estate value, the slave mode of production, with a profit level of 3.5%, presents a somewhat poor show.[25] In the first instance, then, using these simple profitability models employed by Rathbone for the rural villa of Settefinestre, the slave mode of production, based exclusively on male slave labour, seems the least profitable and desirable form of labour organisation at a villa estate, and the huge success of the villa economy in the period of imperialist expansion not easily explained by this apparent economic disadvantage of a form of labour organisation that has virtually become its synonym.

If, on the other hand, an estate that needed at peak times of agricultural labour three times the number of labourers than throughout the rest of the year could secure such labour in a labour force that could add to the productivity of the estate throughout the rest of the year, the figures could change dramatically. A slave *familia* that was demographically structured as the one idealised in the previous section of this chapter would fit the bill perfectly: twenty adult male slaves, twenty adult female slaves, and forty children from the age of one to fifteen; a total of 80 persons, capable of supplying the kind of additional casual farm labour that was needed throughout the two months that were dominated by the harvest work (assuming that all the women and half the children were physically capable of farm work). Those who may be sceptical of the labour capacity of women and children need only be reminded of the fact that, as

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[25] The calculations for the various different ways of organising labour are in Rathbone, 'The Development of Agriculture' (n.18), 14.

Rathbone stated, "the vintages and hop harvests of modern France and Germany rely heavily on student labour",[26] i.e. on a labour force that throughout most of the year is engaged in an activity of a less physical nature. Although the actual slave numbers increase in this model, there is no need to increase the area of arable land for the slaves' food crops in comparison with that estimated by Rathbone for an estate supporting sixty adult male slaves; in fact, the calorific needs of twenty adult females and forty children of mixed ages, assuming the daily requirement figures used in chapter 4, is around $^1/_6$ lower than that of forty adult males. Thus, instead of an additional 240 *iugera*, only 200 *iugera* need adding to the original estate size of 250 *iugera*. At this point of the game, those women and children would, at the very least, not incur more maintenance costs than an additional adult male labour force of forty slaves. At the same time, however, this mixed-sex slave labour force would contribute to its own natural reproduction. Even if we set the reproduction rate substantially lower than what was proposed in the argument in the previous section of this chapter, say around a third of home-bred slaves, this would cut the amortization figure by 33%, i.e. to 4000 HS. Thus, the mere presence of women and children, who could help out during the harvests, would in fact raise the profitability of the villa estate by almost 1%:

Estate value (450 *iugera*)	450,000
Sale of wine	23,400
Amortization of 80 slaves	4,000
PROFIT	19,400 = 4.3% of estate value

To continue, then, the women's own productivity needs to be accounted for. Let us assume that our twenty female slaves were, as suggested in chapters 1 and 2, regularly engaged in textile production. Let us assume further that a quarter of the children could *fully* assist them therein (assuming that half the children were male and would not be engaged in spinning and weaving, and that half the female

[26] Rathbone, 'The Development of Agriculture' (n.18), 15.

children were too young to be good spinners, etc.). And let us finally assume that these thirty textile workers would engage in the spinning of wool for around 3.5 hours per day: a typical time investment in textile production for women within a domestic context.[27] So, supposing that thirty female slaves engaged for ten out of twelve months (i.e. for 305 days, thus excluding the times of harvest labour) in textile production on a part-time scale (and in analogy to the model of low economic potential presented in chapter 2), the total number of hours invested in the spinning of wool was $30 \cdot 3.5 \cdot 305 = 32025$ hours. Given that wool is averagely spun at a speed of 100 metres per hour, this makes a total of 3.202,500 metres of wool thread per year. Weaving, on the other hand, was far less time-consuming than spinning. Leaving aside the possibility that an estate may employ professional weavers as Varro implies,[28] the women needed to invest another hour of weaving for every ten to twelve hours of spinning, i.e. just over a quarter of an hour per day for each woman's thread, or a total of nine to ten hours per day. Not an impossible task. For ease of argument, I will furthermore assume that the wool was woven into basic, but decent tunics, i.e. a garment that could be tailored on the loom. An adult's tunic requires about $3m^2$ of cloth. The weaving of $1m^2$ of fabric requires about 3000m of thread, i.e. 1500m for the warp and 1500m for the weft.[29] Hence, the 3.202,500 metres of wool thread would produce $1067.5m^2$ of fabric, or 356 adult wool tunics.[30]

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[27] cf. K. Carr, 'Women's Work: Spinning and Weaving in the Greek Home', in D. Cardon and M. Feugère (eds.), *Archéologie des textiles des origines au V^e siècle* (Montagnac 2000), 163-166; L. Larsson Lovén, 'LANAM FECIT – Woolworking and Female Virtue', in L. Larsson Lovén and A. Strömberg (eds.), *Aspects of Women in Antiquity* (Jonsered 1998), 85-95.

[28] Varro, *De re rustica* I,2.21.

[29] Carr, 'Women's Work' (n.27), 164, argues for a typical use of double ply for the warp in the Greek world, i.e. a total of 4500 metres of thread for the production of $1m^2$ of fabric; yet, there is no evidence for woven double ply in the Roman world: J.P. Wild, *Textile Manufacture in the Northern Roman Provinces* (Cambridge 1970), 45, confirmed by personal comment, June 2003.

[30] As in chapter 2, all figures for the economics of spinning and weaving are taken from Carr, 'Women's Work' (n.27), 164f.

Clothing was a precious item in the ancient world, one which not everyone could afford at the same level. Diocletian's edict of maximum prices from the early 4th century AD lists alone thirteen varieties of woollen thread and 336 different kinds of cloth, excluding varieties with purple, from the cheap and cheerful to the rich and beautiful.[31] The few prices we have from Roman Italy equally suggest a substantial diversity in quality and price, although the anecdotal nature of most references makes it difficult to gain a realistic perspective from them.[32] Clearly, as with other luxury goods, there was hardly a limit for the most precious pieces. On the other hand, the majority of the population would have purchased at the lower end of the scale. Even Cato apparently boasted himself for having acquired his complete outfit comprising a toga, a tunica and a pair of shoes for 100 *denarii*, i.e. 400 HS.[33] The shoes would have taken the smallest part of the bill, the toga the largest. The tunica could have cost him as much as 100 HS (setting a minimum of 250 HS for the toga aside). There is little doubt that others could and would have spent multiples of this on their clothing. Yet, although Cato was renowned for his personal meanness, not everyone could have afforded clothes even at that price. In the back streets of Pompeii and Herculaneum, tunics may have been sold at a fraction of the money Cato had spent on his: the cheapest went on special days of sale for as little as six to fifteen *sestertii*.[34] These would hardly have been comparable to some of the better quality garments listed in the prices edict, or to those worn by even the meanest republican senators. The tunics

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[31] cf. M.H. Crawford *et al.*, *The Aphrodisias Copy of the Prices Edict* (forthcoming), ch. 55 for wool, ch. 56 for cloth, and ch. 57 for cloth with purple.

[32] cf. the lists of prices in S. Mrozek, *Prix et rémunération dans l'occident romain (31 av.n.è. – 250 de n.è.)* (Gdansk 1975), 37-39, and M. Prell, *Sozialökonomische Untersuchungen zur Armut im antiken Rom. Von den Gracchen bis Kaiser Diokletian* (Stuttgart 1997), 106-114 and 184 (and 186 for his list of food and clothes allowances).

[33] *Plutarch*, Cato Maior 4,3. On Cato's outfit see also Prell, *Sozialökonomische Untersuchungen zur Armut* (n.32), 184.

[34] cf. *CIL* IV 9108 (Pompeii) and *CIL* IV 10664 (Herculaneum).

produced on our villa estate, on the other hand, would have been of medium quality: Columella thought that clothing produced on the estate was of the right quality for his managerial farm slaves, thus implying a decent, albeit not flash fabric.[35] This aspect of quality also explains why Cato recommends the purchase of clothes for his slave labour force in the markets of nearby Rome – those produced at the villa would have been too good for them.[36] Therefore I will assume an average market price of 30 HS per tunic, i.e. less than a third of Cato's tunic, but at least twice the money of the cheap poor quality tunics offered to the town plebs.[37] If we then work with an average market price of 30 HS, the 356 tunics would bring in 10680 HS per annum. The new profit calculations for the estate are thus:

Estate value (450 *iugera*)	450,000
Sale of wine	23,400
Sale of tunics	10,680
Amortization of 80 slaves	4000
PROFIT	30,080 = 6.7% of estate value

Of course, one could argue that the estate owner preferred to employ free hired labour for the harvest work, in which case the profit calculations are as follows:

Estate value (450 *iugera*)	450,000
Sale of wine	23,400
Sale of tunics	12,780
Amortization of 80 slaves	4,000
Free labour (1,750 man-days)	3,500
PROFIT	28,680 = 6.4% of estate value.

The figure for the sale of tunics has risen to 12,780 HS, i.e. 426 tunics at 30 HS each, due to the women's engagement with spinning and weaving for a full twelve months period as opposed to a mere ten as in the previous model. Although the

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[35] Columella, *De re rustica* XII,3,6.

[36] Cato, *De agricultura* 85.

[37] I ignore questions of special dies and finishes which could raise the market price as they would obscure the argument.

difference in the profit between the two scenarios is marginal, it is nonetheless worth noting at this point that the employment of free labour was less profitable than that of the full slave labour force only. On the whole, however, both profit levels are already suspiciously close to those estimated by Rathbone for the models with the least slave-carrying capacity. None of this has stretched our female slaves to their productive limits. If they just spent another thirty minutes per day on spinning, plus the additional three minutes of weaving per person, the profit could rise to just over 7%, but again remains slightly below that, 6.8%, if additional free labour is hired for the harvest work. If they had spent a full additional hour on spinning, i.e. a total of 4.5 hours per day and person, the profit could be 7.4%, or again marginally below that, 7.2%, if free hired labour is called in for the harvest. It is notable once more that in all scenarios the hiring of free labour is less cost-effective than the use of the female labour force for additional farm labour, despite the fact that it'll free the female slaves to engage also during this period in textile production.

To achieve a profit margin in excess of that calculated by Rathbone for an estate worked exclusively by free hired labour, namely 8.6%, through an increase in textile production, would require a daily spinning time of six and a half hours if the women helped in the harvest, or six and a quarter hours if the additional harvest work was carried out by free hired labourers. There is clearly scope to take matters even further. Textile production on a professional or semi-professional level need not be restricted to the kind of time investment that textile production in the private household may have been experiencing. There is plenty of epigraphic evidence from urban slave *familiae* that suggests a virtually exclusive occupation with textile production by specifically chosen and trained members of the slave household.[38] Although the kind of assemblages of funerary inscriptions that urban *familiae* have produced are totally lacking for rural slave

[38] cf. S. Treggiari, 'Jobs for Women', *AJAH* 1 (1976), 76-104, at 81-86.

households, some references in the legal sources could be interpreted to propose a similar set-up at the masters' rural enterprises.[39] Given the possibility to spin at odd hours of the day, including the hours after sunset but before going to bed, the various time investments considered so far are anything but far-fetched. Even in the most demanding scenario which requires the female slaves to engage in textile production for more than six hours a day, they would still have plenty of time for such activities as cooking and general food preparation, and, not to be forgotten, active childcare. More than half their waking time (allowing for a generous eight hour sleeping or resting time) is still left open for other occupations: this does not break the 'family-mould'. Thus I think it possible, if only for sake of argument, to contemplate an occupation with textile production by these female slaves, which would take up roughly half their waking hours, i.e. around eight hours a day. (Again these need not be concentrated in the middle of the day in the way working days in large parts of the modern world are currently structured).[40] If, then, our thirty female textile workers were occupied with spinning (and weaving) for just over half their working day (accounting for seven and a half hours of spinning and around half an hour of weaving), the numbers of tunics produced would rise to over 760, and the level of profit in relation to the estate value to 9.4%:

Estate value (450 *iugera*)	450,000
Sale of wine	23,400
Sale of tunics	22,875

[39] Digest 33.7.12. Cf. also K.R. Bradley, *Slavery and Society at Rome* (Cambridge 1994), 58-65.

[40] Evidence for the lengths of working days in modern slave societies suggest peaks of up to 75 hours per week, i.e. over ten hours per day of heavy field work. Of course, working days for many activities were seasonally dependent, and could change from region to region, but there is no reason to assume that activities that were not equally seasonally dependent would have been carried out at a lower level of labour input: R.W. Fogel and S.L. Engerman, *Time on the Cross. The Economics of American Slavery* (Boston and Toronto 1974), 207-209. Cf. also P.A. David and P. Temin, 'On the Measurement of Labor Inputs', in P.A. David, H.G. Gutman, R. Sutch, P.Temin, G. Wright (eds.), *Reckoning with Slavery. A Critical Study in the Quantitative History of American Negro Slavery* (Oxford 1976), 209-214.

Amortization of 80 slaves	4,000
PROFIT	42.275 = 9.4% of estate value

If additional free hired labour was called in for the harvest, the numbers of tunics would be well over 900, and the level of profit in relation to the estate value 9.6%. For the first time, the female slaves would produce at a market rate that exceeded that of their male counterparts quite obviously. More interestingly, however, is the fact that in this scenario the cost of hiring additional free labour for the harvest work would be more than balanced out by the returns of the female slaves' productivity (which was not the case before):

Estate value (450 *iugera*)	450,000
Sale of wine	23,400
Sale of tunics	27,375
Amortization of 80 slaves	4,000
Free labour (1,750 man-days)	3,500
PROFIT	43,275 = 9.6% of estate value

These figures suggest that it was most profitable to keep the female slaves busied with textile production throughout the whole year. It also suggests that the maximum level of profit could only be achieved if free hired labourers were called in for the times of peak labour demands in the agricultural operations of the estate. It implies furthermore that the hiring of free seasonal labour proves only fully successful if the women's productive energy is exploited at a relatively high level. Without the free hired labourers, the profitability of the slave-run estate would marginally sink; without the female slaves, it would hardly be worth consideration.

None of this is impossible to think. It does not require a view of agricultural slavery beyond the possible. If anything, it may provide some answers for the huge success of a system of agricultural production that became a landmark for Roman Italy: the slave-run villa estate. It may also throw some light on the workings of an industry that has long been puzzling modern scholars of Roman Italy, and for which the towns have failed to supply either good evidence or the basis for an enticing model: textiles. It does, moreover, provide a model for the

workings of the villa estate that is both consistent with the evidence for free hired labour – in terms of both the literary evidence such as Cato's harvest contracts, as well as of the archaeological evidence for the continued existence, if not growth, of small farms in the republican countryside along with the larger slave-run villa estates – and that of the evolution of a slave society in the ancient world that lacks a precedent in scale as well as its economic and social location. That the masters should not have noticed the profitability that the combination of male and female slave labour, supported by seasonal employment of free hired labour, could have brought in, seems incomprehensible to me. Just as it seems incomprehensible that, given the above, the female slave could have been mistaken by them as an insignificant and essentially unproductive economic agent; that mistake was left for much later generations to make.

The evidence for such economically significant production, even at the highest imagined level, would not have been numerous: spindle equipment and looms, as argued in chapter 2, leave as a rule little trace in our archaeological record. The usual culprits, a couple of loom weights and the odd spindle whorl, have traditionally found hardly any economic discussion. If they found mention at all, it seems to be more for reasons of comprehensiveness than historical analysis. The economic activity required by the female slaves to turn the slave-run villa estate into a truly valuable commercial enterprise, as imagined in this section, consisted to a large extent in the spinning of wool, and to a lesser extent in the weaving of fabric. It is irrelevant whether the women would have shared out the spinning and weaving equally amongst them, or whether some specialised in one, the others in the other activity – the argument was kept schematic in this respect for reasons of clarity. What is relevant from the point of view of archaeology and its historical interpretation, however, is the extremely small number of those means of production that were required for the activity with the highest chances of archaeological survival: weaving on the warp-weighted loom. The weaving in the

scenario with the lowest profit level would have taken up a total of up to ten hours per day; the weaving in the scenario with the highest profit level up to fifteen hours per day. What this means is that the number of looms required for this level of production was two at the most (allowing for active use of each loom for a maximum of 7.5 hours per day in the scenario with the highest profit level). Given that the average number of loom-weights would have been somewhere around fifty per loom, and allowing for some spares, the weights needed at any one time was not many more than 100. The archaeological records for textile implements typically found at republican and early imperial villa sites as discussed in chapter 2 appear to match such a small number of the means of production quite nicely: the excavators of the so-called Posto villa at Francolise duly considered a small, yet multiple number of looms from the evidence.[41] What they – and others – have not considered is the potential economic significance of this *discovery*. Instead of being evidence for an economically marginal occupation with weaving by the *vilica*, one or two looms would have been sufficient to keep the production of woven fabrics going at an economically significant scale. Cato's recommendations for the inclusion of two looms in the inventory of a vineyard that was directed at market production, was not a silly thought at all; on the contrary: it is evidence for his head for business.[42] All it takes to trace its realisation back from the archaeological record – within the kind of set-up assumed in the scenarios imagined above – is a couple of weights.

It has been said that "whatever the economic and social implications of the Roman 'villa system' – and here the debate has hardly begun – it is nevertheless astonishing that a casual stroll in anywhere but the most mountainous areas can bring to light the remains of what is recognisably a Roman villa or farm. No-one can ever guess how many villas there may have been, but it is their very ubiquity

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[41] M.A. Cotton, *The Late Republican Villa at Posto, Francolise* (London 1979), 76.

which most vividly underlines the huge wealth and success of Roman Italy."[43] As the villas were a part and a symbol of the splendour that was Roman Italy, so the female slave was a part and a symbol of the republican villa estate that made this splendour possible. We cannot, of course, know in detail how far business economics and profitability levels influenced villa planning and labour organisation at the farmsteads; the ownership of land and slaves brought along social prestige, and that may have been equally important to the average Roman aristocrat than outstanding returns from their investments. Just as we cannot know, as yet, how far the kinds of estates described by the agricultural writers were spread evenly across the Italian countryside, or in a rather hap-hazardous manner.

Villas like that of republican Gravina di Puglia, outstanding in both level of specialisation in sheep rearing and the number of textile implements in its archaeological record, would have had a greater need for textile workers than some suburban farms just outside Rome that specialised in market gardening and other cash crop production.[44] Only the archaeology of the Italian countryside may one day be able to provide a more detailed picture of the productive landscape of Roman Italy. Until then, we should refrain, however, from any rash conclusions of the Apulia=sheep and Etruria=wine type. Columella, who knew the situation in Spain well and who owned farms in Latium and Etruria, took the production of textiles on his estates obviously for granted, as did Cato and Varro before him in their purely Italocentric view. The production of textiles, after all, does not require the rearing of sheep *in loco*; what it does require, to be a profitable undertaking, is easy and cheap access to the raw produce, i.e. the fleeces of sheep. These however could be readily available through access to sufficiently large flocks of sheep transhuming through the Italian countryside. Of course, Etruria may not have been

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[42] Cato, De *agricultura* 14.2.

[43] T.W. Potter, *Roman Italy* (London 1987), 124.

[44] A.M. Small (ed.), *Gravina. An Iron Age and Republican Settlement in Apulia*, 2 vols. (London

much of a sheep ranching area in republican times as Rathbone contends:[45] but this does not exclude the Tuscan villa owners to own flocks that could deliver the raw produce at regular intervals to their villa estates. Varro's sheep, in any case, wintered in Apulia, but returned to near his farm in Reate during the summer months.[46] And how else would these Roman aristocrats have benefited at a noticeable level from the secondary produce of their flocks? The sale of the raw produce, i.e. the fleeces would have only brought in a fraction of the monies that fully tailored woven garments could fetch. It is, then, not a coincidence, I think, that the spread of the villa as a productive system went hand in hand with the growth of flocks and pasture lands in republican Italy. What made this such a hugely profitable combination, however, was the female slave.

Let us return, now, briefly to the question posed at the outset regarding the demographic development of the population of republican Italy, and in particular, the relationship between slave and free: one of the central aspects of estimating a total population size is the proportion allocated to these two sections of society. Although the nominal figures offered from Beloch to Brunt, and from Hopkins to Morley differ, the ratio between slave and free has remained surprisingly settled over the years, being somewhere between 1:3 and 1:4; a further aspect regularly brought into consideration is that of the carrying capacity of the land, i.e. the extent at which the rate of production exceeds the rate of consumption.[47] Both aspects are intrinsically linked to the question of labour organisation in the countryside as a whole and at the slave-run villa estate in particular. If we, then, recall the crude 'exchange rate' put forward by Hopkins,

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1992), II:218-226.

[45] Rathbone, 'The Development of Agriculture' (n.18), 12.

[46] Varro, *De re rustica* II,Intr.6 and II,2,9.

[47] cf. K.J. Beloch, *Die Bevölkerung der griechisch-römischen Welt* (Leipzig 1886), 413-443; P.A. Brunt, *Italian Manpower, 225 BC - AD 14* (Oxford 1971), 121-130; Hopkins, *Conquerors and Slaves* (n.4), 101; Morley, 'The Transformation of Italy, 225-28BC' (n.17).

namely that counter-positioning eight adult (and single) male slaves with eighty free men, women and children, i.e. an 'exchange rate' of 1:10, the introduction of the female slave into the economics of the slave-run estate has obvious consequences beyond those sketched for its level of productivity.

I do consider it as premature to postulate a new all-Italy-embracing population figure merely on the basis of the model slave population argued for in this chapter, and its consequences on the 'exchange rate' between the original free peasant population and the new incoming agricultural slave population. Clearly, if the model gets anywhere near the truth, the number of slaves in the countryside of republican Italy has been hugely underestimated. However, all that a new estimate of both total population size and the ratio between slave and free could provide, at this point, is yet another more or less intelligent guess devoid of any meaning. As K.D. White, at a similar point in the argument once said, "where there are so many imponderable factors, it is surely better to avoid repeating stock generalisations, and look at the evidence."[48] The evidence, however, is not, as Rathbone has made sufficiently clear, to be found in "further introspective critique [of the literary sources]", but in "the archaeological evidence for rural settlement patterns in Italy during the Republic."[49] Survey work and actual excavation have vastly progressed in the last two decades, allowing for more detailed propositions of the occurrence of sites, both small and large, in a given area over a given period.[50] It is on the basis of such data that we may be able, region by region, to establish a more sophisticated picture of the population structure of republican Italy with the help of

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[48] K.D. White, 'The Productivity of Labour in Roman Agriculture', *Antiquity* 39 (1965), 102-107, at 107.

[49] Rathbone, 'The Development of Agriculture' (n.18), 10.

[50] e.g. in the Tiber Valley: H. Patterson and M. Millett, 'The Tiber Valley Project', *PBSR* 66 (1998), 1-20, and H. Patterson, *et al.*, 'The Tiber Valley Project: The Tiber and Rome through Two Millennia', *Antiquity* 74 (2000), 395-403. For a preliminary report on fieldwork in a specific area in the Tiber Valley see H. di Giuseppe, M. Sansoni, J. Williams, R. Witcher, 'The *Sabinensis Ager* Revisited: A Field Survey in the Sabina Tiberina', *PBSR* 70 (2002), 99-149.

models as the one proposed here. The margin of error will still be large because status allocation of any one site, even if excavated, is extremely difficult and ultimately depends on the researcher's decision. So does the application of a population model on a specific site. In how far the 'family model' proposed here for agricultural slavery can be applied to villa sites across the whole of the peninsula may be a matter of contention. Yet, lack of evidence as well as of regional and site-specific differentiation did not stop previous generations to work with the 'male-only-model' virtually throughout. A simple change in default may at the very least provide new grounds for fresh debates on old issues. Various reasons for doing so have been put forward in the course of arguing for this thesis. Whatever the conclusions derived from it for the population of Italy may be, there is little doubt that the ratio between slave and free was influenced and determined by the economic profitability and success of the slave-run villa estate. This however was influenced and ultimately determined by the economic contribution of one of its main productive agents: the female slave.

Subjects Matter: The Female Slave and Ancient History

Women and slaves have, historically speaking, received lesser recognition, political, social and economic, than their male and free counterparts, female slaves even less so. Yet, modern intellectual interaction with slavery, ancient, has been given a firm place in the study of ancient worlds, including Roman Italy, virtually from the beginning of academic engagement with ancient societies and economies. In contrast to the more recent interest in the study of ancient women, slavery studies form thus part of a long intellectual tradition. The reason for this lies in an overall acceptance of the significance of slavery for an understanding of both society and economy by modern scholarship. Women have only slowly been catching up. However, although women and gender studies have struggled to and succeeded in getting a place in the range of topics regularly discussed today, their findings have not changed the way in which mainstream topics of Roman history are being approached: from Roman imperialism to agrarian history, from the slave mode of production to the economic history of Roman Italy: they are continuously written without providing a central stage for the female element. Yet, not only have women been allocated extremely circumspect roles in these, if any, what is written does not appear to be in need of them. They are amongst the lesser subjects that historical writing has produced.

The female slave is no exception. Despite the overall acceptance of the significance of slavery studies within the writing of ancient history, her place has been more than negligible, and at best random to main issues of discussion. Yet, in embracing the status both of the slave and that of ancient woman, the female slave can be the missing link so badly needed by modern scholarship to bridge this gap and to develop a more balanced picture of ancient life, political, social and economic.

I have argued in this thesis for the female slave's central role within

the set-up of the villa economy. Starting from a re-reading of some few scraps of literary sources in Chapter 1 on the basis of an anthropological model of economic roles of women in pre-industrial societies. I demonstrated that our ancient sources can contain a wealth of information way beyond what is obvious through study in a traditional way: the agricultural writers from Cato to Columella, instead of documenting a steady linear development in the use of female slave labour during the period of Roman imperialist expansion, in fact are silent witnesses to an ongoing exploitation of the female on rural estates. Whatever changes there may have been in the exploitation of the female agricultural slave, they are not obvious in our agricultural manuals.

If the female slave was, as I argue, a permanent fixture on the rural estates of the aristocratic Romans, then one could expect her presence to have left a mark on the ground: the archaeology of female (slave) labour is however a matter of deep content. In Chapter 2 I question traditional approaches to the study of material remains with special reference to the female agricultural slave. Whilst it has never been a problem for modern scholarship to trace male slaves in the archaeological record, the female slave was denied such recognition, superficially on grounds of the limited number of 'female' artefacts in the material record. My main concern in this chapter lay in uncovering the dependency between the recognition of 'male' artefacts and historical models that favour an androcentric reading of the evidence – to the virtual exclusion of the female from both the model and the ground. In its place, I offer a model of interpretation of archaeological remains that is consistent with wider economic hypothesis of the Roman world as well as unbiased in its interpretation of both male and female gendered artefacts.

Yet, the problem is not only one of lack of evidence. In the case of the highest female agricultural slave, the *vilica*, abundance of epigraphic evidence has been pushed aside in order to maintain a picture of lower economic importance of this specific type of female slave in comparison with the male

farm manager, the *vilicus*. Chapter 3 presents the inscriptions relating to farm managers and to their female counterparts, on the basis of which source material traditionally employed to sketch a relationship of personal dependence between *vilicus* and *vilica* will be questioned. The result of this inquiry portrays the *vilica* as an important member of the staff of a villa estate, regardless of her personal relationship to the *vilicus*.

Having thus made a claim for the existence and overall significance of female agricultural slaves on villa estates within the sphere of economic production, the remaining three chapters investigate its quantitative, social and practical consequences. The question that may be most puzzling is that of the numbers of female slaves, and subsequently of child slaves, in relation to male slaves on any one estate. By studying the recommendations of Cato for grain and wine allowances for the slave *familia* from a nutritional point of view, a presence of female slaves equalling in number that of male slaves is being suggested in Chapter 4. It concludes in proposing the nuclear slave family as the standard type for agricultural estates in the period of Roman expansion.

This argument is further developed in Chapter 5 by concentrating on the issue of slave possession, especially *peculium* allowances. Whilst these may have been by and large a privilege of male slaves, they formed the basis for slave family life and were thus equally important for female slaves. However, although *peculium* allowances were in my view a general feature amongst agricultural slaves, not all would have received at the same level: differences in slave possessions could and would mean differences in the family size which an agricultural slave would and could maintain. In thus viewing *peculium* allowances as part and parcel of slave maintenance and slave organisation, aspects of rural slave life that were hitherto obscured and generally not accepted become clearer and more comprehensible: slave personal production, strong family ties, and a highly diversified slave community.

The final chapter, then, picks up on issues that were brought to

attention in previous chapters: the first section of Chapter 6 is reserved for the construction of an ideal type of a slave *familia* from a demographic point of view – thus developing the point made on the standard set of the nuclear slave family in Chapter 4 and setting it into a model of the larger slave community. The second section of Chapter 6 imagines an economic hypothesis based on the one hand on the kind of slave *familia* calculated in the first section of this chapter, and on the other hand on the kind of economic potentials discussed already in the context of the archaeology of female slave labour in Chapter 2. The result is understood as a challenge to views of the female as an unimportant economic agent. More to the point, the model not only shows the profitability of rural estates dependent at its highest level on the inclusion of female slaves into the labour force, but even more so the female slave in her own right as an economic agent with a difference.

Recognition of the female slave as pursued in this thesis demands a rereading and rewriting of central topics of ancient history. More generally, it claims historical significance for those that have been allocated little or none: subjects do matter. Villa estates without the female slave show a very different historical pattern than estates with female slaves: the location of the textile industry in urban centres, the place of villa estates within the wider economy, views of Roman imperialism and its importance for the Roman slave supply, the transformation of Italy from a peasant to a slave society, concepts of slave life and slave identity: all in their current state depend on the male-dominated villa estate. To change the latter means to change the whole picture. Yet, this thesis is only a beginning. Inclusion of the female agricultural slave, as well as of women on the whole, into our interpretative frameworks is, historically speaking, a very recent development. However, problems of evidence and its autopsy can no longer be persuasively employed as an excuse for the overall reluctance to deal with these subjected elements of history. Nor can scholarly austerity any longer claim a value-free and unbiased approximation to the study

of the ancient world. Instead, a bit of theory, historical imagination and a scholar's passion for his or her subjects may be all that is needed to continue changing the default, a default that *is being changed* simply by the act of historical writing. It is that act of the historian, the practice of history itself, that *is* the end of the current imbalance, and that *by itself* changes the present.

Epilogue:

A Liar's Tale

The God tapped the Liar on the shoulder.
"Tell me some lies."
"I've told you all I know, Great House."
"All you can think of, you mean," said the Head Man.
"They wouldn't be lies if you knew them."
William Golding, *The Scorpion God*

A few months back now, I enjoyed a jovial conversation with Lindsay Davis, the novelist, best known, probably, for her stories of sex, crime and passion set in ancient Rome. I was curious to hear about Lindsay's next book; Lindsay, in turn, kindly inquired about my work. "Still in progress", I replied, then. The same, Lindsay assured me was the case with hers. "However", she proceeded, "this comparison isn't quite valid, after all, you are engaged in the writing of history", she said looking at me, "whereas I am writing fiction." Lindsay persevered to exclaim that whilst she may get inspiration from ancient literary sources or visits to ancient sites in Italy, her work was not based on any true case or event known from antiquity, that, in fact, her professional obligation as a novelist demanded of her to decline any intended similarities with true happenings and, dead, missing or alive. Her stories were thus essentially the result of her imagination as a writer. I picked up the conversation at this point to add that, of course, my professional obligation as a historian demanded of me to claim that any similarities in my work with any real persons or happenings of the past were not only intended but indeed truly wanted. A silence occurred at this point. And I cannot now remember who of us broke it first; but I do remember very clearly that it didn't take us long to agree upon the fact that in thus describing our professional roles, we were, of course, both lying.

Appendix:

No more slave-gangs: Varro, *De re rustica* I,2,20f.

The image of large slave-gangs ruthlessly worked on the agricultural estates of aristocratic Romans has been haunting the writing of Roman slavery for some time now.[1] For over one hundred years, historians have seen the wealthy aristocratic Roman as investing "[...] his money in flocks of sheep and herds of slaves, both of which he treated as beasts of the field."[2] During the period of the late republic, this took the form of a "[...] systematic organization of gangs on the farms attached to the residential villas of the rich [...]", soon to be seen as "[...] prototypical of the 'slave mode'."[3] One of the passages regularly employed to support the notion of a merciless plantation culture in republican Italy is Varro, *De re rustica* I,2,20f:

20: *Nec ullae, inquam, pecudes agri culturae sunt propriae, nisi quae agrum opere, quo cultior sit, adiuvare, ut eae quae iunctae arare possunt.*
21: *Agrasius, Si istuc ita est, inquit, quo modo pecus removeri potest ab agro, cum stercus, quod plurimum prodest, greges pecorum ministrent? Sic, inquit Agrius,* ***venalium greges*** *dicemus agri culturam esse, si propter istam rem habendum statuerimus. Sed error hinc, quod pecus in agro esse potest et fructus in eo agro ferre, quod non sequendum. Nam sic etiam res aliae diversae ab agro erunt adsumendae, ut si habet plures in fundo textores atque institutos histonas, sic alios artifices. Scrofa, Diiungamus igitur, inquit, pastionem a*

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[1] So most persuasively argued in modern times by K. Hopkins, *Conquerors and Slaves. Sociological Studies in Roman History 1* (Cambridge 1978), chs. I and II, esp. pp. 8-11. But see already H. Wallon, *Histoire de l'esclavage dans l'antiquité*, 2 vols. (Paris 1879), II:96, who sees Roman agricultural slaves as on a par with "ces bandes de nègres conduites au travail".

[2] R.H. Barrow, *Slavery in the Roman Empire* (London 1928), 69.

[3] C.R. Whittaker, 'Circe's Pigs: From Slavery to Serfdom in the Later Roman World', in M.I. Finley (ed.), *Classical Slavery* (London 1987), 88-122, at 90.

cultura, et siquis quid vult aliud (my emphasis).

Translators and commentators are unanimous in their translation of *venalium greges* as slave-gangs,[4] because, as one of them tells us, "[...] *venalis* may be applied to anything which can be sold and therefore is used as a synonym of *servus*. The Romans regarded the slave-labourer on the farm as being on a par with the farm beasts. *grex* is primarily applied to herds of animals, but it is also used for crowds of people, not usually, however, in a good sense."[5] A typical translation of the above passages thus reads:[6]

20: No animals, said I, come within the province of agriculture save those which can help the soil to greater fertility by their labour, as for example those which yoked together can plough the land.
21: If what you say is true, said Agrasius, how are you to disconnect cattle from the land, seeing that dung, which is of the greatest use to it, is furnished by herds of cattle? Then, replied Agrius, we must say that **a troop of slaves** belongs to agriculture, if we decide to keep one for that purpose. No, the mistake arises from the fact that cattle may be on the land and be productive of revenue on that land; but you must not make this fact an argument; for if you do, other things as well which have nothing to do with land will have to be admitted – as when a farmer has several weavers on a farm with buildings set apart for weaving, and so on for craftsmen. Well, said Scrofa, let us separate stock-raising from farming, and all the other things to which objection may be taken on this ground.

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[4] e.g. D. Flach, *Marcus Terentius Varro. Gespräche über die Landwirtschaft. Buch 1* (Darmstadt 1997), 170 speaks of 'Sklavenherden'; J. Heurgon, *Varron. Economie Rurale. Livre I* (Paris 1978), 18 speaks of 'les troupeaux d'esclaves'; W.D. Hooper, *Marcus Terentius Varro. On Agriculture* (Cambridge/Mass. 1934), 178ff. speaks of 'slave-trading [as a part of agriculture, if we decide to keep] a gang'; L. Storr-Best, *Varro on Farming* (London 1912), 17 speaks of 'a troop of slaves'; B. Tilly, *Varro the Farmer. A Selection from the Res Rusticae* (Foxton 1973), 42f. and 151, speaks of 'gangs of slaves'.

[5] Tilly, *Varro the Farmer* (n.4), 151.

[6] Taken from Storr-Best, *Varro on Farming* (n.4), 16f.

The combination of *grex* with *venalis* has indeed a precedent in Plautus' *Aulularia*, and there refers to a group of people.[7] Cicero, too, uses it once to refer to a Cappadocian purchased *de grege venalium*.[8] Other passages that predate or are contemporary with Varro's *De re rustica*, including those just cited, use *venalis* by itself or in combination with other terms to refer to a whole range of things, from fish for sale to men acquired on slave markets.[9] Where the meaning implies men (and not animals), this is made clear either by the context in which the term appears or some additional specification (e.g. *homines*). But is this the meaning implied by Varro?

The background of the conversation between Varro and his imaginary friends Agrasius and Agrius is a debate over the right subject matter for a treatise on agriculture. The discussion becomes heated when the question comes on to cattle, which, unless directly employed for the cultivation of the land, ought in Varro's view be excluded from further treatment. Yet, the manure of cattle was indispensable for the successful cultivation of the land, and Agrasius thought it thus difficult to exclude a treatment of cattle, thereby prompting Agrius' reply that contains the passage in question. '*venalium greges*' can mean, as stated above, groups of slaves, but what would be the consequence of this translation in this context?

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[7] Plautus, *Aulularia* 452: *ite sane nunciam omnes, et coqui et tibicinae, etiam intro duce, si vis, vel gregem venalium, coquite, facite, festinate nunciam quantum libet*. Cf. also Plautus, *Cistellaria* 733: *Mirum quin grex venalium in cistella infuerit una*. For later occurrences see Aulius Gellius VI,4.4 and Suetonius, *De grammaticis et rhetoribus* 25,5.

[8] Cicero, *Post reditum in senatu* 14: *[...] Cappadocem modo abreptum de grege venalium diceres*.

[9] Plautus, *Rudens* 974: *in foro palam omnes vendo pro meis venalibus*; Cicero, *Pro Sestio* 134: *cum vero ne de venalibus quidem homines electos, sed ex ergastulis emptos nominibus gladiatoriis ornarit [...]*; *De oratore* I,246: *[...] nec quisquam est eorum, qui, si iam sit ediscendum sibi aliquid, non Teucrum Pacuvii malit quam Manilianas venalium vendendorum leges ediscere*; Vitruvius II,9,1: *uti etiam corpora muliebria, cum conceperint, ad foetus a partu*

What does *ista res* refer to? The commentators are almost unanimously quiet about it – and for good reason. The demonstrative pronoun *iste* requires a referent previously introduced, and generally one that was put forward by another or an opposing speaker. This, however, would suggest that the *res* referred to is the enhancement of the soil through the manure, the only item brought into the discussion by the previous speaker Agrasius. The Romans sought to exploit their slaves in virtually all sorts of ways possible. But do we really want to imagine slave-gangs as kept on the land for *that* purpose?[10] Well, I don't.

One could, of course, stipulate that Varro was only making a pun: he is, after all, well known for playing games with his readers. But the level of crudeness required by the translation traditionally offered for this passage is in my view not at all akin to Varro's sense of humour. Similarly, one could argue that the *res* in question was the cultivation of the land itself – *agri cultura* purely linguistically speaking. But that would not make much sense of the discussion, and indeed of the very sentence itself. For whatever is kept for the sake of agriculture proper, is a part of agriculture and need not be questioned. The point here, however, is that the *venalium greges* are usually not regarded as the right kind of subject matter for an agricultural handbook; they are obviously not normally used to improve the cultivation of the land through their labour. This however is precisely the function of agricultural slaves. Bertha Tilly (n.4 above) was very correct in stating that the Romans perceived the ordinary farm hand as on a par with the working animals, i.e. with those that were needed for various cultivation processes – the ox under the plough being the example chosen by Varro here. The only distinction made by Varro between man and

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non iudicantur integra, neque in venalibus ea, cum sunt praegnantia, praestantur sana [...].

[10] So Flach, *Marcus Terentius Varro* (n.4), 241 without comment. Of course, just like today, human excrement, like animal dung, would have been used when available, but not by keeping

animal is that symbolised by the labels attached to either: the slave labourers are regarded as '*instrumenti genus vocale*', and the plough oxen, etc. as '*instrumenti genus semi-vocale*'; both are set in contrast to the '*instrumentum mutum*', i.e. to tools, machines and other such necessary appliances on a farmstead.[11] Leaving these distinctions aside, what all three have in common is their allocated purpose: *agri quibus rebus colantur* – they are the means by which the soil is cultivated, and they thus form part of agriculture proper. [12]

If that is so, however, and I cannot see any reason to distrust Varro in this, especially since the attribution of slave farm labourers to the *instrumentum* of an agricultural estate is heavily supported by the legal sources,[13] the slaves' contribution and resulting relationship to the agricultural processes is beyond doubt. There is no point in using them as a controversial example in this

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people directly on the land.

[11] Varro, *De re rustica* I,17,1.

[12] Ibid. Cf. also Varro, *De re rustica* I,19,3.

[13] See generally Digest 33.7, especially Digest 33.7.8: "*In instrumentum fundi ea esse, quae fructus quaerendi cogendi conseruandi gratia parata sunt, Sabinus libris ad Vitellium euidenter enumerat. quaerendi, ueluti homines qui agrum colunt, et qui eos exercent praepositiue sunt is, quorum in numero sunt uilici et monitores: praeterea boues domiti, et pecora stercorandi causa parata, uasaque utilia culturae, quae sunt aratra ligones sarculi falces putatoriae bidentes et si qua similia dici possunt, cogendi, quemadmodum torcularia corbes falcesque messoriae falces fenariae quali uindemiatorii exceptoriique, in quibus uuae comportantur. Conservandi, quasi dolia, licet defossa non sint, et cuppae* / Sabinus states plainly in his books on Vitellius that those things are included in the *instrumentum* of a farm which are provided for the producing, gathering, and preserving of the fruits. Thus, for producing, the men who till the soil and those who direct them or are placed in charge of them, including stewards and overseers, also domesticated oxen and beasts kept for producing manure, and implements useful in farming, such as plows, mattocks, hoes, pruning hooks, forks, and similar items. For gathering, such things as presses, baskets, sickles, scythes, grape-pickers' baskets in which grapes are carried. For preserving, such things as casks, even if not set in the ground, and tuns." (Text and translation taken from *The Digest of Justinian*. Latin text edited by Th. Mommsen with the aid of Paul Krüger. English translation edited by A. Watson, 4 vols. (Philadelphia 1985)). For a brief modern discussion of the *instrumentum fundi* see U. John, *Die Auslegung des Legats von Sachgesamtheiten im römischen Recht bis Labeo* (Karlsruhe 1970), 8-12.

discourse. Moreover, Scrofa makes it plain that it is the issue of the *venalium greges* that leads to the exclusion of pasture activities from the subsequent discussion. The slave labourers, being by their very purpose of an agricultural 'nature', in contrast, stay in.[14] Do we have to conclude then that Varro contradicted himself?

There is, I think, a much simpler and more straightforward solution that can be offered to solve the riddle. So far, I have simply sought to demonstrate the problems arising from a translation of *venalium greges* as slave-gangs. Let us now return briefly to the discussants' subject matter, the setting of which is that of a republican agricultural estate engaged primarily in the production of cash crops such as olives and wine. Cato's inventories of both an olive grove and a vineyard – whether precisely exact or not is irrelevant in this context – knows of working animals, including cattle such as plough oxen or donkeys to mill the grain, but also by implication of flocks of sheep and herds of swine, probably kept at the farmstead all year round.[15] Varro in fact devotes the second book of his agricultural treatise entirely to the herding and pasturing of cattle directed at the intensive production of both primary and secondary produce. Even if the majority of large flocks of the kind Varro has in mind were subject to seasonal movements, some animals would have remained at the farmstead throughout the year, not least precisely for the reason given by Agrasius.[16] Such animals were distinct from the working animals used for ploughing the fields or for turning the mills.[17] In the course of the discussion, Varro had to differentiate the two categories of animal. The best way to do so

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[14] See Varro, *De re rustica* I,17,4-I,18,8.

[15] Cato, *De agricultura* 10 and 11.

[16] On sheep-rearing, pasturalism and transhumance see generally J.M. Frayn, *Sheep-Rearing and the Wool Trade in Italy during the Roman Period* (Liverpool 1984), and M.L. Ryder, *Sheep and Man* (London 1983), ch.12; on the use of manure see Ryder, *Sheep and Man*, 735.

[17] I do not wish to imply by this that the manure of working animals was not used for the benefit

was to use a term that could be applied to anything which could be sold or which was likely to be subject to sale. Flocks of sheep, even if kept on a large scale for the benefit of secondary produce, fit this category nicely. The maintenance of a highly productive flock would have incurred a good amount of buying and selling of individual animals on a regular basis. Most of all, however, we need to think of the selling of offspring that were superfluous for the maintenance of the flocks but that would have increased these on average by two-and-a-half times their original size when the lambs were born. Such a flock would truly deserve to be referred to as *venalium greges*. The same would apply to herds and flocks of animals on villa estates that actually dealt in the production of these animals for market (as opposed to production of secondary products). The pig breeding at the villa estate of Settefinestre in Etruria, as evidenced by pig-stalls and osteological remains in the archaeological record, is a good example of this.[18] To turn these animals out on your land and make use of their dung before these little piggies go to market would be the obvious thing to do. No market-oriented farmstead could have renounced this kind of fringe benefit, and those that were not set up to benefit incidentally from it would have gone out to acquire animals precisely for this purpose.

The discussion between Varro and his friends centres on this interplay between agriculture proper and those activities that became more and more intertwined with the medium- and large-size rural enterprises of aristocratic Romans. Varro and his friends, in the paragraph in question, concern themselves essentially with nothing but the finding of a meaningful (literary) distinction between farming and herding, between the cultivation of the land and the ranching of large flocks of sheep on the land. It is this interplay between

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of the farmland.

[18] A. Carandini *et al.* (eds.), *Settefinestre. Una villa schiavistica nell'Etruria romana*, 3 vols. (Modena 1985), II:182-188.

agriculture proper and the use of large tracts of cultivable land for non-cultivation purposes that had become a major issue in the politics, economy and society of the maturing republic. One need only think of the Gracchan efforts to keep flock sizes and pastures under control, or the clear social distinction implied by the concept of a special pastoral way of life, the *pastoralis habitus*, repeatedly referred to by Livy, who regarded the inhabitants of predominantly pastoral settlements as *ignobiles populi*.[19] In a society that was accustomed to see agriculture as the only acceptable economic pursuit of the respectable gentleman, the increase in large-scale pastoral activities, alongside and in conjunction with the growth and rapid spread of the slave-run agricultural estate, asked at the very least for some comment, if not explanation or even justification. Cicero, for instance, found it necessary to describe the owners of large flocks of sheep as 'reputable men endowed with great distinction'.[20] Varro, although declining to bridge the gap completely and to treat agriculture together with pastoralism in a single volume, nonetheless reserves a whole book for the latter subject too. Cato before him had not chosen to do so.

It is this wider historical context that can inspire a better translation for the phrase in question than those previously offered. Varro's *venalium greges*, then, are flocks of (market) animals, belonging to the realm of pastoralism and described accordingly in order to differentiate them from the ordinary working animals of a rural farmstead. The translation of the above passage should thus read:

20: "No cattle", I said, "are a proper part of agriculture unless they can help to cultivate the soil through their labour like those that can plough under the yoke."

21: "It that is so", said Agrasius, "how can cattle be taken off the land if the

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[19] cf. Livy 9,2,2; 9,36,6; 29,38,1; 30,19,10.

[20] Cicero, *Pro Cluentio* 198.

manure, which adds so much, is delivered by the herds of cattle?" "This being so", rejoined Agrius, "we could argue that **flocks of animals for market** are part of agriculture if we decide to keep them (on the land) for this purpose. But the mistake is that this doesn't follow simply because cattle can be on the fields and can bring in returns on these fields. Otherwise we would have to include other things which would take us away from the fields, for instance if you have on the estate a number of weavers and weaving establishments, or other craftsmen." "Let us then distinguish pastoralism from agriculture", said Scrofa, "and anything else anyone would like to."

This translation and interpretation is fully consistent with the end of the discussion between Varro and his friends, which concludes, as mentioned above, in the exclusion of pasture activities from the subsequent debate on agriculture; that, however, contains a lengthy discussion of slave labourers, not including, of course, any gangs.[21] This is not the place to debate issues of agricultural slavery in republican Italy. I have simply sought to demonstrate that a passage traditionally employed to paint a grim picture of rural slave life does, in fact, have nothing to do with it. Its widely accepted translation rests on an equally widely accepted prison-camp-image for agricultural slavery in the republican period.[22] I have argued elsewhere that the concept of a male-dominated slave system, based on a reduction of personal and physical liberty as typically assumed in connection with the gang-labour-system, is not consistent with the bulk of the evidence.[23] Here, I have simply tried to show that there are no slave-gangs in Varro's *De re rustica* I,2,21.

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[21] Varro, *De re rustica* I,17,4-I,18,8.

[22] The most emphatic recent statement along these lines is that by T.E.J. Wiedemann, 'Roman Slavery: The Prison-Camp-Analogy', Unpublished Paper given at the Anglo-American Conference of Historians, London 30 June – 2 July 1999.

[23] U. Roth, 'Food Rations in Cato's *De agricultura* and Female Slave Labour', *Ostraka* 11.1 (2002), 195-213.

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