

ABSTRACT

Modelling Roman Imperialism: Landscape and Settlement Change in Italy

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Through the evidence of regional surface survey, this thesis explores the range of landscape and settlement change in Italy contemporary with Roman imperial expansion. An important role model and starting point for this research is provided by Alcock's (1993) *Graecia capta*, which similarly uses the results of a selection of regional surface survey projects to characterise the impact of Roman imperialism on a macro-regional scale. The general theoretical framework for this research is provided by post-colonial perspectives on the nature of imperial relations. These emphasise consideration of Roman Italy as not the study of imperialism but colonialism.

The recent publication of several major Italian regional surface surveys provides the basic data. These survey results are subject to thorough 'source criticism' in the light of recent work on their collection and interpretation. In particular, emphasis is placed upon the identification or recovery of data regarding their methodological diversity in order to assess the potential for comparison between their results. The approach is developed in detail for the Biferno Valley Survey using a range of statistical techniques, Desktop Mapping and Geographical Information Systems. The latter represent an important development in the handling of survey data and their utility is explored in detail through a case study application to the area around the Samnite/Roman town of Larinum, in the lower Biferno valley.

Having explored methodological influences on the diversity of survey results, attention then focuses on a range of models, which can be used to assess the reasons for the marked variation in social and economic development across post-conquest Italy. In particular, attention is focused towards scale as an important means of conceptualising the tensions between change and continuity, similarity and diversity.

**MODELLING ROMAN IMPERIALISM:
LANDSCAPE AND SETTLEMENT CHANGE IN ITALY
VOLUME ONE – TEXT**

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Chapter One

INTRODUCTION

The potential of Roman rural archaeology has hardly been tapped...

(Dyson 1992: 20)

1.1 *Introduction*

The aim of this research is to characterise the landscape and settlement change identified by Italian regional archaeological survey and to use this to explore the dynamics of Roman imperialism. This is neither an historical narrative of Roman expansion in Italy, nor a corpus of archaeological survey data. Rather, through discussion of recent theoretical perspectives, assessment of a range of survey data and a detailed case study of the Biferno Valley Survey, including a Geographical Information Systems (GIS) component, this research provides the beginnings of a new, more critical, synthesis of Roman Italy – fragments of an archaeology of Roman imperialism.

1.2 *Aims of Thesis*

The following research stems from a comparatively simple question: is it possible to recognise Roman imperialism through the archaeological record – specifically, through the evidence of regional archaeological survey? If so, what was the character of this historical process? Did imperialism effect the same responses across the Italian peninsula or was there diversity in the experience of empire? In order to answer the first question it is necessary to deconstruct understanding of what we believe imperialism to be and to assess the theoretical and practical issues involved in its recognition in the archaeological record. In turn, these apparently simple tasks require detailed assessment of the nature of the historical and archaeological evidence. Both resources are value-laden, the products of constantly shifting theoretical and methodological considerations. The motives of ancient and modern historians alike must be deconstructed, as must the results of archaeological surveys. The changing significance of these two resources also has major implications for understanding of the relationships between them.

Some sixteen years ago, the (then) significant number of Italian surveys prompted Cherry to state:

I am enough of an optimist to believe that we are at, or fast approaching, the stage when synthesis and comparison at a geographical scale considerably larger than that of the individual survey would be worthwhile. Indeed, this is already quite clearly so in Italy, where sufficient good-quality surveys have been executed in widely scattered parts of the country for it to be apparent that different regions have their own rhythms and patterns of change.

Cherry (1983: 406)

To date, the most effective response to this challenge (see also Sherratt 1996: 150–6) has been Susan Alcock's seminal *Graecia capta* (1993), in which survey data are used to re-write the Greek experience of Roman imperialism (reviews include Mattingly 1994; Shipley 1997; see also Bintliff & Snodgrass 1988). This book represents one of the few in-depth attempts to compare between individual surveys in order to assess the variability of settlement history at a provincial level. Many of the problems encountered are directly paralleled in the Italian context; as a result, Alcock's methodologies and conclusions are of critical importance to this thesis. The significance placed upon her work in the following research is testament both to its significance in its own right and to the lack of similar comparative syntheses for other regions of the Empire. Indeed, Cherry's own suggested subject area for a macro-regional comparison – Italy – remains unserved by such work. A central objective of the present thesis is therefore to explore processes of settlement change and Roman imperialism across Italy by building upon Alcock's work and criticisms of it, in order to make a contribution towards the achievement of Cherry's vision (see Barrett 1997a; Greene 1995; Woolf 1994).

In Greece, Alcock (1993: 91–2) identified a broad uniformity of historical development across the province (cf. Bintliff 1997: 14); superficial assessment of Italian regional archaeological surveys demonstrates significant variation in their results (e.g. Greene 1986: 103–9; Patterson 1987: 134–8). This may not be unexpected – Roman expansion across Italy took place within the context of highly diverse Italian societies. However, as well as historical and geographical diversity, there are major depositional, post-depositional and, thus, methodological considerations which have a potential influence on the results of these surveys and their comparability. In short, is the diversity attested by these surveys genuine or a product of methodological differences?

The influence of methodology upon the results of surface survey data has long been discussed (e.g. Plog 1976): however, its significance in terms of the comparability *between*

datasets has only come to the fore in recent years (e.g. Alcock 1993: 49–71). The means to address this major issue lies with the concept of metadata – that is, data about data (Wise & Miller 1997: 1). Concerns about the recording and dissemination of archaeological metadata in general are reflected in the work of the Archaeological Data Service (ADS). However, despite the increasing awareness of the importance of metadata particularly for the interpretation of survey archaeology (Bintliff & Sbonias in press; Cherry 1983; Francovich & Patterson in press; Mattingly in press; Schiffer 1987), the ADS is not currently planning a specific *Guide to good practice* similar to those published, or in preparation, for other aspects of archaeological research (e.g. GIS – Gillings & Wise 1999). The collation and assessment of metadata for thirty regional archaeological surveys therefore forms a central objective of this research.

In the sixteen years since Cherry identified the potential of macro-regional comparison in Italy, a further significant number of major regional surface surveys have been completed and/or published; these provide a massive body of material for the assessment of the nature of Roman imperialism across Italy. The surveys discussed in detail in the following research range in date from the 1950s to the 1990s and consequently there are major differences in their basic methodologies and standards of publication. This makes the collation and use of metadata even more important for their evaluation, interpretation and comparison.

As well as critically assessing received theoretical frameworks and the significance of the data themselves, the basic research questions outlined above require the definition of a series of models through which to conceive of, and identify, Roman imperialism. The application of these models and the assessment of their utility and results form another important objective of this research. In particular, the radical shift in attitudes towards imperial and colonial relations as part of post-colonialism and, more generally, post-modernism, is of direct relevance to this thesis (Golden & Toohey 1997; Loomba 1998; Said 1993; Shanks & Tilley 1987). Although Roman studies have traditionally demonstrated reluctance towards such ‘revisionism’ (see Webster 1996: 10), there is a growing corpus of publications which explore post-colonial theories with the explicit aim of deconstructing Romanocentric models of imperialism; this has led to a proliferation of alternative perspectives (e.g. Dench 1995; Mattingly 1997a; Mouritsen 1998; Webster & Cooper 1996). Despite this progress, to borrow the conclusion of Barrett’s (1997a: 7) assessment of Roman studies, ‘the archaeology of the Roman Empire has hardly begun’. Some of the major implications of these perspectives, especially for the relationship

between historical and archaeological evidence, have yet to be explored in detail. A more specific challenge, discussed in section 1.4.2 below, is the need to shift attention from imperialism to colonialism.

As well as the availability of data and the elaboration of suitable theoretical frameworks, the rapid adoption of Desktop Mapping and Geographical Information Systems (DTM/GIS) techniques by archaeologists is another important stimulus for this research. Particularly in relation to regional surface survey, these relatively new Information Technologies have provided archaeologists with a powerful new toolkit in the analysis of archaeological data. In part this has been directed towards the more efficient realisation and/or enhancement of existing analytical and interpretative frameworks: that is, for the collation, manipulation and presentation of spatially referenced data (primarily Desktop Mapping applications – see Fisher in press). Other projects have attempted to use these technologies to facilitate new analytical and interpretative approaches (primarily GIS techniques). Within the context of the present research, both DTM and GIS techniques are used to look at the results of the Biferno Valley Survey.

Here, it is important to stress that GIS does not offer a tool for the comparison of these survey data *per se*. In order for the real potential of GIS to be developed, it is vital that undertakings such as this thesis – and on a much larger and more ambitious scale, as an integral part of the Tiber Valley Project (Patterson & Millett 1998; see below) – collect and analyse the metadata which shape survey results before they are entered into a GIS. Only by understanding the ‘significance’ of these data can such retroactive GIS applications move beyond automating tasks and perpetuating existing theoretical and interpretative frameworks, avoid disguising the incompatibility of these data, and eventually facilitate their comparison. Currently, the greatest contribution of GIS to the comparison of survey data is the improvement of our understanding of individual surveys.

Together, these stimuli, possibilities and methodologies encompass a wide range of general issues concerning how archaeological data are collected, integrated with historical evidence and interpreted. This research attempts to reach out between these rifts and opportunities to demonstrate the benefits that a theoretically informed and more reflexive synthesis can reap – it is precisely in bridging these gaps that the most interesting avenues for research in Roman studies lie. In this context, it is important to outline the work of the current Tiber Valley Project (Patterson & Millett 1998). Organised by the British School at Rome, this long-term, multi-disciplinary project shares many of the same stimuli, aims

and objectives as the present research. The project is centred upon the reassessment and full publication of the South Etruria Survey (section A.4.1) and the integration of these data with new fieldwork in the middle Tiber Valley. A team of specialists is currently studying the survey archive of *circa* 300 crates of (largely ceramic) material, utilising up-to-date and consistent typologies for the entire collection – previously, the piecemeal collection, study and publication of the material over forty years meant that different areas were classified and dated inconsistently. These data are being entered into a relational database, which houses additional information about findspots, such as recovery conditions and uncollected material. This database is fully integrated with a Geographical Information System which allows these survey data to be combined with topographical and other environmental information, aerial photographs, satellite imagery, geophysical data and a range of other archaeological sources. Through the full-time involvement of the author with the Tiber Valley Project over the next three years, it is hoped to implement some of the approaches outlined here and to build upon the conclusions reached.

Behind the basic aims and objectives of this thesis lie a series of stimuli, both theoretical and methodological; it is their integration herein that constitutes the originality of this work and its wider relevance. The persistence of arbitrary divisions within Roman studies has been widely recognised as an obstacle to the development of more productive approaches to the period (Cornell 1988: 205). This thesis goes some way to reversing this situation by integrating and synthesising the data and models derived from ‘sub-disciplines’; this approach has been seen as vital in order to assess the wider subject’s current status and its future progress (*ibid.*: 202–5; see Curti *et al.* 1996). This thesis does not intend to produce a comprehensive overview akin to that provided in Potter’s *Roman Italy* (1987) – the attitude towards both theory and data is fundamentally different (see Scott 1993a: 1–2). However, it does build explicitly upon Potter’s objective of an integrated synthesis of the rich – and, to borrow Dyson’s (1992: 20) term, untapped – evidence of Roman Italy.

1.3 Structure of Thesis

The remainder of Chapter One deals with the definition of imperialism and colonialism and considers the relationship between their historical and archaeological manifestations. Chapter Two then provides an historical outline of the Roman conquest of Italy. This includes a critical assessment of the nature of the historical sources and a detailed critique of some of the principal theoretical frameworks of contemporary historical perspectives such as the slave mode of production.

Next, Chapter Three assesses the issue of identifying imperialism within the surface archaeological record through discussion of the nature of this material resource. A range of behavioural/depositional and post-depositional factors condition the form of the archaeological record and are discussed accordingly. However, attention is focused upon the way in which survey methodology impinges upon the nature of the results achieved and their interpretation: this is because such influences are both central to our understanding and the most easily addressed through retroactive study. Methodological considerations are also important because the rapid development of survey techniques makes the simplistic comparison of their results increasingly complex.

Building upon the historical framework and methodological critique, Chapter Four reviews the evidence of thirty regional archaeological surface surveys. For each project a 'metadata' section is provided in the Appendix (Volume Two), gathering together methodological details and results. On the basis of this resource, the syntheses provided by the surveyors are critically assessed and an interpretative summary is provided for each project. Grouped into four geographical regions for convenience, it is clear that there is significant diversity both within and between these groups. Despite the influence of methodology, not all of this patterning can be ascribed to such differences between projects and the diversity of the archaeological and historical evidence is explored in Chapter Five through a series of models. Drawn from a range of disciplines, this series of interpretative frameworks develops the theme of diversity in post-conquest Italian settlement and society in more detail. In particular, the issue of scale is stressed through the use of a range of models extending from long-term demography to specific historical events.

In order to develop some of the issues and models discussed in the preceding chapters, Chapter Six then takes the Biferno Valley Survey as a case study. The chapter is divided into two halves. The first explores the project results as a whole through the development of a database, simple statistical analysis and Desktop Mapping techniques. It aims to deconstruct this resource in the light of the type of methodological metadata discussed generally in Chapter Three and specifically in Chapter Four. The second half of the chapter takes a case study area in the lower valley around the Samnite and Roman centre of Larinum. This develops the approach taken in the first half of the chapter through the application of GIS techniques. In particular, this chapter explores the influence of historical, geographical, depositional, post-depositional and recovery factors on the regional diversity recognised and assesses the utility of some of the models discussed in Chapter Five.

Finally, Chapter Seven moves back from the specific (Larinum) to the general (Roman Italy). This involves the comparison of Larinum to a range of other pre-Roman centres, such as Oria and Monte Pallano, and the area's relocation within the wider Biferno valley. Next, the valley itself is placed in the context of Samnium more generally and finally the diversity of Roman Italy as a whole is illustrated through a review of the general similarities and differences identifiable across the peninsula.

1.4 *Defining Imperialism*

The definition of imperialism is complex and dynamic (general – Doyle 1986; Loomba 1998; Sinopoli 1994; Roman imperialism – Freeman 1997; Harris 1979; Mouritsen 1998; Webster & Cooper 1996). At its most simple, it relates to the extension of power by one polity over another; however, the nature of this power (military, political, economic or social) and its motivations, strategies and consequences not only vary widely between each example, but are hotly disputed. The debate has become even more intense in the current post-colonial climate (section 1.4.2).

Nonetheless, the very familiarity of the term frequently means that its significance is assumed; for example, Alcock (1993) makes much use of the term imperialism in her study of the conquest of Roman Greece, but does not explicitly define it (Freeman 1997: 9). In Alcock's case, it is taken in its most generic form to reflect the processes of change instigated by the extension of Roman military and political control over subject populations. It will be argued in this thesis that avoiding the definition of imperialism within a narrow historical context avoids a restrictive approach which may limit perception of processes in the archaeological record – especially in the context of coarse regional survey data (sections 1.5, 1.6). On the other hand, simply to identify any and all change as imperialism is uncritical and fails to explain the success of Roman expansion and, in general, there has been too much emphasis on change in the archaeological record and not enough upon stability and continuity.

In order to facilitate a framework for the study of imperialism, the following section provides a survey of the development of studies on the subject, and in particular, their approach to the motivations of imperial expansion (for detailed reviews, see Hingley 1996; Woolf 1993). This offers a context for subsequent discussion of post-colonial approaches to imperialism (section 1.4.2) and the development of Roman Italy from both historical (Chapter Two) and archaeological perspectives (Chapters Four and Five).

1.4.1 Motivations of Roman Imperialism

The ancient sources provide a number of interpretations of the motives for Roman imperial expansion; many of these have been used, directly or indirectly, by later imperial societies. Recurrent themes include an inflexible dichotomy between coloniser and colonised, an evolutionary paradigm of cultural progression and a notion of the inevitable exercise of, and submission to, power (*imperium sine fine* – Garnsey & Saller 1987: 196; Hingley 1996: 35–9; Mouritsen 1998: 86). Although the negative, principally moral, consequences of imperialism were noted in Antiquity (e.g. Hor. *Epist.* 2.1.156; Pliny *HN.* 34.34), most commentators demonstrate their support for, and thus assistance in the extension of, Roman imperialism – notably, some of the most vociferous adulation comes from non-Roman aristocrats, for example Plutarch, who themselves had benefited from Rome's expansion (Garnsey & Whittaker 1978: 6).

The genesis of Rome's rapid expansion has been widely traced to the city's particularly competitive social structure and conduct in a wider militaristic milieu. Élite competition was focused around the ideals of *virtus* and *dignitas* (Badian 1979: 13) which were achieved through military glory and, specifically, the triumph. This activity also allowed competition through the acquisition of certain forms of wealth and clients. Finally, advancement in any public office was heavily dependent upon military experience (Harris 1979: 10–1). As such, the social and political fabric of Rome embodied a predisposition towards military expansion (Badian 1979: 1).

Although few would deny this (structural) stimulus, additional motivations are widely debated. Most importantly, these concern the arguments for accidental, defensive and economic imperialism. Accidental imperialism, that is, Rome accidentally acquired territory (e.g. Cary 1954: 145), represents a confusion with the ideological notion of inevitability (Garnsey & Whittaker 1978: 2). However, empires are created, not predestined (Hanson 1997: 78). Defensive imperialism has been used to explain 'inconsistencies' in Rome's decisions regarding, for example, the annexation of territory in relation to wars with Carthage and in the East (Scullard 1951: 145; Smith 1955: 47–8). The reluctance to annex has been seen to indicate that Rome was fighting defensive wars. But, in spite of careful justification of military encounters through the notion of the 'just war' (Webster 1994), Roman actions were frequently aggressive conflicts conducted in other people's territory (e.g. the Second Samnite War, First Illyrian War – Cornell 1995: 353; Harris 1979: 178, 196). Nor should limited annexation be mistaken for the absence of an expansive political and military policy. Finally, a defensive paradigm can also be read

as an apologia for both Roman and modern imperialism (Harris 1979: 253). A more likely interpretation of Rome's 'reluctance' to annex territory (c.264–202 BC) concerns the explicit or implicit attempt to preserve Rome's internal social and political *status quo* (Gabba 1989: 198; Smith 1955: 49–51).

A central debate focuses on the role of economic profit. Rostovtzeff (1957: 13–22) argued that the economic benefits of imperialism – both plunder and the more systematic extraction of wealth – formed the principal motive for Roman expansion (more recently, Garnsey & Whittaker 1979; Harris 1979: 54–9, cf. 104). Subsequently, Badian (1979: 2) has argued against this interpretation, suggesting that the lack of annexation indicates economic exploitation was not a consideration – most provinces did not produce a profit (*ibid.*: 18–20). Instead, imperialism was primarily the result of social and political factors (*ibid.*: 21); indeed, Millett (1990) has stressed the moral restraints upon the systematic exploitation of allies and provinces.

A more recent and convincing approach to expansion within Italy has argued that taxation based upon the contribution of military manpower did not allow Rome to exert its authority over its allies during times of peace. Imperial expansion was therefore necessary to extract this tax and to maintain and further its supremacy over its existing allies (Cornell 1989: 386; 1995: 364–8). The profits of warfare were thus re-invested in further military enterprise. By extension, the completion of the conquest of Italy by the mid third century BC must have threatened to undermine the very basis of Roman society and the loyalty of the allies (*ibid.*: 366; Harris 1979: 184). This provides a persuasive, if generalised, context for Rome's pursuit of wars beyond the peninsula. However, regardless of whether economic gain was the foundation of Rome's motives, such advantage formed an integral part of Roman warfare and the vast amounts of wealth generated were acknowledged in Antiquity (Harris 1971: 58–9).

Much debate about imperialism has clearly become caught up in wider ideological disputes. In reality, the motives for imperial expansion are likely to have been multiple, shifting and even conflicting. For example, the promotion of wars by individuals during the late Republic (Harris 1979: 252) contrasts with the more institutional basis of warfare in the third century BC. Indeed, this well illustrates the long and evolving history of imperialism – motives are unlikely to have been uniform over both time and space. In particular, it has often been assumed that Roman expansion in the provinces was a natural progression to that within Italy. Consequently, theories of imperialism derived within

provincial contexts have frequently been projected back onto third century BC Italy. It is therefore clearly inappropriate to define a single motive for Roman imperialism (Woolf 1993: 19) – not least this risks perpetuating a Romanocentric perspective of the experience of imperialism. This issue is specifically addressed through the application of post-colonial concepts.

1.4.2 Post-Colonial Approaches to Roman Imperialism

Over the last two decades, many of the humanities have developed post-colonial theory as part of a wider post-modern movement (see Loomba 1998; e.g. Said 1993). This shift of perspective has successfully deconstructed many of the ‘grand narratives’, assumptions and categories of imperial relations to reveal their ideological construction. Concepts such as the ‘civilising mission’ and the rigid distinction between coloniser and colonised are revealed to be the products of a complex set of power relations both within and between the societies of the imperial core and the colonised periphery.

Post-colonial genealogies of the dominant interpretation of Roman imperialism have emphasised the profound influence of nineteenth-century nationalism – in particular, the Italian *Risorgimento* and German unification – on theoretical constructions of the process. The continuing influence of this paradigm is perpetuated through the filter of the modern colonial experience (Freeman 1997: 9; Hingley 1996: 35–9; Mouritsen 1998; Rowlands 1998; Webster 1996: 17). Existing models draw heavily from Appian (*B.Civ.*), promoting the notion of Italian communities simultaneously desiring Roman citizenship, yet united by force. This embodies a Romanocentric perspective; the notion of self-Romanization, based upon an implicit assumption that communities aspired to Roman culture, could only be promoted by archaeologists from large, imperial nations whose own cultures had never been challenged (Mouritsen 1998: 70; Webster 1996: 7). Some earlier studies now read as blatant apologia; the suggestion that Rome’s failure to acknowledge its own military and political supremacy lay behind its destruction of Carthage and Corinth (146 BC) now appears as a startling defence of Roman violence (Smith 1955: 50–3; also Badian 1979: 1–10; Scullard 1951: 145). However, although many historical and archaeological studies remain resolutely Romanocentric (e.g. David 1996; Torelli 1995), under the influence of post-colonialism, a number of alternative perspectives have emerged over the last five years (papers in Mattingly 1997a; Webster & Cooper 1996).

Post-colonial work has specifically stressed the importance of making a clear distinction between imperialism and colonialism. The former refers to the general motives and

practice of military and political expansion; the latter concerns the manifestation of these processes on the periphery (Loomba 1998: 6–7)¹. These two processes are related through the means of ‘dialogue’ (Mattingly 1997b; Webster 1996; Woolf 1993). With these definitions in mind, it is clear that there has been a strong tendency within studies of the Roman period towards imperialism at the expense of colonialism (Webster 1996: 5). By imposing a monolithic view of reality, such a centrist perspective minimises the significance, and the ability to recognise, the dialogue between coloniser and colonised – and hence the means through which domination was achieved and sustained. Investigating the diversity of the impact of Rome therefore requires, not only the study of Roman imperialism, but also Roman colonialism. Such an approach also emphasises the maintenance of imperial acquisitions, rather than simply their conquest (Mann 1986: 251; Sinopoli 1994: 160).

This de-centring of approach to the development of Roman Italy militates against the definition of a baseline against which to measure the impact of, or response to, Roman expansion. Hence it is possible to reject the Romanocentric assumption of a normative experience of Roman imperialism and an evolutionary cultural paradigm, with their implicit connotations of cultural and economic under-development (cf. Dench 1995; Torelli 1995: 2–11). Colonial rule was not simply imposed from above but, through Gramsci’s notion of hegemony, involved a dialogue of negotiation and consent to the operation of power (Loomba 1998: 29–31; Mattingly 1997b: 9–10; cf. Barrett 1997a; 1997b; Webster 1996: 8). Post-colonial perspectives therefore emphasise a range of dialogues between core and periphery and promote a multitude of more parochial models of imperial relations. An historical example of this approach is the Second Punic War (section 2.3): the question of whether to support Rome or Hannibal was determined within the context of local needs rather than the wider ideological framework espoused by the historical sources (e.g. Polyb. 3.77.4–7). An archaeological example is provided by the adoption of ‘Roman’ public architecture during the early Principate. Again, this was not simply imposed or emulated, but developed within a dynamic pre-existing context on the basis of local, not global, considerations (Häussler 1999: 9; section 5.4.2.3).

Notably the impact of post-colonialism has been of greater significance for study of the provinces than for Italy (though see Terrenato 1998b; van Dommelen 1997; 1998). In

¹ To clarify terminology, colonialism should also be distinguished from colonisation. The latter explicitly refers to the establishment of colonies, although the distinction between colonialism and colonisation is rarely clear-cut.

particular, post-colonial analyses of historical texts have focused on ‘barbarians’ – such as Caesar’s (*B.Gall.*) or Tacitus’ (*Germ.*) commentaries on the Britons, Gauls and Germans (Webster 1994; 1996). However, colonialism is equally apparent in the literature concerned with the Italian communities; it is Italy’s unusual position vis-à-vis the rest of the Empire (Terrenato 1998a: 20) which has tended to discourage the exploration of such relationships. In a notable exception, Dench (1995) has deconstructed the literature pertaining to the peoples of the central Appennines, to reveal the ways in which identities are represented and negotiated within the wider dynamic of Roman imperialism (for the Umbrians – Bradley 1997). Considered as material culture, such literature serves to create and legitimise imperialism (Said 1993: 12; Sinopoli 1994: 167). More generally, the construction of literary ‘Others’ is a widely used technique in the cultural definition of self (Alcock 1993: 28; Dench 1995: 22). The literary Samnite – the focus of extensively-used tropes which contrast mountain and plain, farmer and pastoralist, civilised and uncivilised – constitutes a clear anti-Rome (Alcock 1993: 24–7; Dench 1995: 21, 91, 112–9, 141, 172). Consequently, authors such as Livy have more to tell us about what it was to be Roman, than what it was to be Samnite. Indeed, there is some debate about the possibility of using Roman sources to write histories of other peoples (e.g. Pallottino 1991). Spivey & Stoddart’s (1990) rejection of these sources in an attempt to write an archaeological history of the Etruscans (also Riva & Whiting 1997) is disputed by Cornell (1995: 408) who argues the whole notion of ‘Etruria’ to be an historical construct.

Post-colonial assessment of modern ethnography, anthropology and historical archaeology provides a useful means of assessing attitudes towards the Other in Roman literature. In particular, there is a tendency to view the colonial subject as static and timeless – a baseline definition of aboriginality, tradition or pure culture which embodies a notion of authenticity (Friedman 1994: 12; Loomba 1998: 182–3). Such ideas are clearly problematic – authenticity implies the nonsensical possibility of *ina*authenticity. Rather, the objects of modern anthropology and ethnography have been interpreted as the products of colonial systems; that is, constructed from data taken from a colonised periphery (Ferguson & Whitehead 1992: 12–6; Friedman 1994: 4). A similar situation can be envisaged in the Roman period: literature did not simply reflect a pre-existing reality on the imperial periphery, but related to a situation which was fundamentally altered – indeed, created – through contact with Rome (e.g. Umbrians – Bradley 1997: 63; Samnites/Sabines – Dench 1995: 17–25; Friedman 1994: 7; Witcher forthcoming).

Post-colonial theory also has implications for interpretative models such as ‘Romanization’ which deal with imperialism and cultural, social and political change. For example, although societies remained autonomous, the colonial system did not simply rest on top of pre-existing social structures, constituting a superficial veneer of ‘Romanization’ (see Forcey 1997: 18–9; Grahame 1998a: 8; Sinopoli 1994: 167; section 2.6.1). Conquest instigated the complete transformation of social relations – existing structures and opportunities were curtailed and new possibilities presented; although pre-existing élites were frequently strengthened and social differentiation intensified (Garnsey & Whittaker 1978: 6), this was not a foregone conclusion.

In summary, post-colonial theories have a major role to play in the study of Roman expansion in Italy. By challenging the dominant Romanocentric interpretations derived largely from the writings of Roman and pro-Roman authors, it is possible to extend significantly our understanding of the nature of Roman imperialism. Further, the promotion of colonialism as an important aspect of this study both develops a more balanced approach to the experience of empire and provides a basic framework for the integration of the full range of the archaeological evidence.

1.5 History & Archaeology

Literature on the relationship between historical and archaeological evidence is legion (e.g. *Archaeological Review from Cambridge* 1997; Bintliff 1991a; Hodder *et al.* 1995; Knapp 1992; Little 1992a; Small 1995). Yet, with few exceptions, this wealth of discussion has had limited influence on Roman studies, where the arbitrary distinctions of history and archaeology (as well as art history and epigraphy) persist (see Britton 1997; Cornell 1988: 205; Hall 1991; Hodder 1993). Indeed, it is this dichotomy between archaeology and history that has shaped the wider study of this period; generally, approaches have divided between the two halves of Table 1.1. For example, historical perspectives of imperialism have, largely, emphasised events, agency and urbanisation, whilst archaeologists have focused on process, structure and rural development.

Theoretical frameworks for the integration of historical and archaeological evidence include the analogy of material culture as text (e.g. Britton 1997; Tilley 1990), texts as material culture (Hodder 1977) and image (Little 1992c). All these different conceptualisations are premised on the post-modern scepticism towards inherent meaning within either text or material culture. However, this paradigm shift has had far greater influence within the discourses of history and archaeology than between them (ancient

history – Cameron 1989; Golden & Toohey 1997; archaeology – Shanks & Tilley 1987). Despite the immense potential for contributing to this debate through the wealth of archaeological and historical evidence available (Scott 1993a: 7), Roman studies still pay respects to ‘the cult of authority’ (Little 1992b: 5) which attends the written record. For example, in spite the results of the South Etruria surveys, their significance was slow to be adopted because they did not fit preconceived historical models which stressed the depopulated, agricultural wastelands of the late second and first centuries BC (e.g. Plut. *Ti.Gracc.* 8; Livy 6.12.5; Dyson 1988: 196; 1992: 5). Where greater consideration of the relationship is found, a ‘phoney war’ (Ravn 1997: 129) can be identified: that is an insistence on the fundamental difference between the objectivity and usefulness of historical and archaeological evidence which hinders their constructive synthesis. They clearly are different, but this does not presuppose the superiority of one over the other. Finally, of course, there is the complex web of internal and external relations within and between the disciplines which constitutes the foundations of chronology (Biers 1992).

1.5.1 History & Regional Survey Data

The relationship between historical texts and regional surface survey data is particularly problematic. They constitute two very different sources in terms of their origins and interpretation; most obviously, they work at very different scales – *l’histoire événementielle* and the *longue durée*. Yet, despite the fact that the ‘traditional historical goals...are quite beyond the reach of the survey archaeologists, who do not deal in the individual event, the unique place, the particular relationship’ (Cherry 1983: 388), there has been a tendency to subject archaeological data to very specific historical frameworks (e.g. Patterson 1988; Potter 1978: 107; see Barker & Hodges 1981: 13; Millett 1992: 1).

Alcock’s (1993) *Graecia capta* has been hailed as defining a new approach to this issue (Mattingly 1994: 162) which claims to advance from the traditional approach that defines historical questions and then seeks archaeological correlates. Alcock demonstrates acute awareness of the problems of survey comparison through perceptive source criticism of both historical and archaeological data, recognising the impossibility of separating objective results and subjective interpretation, and basing her comparisons on qualitative rather than quantitative techniques. However, ultimately this careful deconstruction is intended as a basis for ‘substantiation or rebuttal’ (Alcock 1993: 30). Here, archaeological evidence is given primacy over the historical. This misses the potential to clarify the complexities of the relationship between the two sources (Greene 1995: 221) and, in

particular, to explore the multiple and competing landscapes which seek to emphasise contradiction as inherent (Mattingly 1997b; see Alcock 1996: 457). Rather, archaeology and history are considered to relate to real and imaginary landscapes respectively (Alcock 1993: 24, 224). However, the distinction is clearly simplistic (Barrett 1997a: 1, 4) – one informs the other and, arguably, the dialogue of imperialism is located at the intersection between the two, where ideas and understandings derive from, and in turn effect, physical reality.

In reconciling historical and archaeological evidence within a single coherent framework, it must be acknowledged that there is little reason they should be easily integrated and why they need be either mutually inclusive or exclusive. This is obvious given the different means through which these sources of information are created and understood (Jenkins 1991; Shanks & Tilley 1987). More generally, historical and archaeological sources do not inform on precisely the same aspects of the past – most obviously, pottery is rarely mentioned in the historical sources, but forms the mainstay of archaeology; similarly, whilst Roman agronomists show limited awareness of water conservation (Morley 1996: 120), there is extensive archaeological evidence for hydraulic engineering (Thomas & Wilson 1994). Problems arise when these sources allegedly inform on the same themes, such as specific colonial acts, where a direct one-to-one correlation is ‘expected’. For example, it has been claimed that the archaeology of Cosa reveals no indication of the colony’s change from Latin to Roman citizenship after the Social War (Brown 1980: 72). However, there is no *a priori* reason that such a change should be reflected directly in the archaeology, especially within the few years before the city’s apparently violent destruction (section 4.3.1.5).

Regional survey reports abound with examples of ‘discrepancies’ where settlements are *either* historically *or* archaeologically attested. For example, a large urban centre in the Ager Caletranus in the lower Albegna Valley is mentioned by both Pliny (HN. 3.5.52) and Livy (29.55.10) though no physical evidence has been identified (Perkins 1991: 139). Similarly, Livy’s (10.45) commentary on the closing stages of the Third Samnite War includes reference to many ‘unidentified’ places in Samnium. The relevant section of the Peutinger Table for the Biferno valley also lists archaeologically unlocated places (Lloyd 1995b: 223). Conversely, there are also examples of sites without historical references. Again, several large villages in the Biferno valley and the late second century (?Gracchan) colony of c.12–3ha at Fiocaglia di Flumeri (east of Benevento – Johannowsky 1990). Rather than reconceptualising the relationship between archaeology and history when such

a lack of correlation is attested, frequently attention is focused on the inherent limitations of one or other of the sources.

The basic issues concerning the relationship between historical and archaeological data are well illustrated by Patterson's (1988) attempt to find archaeological evidence for a Ligurian community, deported to the area around Beneventum in 180 BC (Livy 40.38.1–7; section A.1.3.5.). Based on the historical sources, Patterson (1988: 127) predicted major, if localised, changes to settlement patterns and material culture. However, this turned out not to be the case (Patterson 1988: 187). Arguably, one of the reasons for this lies in the simplistic equation of material culture with identity and ethnicity (see Jones 1997; Shennan 1989). The active role of material culture in the negotiation of identity and ethnicity, and the instability of its meaning, brings the whole enterprise of locating a distinctive Ligurian material culture into theoretical question. Further, the coarseness of the archaeological data also questions the possibility of locating (the effects of) such historical events. Finally, the reliance upon a standard suite of chronologically diagnostic material across Italy (section 3.8.1) questions the possibility of recognising such localised identities. Similar examples can be found in the reported inability to find archaeological evidence or 'cultural signatures' for the Samnites who occupied large parts of Apulia and Calabria including Botromagno (e.g. Livy 9.1; Diod. Sic. 10.10; Small 1992b: 13) or the Volscians in the Pontino (Livy 1–8; Attema 1993a: 20; Koot 1991a: 126). Such lack of correlation, although unsatisfactory from an empiricist perspective, should not really occasion surprise.

As well as the identification of such 'ethnic identities' in the archaeological record, there is some debate regarding the recognition of social and political status – peasants, slaves, owner-occupiers, tenants, share-croppers (Duncan-Jones 1982; Garnsey 1979; Garnsey & Saller 1987: 76; Nicolet 1994: 619; Purcell 1988: 197; Rathbone 1981: 22). Although often dismissed, and undoubtedly hazardous, some interesting hypotheses have been put forward. For example, the combination of high-quality masonry and capital investment in processing equipment with limited finewares (e.g. Monte Forco – Jones 1963) may indicate a leased farm (Foxhall 1990b: 109–11). In reality, however, specific legal distinctions may have been blurred – social independence may be eroded by economic bonds or vice versa (van Dommelen 1993: 183). Similarly, the land registers of Velleia and Ligure Baebiani indicate a high turnover of landownership, yet with continuity of estate lands (Duncan Jones 1982: 126, appendix 4; Patterson 1987: 124–33; also Virgil *Ecol.* 1.9). However, there is no *a priori* reason that such changes in ownership should be archaeologically visible, especially when this does not require different agricultural

strategies or settlement (Alcock 1989: 17). The identification of estate agglomeration has also been questioned because, if estates were fragmented, there is no reason for significant change in settlement distribution or agricultural exploitation (Arthur 1991a: 65; Foxhall 1990a: 207–23; Lewit 1991: 16).

However, such scenarios are only problematic if archaeological evidence is sought solely in the service of historical models. Beyond questions of legal landholding, the distribution and development of settlement offers insights into more general agricultural, economic and social considerations (section 5.3.2). More significant, for example, might be the general contrast between the stability suggested in the archaeological record and the disrupted historical context.

1.5.2 Annales

In the context of regional survey, much recent interest in the relationship between archaeology and history has focused on the *Annales* paradigm (Bintliff 1991a; Bulliet 1992; Knapp 1992). The superficial similarity of the objectives and methods of Landscape Archaeology and *Annales* history is striking – aiming to use a range of techniques to assess and write ‘total history’. However, whilst Landscape Archaeology might be considered as a blanket descriptor for various distinct specialisations, an *Annales* approach, in theory at least, provides the framework for the rigorous integration of these data. As such, *Annales* offers a convenient method to give shape to the diverse strands of regional survey.

Despite the fact that it is a misnomer to refer to an ‘*Annales* school’ (Knapp 1992), it is the work of single *Annales* historian – Braudel – which has dominated recent archaeological attention (Last 1995: 143). Acknowledgement of the influence of his *The Mediterranean and the Mediterranean world* (Braudel 1972) has become ‘*de rigueur*’ (Kennedy 1996: 697; e.g. Alcock 1993; Attema 1993a: 212; Barker 1995a; Bintliff 1991a; Malone & Stoddart 1994). Braudel (1972: 64, 651) posits three scales of time, the *longue durée*, *conjunctures* and *histoire événementielle*, moving from the imperceptible, but undeniable, influence of environment and climate to the ephemeral historical event (Barker 1995c: 1; Last 1995: 142). History lies at the intersection between these different temporal scales.

Originally founded as part of a ‘deep reappraisal of the personal stance of the historian’ (Gurevich 1995: 158), *Annales* rejected positivist history by stressing the constructed, as opposed to re-constructed, nature of history. The parallel to post-processual archaeology is clear – both are responses to the empirical mode of enquiry (Last 1995: 144). Recently,

however, connections between the archaeological application of *Annales* and New (or Processual) Archaeology have been drawn (e.g. Bintliff 1991b: 4; Moreland 1992: 113–5). This is significant because the large regional surveys of the last twenty years can be considered as the direct products of the New Archaeology (Fotiadis 1997: 102).

Braudel's emphasis on the *longue durée*, and focus on the environment and economy, are reflected in the systemic and adaptive processes of New Archaeology (Moreland 1992: 115). The environment becomes a structural, not dynamic, factor, denying scope for its social construction as promoted by post-processual perspectives (Alcock 1996: 457; Bender 1993); individuals and free will are denied due to 'the deficient concept of agency' (Last 1991: 142; Barrett 1997a). It is therefore unfortunate that the most widely courted *Annales* approach is the least radical in its implications for archaeological interpretation. This may be one reason for its popularity – its close correspondence to pre-existing theoretical agendas offers the potential for the integration of disparate data without the need for radical rethinking of overall methodology. Despite its heuristic value, it is of limited scope for tackling the practical integration of different scales of time because of the ambiguity of the dialectical relationship between these temporal scales in Braudel's argument. This can be found in a review of '*Annales* surveys': Alcock (1993) focuses primarily on the *conjunctures*; the Biferno Valley Survey is divided between the environmental *longue durée* for prehistoric periods (Barker & Suano 1995) and *événements* for the Roman period (Lloyd 1995a; 1995b; cf. Millett 1997; Oakley 1997a). In each case, the practical application of the paradigm is more difficult than its heuristic value suggests.

There are, therefore, some inherent difficulties in using long-term, coarse-grained field survey data to explore historical processes. However, this does not mean that the enterprise is impossible. Indeed, comparison of historical and archaeological records can be of central importance in understanding the nature of both (e.g. Samnites – Dench 1995: 23). Some of the issues in the specific case of Roman imperialism are discussed in the next section; some models which integrate historical and archaeological approaches are developed in Chapter Five.

1.6 Imperialism / Colonialism in the Landscape

This final section of Chapter One concerns a central question of this thesis – is Roman imperialism/colonialism visible in the archaeological record, and if so how (Mattingly 1997a; Meinig 1982; Sinopoli 1994)? As imperialism is fundamentally geographical or

territorial (Meinig 1992: 135; Said 1993: 271), change in the spatial organisation of society is to be expected, whether this relates to overtly ‘spatial’ policies (e.g. Augustus’ administrative reforms), the effects of economic development or the multiplication and transformation of cultural identities (Laurence & Berry 1998; Nicolet 1991: 203; Witcher forthcoming). However, the visibility of such changes in the archaeological record is neither predictable nor a foregone conclusion – there is no mechanistic relationship between space, material culture and identity which permits the direct observation of imperialism/colonialism. For example, during the fifth century BC, the Greek colony of Poseidonia was occupied by the Lucanians who continued to live in the pre-existing political and religious ‘spaces’ of the Greeks (Curti *et al.* 1996: 183, 186). In contrast, Rome completely redefined this landscape when it (re-)founded the town as the Latin colony of Paestum (273 BC). In a major revision of its urban plan, essential Roman political and religious buildings – the forum and comitium – were inserted into its core, replacing the *agorá* and *ekklesiasterion* (Morel 1989: 488, figure 5). Hence, although the Roman presence is clear through the archaeological record, the Lucanian presence would be unknown but for the historical evidence: the two resources are therefore complementary.

Further, by directly associating imperialism with the recognition of change – and resistance and/or ‘underdevelopment’ with continuity – much research has started with an inherently disruptive view of the process (Curti *et al.* 1996: 188); a similar problem concerns the more generic Invasion Hypothesis (Dench 1995: 193). Consequently, it is colonisation, centuriation and road building – blatant and disruptive acts of imperialism – which have dominated studies (see Terrenato 1998c; Yamin & Metheny 1996: xvi). It is also important to stress that Roman imperialism cannot be accessed by evaluating ‘before and after’ scenarios: there was rarely a decisive moment of conquest (Sinopoli 1994: 163). Further, as cultures are dynamic and on going, the definition of such points is purely arbitrary. It is, therefore, important to move beyond these more obvious imperial landscapes and Romanocentric perspectives to stress the operation of imperialism within ordinary or vernacular landscapes (Meinig 1979). The solution is more contextual analysis, placing imperialism in the context of a dialogue between dynamic groups – that is, not homogenous groups of Romans and Others, but internally-differentiated societies, operating within a range of official and unofficial situations.

1.7 Note on Geographical Scope of Thesis

The geographical focus of this thesis is restricted to peninsular Italy, that is, northern Italy, including the Po Valley, is excluded. This is justified on several grounds. First, there are substantial differences in the way in which northern Italy was conquered and its subsequent relationship with Rome regarding citizenship and economic development (e.g. Dyson 1985b; Lloyd 1991b: 235; Morley 1996: 150); indeed, in the Roman mindset, the area had originally been considered to be part of Gaul, rather than Italy. Secondly, the archaeology of this area – both the record itself and approaches to it – is very different to that of central and southern Italy. For example, regional survey has tended to focus more heavily upon aerial reconnaissance in search of centuriation rather than fieldwalking surveys for settlement. Thirdly, and related to the first two points, there has developed an archaeological and historical tradition that deals separately with the two areas (e.g. Curti *et al.* 1996; Dyson 1985b). On grounds of space alone, therefore, attempting to tackle this marked division cannot be attempted here – central and southern Italy provide more than sufficient issues before such a task could be undertaken. Ultimately, however, the in-depth comparison of peninsular and northern Italy will be of great utility in understanding the nature of Roman imperialism in both areas.

1.8 Note on Terminology

The names of places, surveys and other terminology (such as types of ceramic), follow the usage by the relevant survey. Hence, the ‘Metaponto Survey’ reflects the fact that the Greek period forms the principal focus of the survey by use of the Greek form *Metaponto*, rather than the Roman *Metapontum*. Similarly, reference to Black Gloss, *vernice nera*, black-glazed or Campanian wares is dictated by the terminology of the survey under discussion. The intentional preservation of the original terminology in this case is designed to avoid introducing further confusion – as discussed in detail in section 3.8.5 – regarding the specific nature of the material under discussion. The rigorous standardisation of terminology – of unquestionable importance – lies at a stage of research beyond this thesis and, indeed, beyond the work of an individual.

Chapter Two

HISTORICAL & ARCHAEOLOGICAL APPROACHES TO ROMAN IMPERIALISM

2.1 *Introduction*

This chapter builds upon the review in Chapter One of the concepts of imperialism and colonialism and their interpretation both past and present. The first objective is to survey the historical sources in order to illustrate their range and to provide a chronological narrative for subsequent discussion of Roman expansion in Italy. Next, some of the strategies adopted by Rome – and the colonial ‘Other’ – are explored in more detail. Finally, a selection of high-level interpretative models of Roman imperialism are deconstructed to make way for the diversity of evidence presented in discussion of Italian regional archaeological surveys in Chapter Four; alternative models are in Chapter Five.

At this stage it should be clarified that the term ‘empire’ is used generically (unless capitalised). Although there are clear historical and political distinctions between the Roman Republic and Roman Empire (relating to the establishment of the Principate in 27 BC), the processes through which Republican Rome came to Mediterranean dominance were clearly imperial in nature. From an analytical perspective, therefore, much Republican history concerns the conquest of an empire.

2.2 *Historical Sources*

A range of authors informs on the nature of Roman imperialism and the conquest of Italy including historians, biographers, geographers, agronomists and poets. The majority of these sources date to the second century BC or later, that is, the period of Rome’s greatest military expansion and economic prosperity. Earlier historical literature existed (e.g. the works of Quintus Fabius Pictor), but is known only through the writing of later authors (Table 2.1). The history of Rome before the fourth century BC is harder to interpret; written histories were few, and those records in existence were lost in the Gallic Sack of 390 BC (Livy 6.1.1).

The lack of surviving non-Latin, Italian literature need not surprise – history is written by the politically dominant of the past – that is, the ‘winners’. However, it is interesting to note that the majority of those writing in Latin were of ‘non-Roman’ Italian origins (e.g. Livy, Cicero; see Lomas 1996a: 8; Mouritsen 1998: 61). Indirectly, this lends support to the previous existence of non-Latin literature as well as demonstrating the thorough ideological integration between Roman and Italian – at least for those Italians who found wealthy Roman patrons.

The traditional approach of modern historians to the Roman conquest of Italy has adopted a narrative structure which closely imitates the annalistic tradition of, for example, Livy (e.g. Cornell 1989; Salmon 1982; see Smith 1997; Jenkins 1991: 32–3). In contrast, the dearth of sources which concern the historical development of Italy after the Civil Wars of the first century BC have produced more thematic deliberations (see Lomas 1996a: 6). Consequently, there is a danger of reducing the history of Republican Rome to simple lists of dates and events; such an approach may rightly be considered ‘a travesty of the historical method’ (Hodder 1977: 33). With this criticism in mind, Table 2.2 is intended purely to provide a source of reference for the chronology referred to in subsequent discussion.

More generally, such historical frameworks are also problematic because of the (frequently) unwarranted impression of coherence about the order and significance of events (see Barrett 1994: 33; Lomas 1996a: 6). Indeed, the ancient annalists can be seen to have drawn disparate events into logical narratives to serve their purposes. For example, Livy (8.22.7–23.10) presents the Second Samnite War as the conflict which decided whether Rome or the Samnites would control Italy (Walsh 1961: 39). However, such an interpretation is arguably a literary device designed to elaborate a coherent and teleological narrative for the rise of Rome.

An alternative means of summarising Roman expansion is in cartographic form (Figure 2.1). However, not all historical events or processes can be mapped and knowledge of the location and spatial extent of historical processes is often inadequate. More generally, such maps embody a ‘privileged’ perspective, remote from the imperial experience of the colonised (see Barrett 1994: 12; Thomas 1996: 76–8) perpetuating a Romanocentric view of imperialism. All mapping, from Roman cadastral maps to GIS, embodies issues of power (e.g. Dilke 1987; Harley 1988; Pickles 1995; Said 1993: 273; Witcher in press; Woods 1993). Therefore, it is clear that the most appropriate approach to the historical sources is their detailed description and contextual analysis.

2.3 *The Roman Conquest of Italy*

This section expands upon the significance of the events outlined in Table 2.2; the motivations, strategies and consequences of Roman imperialism are discussed in section 2.4. Clearly such a summary is not an objective exercise; it is entirely dependent upon a Roman narrative, filtered through the lens of more recent imperial experience (see Webster 1996: 15). The aim is therefore to provide a summary of the central themes of Roman (and Greek) historians with reference to the Roman conquest of Italy.

This narrative begins with the *foedus Cassianum* of 493 BC (Dion. Hal. 6.95); this united the Romans, Latini and subsequently the Hernici within a defensive alliance against the Volsci and Aequi (Cornell 1995: 299–304; Salmon 1982: 40). Although the Latin League was nominally a federation, jointly founding colonies against the mountain tribes, (Roman) sources imply that Rome dominated proceedings from an early stage and continued to operate its own aggressive ‘foreign policy’; for example, defeating the Etruscan city of Veii and annexing its land into the *ager Romanus* (406–396 BC – Livy 5.1–19). During the fourth century BC, as Rome’s dominance within the League grew, relations with the Latini worsened, lapsing into military skirmishes, punctuated by several Gallic invasions which variously galvanised the Latini’s support for, or opposition to, Rome (Cornell 1995: 313–26).

Meanwhile, the First Samnite War (343–341 BC) was precipitated when the besieged Campanian city of Capua appealed for Roman assistance against the Samnites. Despite a previous treaty concluded with the Samnites in 354 BC, Rome intervened and secured their surrender. This war did nothing to assuage Latin fears about Roman intent, and the allies revolted in 341/0–338 BC – the Latin War – along with the recently ‘liberated’ Campanians (Cornell 1989: 359–62; 1995: 347). Eventual Roman victory (338 BC) led to the dismantling of the League and its replacement with a series of bilateral agreements (Cornell 1989: 363; Lomas 1996a: 32). Rome also instigated a hierarchy of political statuses which were granted to defeated cities and communities. The basic terms of this treaty laid the foundations for Rome’s subsequent relations with not only the Latini, but also the rest of the peoples of Italy.

The foundation of Latin colonies, the first of many over the next two centuries, at Cales (334 BC) and Fregellae (328 BC) on the borders of Samnium soon provoked the outbreak of the Second Samnite War (327–304 BC – Livy 8–9). This was a largely offensive war on the part of Rome, with military activity divided into two main phases by the disastrous

Roman defeat at the Caudine Forks (321 BC – Livy 9.1–7). During the subsequent decade Rome concentrated on developing alliances in Campania and the recovery and foundation of a series of colonies (e.g. Fregellae, Interamna Lirenas), extensive centuriation and road building, including the Via Appia. Before the conclusion of the war, Rome's attention was diverted towards Etruria and then Umbria, before engaging in a particularly violent campaign against the Aequi in 304 BC (Livy 9.45) and securing the surrender of several Sabellian communities. After the conclusion of hostilities, colonisation was intended to isolate and secure the area, but within a few years, the Samnite invasion of Lucania, precipitated the Third Samnite War (298–290 BC). This conflict came to a head at Sentium in 295 BC, when a 'grand alliance' of Samnites and Gauls was defeated by Rome (Livy 10.27–30) – the absence of the Etruscans and Umbrians may have made the difference between victory and defeat (Livy 10.27.11). Rome quickly subjugated the Etruscans and Umbrians and then crushed the Samnites at Aquilonia in 293 BC, before completely overrunning Samnium during 292–290 BC.

During the third century BC, the pace of colonisation was increased, encompassing substantial areas across the peninsula including Venusia (291 BC), Cosa and Paestum (273 BC), Beneventum (268 BC) and Aesernia (263 BC) (Salmon 1969: 55–62). Direct land access to the Adriatic coast was secured for the first time through the defeat of the Sabines and Praetuttii in 290 BC (Livy *Per.* 11; Cornell 1989: 380). Subsequently, territory was rapidly accumulated in north eastern Italy including in the Ager Gallicus in 283 BC and Picenum in 269 BC (Florus 1.10).

The final phase of the military subjugation of the Italians focused on southern Italy. Rome's principal adversary in this area, the Greek colony of Taras (Roman Tarentum), had appealed for assistance to the Greeks against Rome's increasingly hostile intentions (Livy *Per.* 12). As a result, Pyrrhus of Epirus landed an army and conducted an extended and costly series of campaigns across southern Italy and Sicily (280–275 BC – Plut. *Pyrrh.*; Cornell 1995: 365). His army was finally defeated at Beneventum, after which Rome set about completing its conquest of southern Italy. Although, none of Rome's existing allies had joined with Pyrrhus, the Samnites, Lucanians and Bruttians all took the opportunity for rebellion, not being finally suppressed until 272 BC (Cornell 1995: 364). Meanwhile, occasional military activity was still conducted in Etruria, including the defeat of Vulci, Volsinii and Caere; active resistance did not end until the suppression of a revolt at Volsinii in 264 BC and the violent reduction of the Faliscans in 241 BC (Zonar. 8.18).

During the seventy-five years between 338 and 264 BC, Rome had engaged in constant and aggressive expansion, in several distinct theatres of war, leading to the establishment of effective military control across peninsular Italy. By this time, the directly administered *ager Romanus* was extended from c.5,525 km² (c.4.5% of peninsular Italy) to c.26,805 km² (c.21%). Similarly, its resident population increased from c.347,300 (c.11.5% of the Italian total) to c.900,000 (c.30%) (Cornell 1995: 380). In addition, there was extensive redistribution of land (c.7,000km²) associated with the settlement of c.70,000 colonists at nineteen colonies (*ibid.*: table 9). In contrast, at the start of the Republican period (509 BC), Rome's territory was just c.822km² (*ibid.*: 205). Despite the size of these Roman and Latin territories, the majority of land remained in the possession of nominally independent Italian communities, totalling over 150 by the mid-third century BC (*ibid.*: 386; Salmon 1982: 52, 67). As such, it is still difficult to talk of 'Roman' Italy at this date (Nicolet 1994: 600).

Following the subjugation of the Italian communities, wars were conducted beyond the peninsula, to the north in the Po Valley and the foothills of the Alps against the Gauls, Ligurians and Celtic peoples (Boii, Senones, etc.), in Sardinia and Corsica (259 BC) and in Spain during the First Punic War (264–241 BC). However, the Second Punic, or Hannibalic, War (218–202 BC) distracted attention from these areas and brought conflict back to the peninsula (Livy 21–30). The immediate cause of the war concerned Rome's involvement in Spain – a Carthaginian sphere of influence. Although battles were fought around the Mediterranean, the main theatre of war was Italy where Hannibal inflicted a series of defeats and secured the support of several Roman allies, especially in the south. The Carthaginians were finally defeated at Zama (202 BC), when Rome launched a counter-attack on North Africa. Those peoples who had rebelled against Rome were subject to punitive measures, in particular Capua (211/10 BC – Livy 23.2.1–4) and Tarentum (208 BC – Livy 27. 21.8). As a result, large areas of land (up to 10,000 km²) were added to the *ager Romanus* (Gabba 1989: 198). Following the defeat of the Carthaginians, the old alliance system was restored, but Rome's new status of Mediterranean 'super-power' fundamentally altered the *de facto* significance of this situation (*ibid.*: 208).

During the second century BC, the focus of Roman imperialism shifted beyond the peninsula, to northern Italy (Dyson 1985b), the Eastern Mediterranean, Spain and Africa. Many of the communities of northern Italy provided significant resistance to Rome and the

massive campaigns of colonisation and road building demonstrate a more intensive and organised strategy of subjugation and exploitation by Rome (e.g. Dyson 1985b: 115–122; Purcell 1990). Further south in peninsular Italy, the only recorded armed resistance was the revolt of the Latin colony of Fregellae in 125 BC (Livy *Per.* 60). The principal focus of the historical sources for peninsular Italy shifted towards the ‘agrarian crisis’ concerning the ownership and exploitation of land. The growth of the *ager publicus* led to the development of extensive estates which were considered to have driven peasants from the land or forced them into tenancy (e.g. App. *B.Civ.* 1.7.26–8. 34; Livy 6.5.3). The *lex Licinia Sextia* (367 BC) had attempted to limit the amount of *ager publicus* that might be held by individuals (500 *iugera*; App. *B.Civ.* 1.8.33–4). However, its limited efficacy is suggested by the work of the Gracchan land commission (133–129 BC) which intended to identify, recover and redistribute this land to the poor (Plut. *C.Gracc.* 5; cf. Gabba 1989: 203; Hornblower & Spawforth 1996: 39). It would also increase the number liable to military service. For the Roman élite, this was an undesirable piece of populist legislation aimed at appropriating land which had been (illegally) occupied – and at providing the law’s architect, Tiberius Gracchus, with a body of powerful *clientelae*. There is some disagreement between the historical sources about who gained and lost by this legislation (cf. App. *B.Civ.* 1.7–8; Cic. *Rep.* 3.41), though in general, the subsequent appropriation and redistribution of land (including colonial foundations) caused significant disruption for Romans, Latins and Italians alike (App. *B.Civ.* 1.18).

Possible resentments at the Gracchan land reforms may have contributed just one of several reasons for the discontent which fomented the Social War (91–88 BC). During the second century BC, relations with the allies had become strained on various issues; the most significant was the growing disparity between the role played by the Italians in furthering Roman imperialism and the economic and social benefits they received. One potential solution was access to Roman citizenship and its privileges. Rome’s refusal to extend its citizenship led to the outbreak of hostilities with some of the allies, but especially the peoples of the central Apennines (Livy *Epit.* 72), who established an ‘anti-Roman’ state of *Italia* with its capital at Corfinium (Diod. Sic. 37.2.4; Appian *B.Civ.* 1.39; Keaveney 1987: 14–20; Mouritsen 1998; Salmon 1982: 126). Rome quickly responded by providing citizenship, via the *lex Julia* (90 BC), for those communities which had not taken up arms (Salmon 1982: 133) and subsequently the *lex Plautia Papiria* (89 BC) for those who surrendered (Vell. Pat. 2.17.1). These grants neutralised the threat of consolidated Italian

opposition. However, fighting continued against the remaining insurgents and, in particular, the Samnites who were eventually suppressed by Sulla in 88 BC.

The enfranchised communities of Italy forfeited their *de iure* political autonomy and were required to adopt Roman laws and municipal/colonial charters. However, no sooner had the process of rationalising the administration of Italy commenced, than the Civil War between Sulla and Marius broke out. This instigated a series of largely personal conflicts, lasting for half a century, which were aimed at the seizure of political power at Rome, but played out around the Mediterranean. Factionalism of the Italian communities (for Sulla or Marius, Caesar or Pompey) caused particular disruption, as did the subsequent proscriptions and massive veteran settlement programmes. Adding to this picture of disorder was a number of slave revolts, including most famously, that led by Spartacus (73–70 BC – e.g. Cic. *Ver.* 1.2.2; Florus 2.8.5). The founding of the Principate in 27 BC marked the closure of this period of political and military instability. In spite of this disruption, Italy had undergone massive economic development and social transformation during the first century BC – including significant urbanisation and ‘Romanization’.

Although the Principate does not mark the end of Roman imperialism in Italy – indeed, Augustan reforms represent a new phase of enhanced control (Nicolet 1991) – from this time, the attention of the (narrative) sources is monopolised by the provinces. As the purpose of this section is to provide a brief narrative of the conquest of Roman Italy, it is here that this account must end.

2.4 *Imperial & Colonial Strategies*

This section discusses the nature of Roman imperialism and colonialism – that is, the strategies through which Rome extended its military, political and ideological power within Italy, with particular emphasis on the relationships between core and periphery. Despite the logical progression implicit in Table 2.2 – the product of imperial hindsight and the annalistic paradigm of ancient and modern historians alike – the extension of Roman power over the Italian communities was neither predestined, nor the result of a pre-conceived or long-term plan. Further, use of the term ‘strategy’ does not necessarily imply the following processes were explicitly rationalised or pursued as policies. This is not to suggest that Rome conquered its Empire by accident; rather that the strategies adopted and decisions taken were contingent upon contemporary social, political and economic situations which changed significantly over the course of 500 years,.

It must be stressed that, although this section concerns the strategies through which Rome imposed, maintained and extended its political, military and ideological power, the Italians were not passive in these processes (section 1.4.2). The operation of imperialism was contingent upon *dialogue* (Mattingly 1997b); that is, the negotiation of, and consent and resistance to, Roman power. The diversity of experience these dialogues produced will be illustrated in Chapter Four and its significance drawn out in Chapters Four and Seven.

2.4.1 Military Expansion & Physical Control

The most obvious strategy by which Rome extended its imperial control was warfare (e.g. Rich & Shipley 1993) and, during subsequent discussion of non-military strategies, it should not be forgotten that Rome's success was predicated on the application of repressive power or force (see Loomba 1998: 52–3). Rome was annually engaged in (usually aggressive) warfare (Harris 1979: 9). Yet this must be placed in context; during the mid-first millennium BC, Rome was located within a wider military milieu of warrior societies and city-states (e.g. see Barker & Rasmussen 1998; Cornell 1995). Although the nature of this warfare changed over time, several enduring aspects can be emphasised. As well as the simple exercise of force, whether this was military defeat or acts of genocide, warfare also constituted a psychological weapon. The brutal treatment of Aequi encouraged the rapid surrender of the Frentani, Marruncini, Marsi, Paeligni and Vestini (Diod. Sic. 20.101.5; Livy 9.45.18, 10.3.1). Yet capitulation alone was insufficient; Rome insisted surrender was unconditional (McDonald 1965: 23). The immediate aftermath of submission might have witnessed the confiscation of arms, property and other booty and the taking of hostages (e.g. Livy 28.34.7).

An important strategy was mass enslavement; this appears to have been in operation from as early as the start of the fourth century BC, though became more regular with the commencement of hostilities with the Samnites (e.g. Livy 9.44, Cornell 1995: 333). The strategy reached its greatest extent, in quantitative terms, during the second century BC with the mass enslavements resulting from wars, for example, in Sardinia and the East (Crawford 1992: 103). The removal of these people from their societies, as well as those killed during warfare, significantly reduced the capacity for military resistance, even if fomenting further hostile sentiment. More generally, the strategy of physically relocating communities sought to break the physical and emotional ties between people and territory. Such deportations involved both local and long-distance movement; in 269 BC, the

Picentes were moved from their homeland on the Adriatic coast to the vicinity of the recently colonised city of Paestum (Strabo 5.4.13). In 180 BC, 47,000 Ligurians were deported from northern Italy to Samnium (Livy 40.38.1–7, 41.3) and further Ligurian communities were granted land in Gallia Transpadana in 172 BC (Livy 42.22.5–6). Parallels to more recent imperial scenarios suggest that such enforced migrations often involve the creation of ‘reservations’ which consist of land that is undesirable for colonisation by the imperial power or which has no strategic value (Meinig 1992: 132; Sack 1986: 12). Other attested deportations include the relocation of the population of Falerii Veteres to Falerii Novi (Zonar. 8.18) and the exile of individuals and groups both within and beyond Italy (e.g. the exile of the Veliterni to far side of the Tiber, 338 BC – Livy 8.14.4).

2.4.2 Treaties

Whether ‘voluntarily’ accepted, or imposed after military defeat, treaties (*foedera*) formed the basis of the relationship between Rome and the Italians. These established both the tribute owed to Rome and ‘privileges’ granted in exchange. Alternatives included the *sponsio*, an agreement negotiated in the field and ratified by the senate (e.g. Ocrinum – Livy 9.41.20) and truces (e.g. Tarquinii in 308 BC – Livy 9.41.5–7). The diversity of treaties, especially in terms of political status, introduced rivalry and competition amongst the Italian communities, discouraging potential anti-Roman alliances. Notably, these treaties were bilateral; regional leagues in Latium, Samnium, Campania and Magna Graecia were dismantled and treaties negotiated with individual communities – divide and rule (Salmon 1982: 71).

2.4.2.1 Privileges

Central to these treaties was the granting of privileges, especially in terms of political status, (cf. Mouritsen 1998: 85, 87). This strategy is conventionally dated to the settlement of the Latin War (338 BC). In re-organising its relations with the Latini, a series of political statuses, with significant social and economic consequences, was instigated (Livy 8.14.1).

Roman citizenship was graded between full and partial rights; the latter consisted of civil, but not political entitlements – the right to trade and marry and the obligation of military service, but no political influence at Rome (Livy 8.14). The treaty also enshrined the

distinction between Roman ethnicity and Roman citizenship (see Laurence 1998: 103) and, for the first time, a similar distinction was made for Latin identity, with the creation of a Latin citizenship. This comprised a package of social and political rights and responsibilities, again including military service. Crucially, however, Latin status could be conferred regardless of ethnic origin or domicile. At the bottom of this hierarchy came allied status which left communities nominally autonomous in exchange for military manpower. The precise terms of these alliances are unclear – the best evidence coming from the much earlier *foedus Cassianum* (493 BC – Dion. Hal. 6.95; Lomas 1996a: 37; Salmon 1982: 40), though, they are likely to have varied significantly in practice, being negotiated on an individual basis.

This hierarchy of agreements and statuses – which coexisted with local citizenship (Cic. *Leg.* 2.5) – formed a powerful means of ‘political engineering’ (Cornell 1989: 365–8) and arguably constituted the key to Rome’s ability to sustain its conquests (Cic. *Balb.* 31). By effectively designating everything a right or privilege – and always maintaining the possibility of their improvement – Rome fostered rivalry between its subjects, extended its political ideology and preserved its military supremacy. For example, Cumae on the Campanian coast, retained the right to use Oscan after entering a treaty with Rome; later, in 180 BC, the city requested the privilege to use Latin (Gabba 1989: 231). Hence, both the preservation of pre-conquest institutions and their transformation become involved with the exercise of Roman power. However, if this ‘generosity’ offered an incentive to co-operate, Rome also demonstrated that privileges were not to be taken for granted through their withdrawal (e.g. the political demotion of Capua, 211/10 BC – Livy 26.16.5–8).

The Hannibalic War is often cited as an example of the alliance in action (Polyb. 3.90.13–4; e.g. Lomas 1996a: 14). The war focused around Hannibal’s attempts to win the support of the Italians against Rome. Some non-Latin cities and states did defect (e.g. Capua, Taras/Tarentum – Livy 26.16), and twelve Latin colonies refused to contribute manpower (Livy 27.9.7; 29.15.2–5), but the majority remained loyal to Rome (Lomas 1996a: 15). Although this has been seen as patriotism or cultural affinity, the fact that most of the allies had been forced into treaties suggests this ‘loyalty’ actually says more about the efficiency with which Rome controlled the allies (Mouritsen 1998: 69; Salmon 1982: 73). At this stage, therefore, Italy’s cohesion concerned Roman political and military supremacy (Gabba 1989: 208). This was maintained by example; those communities, which attempted to resist Roman authority, were punished, often out of proportion to their transgressions or

potential threat. For example, the destruction of Fregellae (125 BC – Livy *Per.* 60) served as a blatant warning to everyone, whether Latin or Italian, that Rome's power was to be accepted.

One problem with the grading and institutionalisation of statuses and privileges was a form of 'inflation'. As the allies competed for the social, political and economic benefits of different statuses, so Rome had to retain tighter control over access to the most valuable of these – and the principal means by which it distinguished itself – Roman citizenship (Gabba 1989: 239–40; Lomas 1996a: 31, 35). More generally, as the Republic continued to expand, so the value of Roman citizenship increased making it more attractive. In 177 BC, laws were passed to curtail the political accessibility of Rome to Latin and Italian élites (Gabba 1989: 218). Although the magistrates of Latin colonies had been enfranchised in c.124 BC (Gabba 1989: 242), the increasing inequality between Roman and other statuses promoted the outbreak of the Social War and subsequent mass enfranchisement (cf. Gabba 1989: 223, Mouritsen 1998: 87).

2.4.2.2 *Tribute*

Privileges formed only one half of these treaties; Rome also demanded tribute. The principal form of taxation was manpower – the allies were enrolled on the *formula togatorum* from which Rome calculated annual demands (Polyb. 6.21.4). The use of this manpower for Rome's own war effort (Brunt 1971; Cornell 1995: 366) served to perpetuate pre-existing divisions between Italian communities, already intensified by the differential concession of privilege and status. These huge reserves of manpower – already outnumbering citizens in the Roman army by 295 BC (Cornell 1989: 386) – allowed Rome to engage in wars of attrition that its own citizens could not hope to wage alone (Cornell 1995: 364–8), thus providing Rome with further imperial success.

Manpower formed the only systematic tax extracted from the allies; land was confiscated and various other tariffs imposed, but these were both irregular and insignificant in comparison to the demands for manpower (Harris 1979: 61). Roman Italy therefore constituted a primarily military alliance; only secondarily was it fiscal (Nicolet 1994: 601). However, this is not to claim that the extraction of manpower did not have significant economic consequences. Most obviously, it instituted substantial demographic instability, which, in agrarian and pastoral communities, had significant implications for agricultural production. Further, whereas monetary taxes promote, or inhibit, processes such as

urbanisation and increased agricultural and craft production and exchange (Alcock 1993: 19–24; Garnsey & Saller 1987: 56; Groenman van-Waateringe 1980; section 5.2.5), tax-in-kind, including manpower, does not exert the same pressures (Hopkins 1980: 102). This is significant because processes such as urbanisation affected the way in which Rome exercised its power.

However, if Rome did not demand monetary taxation, by using coinage for military pay, Rome extended its own economic order across Italy. The movement of the army assisted in the spread of the system and the standardisation of existing local coinages (Nicolet 1994: 631). Silver coinage had originally been introduced during the early third century BC to pay for military operations in southern Italy, being definitively organised in 212/11 BC with the introduction of the *denarius* (Cass. Dio 52.6; see also SHA *Prob.* 23; Nicolet 1994: 631). Despite this, minting was not centralised at Rome until after the Hannibalic War (Morel 1989: 494).

Two important reasons for minimal monetary taxation can be identified. First, codes of moral conduct at Rome discouraged the systematic economic exploitation of communities for the accumulation of profit (Millett 1990: 3–8). Secondly, as these communities remained autonomous, there was no substantial administrative bureaucracy to fund. Any revenue collection, including manpower, was devolved to the local élite (*decuriones*). This system both guaranteed Rome's income, whilst politically and socially implicating the allied élite within operation of the system.

2.4.3 Administration, Autonomy & Élite

The administration of the Italian allies was locally devolved – it operated through existing social structures and, in particular, the collaboration of the élite. The overall arrangement of Roman Italy therefore resembled, and arguably formed an extension of, Rome's traditional patronage network (e.g. Octavian/Augustus' patronage of Larinum – section 6.4.4). Through grants of *beneficia*, both individuals and communities were indebted to pay *officia* to Rome (Badian 1958; 1979: 14; cf. Mouritsen 1998: 68, 72–3). Rome therefore worked most effectively with communities of enhanced social stratification, such as in Etruria, where it fostered 'communities of interest' with the ruling élite. This was manifested both through a share in the spoils of imperialism and the opportunity to strengthen and extend social status (Cornell 1995: 367). Roman support for Italian élites is historically attested at Neapolis (modern Naples), precipitating the Second Samnite War

(327 BC – Dion. Hal 15.6.5), and Arretium (302 BC – Livy 10.3–5); in Lucania (296 BC – Livy 10.18.8), and at Volsinii (265 BC – Zonar. 8.7.4–8) and Patavium (175 BC – Livy 41.17.3–4; generally Badian 1958: 147–8). The recent suggestion that the lack of such references for the second century BC constitutes valid negative evidence (Mouritsen 1998: 71) against this interpretation cannot be accepted.

The devolution of administration to local élites averted the need for the development of new bureaucratic structures (Cornell 1989: 367–8; Salmon 1982: 41). Indeed, pre-Social War Rome did not develop any systematic structure for the administration of either Italy or the provinces (for voting tribes – Cornell 1995: 383). Not least, this conservatism was related to social and political organisation at Rome – despite the city’s global significance, its social fabric remained that of a city-state (McDonald 1965: 13; Smith 1955: 55).

There is no evidence that treaties with Rome led to the wholesale implementation of Roman law. Indeed, it is difficult to see how political autonomy could have operated in such circumstances. However, certain specific crimes – treason, conspiracy, assassination – came under the jurisdiction of the Roman Senate (e.g. *lex Sempronia*, 123 BC). Rome also acted as arbiter in disputes between communities (e.g. Polyb. 6.13.4–5). This offered communities the possibility of acquiring the weight of Roman authority in a local conflict – at the risk of having the decision going against them. As such, Rome established itself as supreme judge and dispenser of justice.

The administration of Italy was subject to a series of increasingly significant, if *ad hoc* administrative reforms from the late second century BC, but particularly after the Social War. For example, the *lex Julia* (90 BC) and the *lex Plautia Papiria* (89 BC) provided the means for the imposition of Roman municipal charters and by implication Roman land law (Whittaker 1994: 135). Both Caesar and Augustus were also keen reformers (Aug. *RG.*; Suet. *Iul.* 41–2) – the latter began a rationalisation of Italian administration, including the definition of eleven *regiones* (Pliny *HN.* 3.46; Nicolet 1991: 202; Figure 2.2). The granting of citizenship and the process of ‘municipalisation’ ensured that the locus of power remained localised and that the élite did not leave their communities for political careers at Rome, disrupting the *status quo*. Instead, they were encouraged to remain in the (newly-) emergent towns of Roman Italy and compete amongst themselves (e.g. section 5.3.4.1). The census was also extended to form an even more potent means of control (Nicolet 1991: 131–9).

2.4.4 Colonisation – Cities & Landscapes

Rome was involved in the foundation of colonies in Italy for over five centuries (see Figure 2.3); unsurprisingly, therefore, colonisation is not an historically static term. During the fifth and early fourth centuries BC, Rome and the Latin League developed a system of colonisation with two functions – to divide conquered land between the allies (Cornell 1995: 301) and to develop a network of strategic military sites, with defensive and offensive functions (Salmon 1969: 14). The settlement of 338 BC, instigated two new forms of colonial foundation, the (Roman) citizen colony and the Latin colony. The former were political extensions of Rome itself, whilst the latter constituted politically autonomous city-states, retaining a high degree of independence (Harris 1971: 158). Citizen colonies, including *coloniae maritimae*, were comparatively small (c.300 families) and founded, at least until the Gracchan period (133–120 BC), at previously unoccupied sites, for strategic purposes (Lomas 1996a: 36). In contrast, Latin colonies were larger (c.2–5000+ colonists) and located both at new sites (e.g. Buxentum, 194 BC; Cosa, 273 BC) and pre-existing centres (e.g. Nepi, 383 BC; Paestum, 273 BC). Virgane land assignments, without associated urban centres, formed another type of colonisation (e.g. Ager Falernus, 340 BC).

The late fourth and early third centuries BC were a period of continuous colonisation. The majority of colonies were of Latin status aimed at consolidating the recently subjugated areas of Samnium, Etruria and Umbria. Some citizen colonies were established on the coast, though notably few in Magna Graecia. Following the Hannibalic War, a renewed and intensive phase of colonisation during early second century BC was probably intended to ensure the loyalty on those areas which had rebelled, as well as to protect against sea-borne invasion (Gabba 1989: 207). From the mid second century BC, it became harder to recruit for Latin colonies due to a shortage of manpower and the declining benefits of Latin status (Harris 1971: 155–7). As a result there was new emphasis on Roman colonies, despite fears of citizens so far from Rome (e.g. Livy 39.45.5–9; Gabba 1989: 215; Salmon 1969: 102–3). Increasingly, non-Romans were admitted to Latin, and even small Roman, colonies (e.g. Volscians at Antium – Livy 3.1.4–6; Gabba 1989: 213), stressing the importance of colonisation to the Roman Senate even if willing colonists were hard to find. More generally, it serves to emphasise that colonisation involved not only the movement of Roman populations, but also Italians – as colonists themselves or as a result of their eviction from land or their attraction to the economic and social opportunities offered by

colonies (e.g. 4000 Samnite and Paelignian families had settled at Fregellae by the early second century BC, the same number as the original colonists – Livy 41.8.8).

If pre-Gracchan colonies were primarily military (Cic. *Leg. agr.* 2.73; Harris 1971: 152), Gracchan and first century BC colonisation was overtly political, even personal, in its motivation. Yet, it can also be seen as an attempt to control population movements caused by the social and economic disruption of imperialism and civil war (Nicolet 1994: 601). In particular, the admittance of landless peasants into the army created the need for land for veteran settlement. Many of these communities were attached to pre-existing towns, frequently on confiscated land (Potter 1987: 76). During the Principate, colonisation in Italy declined considerably, though continued through the first century AD; the focus of both recruiting and veteran settlement shifted to the provinces. By the mid imperial period, the term *colonia* had become an honorary title for pre-existing settlements.

As well as chronological development, colonisation also demonstrates significant spatial diversity. Examination of the specific contexts into which individual colonies were inserted, and their subsequent development, permits the identification of their diverse functions and histories (Salmon 1969: 60). For example, they served as outposts for seaborne defence (e.g. Minturnae, 295 BC), local subjugation (e.g. Beneventum, 268 BC) or both (e.g. Buxentum, 194 BC); to replace forcibly depopulated centres (e.g. Falerii Novi, 241 BC) or to ‘urbanise’ dispersed populations (e.g. Picentia, 269 BC – Strabo 5.4.13). Others were located at strategic boundaries in order to undermine pre-existing political centralisation, for example, Cosa (273 BC) between Vulci and Roselle, and Castrum Novum, (264 BC) between Tarquinia and Cerveteri. Finally, special foundations included the colony at Puteoli (194 BC) which was established as a port for Rome.

All these colonies performed several basic functions in the creation, maintenance and furthering of Roman domination. Most obviously, they deployed a physical body of colonial agents intended to stabilise areas of recent or potential disorder. Through the grant of (Latin) citizenship, they also increased the number of men liable for military service (Salmon 1969: 56). It is doubtful whether colonies were intended to provide role models for Romanization, though they may have *indirectly* achieved this end (Harris 1971: 158). Rome’s primary concern appears to have been the control, not the cultural transformation, of Italian communities. Nonetheless, colonisation served to replicate and extend the structure of Roman society (generally, Rykwert 1988). For example, the size of individual land assignments at Latin colonies was deliberately used to engineer *de facto* social

hierarchies which imitated Rome's own (Gabba 1989: 203–5, 234). At Thurii on the Ionian Gulf (193 BC), 3000 *pedites* were assigned twenty *iugera* each, whilst 300 *equites* each received forty *iugera*. A similar disparity has been noted for the viriatae assignments in the Ager Ligustinus et Gallicus (173 BC), where citizens received ten *iugera* and Latins and Italians just three *iugera* (Gabba 1989: 213). This inequality is likely to have been confirmed in the laws associated with the foundation of these colonies and was reinforced through their political conduct and architecture. For example, it has been suggested that the military precision with which centuriation schemes were laid out, encouraged their acceptance as authoritative (Frayn 1979: 97).

Yet, at its heart, colonisation embodied a fundamental contradiction. This can be recognised in its conception as a primarily rural phenomenon – ‘fortified village[s] of peasants’ (Rostovtzeff 1957: 13) – despite its implications for the urban landscape of Italy, especially in those areas previously un-urbanised (e.g. Alba Fucens, Aesernia and Beneventum in the central Appennines – Gabba 1989: 206; Nicolet 1994: 621). Although Roman culture became fundamentally urban (Garnsey & Saller 1987: 203), Rome never abandoned the ideology and ethos of the peasant society from which it so rapidly developed. As the evidence in Chapter Four and discussion in Chapter Five demonstrate, this paradox reflected in the instability of individual colonies in the archaeological record.

Intimately related to colonisation is road building (Figure 2.4). In general, roads have been considered primarily from economic and technological perspectives or their embodiment of the *pax Romana* (Pliny *HN*. 27.3; e.g. Chevallier 1976; Morel 1989: 505; Quilici & Quilici Gigli 1992). There is little attention towards roads in the exercise of Roman power (though see Wiseman 1970; Witcher 1998: 60–1), despite the fact, for example, that the provision of land for road building was stipulated in treaties (Gabba 1989: 230). Many Roman roads were formalised versions of pre-existing routes (e.g. Via Appia in southern Italy – Vinson 1972: 87; Etruria – Frederiksen & Ward Perkins 1957: 187). This has significant implications for the inclusion or exclusion of pre-existing settlements and the appropriation and control of everyday movement within the landscape. Roads could be constructed or re-routed as part of deliberate attempts to promote or destroy places (cf. Falerii Veteres, Veii – Witcher 1998: 63). However, there is no straightforward relationship here. Roads may have deliberately bypassed particular places, but this did not condemn them to decline; for example, small towns, markets and road stations were attracted to the Via Appia where it crossed the Pontine Marshes, but the towns above on the Monte Lepini continued in

occupation (Attema 1993a: 236; Koot 1991a: 13). In the Liri valley, the Via Latina, running between the colonies of Interamna Lirenas and Fregellae/Fabrateria Nova, was re-routed along the original ‘economic axis’ of the area between Casinum and Aquinum (section 4.1.2.2). In contrast, the inclusion of Botromagno on the Via Appia and Valesio near Brundisium (Small 1992a: 15; Yntema 1993a: 10) did little to sustain their economic prosperity or urban identity.

Related to both roads and colonisation is centuriation – the systematic surveying and division of the landscape into geometrical parcels of land for allocation to colonists (*Gromatici*). Again attention has focused on the economic motives and technicalities of such work (Choquer *et al.*, 1987; *Misurare la terra* 1985; Quilici 1994) but there has been more consideration of political aspects. Through the complete transformation of the landscape – physically and conceptually – Roman power was blatantly written across the rural landscape as a ‘realisation of a whole vision of society’ (Purcell 1997: 274; e.g. Campbell 1996; Gabba 1985: 284; Purcell 1990: 15; Witcher 1998: 65–6).

If colonisation concerned the creation of new places and landscapes, the opposite – the destruction of place – can also be considered as a strategy. Indeed, the former presupposes the latter, for colonisation never occurred in a vacuum, but involved the destruction or subversion of pre-existing landscapes, both physically and conceptually. More generally, places were destroyed – in acts of what Douglas Porteous (1988) labels ‘topocide’ – to both punish and avert potential resistance. The most obvious Italian example of the former is the destruction of Fregellae in 125 BC, though more infamous was the destruction of Corinth and Carthage in 146 BC (Laurence 1996). An example of the breaking of potential resistance can be identified in the depopulation of Falerii Veteres, through its forcible depopulation and founding of a new town a few kilometres away (Zonar. 8.18; Potter 1979: 98).

All of these aspects of colonisation presuppose the assertion of a degree of control over movement and experience. Through the manipulation of space – whether architectural or the wider landscape – colonisation offered a means of exerting influence over the physical and emotional experience of the world (Bourdieu 1972). For example, roads and centuriation define sanctioned, and thus unsanctioned, movement in the landscape (Purcell 1990; Witcher 1998: 65–6). The standardised architecture of Latin colonies (Curti *et al.* 1996: 173–4) similarly shaped behaviour.

2.4.5 Colonisation of Time, Culture & Representation

As well as the physical colonisation of space, Roman power was also extended through the wider ideology of colonisation. Most obviously, this is found in the surveying, mapping and listing which accompanied the establishment of colonies and has been widely discussed in both the Roman and subsequent imperial contexts (Loomba 1998: 44; Sack 1986: 11; Said 1993: 93, 130). The physical survey of the landscape cannot be separated from the exercise of imperial power (*Gromatici*, esp. *Lib. colon.*; Witcher 1998: 64). Such maps serve to classify and control (e.g. P. Cornelius Lentulus' bronze map of state lands (165 BC) Cic. *Leg. agr.* 2.82; Dilke 1987; Harley 1988; Nicolet 1991: 149; Wood 1993), as does listing (e.g. Augustus. *RG*; Pliny *HN.* 3.51; Vell. Pat. 1.14–5; Brunt 1971: 33). Such activities do not simply reflect reality, but effectively create their subjects – peoples, identities, places, territories (Laurence 1998: 108; Sack 1986: 15–6).

Such blatant tools of imperialism are supported through more subtle means. As well as taking the names of founders, personified abstractions, fair-sounding adjectives and deities (Gabba 1987: 118; Salmon 1969: note 77), some colonies appropriated the names of pre-existing settlements, for example, Cosa (Brown 1980: 8) and Fregellae (Livy 8.23; Wightman 1994c: 26). The writing of Italian histories, such as Cato's *Origines* (2–3) which describe the origins of Italian cities and communities, not only creates these peoples as historical entities, but co-opts these identities into a Roman view of the world. This 'colonisation of time' reaches its most literal in the setting up at Rome of a sundial taken from Catana (263 BC – Pliny *HN.* 7.214).

The removal of cultural objects from defeated communities and their display at Rome is well attested (e.g. 2000 statues from Volsinii in 264 BC – Pliny *HN.* 34.34; Morel 1989: 484). Such actions are overtly political acts of imperial domination (e.g. for Greece, see Alcock 1993: 177–9): the artistic and architectural Hellenization of Rome through the massive importation of Greek *spolia* informs more on the exercise of power than any supposed cultural aspirations (Mouritsen 1998: 62). Rome may not have aspired to impose its own culture, but its direct interference indicates its recognition of the potential power of cultural resistance (Curti *et al.* 1996: 185). As well as the removal of objects of community identity, other means of controlling expression and representation are attested (Webster 1996: 8). For example, the Books of Numa were defined as politically subversive texts and destroyed (Livy 40.29.3). Similarly, the cult of Dionysus was regulated in 186 BC (Livy 39.18.7; David 1996: 141; McDonald 1965: 17–8); work on the power asymmetries within

religious syncretism in the provinces (e.g. Webster 1995) might be profitably applied to Italy in this context. Other strategies include sumptuary laws (e.g. *lex Didia* (143 BC) extending *lex Fannia* (161 BC) to the whole of Italy; also *lex Oppia* (215 BC), *lex Licinia* (140 BC) – Polyb. 6.57.5; Nicolet 1994: 640). The intention was to control the means by which people, but especially the élite, expressed themselves, through the definition of cultural norms and subversive behaviour (cf. Foucaultian readings of madness and sexuality – Loomba 1998: 41).

Whilst eroding local identities, the notion of *Italia* was promoted as a ‘unifying concept’, particularly, for example, to ensure the loyalty of the Italians in times of difficulty such as when threatened by Gallic incursion or during the Hannibalic War (Mouritsen 1998: 69). The later subversion of this identity by the allies during the Social War indicates the extent of its penetration. However, such resistance demonstrates that *Italia* existed largely as a negative definition in relation to Rome (cf. Gabba 1989: 209, Mouritsen 1998: 69). The subsequent Augustan concept of *tota Italia* can also be seen as much as a strategy for the subjection of Italian communities as it was a description of the situation (Laurence 1998: 109).

Finally, the spread of Latin and its role in the cultural and political control of the allies has been much-debated (for summary, Mouritsen 1998: 79–81). Latin must have formed a *lingua franca* for the Italian communities and was the official language of judicial decrees and the military. However, no simple correlation between language, power or identity can be identified. Rome could not impose the use of Latin in everyday contexts, nor did it need or intend to. Simultaneously, the voluntary adoption of Latin does not presuppose any specific transformation of identity. However, as a change in the form of self-representation, it is implicated in the general exercise of Roman power. For example, the use of Latin political titles, even for pre-existing offices, need not imply the adoption of specifically Roman administrative models. The use of Latin for inscriptions, although not widespread until the Principate, also demonstrates a shift in representation, though the specific meaning must be addressed contextually. For example, in many areas, the adoption of Latin in this context cannot be separated from the adoption of epigraphy as new means of expression (e.g. Lomas 1991). More generally, there is some diversity in the date to which non-Latin languages persisted, for example, disappearing (archaeologically) between the first century BC in Umbria and the second century AD at Naples. This clearly presupposes some diversity of significance in terms of cultural identities.

2.5 *A Territorial Approach to Roman Imperialism*

It is widely accepted that Roman imperialism/colonialism was articulated through people – that is, social relations – and not territory (e.g. Isaac 1992: 395–9), employing a decentralised means of administration based upon local agents and communities (Dyson 1992: 2). Perhaps for this reason, the potential of territoriality as a theoretical framework has been neglected. Indeed, given the explicitly geographical and spatial nature of Roman imperialism, it is notable that territoriality, as the key to understanding the social relations, has been so undervalued. More generally, the organisation of space has been widely interpreted as the key to social power (e.g. Bourdieu, Foucault, Lefebvre). Much of the territorial reading of imperialism developed below is implicit within current interpretations, particularly those concerned with the Empire as a whole. The following model makes this explicit and illustrates how it might be elaborated at different scales.

A brief definition of territoriality indicates its potential in the study of Roman imperialism. Hence,

territoriality [is] the attempt by an individual or group to affect, influence, or control people, phenomena and relationships, by delimiting and asserting control over a geographic area.

(Sack 1986: 19)

This definition does not imply that territoriality is based upon economic exploitation – though it may be – rather ‘territoriality is [the] geographical expression of social power’ (Sack 1986: 5). Nor need it imply that territoriality be adopted as a rational or coherent policy; it may be used in contradictory ways, and may not even be explicitly recognised as territoriality. Finally, it is not only a ‘high level strategy’ adopted by imperial states; territories are created and used by all levels of social hierarchies.

The fundamental significance of territoriality concerns a change in the way people are classified – defining a territory allows them to be classified by where, rather than who, they are, replacing a complex web of social relations with a single spatial strategy (Sack 1986: 21, 33–4, 76). This shift is relative not absolute and permits an additional, rather than alternative, means of social power. The classification, division and control of people through their location is intimately related to their conceptual control ‘on paper’ – surveying, mapping, listing, describing. Classifying by territory is a particularly useful strategy for imperial societies because it avoids the necessity of itemising everything to which a claim of control is made. This ambiguity can be a useful strategy to disguise the effective limits of power (Sack 1986: 21, 25, 27).

Territoriality may be used both to exclude and to contain or restrain (Sack 1986: 20). To achieve this, it requires some form of communication – that is, assertion and comprehension – in order to operate. This is usually in the form of a boundary, which makes a statement about possession or exclusion (Sack 1986: 33–4). Historically, the boundary was of great importance to Rome – Jupiter Terminus and the ploughing of the *pomerium* are just two expressions (Cato *Orig.* 1.18a; *Gromatici*; Cornell 1995: 203; Dyson 1992: 122; Nicolet 1991); archaeologically, centuriated landscapes are the most obvious territorial boundaries. However, territories do not always require physical or preclusive barriers. The basic need is for the communication of possession or control, for example, a boundary stone. However, such communication requires enforcement to be effective; a range of non-territorial strategies can be used to this end – legal rights, force, cultural norms and socially-acceptable behaviour (Sack 1986: 16, 20). Indeed, the lack of major landscape divisions outside centuriated landscapes suggests the existence of a widely accepted legal framework to regulate landownership.

Specific architectural spaces, and wider landscapes, can also be used to manipulate social relations through the organisation of ‘events’ and control of movement (Vitr. *De arch.* 1.Pref., 5.1.6–10; Bourdieu 1977; Haüssler 1999; Sack 1986: 33; Witcher 1998: 65). For example, centuriated rural landscapes (Choquer *et al.* 1987; Purcell 1990) and attempts to regulate the movement of mobile communities (Lloyd 1995a: 220). Similarly, at colonies and later Italian towns, highly standardised spatial plans provided a high degree of control over everyday activities. Through the differential access and the control of experience, territoriality can also accentuate pre-existing inequalities and help to foster new ones (Sack 1986: 39).

One potential consequence of territoriality is the emergence of a notion of space as ‘conceptually emptiable’; that is, space is divorced from its social value(s) and reconceived as a commodity to be exploited (Sack 1986: 11). Within a Roman context, this can be seen in the centuriation of landscapes (Purcell 1990: 16; Sack 1986: 12, 33; Witcher 1998: 65–6) – Purcell (1997: 274) stresses that the veteran settlement of the late Republic could only have occurred with previously centuriated (or commodified) landscapes. As a commodity, space is also an empty container to be ‘filled’ with, for example, deported populations (Meinig 1992). More generally, territoriality requires a degree of predictability and abundance in the object of control (land, its productivity, people, resources) in order to operate, so there is a need to stabilise unpredictable landscapes (Sack 1986: 53). In Italy, it

was important to curb the demographic shifts that imperialism itself caused – emigration offered the lower classes potential social mobility and opportunities denied within traditional societies. Curbing such movement through territorial strategies was important for the maintenance of the local power networks upon which Rome relied.

Once successfully utilised, territoriality has a capacity to engender more territoriality. In particular, there may develop an imbalance between ‘events’ and territory, which demands either the development of more events to fill ‘empty’ spaces, or the acquisition of more territory to accommodate existing events (Sack 1986: 33–4). Such a situation is apparent in Roman territoriality where the intensification of élite competition at Rome was played out through acts of conquest first in Italy and then around the Mediterranean. The success of expansion engendered further growth which was essential to sustain existing territory (e.g. Cornell 1995: 366–7). However, this must not be mistaken for a teleological explanation of Roman imperialism – there was no inevitability about this process and no ‘goal’ *per se*.

As Rome expanded, it was clearly impossible to control its vast sphere of influence through personal means, so classification by location became increasingly important. As a strategy, territoriality is always a means, rather than an end, though there may be an attempt to make territory appear to be the aim (Sack 1986: 39). The Roman élite was no exception, acquiring its *de facto* empire largely for social and political reasons, not for the sake of territory or for its economic exploitation. In particular, such a strategy can be used to direct attention away from social inequalities towards conflict between territories (Sack 1986: 39) – imperialism was clearly used in this way at Rome, deflecting attention from domestic social injustice.

Territoriality is a means through which power can be projected onto the landscape, making it both tangible (e.g. roads, arches, villas), but also reifying it (Sack 1986: 32–3). The latter concerns the displacement of attention from the relationship between the controller and the controlled by making territories appear to be natural and independent of power relations (Sack 1986: 33–4). For example, inscriptions may be used to manipulate temporalities and project Roman power onto the past as well as the present and future (Witcher 1998: 65). However, the imposition of a territory by a colonial power may not be obvious to a colonised individual or group (Sack 1986: 74). This is because everyday experience itself is not replaced with an abstract and commodified understanding of space; this remains local and personal (Sack 1986: 77). Nonetheless, such territories may have major

implications for the exercise of power; indeed, the failure to advertise change in the nature of social relations may have formed a particularly insidious means of control (in the context of roads, Witcher 1998: 66). However, territories can also be subverted, and their identities used in bids for secession (Sack 1986: 40–1), for example, the notion of *Italia* during the Social War (Mouritsen 1998: 69).

The model outlined has focused on providing a coherent framework for the structure of Roman imperialism – Chapter Seven develops the potential of territoriality in the interpretation of change in Samnium from the mid first millennium BC. The utility of such a framework is that it operates at any number of different scales and is thus suited to the exploration of not only imperialism, but also colonialism.

2.6 Cultural & Economic Consequences of Imperialism

Some of the implications of post-colonial studies and of the relationship between archaeology and history are brought together in this final part of the chapter. This involves a review of some of the main interpretative models applied to the transformation of Italian societies during the Roman period – Hellenization, Romanization and the slave mode of production.

2.6.1 Romanization

The dominant theoretical framework for the implications of imperialism on cultural identity is Romanization. However, the term demonstrably means different things to different people. Indeed, its enduring popularity may relate to its frequently ambiguous significance. For example, at its most simplistic, the term refers to the process of ‘becoming Roman’ and the loss of pre-Roman identities (e.g. D’Henry 1988), whether that is defined as the adoption of Roman material culture (Salmon 1982: 159) or the coming-to-think-of-onself as Roman (Harris 1971: 147). The process has been considered to represent cultural, rather than political, integration (Lomas 1996a: 7) or, conversely, to be primarily political, not cultural (Curti *et al.* 1996: 183). Related to this is the question of whether Romanization was promoted as an active policy and thus imposed (*ibid.* 1996: 182; Lomas 1996a: 2) or the result of self-motivated (cultural) emulation, particularly by the élite (Millett 1990: 99–101). The motivations for such élite behaviour have been considered to be economic (Gabba 1989: 208) or social/political (Salmon 1982: 100). Romanization has also been related to the spread of urbanisation (Garnsey & Saller 1987: 196, 203; Salmon 1982: 100;

Torelli 1995: 2–14) and the process of Hellenization. Similarly, the dating of the process is also disputed, ranging anywhere from the third century BC to the Augustan period depending on area (cf. La Regina 1970: 204; Mouritsen 1998: 81, 86; Torelli 1995: 14; general, Curti *et al.* 1996: 181–88; Webster 1996; Woolf 1993).

As with Roman imperialism, the historical and archaeological evidence on which Romanization rests has been distorted to fit various contemporary theoretical frameworks (see section 1.4.1). Originally developed to explain the circumstances by which the provinces were brought into the Roman Empire, Romanization is therefore problematic in its application to Italy. There are significant differences between the situation in third century BC Italy and north west Europe two centuries later. Following the conquest of the latter, a strong colonial presence was rapidly established, communities were subject to administrative reorganisation and there were major changes in the use of material culture (Mouritsen 1998: 74). In particular, the role of urbanisation and levels of autonomy and military power were radically different. Romanization has therefore been projected from periphery to core, and from Empire to Republic (*ibid.*: 85–6).

An assessment of the evidence illustrates the distortion of the evidence required to support this model. For example, the extent to which Latin was used by Italian communities before the Social War appears to have been far more limited and uneven than commonly suggested (cf. Mouritsen 1998: 79–81; Salmon 1982: 125). Further, Romanization relies on a series of distinctive colonial constructs for its implementation; again the spread of Latin illustrates the point. The apparent ease with which Oscan was replaced has been considered to be the inevitable result of both the awe and veneration held towards a superior culture and of the passivity of the Samnites towards their own culture (Gabba 1989: 231). The same inevitability is suggested by the limited discussion of the significance of Roman material culture in Italian societies in comparison to the extensive work on similar material in the barbarian societies of northern Europe (Cunliffe 1988; Hedeager 1992) and even Greek material culture in Italian societies (Herring 1991).

The homogenisation of culture and identity implicit within the Romanization model is incongruous with the historical and archaeological recognition that empires are diverse collections of ethnic communities (Sinopoli 1994: 159). These Roman and pre-existing, local identities are not located on a spectrum, where people become more Roman and less Samnite, Etruscan or Umbrian. Rather they are the result of a multitude of locally situated dialogues that have neither a distinctive beginning nor end, nor any predestined trajectory

(Curti *et al.* 1996: 182). Indeed, the variation in the ‘degrees’ of Romanization between Greeks, Etruscans and Samnites, which even the traditional model is forced to acknowledge (e.g. Gabba 1989: 232), serves to emphasise the point.

It has recently been reasserted that ‘indigenous’ material culture disappeared during the early third century BC, leaving of a lacuna before the adoption of ‘Roman’ material culture and ideas during the second century BC (Curti *et al.* 1996: 188). The second century BC has frequently been considered as the period of most intensive Romanization in Italy (e.g. Salmon 1982: 98). However, not only has the severity and date of this break been challenged (Terrenato 1998b: 112), but more fundamental issues concerning what constitutes indigenous and Roman material culture brought into question. If material culture has neither inherent ethnicity, nor stable meaning, then the whole notion of a ‘Roman’ material culture itself must be questioned (cf. Torelli 1995; also Curti *et al.* 1996: 181; Dench 1995: 176; Freeman 1993). Others have taken the logical next step and questioned the utility of the label ‘Roman’ altogether, citing it as a metanarrative which obscures, rather than assists, the interpretation of identities (Barrett 1997a: 6; Grahame 1998a: 175–6; 1998b: 4–6). Hence, for example, the construction of ‘Roman’ architecture or the adoption of ‘Latin’ titles for local public offices does not directly signify the development of Roman identity – they must be considered as part of the negotiations between and within communities regarding social identity and political power (Mouritsen 1998: 76–7). Once both Roman and Other have been broken down into a series of differentiated groups and individuals, the potential for the negotiation of a range of shifting identities transcends the normative model of Romanization (see Jones 1997; Shennan 1989).

Most recently, Romanization has been taken to refer simply to the events involved in the creation of ‘Roman Italy’ (Terrenato 1998a: 20), though to go this far and retain the terminology is curious, given its weighty baggage. Although avoiding the term altogether may be considered avoiding the issue, it is argued here that these processes of cultural change are best approached in terms of *colonialism*. This removes the teleological aspect of Romanization, because the issue of identity is opened up to negotiation and inherent issues of power are emphasised by the removal of the arbitrary distinction between culture, Romanization and imperialism (Mouritsen 1998: 59, 75). This goes to the heart of recent post-colonial debate and the ways in which material and literary culture are used within the operation of power (Said 1993: 61–2). For example, debate as to whether Romanization, in

the form of urbanisation, was imposed on Samnium after the Social War, or the result of local élite competition (cf. Lomas 1998: 66–8, Patterson 1991a), threatens to miss the critical relationship between culture, identity and the exercise of power. Similarly, Mouritsen's (1998: 8) reversal of the relationship between political 'unification' (citizenship) and cultural 'homogenisation' (Romanization) – making the latter dependent on the former *contra*, for example, Cornell (1982) – risks simply reorganising the same arguments into a different order.

2.6.2 Hellenization

Although Hellenization is closely related to theories of Romanization and the extension of Roman domination in Italy – indeed, it has been considered to be a vital prerequisite (Curti *et al.* 1996: 185–6; Terrenato 1998a: 26) – it has not been the subject of quite the same imperial or colonial ideologies. The process has been considered to be the 'central issue' (Morel 1989: 477) of the third and second centuries BC; it therefore overlaps considerably with the traditional chronology of Romanization, which is held to have intensified during the second century BC. Much like Romanization, vagueness about the precise meaning of Hellenization allows it to be variously defined and some thematic overlap can be detected.

As discussed above, there has been a tendency to consider Hellenization to be a primarily cultural, or occasionally, economic process, leading to the development of a common cultural *koiné* (Curti *et al.* 1996: 182–3; Guldager Bilde *et al.* 1993; Morel 1989). For example, during the first quarter of the third century BC, under the influence of Magna Graecia, large parts of Italy demonstrate strong similarities of artistic expression; craft production was standardised and goods widely distributed (e.g. Gnathian, early Campanian wares). An increase in regional diversity during the mid- and later third century BC has been associated with the defeat of Taras/Tarentum and the decline of the cultural influence of Magna Graecia (Morel 1989: 483–4). Such a specific reading of the intersection of the historical and archaeological evidence is debatable. The process regained momentum during the second century BC through the production and (Mediterranean) distribution of highly standardised ceramics (Campanian wares, Greco-Italic amphorae) and adoption of 'Hellenistic' architecture.

There are several problems with the overall model, many of which have already been outlined in relationship to Romanization. Most obviously, the notion of 'Hellenistic' material culture and the arbitrary distinction between culture and power must be questioned

(Friedman 1994: 15–41). It is only in this way that any meaningful statements can be made about the oft-cited observation that the stone theatres and bath-houses of Campania pre-date their appearance in Rome (Morel 1989: 510; Mouritsen 1998: 65–6); or that contemporary to the late second century BC construction of the Hellenistic temple (B) at Pietrabbondante in Samnium, the Latin community of the nearby colony of Isernia were erecting an archaic-style temple (Morel 1989: 491; also Lomas 1996a: 6; Mouritsen 1998: 65). These ‘peculiarities’ point to the same generalisation and suppression of evidence identifiable in the Romanization model. Finally, it is clear that there is extensive overlap between the processes explained by Romanization and Hellenization and that their labelling as either one or the other may be unhelpful.

2.6.3 Economy & Agriculture in Roman Italy

Modern literature on the Roman economy and Italian agriculture, and the effects of Roman imperialism upon them, is extensive (e.g. Barker & Lloyd 1991; Carlsen 1994; Dyson 1991; Finley 1973; Frayn 1979; Greene 1986; Leveau *et al.* 1993; Morley 1996; Rostovtzeff 1957; Spurr 1986; Vallat 1991; White 1967). Debate concerning the economy has become polarised between two (ideological) factions – the formalist/modernists and substantivist/primitivists. The former, heavily influenced by Marxist theory, have emphasised the modernising aspects of the Roman economy. Monetisation, high volume, long-distance trade of low value goods and the specialisation of agricultural and craft production all lend a modern feel to the ancient economy (e.g. Carandini 1981; Giardina & Schiavone 1981; Morley 1996; Rostovtzeff 1957). In contrast, the substantivist/primitivist model argues the economy remained embedded in socio-political structures, where production and exchange were controlled by the social and economic requirements of the élite. This emphasises poor communications and minimises the volume of long distance trade and specialisation (e.g. Finley 1973; see Greene 1986: 14). The emphasis of research has tended to oscillate between these two extremes (e.g. Millett 1990; Morley 1996; Woolf 1993) with limited attempts to develop alternatives beyond this dichotomy. More generally, such economic concerns have dominated study of the Roman landscape, despite what may be termed an ‘idyllic’ tradition concerned with Roman perceptions of, and attitudes towards, the landscape and its representation (Leach 1988), as well as phenomenological approaches within the wider archaeological discipline (Alcock 1996: 457).

Until recently, both archaeologists and historians have taken the propaganda of Roman politicians and commentators – and the enduring *topos* of the peasant – rather literally. As a result, models of Italian agriculture are littered with ‘agrarian crises’ centred on the decline of the peasant in the face of slave-based agriculture and large under-productive estates (*latifundia*) – the most exemplary text in this regard is Plutarch’s *Life of Tiberius Gracchus* (8.7).

Perhaps the most widely discussed model(s) of Italian agricultural development – in terms of the historical and archaeological evidence – concerns the formalist/modernist approach (Carandini 1988: 121–9; Giardina & Schiavone 1981; see Greene 1986: 14–5). The key developments can be summarised as follows: Rome’s confiscation of land from the Italians served to undermine arable production, leading to a decline of small- and medium-sized farms and the rise of large estates based on pastoralism (Toynbee 1965: 286–95). Meanwhile, from the second century BC, overseas imperialism brought vast amounts of capital (booty, slaves) into Italy (Rostovtzeff 1957: 17–20). At the same time, imperialism opened up large new markets in Gaul, Spain, Africa and the East. These strands are brought together in the so-called ‘slave mode of production’ (Carandini 1981) – imperial wealth was invested in land and agricultural regimes were transformed with the development of large, intensively-farmed, slave-based villa estates aimed at supplying the export market for profit (e.g. App. *B.Civ.* 1.7–8; Arthur 1991b: 157; Carandini 1981: 253). The rise of these villas exacerbated the plight of the peasants, who were forced from the land and their property absorbed into larger estates (e.g. Plut. *Ti.Gracc.* 8.10). Thus the availability of land (*ager publicus*), capital, labour (slaves) and new markets combined to transform the nature of Italian agriculture (Gabba 1989: 203; Hopkins 1978: 48–50; McDonald 1965: 13; Nicolet 1994: 618).

By the first century AD, the slave mode of production was itself in crisis; slave estates became economically un-viable because of the development of provincial competition (App. *B.Civ.* 1.7–8; Carandini 1981: 258; see Garnsey & Saller 1987: 59). Unable to compete, estates were broken up and farmed on a more extensive basis within a new system of tenancy (Carandini 1988: 128–30). Over time, the status of these tenants was eroded through debt and social obligations, until they were reduced to *coloni* and effectively tied to the land; simultaneously, land was being re-consolidated into large estates (*latifundia* – Cameron 1993: 45).

Such a brief outline cannot do justice to the complexity of these interpretations; however, it is sufficient to illustrate several basic issues. First, there are inherent contradictions; for example, the use of slave labour is considered to have been both the cause and result of the decline of the peasant class. As suggested above, the use of historical sources is frequently literal and their significance uncritically extended far beyond their chronological and geographical scope (Dyson 1992: 32; Gabba 1989: 200; Garnsey 1979: 2; Rathbone 1981: 10; Vallat 1987b; 1991: 13). From an archaeological perspective (see Chapter Four), it is clear that this generalisation is unacceptable. Further, increasing archaeological evidence suggests the whole chronology is in need of reassessment (see Chapter Five). However, perhaps the most significant problem concerns the uncritical integration of historical and archaeological evidence. For example, the widespread decline in the number of small sites used to support the historical argument for the collapse of the peasantry is based upon highly problematic negative evidence (Foxhall 1990b: 108; Garnsey & Saller 1987: 76). Further, the assumption that slave and peasant labour is mutually exclusive has also been comprehensively dismissed (Attema 1993a: 237; De Neeve 1984; Dyson 1985a: 76; 1992: 32; Rathbone 1981: 14–5). Similarly, a shift in the ratios of imported and Italian Dressel 2–4 amphorae is a tenuous measure of the rise of provincial competition and the collapse of Italian agriculture (Patterson 1987: 115–6; see Garnsey & Saller 1987: 61; Rathbone 1983: 164; Spurr 1986: 141–3).

2.6.4 Metanarratives & Scale

Ultimately all of these models of cultural, economic and agricultural change are high level theories imposed upon, rather than derived, from the data. Through their derivation from various ideological bases, they may be considered ‘grand’ or meta-narratives. That is, they are presented as universal theories designed to explain all the evidence. It is increasingly clear that such models are incapable of accommodating the diversity attested and that a compromise model – or better still, models – is the most appropriate solution (see Bintliff 1997: 17; Millett 1990: 6; Paterson 1991: 133; Terrenato 1998b: 112). This is not to deny the potential utility of some aspects of these models in certain areas (see Chapter Five), but rather to illustrate that debate about the benefits of either ideological extreme is somewhat sterile, when radically different models co-existed in close proximity. Following such a fragmentation of approach, the juxtaposition of these models should serve to illustrate wider similarities and differences and the potential structural relationships between regions.

The inadequacy of these universal models relates to the fundamental, if under-discussed, issue of scale in the investigation of Roman expansion. It is increasingly obvious that patterns and processes identified in the archaeological record are scale-dependent. Yet, there has been a consistent ‘mis-match’ between the scales at which models, such as the consumer city or the slave mode of production, have been developed and applied. Much of this problem relates to the failure to distinguish clearly between the archaeologies of imperialism and colonialism (section 1.4.2). The impact of Rome on subject communities is always manifest at a local scale, that is, colonialism; yet, the Romanocentric approach of much research concerns the motivations and means through which Rome extended its domination, that is imperialism.

So, for example, the study of Roman Italy as a whole, stresses points of similarity – the use of *terra sigillata*, Latin and epigraphy and the development of towns and villas. However, it is important to recognise that such patterning, and its interpretation as cultural and political homogeneity (Romanization), is achieved at a coarse scale of enquiry; it is a generalisation. Yet, frequently, such models are believed to hold good when the scale is changed and individual communities considered. Here, however, these generalisations begin to break down; the detail not visible – or ignored – at the wider scale undermines their validity (cf. Haüssler 1999; Torelli 1995, Curti *et al.* 1996: 188; Terrenato 1998b: 112). This need not disprove the model, but does mean that the scale at which it can be utilised must be explicitly recognised. The two dominant models of the Roman economy (section 2.6.3) illustrate this point well. Their utility is undermined by the consistent mis-match of scale, which allows relevant data to be emphasised or suppressed. When the locus of Roman domination is clearly local, and because the significance of changes in material culture and identity lies within its contextual analysis, it is the very detail that these generalised models omit which provides the key to understanding Roman colonialism and, therefore, imperialism.

2.7 Chapter Summary

In general, studies of Roman Italy are on the verge of dramatic change. The recognition of the sheer range of localised histories effectively defuses long-running and sterile ideological debate regarding the primitivism or modernism of the Roman economy or the motivations of Romanization. Such metanarratives can never accommodate the diversity attested by the historical and (constantly expanding) archaeological evidence (Terrenato

1998a: 25). Indeed, several considerations militate against the assumption of a uniform regional development in Italy as a result of Roman domination. From a post-colonial perspective, the history of each region is the result of a unique imperial dialogue involving, not simply a dichotomy between coloniser and colonised, but a host of shifting identities and discrepant experiences (see papers in Mattingly 1997a; Webster & Cooper 1996). Indeed, this diversity of colonial encounter is accessible through the historical record, which emphasises the protracted and evolving nature of Roman imperialism. Finally, in light of the strong regionalism of both medieval and modern Italy, it seems unlikely that this predilection was any less significant in the past. Overall then, in spite of the Roman ‘unification’ of the Italian peninsula (cf. Keaveney 1987; Mouritsen 1998), there are good reasons for starting with the assumption that diversity, rather than similarity, was the dominant characteristic of Roman Italy, with radical differences in the conquest and character of even neighbouring communities (Terrenato 1998b: 112).

Indeed, it has been suggested that better parallels for some Italian regions might be found outside Italy in the provinces. For example, Baetica, Africa or Achaia could provide more suitable models than South Etruria for the economic development of southern Italy (Yntema 1993a: 236). However, their limited synthesis currently prevents development of this avenue and assessment of diversity within Italy is both more pressing and more feasible. In a wider context, there have been calls for the greater exchange of ideas between Italian and provincial archaeology (e.g. Terrenato 1998a: 20). This approach has been resisted by historians who cite the inappropriate use of theoretical approaches derived in provincial contexts and argue for the historical uniqueness of Italy (e.g. Mouritsen 1998: 74–5, 85; section 2.6.1). In reality, both positions have merit; comparative work serves both to illustrate the diversity of Italy and to challenge the dominance of the historical record over the archaeological (section 1.5.1). However, the inadequacy of high-level theories – especially when derived from within different historical contexts – threatens the development of a mosaic of locally sensitive models, both archaeological and historical. Indeed, it has been argued that if the locus of Roman colonialism is the local and it is vital to develop detailed case studies to illustrate the operation of this power and the diversity of dialogue (Grahame 1998b: 176; Terrenato 1998b: 94).

In the next chapter, the growing preference for ‘culturally significant’ survey units such as town and hinterland is taken to suggest that the means to explore this general fragmentation of perspective are already being implemented. However, in contrast to the theoretical need

for greater spatial and temporal resolution and contextual analysis, the retroactive study of survey data does not always provide this luxury. Nevertheless, subsequent chapters illustrate that useful information can be distilled from these surveys, when subjected to more critical analysis than has traditionally been the case. Chapter Four demonstrates the considerable diversity of pre- and post-conquest Italian societies and Chapter Five considers how this situation was transformed through the experience of imperialism/colonialism. First, however, Chapter Three explores the ways in which survey methodology intersect with results in order to shape interpretations of these historical processes.

Chapter Three

ITALIAN REGIONAL ARCHAEOLOGICAL SURVEY DATA

3.1 *Introduction*

This chapter starts from Cherry's (1983: 406) prediction of the potential of macro-regional comparison of Italian surveys (section 1.2) and the lack of progress towards this goal both in Italy and more generally. The chapter reviews some of the most important methodological and interpretative issues of regional surface survey which have a particular bearing on the project results discussed in Chapter Four. The literature for this subject is vast (e.g. Barker 1991a; 1995f; 1996; Cambi & Terrenato 1994; Keller & Rupp 1983) – those issues explored in detail elsewhere are only summarised here. Areas of particular relevance to the Italian surveys are developed in more detail and illustrated with examples.

The most important issue concerns the ability to compare between the results of different surveys given their diverse theoretical and methodological frameworks. It will be argued that the best approach to such comparative work is a contextual study, conceiving of survey results as 'artefacts' of their specific survey methodologies.

3.1.1 **Survey Comparison**

A key question of this thesis concerns whether or not it is possible to identify similarity and divergence in the archaeology of different regions or whether these patterns are the result of a range of post-depositional and recovery issues. Much research has focused on the assessment of post-depositional behaviour and its influence upon results (see Cambi & Terrenato 1994; Yorston *et al.* 1990). However, a number of researchers have emphasised the influence of archaeological methodology (Mattingly in press; Plog 1976; Schiffer 1987). Here it will be argued that, although depositional and post-depositional behaviour are central to the understanding of survey results, the primary consideration for retroactive survey comparison must be assessment of methodological diversity. The distinction, however, is not clear cut as all these considerations work in tandem.

Comparative work to date has shied away from detailed methodological deconstruction, preferring superficial quantitative comparison of settlement numbers and densities, often in relation to a baseline defined by the South Etruria Survey (e.g. Italy – Greene 1986: 103–9; Lewit 1991; Patterson 1987; Rasmussen 1991: 113; Greece – Alcock 1993; Bintliff 1997). However, the subjective processes through which these sites are recovered and defined mean that such an approach is highly problematic. All survey data must be assessed in the context of the surveyor's objectives and methodologies (Greene 1986: 100; Schiffer 1987: 343). Yet, often this information – or metadata – is omitted from publications, especially when it cannot be quantified. Worse, is *post hoc* estimation and rationalisation (Schiffer 1987: 348), and comparison between interim and final reports often exposes inconsistencies. Demands for better recording and publication of such metadata are legion (e.g. Millett 1992: 3), and although progress has been made, there is still much room for improvement.

As increasing amounts of metadata are published, however, it is apparent that survey comparison becomes more, not less, difficult. All surveys are reductionist, representing complex cultural phenomena in simplified ways, at its most extreme reducing sites to dots on maps (Gillings & Goodrick 1996: 1.2.2). The apparent simplicity of such data – often no more than 'when', 'where', and 'what' – promotes an impression of their comparability. By placing survey data in their appropriate methodological context, and considering them as 'artefacts' of their methodology rather than objective facts, it becomes harder to justify such simplistic comparison. It is not, therefore, that surveys that are more recent are less comparable, but that the reductionism of earlier surveys has made their data appear more compatible than they actually are.

The recognition of the influence of methodology on results has led to attempts to distinguish genuine patterns from 'methodological noise' – that is, to unbiased results (e.g. van Leusen 1996). Schiffer (1987: 10–8) suggests that 'distortions can be rectified by using appropriate analytic and inferential tools built upon our knowledge of the rules governing these processes' and that it is therefore possible to attain what amounts to an unbiased dataset. However, there are serious theoretical considerations about the validity of such an endeavour. Although Schiffer is right to stress that taphonomic processes, including those related to methodology may be patterned might be created by, he is arguably wrong to believe these distortions can be eliminated in order to create an 'ideal' or objective dataset. For survey, in particular, a bias-free dataset is a misplaced concept given the dynamic nature of surface archaeology and issues such as site definition (section

3.2.2.4). Hence, although the influence of taphonomic processes can be identified, they cannot be simply screened out. Such datasets are the unique artefacts of their contextual formation processes.

A related reason for the importance of such metadata is that, like excavation, survey is not a repeatable exercise. Although a field may be walked several years in succession, each visit is conducted under different conditions (light, vegetation, personnel); the archaeology itself also changes as a result of ploughing and erosion. Each individual visit must therefore be considered as definitive and, consequently, a full range of essential contextual metadata must be collected. It is clearly impossible to derive retroactively much of this information, which has been demonstrated to exert considerable influence on survey results (e.g. surface visibility – Terrenato & Ammerman 1996: 107). Fortunately, methodological metadata are the most accessible, and the most important, for providing context for the interpretation and comparison of surveys. It is worth stressing here that comparison is not simply the aim or conclusion of such research, but also a means of analysis itself, facilitating a useful means of characterisation.

3.2 *Issues of Regional Survey*

Broadly, the remainder of this chapter is structured to imitate the order of such methodological decisions for a ‘typical’ project, though there is obviously much diversity in reality, with one decision exerting influence on a range of issues.

3.2.1 *Survey Objectives*

Through the diverse methodologies adopted, the aims and objectives of individual projects exert a strong influence over survey results. In particular, the chronological focus of individual surveys has important implications for the utility of these surveys for the assessment of Roman imperialism. Those results with no relevance to the immediately Roman and pre-Roman periods are obviously excluded here (e.g. studies of Neolithic settlement in Calabria); others surveys, however, demonstrate arbitrary coverage which limits their utility. For example, the chronological interest of both Pontino surveys (section A.1.1.1) finishes at the end of the first millennium BC; imperial period developments cannot therefore be assessed. Conversely, the (published) re-evaluation of a group of surveys in Basilicata and Puglia (section A.2.2.5) focuses on the imperial period to the exclusion of the pre-Roman and Republican evidence. Such bias operates directly the data collected in the field: Di Gennaro & Stoddart (1982: 13, figure 8) illustrate how

the number of prehistoric sites identified in South Etruria has increased dramatically as archaeologists have widened the chronological coverage of their surveys and actively looked for these sites.

3.2.2 Sampling

The first practical methodological decisions faced by any survey concern sampling – both within the region and the definition of the survey region itself.

3.2.2.1 The Region

The definition of survey regions exerts a strong influence on results (Cherry 1983: 386), yet whilst geographers have long debated the problematic nature of the region (e.g. Allen *et al.* 1998; Juillard 1972), archaeologists have been less enthusiastic about the issue (though see Champion 1994: 145–6; Fotiadis 1997). This is odd, especially given its strong association with New Archaeology and the current ‘post-processual’ climate. In contrast with the attention towards the instability of the notion of landscape (e.g. Chapman 1997; Tilley 1994), the region has been reified as natural, static and spatially bounded, rather than dynamic and open to constant (re-) interpretation. Assessment of the diversity of regional units in Italian survey is therefore of fundamental importance.

The majority of the individual South Etruria surveys (section A.4.1), commenced in the 1950s, adopted historical units (e.g. Ager Veientanus, section A.4.1.1.) or road corridors (e.g. Cassia-Clodia, section A.4.1.5). Surveys conducted or commenced in the 1970s demonstrate a preference for large environmental units, such as watersheds (e.g. Biferno and Albegna Valleys, sections A.1.3.2, A.3.1.5.2). Such definitions remain(ed) popular, though by the late 1980s the size of these units was rapidly declining (e.g. Rieti Basin, section A.3.3.3). There has also been a shift towards the definition of more ‘culturally significant’ units, such as hinterlands (e.g. Tuscania, section A.3.1.6; current work at Falerii Novi) (Cherry 1983: 386). The importance of studying *polis* and *chora*, town and *territorium*, as an integrated unit has been widely stressed (e.g. Carter 1981: 167; Dyson 1992; Malone & Stoddart 1994: 188; Millett 1992: 2), though the strong municipalism of modern Italy has long favoured such ‘localised’ town/hinterland analysis (see Curti *et al.* 1996: 189; Terrenato 1998a: 21). A related trend of Italian survey, especially the *Forma Italiae* series, has been the use of (comparatively) large-scale, arbitrary map sheets, for the purposes of Cultural Resource Management (CRM), rather than research *per se* (Terrenato 1996: 222).

Each of these regional definitions has implications for the settlement patterns recovered and interpretations inferred. The Ager Cosanus Survey (Dyson 1978, section A.3.1.5.1) adopted the *territorium* of colonial Cosa as its survey unit. Unknowingly, this excluded the large Etruscan city of Doganella to the north. The survey concluded that pre-Roman settlement was sparse and undifferentiated (Dyson 1978: 258). The subsequent Albegna Valley Survey, which included the Doganella area – and (re-)discovered the city – reconstructed a strongly centralised Etruscan settlement pattern (Attolini *et al.* 1991; Perkins & Walker 1990; sections A.3.1.5.2, A.3.1.5.3). Similarly, in South Etruria, Di Gennaro & Stoddart (1982: 13, 17) note that the shift from ‘following’ roads to blanket coverage of the landscape, significantly increased the number of prehistoric sites recovered.

Regional definition is therefore a value-laden exercise, where the precise location of boundaries may radically alter results. In particular, the use of anachronistic boundaries, which may have little relevance to long periods of a landscape’s history has the potential to affect data from different periods in different ways. For example, the current dominance of the ‘central place model’ may be unsuitable for areas such as Samnium where pre-Roman urbanisation was comparatively limited (Lloyd 1991b: 238). The adoption of units of period-specific cultural significance, such as town/hinterland, presents the danger of implicitly reinforcing, rather than critically questioning existing understanding.

A compromise between recovering a small amount of data about many sites and much information about a single site is therefore in constant flux. The extensive survey regions originating in the 1970s reflect the concerns of New Archaeology, looking beyond the particular to wider systems (Barker 1995a: 3; Cherry 1983: 385–8; South 1977). The current emphasis on smaller regional units – both historical and archaeological – represents an awareness of the excessive generalisation of some earlier work and a desire to return to more culturally significant analysis. In particular, town/hinterland is increasingly promoted as the basic locus of Roman imperialism (section 1.4.2). It is also likely that this scaling down of the scope of regional research is related to changes in funding.

Extensive regional survey can be argued to have made its point regarding the extent of rural settlement. The density and diversity of settlement identified was completely unsuspected and this has revolutionised historically-informed attitudes towards the classical world. The focus of regional survey has now repositioned itself along the spectrum, seeking to emphasise the uniqueness of smaller case study areas, lost within

general regional analysis. However, the concept of the region remains largely unproblematised within Mediterranean survey; it is habitually used as a means to research, rather than an object of it. As a highly fluid concept, shaped by the nature of questions being asked, regional definition is central to any attempt to interpret and compare surveys.

3.2.2.2 *Within the Region*

Regional definition is also, in part, determined by proposed sampling strategies. With the same time and resources, a survey using a probabilistic strategy can investigate a far larger region than a survey that aims for contiguous coverage. In each case, the results achieved are very different; probabilistic survey has inferential power for the interpretation of those parts of the region not sampled; contiguous survey emphasises spatial relationships. As the size of a survey region declines, so sample size can increase. Recently, the logical conclusion of this process – full-coverage survey – has been advocated from several quarters (e.g. Bintliff 1996: 248; Fish & Kowalewski 1990). Indeed, contiguous areas have long been preferred by Italian surveys with an emphasis on CRM (Terrenato 1996: 217–21), emphasising the difficulty of understanding linear features and complex settlement patterns through sampling. However, full-coverage survey does not evade all sampling issues. It becomes even more important to consider the relationship between the region and its wider geographical context (cf. Agro Pontino and Oria, sections A.1.1.1, A2.2.1). Further differing surface visibilities mean that a *de facto* sampling scheme is already imposed on the landscape (Terrenato forthcoming).

As such, it is clear that sampling strategy has a significant influence on the results achieved. In particular, as different sampling techniques are suited to the identification of different patterns, it is likely that the settlement of individual periods will be sampled with varying degrees of success. This is because in effect, one sampling strategy is used to identify several different patterns (i.e. a palimpsest). In Italy, this issue is of particular importance given the contrast between the dense, dispersed settlement of the Roman period and the more nucleated and/or structured patterns of the pre-Roman and early medieval periods. The former is more suited to probabilistic transect survey than the latter, where judgmental sampling retains an important role (e.g. San Vincenzo, section A.1.3.1).

The theoretical probability of sampling strategy exerting influence on the recovery of settlement patterns was assessed as part of the Tuscania project (section A.3.1.6; Figure 4.33a). The results demonstrate that whilst transects and random sampling recovered similar patterns for the Roman period, the more highly-structured Etruscan settlement

pattern resulted in two slightly different results (Barker *et al.* 1993: 237, 252; Vullo & Barker 1998: 5). A more acceptable way to assess the ‘relative efficacy’ of different techniques is to resample retrospectively the results of contiguous survey (e.g. Plog 1976: 136). However, as the individual nuances of each settlement pattern are unique, and the aims and resources of surveys condition the strategies adopted, the study of relative efficiency *per se* is of little long-term benefit. The theoretical probability has been repeatedly proven without the possibility of developing generalising laws (Thomas 1975: 81).

Multistage sampling represents the most promising approach to this issue, allowing limited time and resources to be deployed as efficiently as possible. For example, following the identification, during systematic work, of a strong association between settlement and hilltops, spurs and other raised topography, the Sangro Valley Survey then instigated a more judgmental phase (Bell *et al.* 1997: 7, section A.1.3.3). This significantly increased the number of sites identified, whilst retaining some control over the significance of that sample.

In particular, given the Sampling Paradox – that is, the contradiction whereby the optimum sampling strategy cannot be calculated without first knowing the distribution of the data – it is important to incorporate as much pre-existing knowledge as possible in order to develop the most suitable sampling strategy. This is the exact opposite of the Tuscania Project, which deliberately ignored the results of an earlier survey (*Forma Italiae*) in order to assess, subsequently, the correlation between the two. Initial comparison demonstrates ‘hearteningly close correspondences’ (Rasmussen 1991: 109). However, as will be demonstrated in Chapter Six, objective and/or quantitative comparison between the results of these surveys is limited by their differing methodologies and the dynamic nature of surface archaeology – two surveys conducted twenty years apart are likely to produce very different results. Incorporating pre-existing knowledge into survey design is therefore vital.

3.2.2.3 *Transects & Fields*

Sampling also occurs within survey transects and individual fields or survey units. Accessibility to certain areas may be constrained by a range of factors, such as ownership and visibility. This imposes another sampling strategy over the landscape that must be taken into account. At Tuscania and the Rieti Basin (sections A.3.1.6, A.3.3.3), the aim was to walk the entire surface of each transect; in each case, a substantial percentage was

inaccessible and additional areas were walked to supplement the sample. The Agro Pontino Survey (A.1.1.1.1) walked randomly selected individual fields within transects until the sample size, calculated on the basis of earlier work, was achieved (Loving *et al.* 1991).

Within the individual field, the spacing of walkers and the width of their ‘corridors’ create another sample; multiplication of the two provides the percentage coverage of the field surface. Differing sampling fractions may alter the results achieved – for example, higher percentage coverage might record a similar overall number of artefacts, but produce a wider range of artefacts. Frequently the sampling fraction is increased when a site is identified (Valesio, section A.2.2.2) or when visibility is low (e.g. Rieti Basin, section A.3.3.3) – by decreasing the spacing of walkers; alternatively, specific sampling strategies are adopted. In all cases, however, the need for flexibility in the field (e.g. Tuscania, section A.3.1.6) means that standards of recording and publication must be improved.

3.2.2.4 *Sites – Units of Survey, Record & Analysis*

In order to assess spatial variation across individual sites, various on-site sampling methods have been adopted. Given the substantial quantities of material found at many sites, these aim to find a compromise between collecting enough material to map patterns and identify the full range of artefacts, whilst minimising the overall sample size (Schiffer 1987: 354). This is particularly the case for urban survey where extremely high densities of material have been recorded (e.g. Valesio, Doganella; sections A2.2.2, A.3.1.5.4). Techniques include gridded collection (Rieti Basin, A.3.3.3), ‘dog-leash’ samples (recent work at Falerii Novi) and transect stints (Sangro Valley, A.1.3.3), all of which may be located either judgementslly or randomly.

There is some debate about the most appropriate basic unit of record (and analysis) for survey data. Without doubt, the site has been, and remains, the most popular. Although the landscape is usually sampled on a field-by-field basis, the final unit of both record and analysis is the site (e.g. Oria, Montarrenti, sections A2.2.1, A3.1.3). The issue of site definition has generated a vast bibliography. In brief, some researchers have rejected the site as a conceptual device, identifying it as a product of a range of post-depositional and sampling processes (e.g. Dunnell 1992: 33–4). Consequently, some have advocated the artefact as the basic unit for mapping the landscape as a continuum (i.e. non-site survey). However, the basic significance of the site as a legitimate behavioural phenomenon has recently been reiterated (e.g. Binford 1992: 43). This position is also supported by a range

of phenomenological perspectives (e.g. Barrett 1994; Tilley 1994). Much of this debate has been conducted within the context of African and New World archaeology, where the non-site approach was developed to study mobile societies (e.g. Foley 1981: 10). Its application to the sedentary societies of the Mediterranean has therefore required some adaptation.

The currently widespread compromise between site- and non-site approaches is off-site survey (e.g. Cecina Valley, Tuscania, Rieti Basin; sections A.3.1.2, A.3.1.6). This approach attempts to combine the cultural significance of the site with recognition of the important information to be gained from ‘background’ material (e.g. intensity of landuse). It also recognises the extreme stochastic variation of in the recovery of surface material which makes the individual artefact too unstable as a basic unit of record (Terrenato & Ammerman 1996: 96; Gillings & Sbonias in press). As such, off-site survey combines the site and field/grid square as the units of record and analysis, using one to contextualise the other; sites now appear as concentrations of material against a low-intensity background scatter (Abnormal Densities Above Background Scatter or ADABS – Millett 1991a: 23; also Gallant 1986: 409–13). In particular, off-site survey has been directed towards identifying land use and agricultural regimes (e.g. Pontine Region Project, Tuscania, Gubbio Basin, Rieti Basin; sections A.1.1.1.2, A.3.2.1). The Manuring Hypothesis argues this background or off-site material is the result of the spreading of household rubbish middens on fields (Alcock *et al.* 1994: 134–70; Bintliff & Snodgrass 1988; Gaffney & Tingle 1989; Francovich & Patterson forthcoming; Stoddart & Whitehead 1991: 142; Wilkinson 1989). If valid, this hypothesis should allow changes in past agricultural practice to be mapped, though results so far have been more successful in (arid) areas of higher artefact density (e.g. Greece, Near East – Bintliff & Snodgrass 1988: figure 2).

The decision to use either fields or grid squares for recording ‘background data’ is typically pragmatic. Regular grids are hard to locate on the ground and take no account of variation in visibility within each block, however, they are more suited to statistical and GIS manipulation. In contrast, fields are easier to locate and are more likely to have consistent internal visibility, but offer much less spatial control. However, in reality, boundaries may not correspond to maps (e.g. Campagnano di Roma – King 1993: 115) and Mediterranean agriculture is more heterogeneous than in northern Europe (*agricultura promisca*). These varying benefits and drawbacks are epitomised by the Sangro Valley Survey switching from grids to fields (see Figure 4.10d), whilst the Boeotia Project (Greece) swapped from fields to grids.

Site definition therefore remains important for survey interpretation and comparison, not least, because sites must be locally defined. Many surveys state that sites were clearly manifested as discrete surface scatters (e.g. Biferno Valley, Valesio; section A.1.3.2). However, there are also plenty of individual examples where site definition is more ambiguous, for example, the difference between a cluster of separate scatters and a much larger discontinuous spread (e.g. Metaponto, section 4.2.1.1).

3.2.2.5 *From Sample to Total Population*

The ultimate purpose of sampling is not to make statements about the sample itself, but to infer the properties of a wider population. Yet, many surveys demonstrate remarkably little consideration of this relationship. Frequently, the sample and total populations are treated as synonymous, though where no systematic sampling strategy has been adopted, and thus no inferential power exists, this may be the case.

Inferring from the sample to total population is important at all those levels of sampling discussed so far. However, in reality, the majority of discussion has concerned the regional level. Here, it is important to consider the extent to which a sample is representative of the number and type of settlements in the total population (e.g. Perkins in press). As outlined above, the relationship between sampling fraction, the shape and distribution of transects, and the pattern under investigation, work together to create specific datasets. The transition from sample to total population therefore requires more than the simplistic multiplication of results by the appropriate sampling fraction (e.g. Albegna Valley, section A.3.1.5.). As such, the suitability of probabilistic techniques in the recovery of regional settlement patterns is increasingly questioned; not least, the assumption of random distribution, which underpins these statistical techniques, may be inappropriate. For example, probabilistic sampling strategies would not have improved the recovery of prehistoric sites in South Etruria in comparison to the judgmental approach adopted (Di Gennaro & Stoddart 1982: 13, 17).

Moving on from this, is the issue of whether the location of sites can be predicted using the known attributes of sample sites – that is, predictive modelling (e.g. Warren 1990; Vullo & Barker 1998: 5). Much attention has focused on the use of environmental variables, often with reasonably good results. However, whilst this approach has some use from a CRM perspective (the context in which it developed in the USA), it has been of less value for the purposes of interpretation.

3.2.2.6 *Artefact Collection Strategies*

Sampling is also inherent in artefact collection strategies. For example, resurvey of prehistoric sites identified by the South Etruria Survey suggests that the pottery was collected – or at least retained – on the grounds of its (then) diagnosticity. This implies that prehistoric sites were probably represented by denser scatters than record cards suggest (Di Gennaro & Stoddart 1982: 14). This has implications for re-evaluative work now being undertaken as part of the Tiber Valley Project (Patterson & Millett 1998); for example, high ratios of finewares may not necessarily be indicative of funerary activity or high status sites.

Frequently, the precise sampling fraction of a site is unknown, or is confused by the addition of ‘grab’, or even excavated, material without distinction (e.g. Biferno Valley Survey – section 6.2.10.1). In these cases, it becomes difficult to relate the diversity and amount of material recovered to the socio-economic status of the site. Further, smaller sites are likely to have been sampled to a higher degree than larger sites (both area covered and amount collected); smaller quantities of material mean that it is easier to cover a larger percentage of a site.

Another important influence on artefact collection is the bias of individual fieldwalkers. Just as projects may ‘institutionally’ discriminate against certain periods (section 3.2.1), consciously or otherwise, so the training and experience of individuals can influence which artefacts are recognised (Shennan 1985: 43). However, although it may be possible to assess and allow for such bias in future, little can be done retrospectively and limited emphasis is consequently placed upon its significance here.

3.2.3 **Sampling Summary**

Sampling has been labelled as the ‘most emotive’ aspect of survey design and the nature of some contributions as ‘excessively polemical and evangelical’ (Cherry 1983: 400). The reason for this lies in the gap between theory and practice. In theory, sampling provides a powerful method of transcending bias and maximising what can be achieved with the resources available. In practice, its indiscriminate or uncritical application risks not only losing intuition and the proven success of identifying sites through judgmental methods, but the creation of misleading results. Sampling cannot be avoided – it is inherent within all archaeological research. However, there is a need for explicit discussion of the development of each survey’s strategies, through acknowledgement that these methods operate in tandem with the object under investigation. Consequently, sampling occurs at a

range of different scales and requires reflexive multistage strategies (Cherry 1983: 378, 394). The corollary is that, as individual surveys tailor their sampling needs ever more tightly towards specific regions and issues, inter-survey comparison becomes even more difficult. Consequently, the provision of detailed metadata is even more essential.

3.3 *Survey Intensity*

By far the most significant variable in the recovery of sites is survey intensity (Schiffer 1987: 346). A direct relationship between intensity and the number of sites recovered has been identified (Cherry 1983: 390, figure 1; Plog *et al.* 1978: 389, figure 10.1), with no indication of a point of diminishing returns. Further, increasing intensity not only identifies more sites, but also a wider range of sites. The relative physical visibility (or ‘obtrusiveness’ – Schiffer 1987: 347) of different sites also means that increased intensity is likely to identify a larger number of small settlements, altering the shape of settlement hierarchies. As such, it becomes difficult to compare surveys of different intensities, as they emphasise different types of site. For example, the comparatively small number of modest, low-density scatters located by the South Etruria Survey is likely to be related to survey intensity. In particular, this questions the utility of quoting site densities as a means of comparing between regions. Hence, superficially the density of rural settlement around Larinum (lower Biferno valley) and Oria are similar. However, the intensity of the survey at the latter was substantially higher (cf. Boxes A.3.1.2., A.2.2.1). If similar techniques were extended to the Larinum area, it is likely that the number of sites recovered would have been greatly increased (see also section 7.1.2.1).

The most obvious means of increasing the intensity of a survey is increasing the sampling fraction within the field (i.e. decreasing the spacing between walkers) and/or at the regional level (Cherry 1983: 390). The latter is most easily achieved by reducing the size of the survey region, a trend already noted. Surveys by individuals, especially covering extensive areas, are likely to be of particularly low intensity.

In the absence of detailed metadata with which to assess survey intensity, various measures have been proposed in order to help characterise results and facilitate comparison. These include the number of person days per square kilometre (Cherry 1983: 390), the number of sites per square kilometre and the relative frequency of sites of different ‘obtrusiveness’ (Schiffer 1987: 348). On the basis of these, crude statements about the reliability of results can be made. For example, only surveys with several or more person days per square kilometre can make meaningful statements about where sites were or were not (Cherry

1983: 387). However, many surveys fail to publish even the most basic of data (e.g. *Ligures Baebiani* – see Figure 4.11 as only published map). Further, neither settlement density nor obtrusiveness are technically independent of survey objectives, making the assumption that settlement density and the ratio of sites types respectively are more or less constant. In reality, the assumption that smaller sites will always outnumber larger ones, and by the same ratio, is clearly questioned by comparing the nucleated settlement pattern of Archaic Oria with the more dispersed early imperial settlement in South Etruria (cf. Figures 4.17a, 4.39c). To some degree, settlement palimpsests help to circumvent this problem, but the basic measure remains somewhat circular.

3.4 Surface / Sub-Surface Archaeology

The basic technique of fieldwalking as currently practised was pioneered in the USA, in response to particular archaeological, environmental and academic considerations – vast areas demanding rapid and extensive survey to investigate overall settlement patterns. The particular success of the technique in the south west of the USA relates to the nature of the archaeological record, with many sites existing solely on the surface, with no associated stratigraphy. The arid climate and minimal post-depositional disturbance, especially agriculture, has aided survival. The environment, land use, archaeology and academic priorities of the Mediterranean have required some modification to these techniques. Not least, Italian survey deals primarily with artefact scatters, which are the result of the truncation of deep-stratigraphy, multi-component, buried archaeology through plough action. This introduces the issue of the relationship between surface material and buried archaeology.

Artefact scatters are frequently associated with areas of dark(er) soil where ploughing has cut archaeological deposits (e.g. Biferno Valley, Gubbio Basin, Lloyd 1995a: 184; Stoddart & Whitehead 1991: 147; sections A.3.1.2, A.3.2.1). At Metaponto, this was often accompanied by a slight rise in ground level (Carter 1990: 498, section A.2.1.1). The extent of this destruction is apparent in the Sangro valley, where areas marked by light(er) soils, indicate where bedrock has been brought to the surface, especially below terraces and field boundaries (section A.1.3.3). These are archaeologically sterile, often immediately adjacent to dense surface scatters, indicating the complete destruction of sub-surface archaeology (Tony Brown pers. comm.; cf. also King 1993: 116–7).

In general, survey has assumed a rather direct correlation between surface and sub-surface archaeology. In spite of its fundamental importance, this relationship has been the subject

of surprisingly little research. Only a minute percentage of surface sites have been investigated through complementary techniques, such as geophysics and augering. The results suggest that, although surface material is often associated with buried archaeology, the relationship is not to be taken for granted. Excavations around Metaponto found most surface/sub-surface archaeology demonstrated good correlation (e.g. Sant'Angelo Grieco), but some surface scatters had no associated buried archaeology and several sites discovered through construction work had no surface evidence (Carter 1981: 170; 1983). Similar examples are cited across Italy (e.g. Biferno Valley – Lloyd 1995a: 197).

Another issue concerns how well surface material represents buried archaeology. For example, despite surface evidence for Republican activity, subsequent excavation recovered no pre-Augustan phase at Monte Gelato in South Etruria (Potter & King 1997: 421). Conversely, excavation of Site 9 at Luni found the chronological range of occupation had been under-estimated by surface collection (Delano Smith *et al.*: 1986: 117, section A.3.1.1). In the context of this discussion, a particularly interesting site is Forum Novum, in Sabina, currently the focus of a British School at Rome project. Here, the area of a strong 'villa' crop mark produced a dearth of surface artefacts. On the basis that ploughing had not disturbed archaeological deposits, the site was excavated. However, despite substantial stone foundations, evidence for occupation was limited and it has been suggested that the site may have remained uncompleted, being used for an alternative function (Vince Gaffney, Helen Patterson & Paul Roberts pers. comm.)

More generally, excavation can also reveal periods of occupation unattested in surface assemblages or improve understanding of, for example, the date at which a farmstead developed into a villa (e.g. Matrice, in the Biferno valley – Lloyd 1991c); it also provides local stratified pottery sequences which are vital for the dating of surface material. Geophysics can identify structures (e.g. Rieti Basin – Coccia & Mattingly 1992: 230; section A.3.3.3) and augering can investigate areas where surface visibility is limited (Biferno Valley – Barker & Linington 1995: 83–98).

Ultimately, the results of such investigations suggest that surface scatters are more than just 'the junk you find on the surface' (*Real Mesoamerican Archaeologist* – Flannery 1976: 51). However, they also demonstrate that the relationship is highly varied, requiring that all surveys should adopt a range of techniques in order to address this issue.

3.5 *Post-Depositional Processes*

The literature on post-depositional formation processes is extensive (e.g. Cambi & Terrenato 1994: 168–74; Schiffer 1987). As with the relationship between surface and sub-surface archaeology, the complexity of the processes involved prevents simplistic assumptions being made and requires detailed geomorphological work to be conducted as an integral part of all survey work. These processes range in both spatial and temporal scale, from major long-term environmental changes, agriculture, land improvement schemes, and modern development. All of these processes interact to distort the archaeological record and to curate new patterns.

Generally, research has focused on the influence of geomorphology on regional site distributions (Cecina Valley – Terrenato & Ammerman 1996: 93–5; Pontino – Attema 1993a: 18–9; Voorrips *et al.* 1991; sections A.1.1.1, A.3.1.2) and vegetation and ploughing on localised variation in artefact densities (Li Castelli di San Pancrazio, Muro Maurizio – Burgers 1992: 114–6; 1995: 409; section A.2.2.3). This work has demonstrated not only the profound influence of geomorphological processes and vegetation on the visibility of sites, but the difficulties of generalising about them. As a result, it is vital that all surface survey is accompanied by assessment of the ground surface in terms of its geomorphological development and its current land use; such work is increasingly standard, if limited, for the majority of modern surveys.

More advanced work in the Gubbio Basin (section A.3.2.1) has begun to tackle the issues surrounding the way in which material culture was originally incorporated into the archaeological record. By comparing the stratigraphy of Neolithic and Roman period sites, it is clear that very different cultural, economic and natural processes were involved in their creation (Stoddart & Whitehead 1991: 143). As yet, however, the potential of detailed agricultural histories in the creation of surface scatters has not been developed in Italy.

Despite the crucial importance of post-depositional factors for the interpretation of survey results, retroactive assessment is difficult. New archaeological and geomorphological fieldwork may provide some form of control, but significant geomorphological or agricultural changes may have occurred since the time of the original survey (e.g. due to ploughing, erosion, dam construction, etc.). Therefore, assessment of whether gaps in settlement patterns relate to genuine, geomorphological and/or recovery factors needs to be based upon a combination of original survey records, new fieldwork and the assessment of

contemporary aerial photographs or satellite images. However, a major problem is that many surveys do not provide sufficient detail regarding the location and extent of areas walked or not walked.

3.6 *Resurvey*

As a result of the instability of surface archaeology, some attention has been focused towards repeat survey, both as part of original survey design (e.g. Biferno Valley – Barker 1995e: 48–51; Montarrenti – Bartoloni *et al.* 1984: 287; sections A.1.3.2, A.3.1.3) and as a means of assessing earlier surveys and rates of erosion (e.g. South Etruria – Di Gennaro & Stoddart 1982; see Cherry 1983: 399, section A.4.1). This work has produced a wide range of results. As expected, a deterioration in the condition of artefacts is widely noted, often significant enough to lead surveyors to suggest that scatters would have been classified differently without prior knowledge of their former character (e.g. Pontino – Attema 1993a: 120; Oria, Yntema 1993a: 185, Valesio – Boersma *et al.* 1991: 125; sections A.1.1.1.2, A.2.2.1, A.2.2.2). The speed of this erosion can be dramatic, often notable between consecutive years. At Montarrenti, a c.50x50m scatter (Site 19) was reduced to just c.7x7m in three years (this example, incidentally, contrasts to simulation work which suggests that ploughing disperses artefact scatters over time – Yorston *et al.* 1990: figure 5; this may relate to the issue of site/scatter definition – section 3.2.2.4). Similarly, in the Biferno Valley, the discernible plan of a three-aisled building (A249) could not be re-identified just a few years later (Barker *et al.* 1986: 301; Lloyd & Barker 1981: 290; sections A.1.3.2, 6.6), though in the Liri valley, deterioration of surface material was still recognisable after circa twenty years of ploughing (Wightman & Hayes 1994b: 45, section 1.2.2.1). Variation within a single season was also assessed at Montarrenti – selected scatters were sherded immediately after ploughing and again after harrowing and heavy rain. This revealed a completely new set of finds of similar quantity and range (Bartoloni *et al.* 1984: 287).

Recognition of the speed of this erosion has led to re-assessment of the value of existing datasets and more concerted efforts towards identifying their relevant metadata. However, despite this erosion, sites recorded decades earlier have been successfully re-identified (South Etruria – Di Gennaro & Stoddart 1982: 6; Michael Craven pers. comm.), as well as new sites brought to the surface through changing agricultural techniques and higher intensity survey (Ager Capenas – Camilli & Vitali Rosati 1995; Liri Valley – Wightman *et al.* 1994: 3–4; section A.4.1.3). Although the condition of such material may have

significantly declined (e.g. King 1993: 119), such work may extend the overall range of artefacts recovered (e.g. Tuscania – Barker & Rasmussen 1988: 34; Quilici Gigli 1970; Rasmussen 1991: 109; section A.3.1.6).

In nearly all cases, the greatest variation concerns smaller sites, whilst larger settlements are more consistently manifested (e.g. Liri Valley – Wightman & Hayes 1994b: 43). This inter-annual instability is exactly the patterning predicted by the concept of ‘obtrusiveness’ (Schiffer 1987: 347), and has been usefully modelled using Monte Carlo simulations (Terrenato & Ammerman 1996: 93–4). Assuming one in twenty artefacts in the ploughzone is visible on the surface and, of these, only one in five is diagnostic, the model suggests that below one hundred ploughzone artefacts (i.e. five surface artefacts), stochasticity expresses itself through the presence or absence of surface material. With larger assemblages, stochasticity is manifested through significant variations in surface densities. Terrenato & Ammerman (1996: 95) suggest that c.300 ploughzone artefacts (producing c.2–6 diagnostic surface artefacts) are needed before a site can be consistently recognised (and dated) by survey work. However, it has been suggested that even these low ratios may be generous (Bartoloni *et al.* 1984: 288).

Although smaller sites are subject to more significant inter-annual variation in visibility, in partial compensation, they are also more likely than larger sites to accumulate into palimpsests. However, quantification or modelling of such relationships is difficult. In general, therefore, whilst it is understood that not all sites are recovered (Lloyd 1991b: 234), it is assumed that the larger and more important sites at least are consistently recognised as well as a range of smaller sites.

Resurvey therefore appears likely to play an increasingly important role in research, both within new projects and re-evaluative work (e.g. current work at Nepi – Ulla Rajala pers. comm.), in order to understand the dynamic ways in which these data are created. In particular, this will require new ways of mapping and presenting data to replace static distribution maps. One important technology here is GIS (section 3.9.3).

3.7 Visibility

All of the points discussed so far have some bearing on the issue of visibility, whether this concerns geomorphological change, sampling strategy, survey intensity or land use. In effect, uneven visibility is another form of sampling. On a general level, this can be addressed through (environmental) stratification (e.g. Cecina Valley, section A.3.1.2;

Schiffer *et al.* 1978). Within the field, the spacing of walkers can be tailored to different surface conditions (e.g. Farfa, section A.3.3.1). In order to maximise the rate of site recovery in the central Cecina valley, only areas of the highest visibility (in terms of vegetation and geomorphology) were walked (Terrenato 1996: 224; Terrenato forthcoming). This is a similar methodology to that used by the South Etruria Survey (section A.4.1), where attention was focused on areas of the highest visibility, such as freshly ploughed fields, and less time spent in areas of limited potential (e.g. vineyards – Michael Craven pers. comm.). However, without coverage of areas of different surface visibilities, it becomes difficult to make statements about the wider settlement pattern. This problem has become more pressing as surveys have turned their attention to upland environments, where arable production is limited (e.g. Cicolano Mountains, section A.3.3.4). However, at Montarrenti even low visibility, unploughed fields often produced small, but significant, numbers of sherds (Vullo & Barker 1998: 5, section A.3.1.3).

3.8 Ceramics

Ceramics undoubtedly form the mainstay of archaeological survey, providing evidence for economic function, social status and, most importantly, date. As discussed in section 3.2.2.6, sampling of this material varies widely. Many earlier surveys indicate only presence or absence of (then known-to-be-diagnostic) wares; sherd count is now the minimum measure, though is often supplemented with weight (Schiffer 1987: 18; Sinopoli 1991). Measures are also being deployed in increasingly subtle ways (e.g. calculated densities – Rieti Basin, section A.3.3.3; see also Millett 1991a), though extreme caution is required given the frequently low numbers involved (section 3.6).

3.8.1 Finewares & Coarsewares

Finewares form only a small percentage of most survey assemblages, yet bear the weight of diagnostic functions (MacDonald 1995: 25). Given the rarity of these wares, it is unlikely that they were distributed evenly in terms of social and economic status and may have remained in ‘circulation’ for comparatively extended periods of time. It has also been demonstrated that there may be significant variation in their supply over time (Millett 1991a; 1992: 2–3). Using different finewares to identify specific periods of occupation is also problematic, as differences in the value and accessibility of finewares are likely to be expressed through distinct social and economic distributions. Therefore, spatially and temporally, the discrepant circulation of finewares shapes specific datasets and

interpretations. Yet, for distribution maps to be valid measures of variation in settlement, the frequency and distribution of pottery must be more or less constant through both time and space (Millett 1992: 2).

Survey is also fundamentally reliant on a largely peninsula-wide set of standard diagnostic finewares. Consequently, most start with a presumption of a ‘normal’ sequence of material culture, in terms of use, discard and date, and by implication, significance. However, this approach clearly conflicts with theoretical approaches to the active role of material culture in the negotiation of identity (e.g. Jones 1997; Shennan 1989). Beyond their immediate chronological value, pottery is treated primarily as an economic phenomenon with implicit social, even ethnic, assumptions. The subtleties of regional development are therefore reduced to simple variation within the same generic framework.

Limited quantification and the indiscriminate use of terminology hinder comparison between survey results. For example, discussion of *vernice nera* (also known as Black Gloss, Black Glaze(d) wares, Campana A/B/C, Campanian ware) rarely makes clear whether the material was imported or locally produced¹. Similarly, statements of variation in quantities over time are frequently unclear as to whether they refer to all *vernice nera*, or just the datable pieces. The date at which a survey’s ceramics were studied must also be considered, as knowledge of dating is constantly expanding.

Ideally, quantified mapping of the basic diagnostic ceramics would provide a context within which material from individual surveys might be assessed. For example, questions such as whether there is greater diversity between regions, or between the different periods of a single region, could be used to consider issues of uneven site visibility, supply, demand and identity. In terms of crude presence and absence, it is clear that all the basic diagnostic forms have extensive distributions, but it is also clear that there is some localised variation in their spatial and temporal distribution. This is only to be expected given differences in their production, marketing and transport. However, few quantified databases are available with which to attempt to map these patterns; even simplistic ratios of the basic diagnostic forms are next to impossible to produce on the basis of published evidence. Yet, without this context, it is difficult to locate individual regions within the wider framework of Roman Italy.

¹ Consequently, the original terms are retained in discussion of surveys in Chapter Four.

Of the basic diagnostic ceramics, *vernice nera* (c. fifth–first century BC) was produced and imitated across Italy – Campanian A ware had the widest distribution, whilst Campanian B and C were of more limited distribution (Hayes 1997; Morel 1981). The majority, however, was locally produced (e.g. Biferno & Liri Valleys, Metaponto, South Etruria; sections A.1.2.2.1, A.1.3.2, A.2.1.1, A.4.1). *Terra sigillata* (c. late first century BC – early second century AD) was produced at a more restricted number of centres within Italy and distributed more widely. Finally, African Red Slip was imported from North Africa, though was locally imitated as Red Painted wares. As such, it is clear that there are major differences in the production, supply and consumption of these basic forms. In particular, it is apparent that over time, increasing reliance is placed upon diagnostic pottery from ever wider and more specialised markets.

The emphasis of surveys upon finewares is largely methodological – indeed, in terms of interpretation, the isolation of fine- and coarsewares may represent an invalid distinction between utilitarian and prestige goods (Champion 1989: 8–9; Hopkins 1980: 103). Increasingly, however, local pottery sequences are facilitating the dating of a wider range of coarsewares (MacDonald 1995). Indeed, the excavation of a range of local sites is vital for the interpretation of any survey results (*inter alia* Cecina Valley, Gubbio Basin, Metaponto; section A.3.1.2, A.3.2.1); surveys without such datasets risk not only underestimating the extent of settlement, but also failing to identify local diversity. The potential of such work is demonstrated at Tuscania where upto half of coarsewares have datable parallels with which to extend the number of dated sites and/or the length of individual sites' occupation (MacDonald 1995: 27; section A.3.1.6). Such refinement of chronologies in future may mean that the periodisations of older surveys will be quite generic in comparison; further, as many of these projects did not (systematically) collect undiagnostic coarsewares (e.g. South Etruria Survey), re-evaluative fieldwork may be the only means of reassessing this work.

As well as coarsewares, the importance of amphorae for dating has been demonstrated in areas of limited finewares such as Luni (Delano Smith *et al.* 1986: 100–2, section A.3.1.1) and is assuming increased importance (MacDonald 1995: 25). Local tile sequences are also being developed (e.g. Rieti Basin – Coccia & Mattingly forthcoming; Sangro Valley – Lloyd *et al.* 1997: 22–3; Tuscania – Barker forthcoming; sections A.1.3.3, A.3.3.3).

3.8.2 Use & Discard

Much research on the use and discard of ceramics has privileged production (e.g. Peacock 1982) and supply (Millett 1991a) at the expense of demand and consumption; there has been even less attention to issues such as cultural identity (Fotidias 1997). Yet, it is the latter concerns that underlie issues such as Roman imperialism. In particular, there has been little attention focused on the use of material culture as an active medium through which to create and express identity (Shanks & Tilley 1987: 114–7; though see Hawthorne 1998). The cultural significance of using one type of pottery over another has barely been discussed (see Grahame 1998a: 8).

The use of a largely normative set of ceramic forms implicitly perpetuates the notion that these forms were consumed in the same ways, regardless of context – amphorae at a small farmstead are not distinguished from amphorae at a villa. Nor is the consumption of *terra sigillata* in southern Italy distinguished from that at locations much closer to its (most important) source in northern Etruria. Clearly, there is a pressing need to contextualise these diagnostic forms, both within and between regions, in order to develop their significance.

3.8.3 Dating & Periodisations

Periodisation is almost totally reliant the largely arbitrary dating brackets of diagnostic ceramics. Frequently, these dates are grouped together to define historically-significant periods (such as Republican or early imperial). However, such archaeological periods rarely ‘dovetail’ neatly with the historical evidence (e.g. the dating of Black-glazed pottery in southern Italy and the chronology of the Roman conquest, section A.2.1.1); these time-slices form a simplified means of handling data. In particular, by creating static snapshots – and measuring the differences between them – survey creates arbitrary points of transition and focuses change upon them (see Barrett 1994: 12, 33). Yet, societies rarely demonstrate discrete moments at which one system (of material culture or identity) stops and another begins: rather, they are in a constant state of transition at the scale of everyday social praxis. More worrying is the grouping together of datable artefacts under (pseudo-) ethnic historical labels. By imposing historical classifications upon the archaeological evidence (e.g. the ‘Samnite’ or ‘Roman’ periods), there is a danger of simply reinforcing current conceptualisation of cultural and ethnic identities and failing to consider how they may relate to changes in material culture (generally, section 2.6.1; Biferno Valley Survey – section 6.2.2).

As a result of this ‘mismatch’ between the scales of past behaviour and archaeological survey, a series of issues arise. Most obviously, the coarse scale of archaeological survey contrasts with the rapid geopolitical expansion identified in the historical record (see Sinopoli 1994: 173). More specifically, the occupation of individual sites need not correlate with arbitrary periodisations: cycles of occupation and abandonment may be subsumed within any single period, leading to the creation of palimpsests (Biferno Valley – Lloyd 1991b: 234, section 6.3). The low levels of diagnostic material needed to identify the occupation of a site mean that stochastic variation can easily create ‘breaks’ in occupation (generally, section 3.6). Consequently, surveys frequently have to make assumptions regarding site histories (e.g. Tuscania – Vullo & Barker 1998: 6; Rieti Basin – Coccia & Mattingly 1995: 114; generally, Lloyd 1991b: 238; sections A.3.1.6, A.3.3.3) and presume continuity rather than reoccupation. On an even finer-scale, is the question of seasonal versus year-round occupation (*ibid.*: 236–7). One method of addressing such issues is to increase the resolution of survey periodisations; this requires even higher intensity work and, in particular, more excavation to provide stratified deposits.

3.8.4 Spatial & Temporal Generalisation – Regionalisation

A significant methodological influence upon data and interpretation concerns the way in which change and temporality are recorded. In theory, attributes such as size, artefact density, and consequently status, should be free to vary over time (e.g. Keos, Greece – Cherry *et al.* 1991: 328). However, the comparatively thin and discontinuous surface archaeology in Italy frequently makes the identification of these ‘components’ difficult. As a result, many surveys quote only a single ‘aggregate’ size or density for individual scatters (e.g. Biferno Valley, section 6.2.1.1), or make only broad distinctions between prehistoric, classical and medieval occupations (e.g. Tuscania, section A.3.1.6). These full range of values these variables may take are therefore limited, hindering assessment of temporal change.

Methodologies may therefore smooth over inter-period diversity, predisposing data towards an interpretation of strong continuity. Thus, caution should be exercised when interpreting such data. However, the specific impact is difficult to assess, because reliance upon different finewares may serve to promote a *discontinuity* between periods (e.g. Millett 1991a: 20). The identification of such pre-dispositions, and assessment of the tension between them, is therefore vital.

A related issue concerns the notion that if enough data are collected, it is possible to smooth over abnormal results and methodological influences, and identify patterns through generalisation – or ‘regionalisation’ – of the data (e.g. Greene 1986: 105; Potter 1979: 133). Yet, the identification of such diversity (i.e. patterning) is arguably the basic objective of such research. Critically, such an approach can only assess change by aggregating the data from individual sites to create hypothetical or ‘average’ sites. This confuses the development of regional settlement with the development of individual sites. It is impossible to access such changes on the individual sites recovered, and assessment of processes such as nucleation or change in status is obscured.

The methodologies that generate these data may therefore also generalise, or ‘regionalise’, them. Some emphasis has been placed upon this issue, and it will be explored further in relation to the Biferno Valley Survey (Chapter Six). This attention is considered important both because of its limited discussion within the literature and its importance for the comparison of survey results.

3.8.5 Comparison of Periodisations

In contrast with Greece (Bintliff & Snodgrass 1985), no generally agreed periodisation has been proposed for pre-Roman and Roman Italy. Regardless of the theoretical limitations of such an approach, the fragmented cultural history of the peninsula makes such a framework impossible in practice. In Italy, significant variation in the production, exchange and consumption of these ceramics can be glimpsed. For example, at Metaponto, the majority of Black Gloss dates to fifth and fourth centuries BC (Carter 1990: 409, section A.2.1.1); *circa* eighty percent of Black Gloss from the Ager Veientanus dates to the second half of the fourth and third centuries BC (Liverani 1984: 42, section A.4.1.1). In Puglia, production at ‘native’ centres peaks during the third century BC (Yntema 1993a: 35), whilst locally produced Black Gloss from the Biferno Valley peaks during the third and second centuries BC (section A.1.3.2). Material from the Liri Valley peaks even later, in the second and first centuries BC (Hayes & Martini 1994b: 70, section A.1.2.2.1). Similar variation in the distribution of *terra sigillata* and African Red Slip wares can also be identified, apparently varying with proximity to production centres or communication networks (e.g. Lewit 1991: 20; MacDonald 1995: 26; Moreland 1992: 120).

The identification of such variation in the archaeological record must form a central part of the study of the impact of Roman imperial expansion upon Italian societies. Rather than

simply consider these patterns to be economically-shaped, there is much potential for interpreting these differences in terms of colonial relations and identities (see van Dommelen 1998; Fotidias 1997). Clearly, however, the above observations of variation in black glazed wares conceal a range of ceramic definitions and approaches to quantification which currently prevent significant emphasis being placed upon them. Classification and dating authorities need to be made explicit in order to assess their comparability in the light of continually improving typologies and chronologies; the potential of extensive re-evaluation of survey material wherever possible is clear (e.g. current Tiber Valley Project – Patterson & Millett 1998: 6).

3.9 *Analysis, Interpretation & Presentation*

As an integral part of methodology, analysis and theoretical frameworks also intersect with past behaviour to produce specific interpretations. This is illustrated by consideration of the uneven impact of Roman imperialism/colonialism upon a series of the simplified dichotomies – urban/rural, upland/lowland, public/private, domestic/funerary élite/peasant (see Terrenato 1998a: 105, table 1). In each case, the former demonstrates greater and more rapid change because of Roman influence, than the latter.

This observation has important implications for the study of Roman imperialism/colonialism through survey evidence. Most obviously, survey concentrates on rural areas, yet the most visible effects of Roman expansion are likely to be found in urban contexts. This stresses the need to consider town and country within a single integrated framework (e.g. Millett 1991b; section 5.4.3). In contrast, however, survey has tended to concentrate on the agricultural landscapes of the lowlands, where the impact of Rome may have been greater. Similarly, the bias towards domestic settlement may over-emphasise ‘Romanization’, at the expense of the more conservative burial record (see Terrenato 1998a: 24). As such, the expression of Roman domination in the archaeological record directly interacts with survey techniques to create and reinforce particular interpretative models.

In re-assessing existing survey interpretations, it is important to acknowledge the influence of historically-informed models upon them. For example, Attema’s (1993a: 237, section A.1.1.1.2) interpretation of the development of a villa economy in the Agro Pontino is heavily reliant upon historical knowledge about Rome’s grain supplies; expansion is pushed back into the third century BC in order to pre-date Rome’s acquisition of alternative overseas grain supplies. Similarly, in Northern Campania, Arthur (1991a: 63,

100, section A.1.2.1.1) reveals a desire to push the development of the villa economy back to the late third century BC to correlate with Rome's (historical) defeat of Carthage. More generally, an historical emphasis on the late Republican decline of the peasantry has encouraged the uncritical acceptance of negative evidence for the abandonment of small settlements (see Dyson 1992: 5; section 2.6.3). For Samnium, over-emphasis on the military aspects of Livy's narrative (7–10) has led to a systematic failure to stress the major contemporary demographic and economic expansion of Samnite society (cf. Dench 1995; Salmon 1967; section 7.2.4)

The identification of such influence is frequently difficult as it may operate insidiously upon surveyors' interpretations. However, the provision of improved metadata, especially those concerning the surveys' objectives, the personnel involved and their approach to the relationship of historical and archaeological evidence, might improve such understanding.

3.9.1 Classification Schemes

Another layer of interpretation is provided by (interpretative) classification schemes. The diversity of approaches adopted presents particular problems for survey comparison. Most obviously, there has been a tendency to subject archaeological data to historically-derived frameworks: for example, assumptions about the archaeological expression of historical events and processes (e.g. decline of peasant class – e.g. Plut. *Ti. Gracc.* 8.10). The use of the term 'villa' epitomises this issue. It has been used to indicate any large and/or wealthy site, regardless of the specific spatial and temporal limits of the historical record (see Morley 1996: 144). Yet, implicit in this label are assumptions about social and economic organisation, leading to confusion as to whether villas represent the production or consumption of wealth, the social status of owners and workers and their position within the wider economy (Alcock 1989: 20; Cambi & Terrenato 1994: 214; Lewit 1991: 15; Morley 1996: 99, 110, 129–30).

There have been various attempts to provide classificatory frameworks for villas, mostly informed by historical, rather than archaeological, considerations. Carandini has proposed two schemes – the first, defines three basic types based on: (a) intensive production of wine or oil; (b) extensive production of pastoral goods (central Italy, Apulia, inland Sicily); and (c) intensive production of grain (Sicily) (Carandini 1981: 198–9, 252–3); the second scheme proposes Central and Peripheral villas, the former constituting a Catonian model and the latter based on *coloni*, cultivating less fertile landscapes which could not be farmed intensively for profit (Carandini 1994: 167–74; also Vallat 1987b: 182–212). Meanwhile,

Vallat (1991: 13) has identified localised patterning within Etruria – divided between north and south, coast and interior. Gabba (1989: 235–6) has suggested that this diversity relates to the environment, crops and local demand, assuming their social significance was comparatively standard. However, it is important to stress that classifications cannot simply be formulated on the grounds of economic considerations, without reference to the diversity of social contexts into which they were adopted. Nor can they be defined by simply by regional distribution, for there is as much variation within as between regions (Curti *et al.* 1996: 177; van Dommelen 1993: 170; Paterson 1991: 133–4). This diversity stresses that the Catonian villa was a prescriptive ideal.

Surveys also demonstrate frequent difficulty in distinguishing such historical categories in the archaeological record. The arbitrary distinction of large farm and villa, and of villa and village indicates how classes have been created by focusing on clearly bounded (historical) categories, leading to ‘grey areas’ – such as villa/*vicus* – despite the significant differences between their historical functions (e.g. Biferno Valley, section 6.2.8).

One of the important contributions of regional survey has been to question such historical frameworks, though their influence is still tenacious. The only thorough means of comparing between such classifications requires a fundamental deconstruction of the labels used, through a return to the original data. Such a project is clearly immense, but the increasing importance such undertakings will assume, if retroactive work and comparison are to progress, is indicated by work such as Small (1991; section A.2.2.5) and the current Tiber Valley Project (Patterson & Millett 1998).

Some projects have placed their results in frameworks derived from other surveys, in particular, the hierarchy identified in South Etruria (e.g. Ager Cosanus – cf. Dyson 1978: 265, Potter 1979: table 1; section A.3.1.5.1). However, the imposition of any standard classification scheme, risks glossing over local diversity and, in particular, using South Etruria as a ‘baseline’ has a tendency to place many surveys in a negative light (e.g. Liri Valley – Wightman 1981: 278, section A.1.2.2.1). The complete absence of villas and villages in some areas also questions the assumption of a universal settlement hierarchy (e.g. Cecina Valley – Terrenato 1998b: 101, section A.3.1.2). Each survey should therefore construct its own localised settlement hierarchy (van Dommelen 1993: 171) through more rigorous *a posteriori* definitions, testing rather than assuming classifications. Even with minimal attribute data, it is clear that many classification schemes have difficulty in accommodating the diversity present. As the complexity of survey data

increases (through the recording of metadata), it is apparent that approaches to such classification schemes will need to become more sensitive. In particular, the definition of such schemes through size or densities does not circumvent this issue because of the influence of stochastic variation on quantification and issues of site definition (e.g. Rieti Basin, section A.3.3.3). Nor does it absolve surveyors from interpreting the significance of these sites (e.g. Tuscania – Vullo & Barker 1998: 6, section A.3.1.6). It does, however, make assessment of different classification schemes easier.

Attempts to assess earlier schemes are made difficult by the ambiguity of the criteria used, frequently, mixing description and interpretation. Similarly, it is rarely clear whether labels such as large and small relate to the size of scatters, structures, estates, or even the type of landowner (Lewit 1991: 23). Therefore, attempts to reclassify survey data have suffered in that, suggested categories are so broad as to negate any sensitive analysis of settlement variation (e.g. Lewit 1991: 24; Small 1991: 208; section A.2.2.5). To be really effective, reassessment of original records and collected material would be necessary, though even with such extensive re-evaluation, the inability to reconstruct the first-hand experience of the surveyors must question the validity of such an undertaking.

Finally, the archaeological adage that one only finds what one is looking for, is also clear from the evidence of survey data (section 3.2.1). For example, as awareness of village settlement has increased over last decade, so the number of villages identified has also grown (cf. Dyson 1988: 195; Potter 1987: 94–123, Dyson 1992: 24; Patterson forthcoming). Conversely, use of the term villa has become increasingly sparing. This is partly as a result of the shift in the focus of regional survey from lowland to upland (e.g. Gubbio Basin, Sangro Valley; Paterson 1991; Patterson 1991b; sections A.3.2.1, A.1.3.3) and partly as a result of an awareness of the inherent problems it involves (for the Larinum area, see section 6.5.2).

3.9.2 From Settlement Pattern to System

The influence of methodology upon interpretation can also be identified in the ways in which results are presented and analysed. The most common form of presentation is the distribution map. There is a vast literature on cartography and the ways in which it shapes interpretation. As with sampling, mapping is not an objective exercise; through generalisation, maps serve to construct specific ‘realities’ (Harley 1988: 282; Wood 1993: 88). Indeed, analogy can be drawn with the use of mapping during the Roman period (Dilke 1985; 1987) and subsequent empires, as well as archaeology as a colonial discourse,

attempting to map, know and control the past (Chapman 1997: 6–7; Loomba 1998; Said 1993). In particular, distribution maps suppress ‘experience’ in order to reveal pattern; however, such a ‘specular’ and privileged perspective may have had little relevance to past inhabitants of a landscape (Thomas 1993: 25). From the practical perspective of mapping surface archaeology, it is apparent that a dynamic phenomenon is being reduced to a static representation, again encouraging a certain understanding and interpretation of the archaeology. As discussed in the next section, DTM/GIS have a potential role to play in this context.

Once mapped, settlement archaeology has been subject to a range of (spatial) statistical measures. Some of these have been intended to facilitate interpretation, however, if space is not a (Cartesian) given, but socially-constructed, then the use of spatial statistics becomes questionable as a means of explaining the past (Lefebvre 1991; Thomas 1996: 84). This does not rule out the use of statistics for the modelling of archaeological formation and recovery processes or the description of data. Nor is the Cartesian conception of space contradictory to more experiential approaches to space; however, it does need to be considered alongside such other paradigms (Sack 1986: 83; Thomas 1996: 85). More generally, in the use of statistics, caution is needed because of the particular nature of archaeological material (e.g. Terrenato 1996: 226). For example, the use of rank-size analysis is of limited use when survey regions are defined in terms of urban hinterlands – one settlement will always be dominant (primate). Further rank-size is poor at predicting the size and number of small sites (Hodder & Orton 1976: 255–6), that is, those sites with which survey is primarily concerned. Other issues, such as site definition, make the use of methods such as point pattern analysis problematical (e.g. Espa *et al.* 1996), especially when limited metadata are available for assessing the nature of these datasets. However, the limitations caused by issues such as uneven visibility can themselves be considered through statistical techniques (e.g. Terrenato & Ammerman 1996).

Principally, therefore, such measures concern the recognition and description of patterns, not their interpretation. The real focus of survey, however, is not settlement pattern but settlement system (Flannery 1976, 162; Foxhall 1990a: 218; Kroll & Price 1991) – that is, the dynamic processes which lie behind these static patterns. Progression from pattern to system requires the development of models for interpretation and explanation. A range of these is discussed in Chapter Five.

3.9.3 Geographical Information Systems

The adoption of GIS by regional survey has been rapid and extensive, and includes current projects and retroactive applications (e.g. Gaffney & Stančić 1991; papers in Allen *et al.* 1990; Andressen *et al.* 1993; Gillings *et al.* in press; Huggett & Ryan 1995; Lock & Moffett 1992; Lock & Stančić 1995; Maschner 1996; reviews, Bampton 1997; Witcher in press). Italy is no exception to this development – a recent review lists twenty-seven Italian projects (Moscati 1998; cf. the complete lack of reference to GIS in Barker & Lloyd 1991), including the *Forma Italiae* (Azzena & Tascio 1996) and the number is growing rapidly (e.g. *Forma Urbis* – Ricci & Terrenato 1999). Some of these are primarily CRM projects and/or concerned with urban archaeology, but a substantial number of foreign surveys must be added to this figure (e.g. Sangro Valley Project, Tiber Valley Project; Belcher *et al.* in press; Lock *et al.* in press; section A.1.3.3). Retroactive GIS work on a number of other regional projects has been completed including Tuscania (Vullo & Barker 1997, section A.3.1.6) and the Albegna Valley (Perkins 1998, in press; section A.3.1.5). Given the size of this bibliography, only a handful of issues is discussed here.

A particularly useful aspect of GIS is the ability to change the scale of observation – to focus in or out, in order to observe a range of scale-dependent patterns (Bintliff 1994: 9). However, such work is dependent upon the inherent resolution of the data, and in retroactive applications especially, this scale is often coarse (e.g. grid references to nearest 25m in Biferno Valley, nearest 100m South Etruria Survey; see Lewarch & O'Brien 1981: 318). The adoption of new technologies for the collection of data, in particular GPS (e.g. recent work at Falerii Novi), will enable this resolution to be increased so that the utility of GIS can be improved, for example, in the modelling of archaeological formation processes.

The retroactive application of any technique for which data have not been specifically collected must always be carefully considered (Carver 1990; Shanks 1990); this is particularly the case with GIS (Perkins in press; Vullo & Barker 1997: 4c). Here, there is a suspicion that the use of the acronym as a verb (i.e. *to GIS something* – Gillings forthcoming) belies an attitude that GIS can be applied without concern for the way in which data have been collected, in order to 'wring' more information from them. Obviously, GIS does not make bad data more meaningful; indeed, there is a danger that it may actively disguise the methodological diversity of different datasets (Miller & Richards 1995: 20).

The relationship between regional survey and GIS, especially retroactive applications, is characterised by a heavy environmental emphasis (Witcher in press). In part, this is related to the coarse scale at which data have been mapped and the ease with which environmental variables can be generated. More generally, regional survey is not well suited to consideration of many theoretically fashionable ('post-processual') themes such as identity and ethnicity. Consequently, interpretations of survey data in the context of GIS have remained more closely aligned with the generalising tendencies of New Archaeology than the particularities of post-processual archaeology.

Attempts at imposing standardised GIS and database architecture on different surveys have met with limited success (e.g. South Etruria Survey – Massagrande 1995a; 1995b; South Etruria Enhancement Project – Ulla Rajala pers. comm., section A.4.1). For older survey material, this is because the lack of methodological context means that data are reduced to simple 'dots' of deceptively increased comparability. For more recent survey results, this relates to an increased awareness of the methodological diversity of the data, making the (implicit) difficulties of comparing survey data more obvious. However, used more flexibly, GIS offers a useful method of assessing existing datasets. In particular, analysis of individual surveys, rather than their forcible integration within a single rigid framework, can facilitate the generation of important contextual metadata – an 'archaeology of process'. This may then be used for both more sensitive interpretation of individual surveys and the comparison of their results with other projects'. It may be used as a tool for the identification of issues in need of further selective fieldwork to improve understanding of existing datasets.

The Archaeological Data Service's guide to *Good practice in the archaeological use of Geographical Information Systems* (Gillings & Wise 1999) aims to address the issues of data standards and methods discussed here. However, equally important, is the improved collection and publication of survey metadata, as Chapter Four will demonstrate, in order that both the data themselves, and GIS, can be used to their full potential. Chapter Six develops a GIS case study of the area around the Samnite/Roman town of Larinum in the lower Biferno valley. This explores the possibilities of the range of applications discussed above including the visualisation and integration of data from different sources, the investigation of 'process' in the archaeological record and attempts at more phenomenological approaches, such as those outlined the next section.

3.9.4 Social Landscapes, Phenomenology & Landscapes of Experience

The concept of landscape has been the subject of intense debate over the last two decades; for reasons of space, detailed discussion cannot be provided here. However, the principal trend has been the recognition of the subjective and socially-constructed nature of landscape. In contrast to the detached ‘gaze’ of the landscape artist or the positivist archaeologist, the landscape is created and re-created through constant engagement or dwelling. This polysemic nature – that is, the ability to sustain multiple identities – means that landscapes can become the focus of ideological and physical conflict (e.g. Baker 1992; Bender 1993; Chapman 1997; Cosgrove 1984; Daniels & Cosgrove 1988; Tilley 1994; Yamin & Metheny 1996).

Against this paradigmatic shift, it is important to consider the nature of survey techniques and interpretation of results. These remain largely positivist in their approach to landscape – it can be subject to measurement and rational interpretation and, through the collection of more data, it becomes better understood. This relates to a wider Cartesian conception of space as a variable independent of human activity. The danger of such an approach, especially those focused at the level of the region, is that it (re-)creates landscapes devoid of people, meaning, experience and relationships of power (Alcock 1996: 457). As yet, the full influence of such theoretical debate has not filtered through into practice and/or publication, though many surveys are comparatively long-term projects and it may be too early to judge; potentially interesting work on landscape perception has been outlined by Attema (1992) for the Pontino region.

More generally, the adoption of new technologies such as GIS and satellite imagery may not appear immediately compatible with such an approach to landscape studies, and many early applications tend to confirm this. Those utilising existing data are also somewhat at a disadvantage in this respect. However, new applications are emerging which attempt to integrate such theories more explicitly (e.g. <http://www.bufau.bham.ac.uk/BARROWS>).

As illustrated throughout, the region has formed the basic point of entry for the majority of surveys, being taken as a valid unit for the analysis of past behaviour (e.g. Barker 1995a: 3). However, it is through site or locale that the past was lived, that is, the locus at which structure and agency and Braudel’s temporal scales were mediated. Place, dwelling and movement, not abstract regions, are the focus of people’s daily experience (Barrett 1994; Roberts 1996: 1; Thomas 1993; 1996; Tilley 1994: 14; also Meinig 1979: 215). It is therefore important to approach settlement from a humanised or ‘phenomenological’

perspective – for example, statements about the long- or short-term occupation of sites might be considered in terms relative to the human experience. In general, such work (especially within British prehistory) has focused on monumental architecture and landscapes. There is potential, however, for such approaches within the domestic, economic and ritual landscapes of the Roman period (Alcock 1996: 457; Derks 1997: 145). By its nature, such work requires thick description and is not suited to summary or generalisation; these are parochial considerations. As such, examples are developed in Chapter Six in the context of the Biferno Valley Survey and Larino case study.

3.10 Chapter Summary

This chapter has outlined a series of issues concerning the collection, analysis and interpretation of survey data. At each stage, it has been stressed that there is a discursive relationship between the methodologies adopted, the results achieved, and the interpretations derived. These issues are of critical importance in any survey assessment, but particularly, when undertaking a comparison between them. The emphasis has been placed squarely on methodological influences upon survey results. This is both because of the impossibility of retroactively assessing many post-depositional factors and because the reductionist tendencies of many early surveys has created an impression of methodological neutrality. The intention has been to problematise these datasets with the aim of facilitating their more meaningful analysis. On this basis, Chapter Four sets about the critical assessment and interpretation of a series of Italian surveys.

Chapter Four

ITALIAN REGIONAL SURVEYS

Syntheses of Italian regional surveys are rare, not least because of the issues discussed in Chapter Three. Greene (1986: 103–9) has compared the results of several projects, identifying a general expansion of settlement during the late Republic, followed by consolidation or decline in the imperial period; Lewit has identified (1991: 34) a similar imperial decline. Patterson (1987: 134–8) and Morley (1996: 83–107, 143–8) have placed greater emphasis upon the diversity found between surveys and/or regions. In each case, however, comparison is brief, generalised and reliant upon vague terminology and simple counts of site numbers. This chapter builds upon a collation of methodological metadata for a series of Italian surveys (see Appendix, sections A1–4) to assess their methodological diversity and to consider the influence of this upon their results and the ability to compare between them.

Such characterisation or ‘meta-archaeology’ is intended to assess whether the similarities and differences between individual surveys can be ascribed to methodological processes and/or to genuine variation in the archaeological record. As stressed throughout, comparison is considered a useful mechanism for the characterisation of datasets, both of duplicate surveys of the same area, and between different regions, though in general, the approach is more cautious than Alcock’s *Graecia capta* (1993).

Landscape and topographical survey have a long history in Italy (Barker & Lloyd 1991; Bernardi 1992; Cambi & Terrenato 1994: 13–43) – here, there is only room for a selection. Emphasis has been placed upon systematic regional surveys, though some urban surveys are also included. Many of these projects are British, though French, American and Italian surveys are also discussed. The latter include the most recent volumes of the *Forma Italiae*. This ongoing series of monographs comprises a series of landscape surveys based (mainly) on individual 1:25 000 *Istituto Geografico Militare* (IGM, Italian National Mapping Agency) map sheets (c.10x10km). Originally focusing on major structural remains, the series has recently broadened its scope to include artefact scatters (Terrenato 1996: 217).

Consequently, the series of surveys discussed below is not comprehensive; however, it does provide a representative selection of methodologies and regions.

Projects have been divided into four geographical groups for ease of discussion (Figure 4.1). These are based broadly upon cultural, ethnic and archaeological criteria.

- Southern Central Italy (Abruzzo, Campania, southern Lazio, Molise)
- Southern Italy (Basilicata, Calabria, Puglia)
- Northern Peninsular Italy (Tuscany, Umbria)
- South Etruria (northern Lazio)

For each of these regions in turn, a summary of modern political and physical geography, and historical geography, is provided in the Appendix. These are to be read closely with the main text, providing important contextual information. Each survey also has an associated section in the Appendix. These comprise of a summary of methodological details (see Box 4.1) and an associated commentary. These are followed by a series of tables and figures. For each survey, the intention is to provide a tabulated summary of settlement numbers, a map of the location of survey transects and a series of maps demonstrating the distribution of settlement by period. It will be noted that in several cases, this rather basic information is unavailable. Original publication figures are used in order to stress the diversity with which results are presented and the problems of their comparison. The order in which tables and figures are presented is internally logical to the gazetteer, to allow that volume to stand independently. All of this information is brought directly to bear on the interpretative syntheses provided for each survey below. Throughout, therefore, the Appendix is to be read closely with the main text. Some of the most important themes of each regional group are outlined at the end of each section and are developed further in Chapter Five.

4.1 Southern Central Italy (Appendix 1)

4.1.1 Latium (Appendix 1.1)

4.1.1.1 Pontine Region (Appendix 1.1.1)

During the Archaic period, settlement was dominated by a series of large Latial cities, such as Satricum, focused on the boundary between the tuff hills and the plain. The abundance of material from sites such as Cisterna (Figure 4.5r) and geomorphological evidence for

significant deforestation (Attema 1993a: 111, 193) suggest intensive exploitation of the landscape, though with minimal settlement on the plain itself. Around 500 BC, a significant number of these centres was abandoned, including Satricum, Cisterna and Caracupa/Valvisciolo (*ibid.*: 226–7). An exception at Contrada Casali (south of Norba, Figure 4.5f) is best characterised as a collection of archaic farmsteads, occupying a remote hilltop site (*ibid.*: 155; 1994: 275). Archaic sanctuaries were also abandoned at this time.

The few isolated farmsteads and limited hierarchy of the post-Archaic period (c.500–350 BC) suggests the cessation of surplus production and inter-regional exchange (Attema 1993a: 227). The context of this transformation may relate to historical instability associated with the Volscian occupation of the area. Having been pushed westwards from the Sacco Valley, this group, related to the Oscan-speaking peoples of central Italy, came into conflict with Rome and the Latin League. An extensive programme of Roman/Latin colonisation was undertaken in this context (*ibid.*: 229; Cornell 1995: 301–4). Located along the volcanic hills at Cora (pre-Republican; modern Cori), Norba (492 BC; modern Norma) and Setia (383 BC; modern Sezze) (and later Saticula, 313 BC). These colonies re-established an urban infrastructure (Figure 4.3). Following the conclusion of the Latin War (338 BC), the rural landscape was transformed – the marshes were drained and centuriated, as was land around Setia. The Via Appia was constructed through the area in 312 BC forming a link between Rome and Campania. Combined with a dense pattern of farmsteads and villas, the Republican period demonstrates a significant (re-) intensification of agricultural production, peaking during the second century BC (Attema 1993a: 200). The dating of the extensive network of *cuniculi* (drainage/irrigation channels) is unclear. They have been associated with the centralised settlement pattern of the Archaic period (*ibid.*: 224). However, association with Rome's significant colonial investment is equally feasible and does not contradict the suggestion that Rome actively developed the area as a 'breadbasket' (*ibid.*: 230; Koot 1991a: 13; Purcell 1990).

As such, the Pontine Marshes and Monte Lepini formed one of the earliest areas of Roman colonial activity. They were an 'experimental laboratory' (Curti *et al.* 1996: 170) for the perfection of the colonisation and centuriation later applied across Italy. However, within this general trend, it is possible to recognise some diversity in relation to individual colonies. The expansion of small farmsteads was early in the Norba area, although the shift from the mountain slopes to lower colluvial areas demonstrates the limited central place function of the colony (Attema 1993a: 122; Figure 4.5t). In contrast, a series of villas developed during the second/first centuries BC, around Cora and Setia, indicating a

strong central market place function (*ibid.*; Attema 1994: 276; Figure 4.5t). At Caracupa/Valvisciolo, a villa was constructed on the old Latial site (Attema 1993a: 179). Overall, however, rural sites were small and architecturally undistinguished, akin to sites in the Liri Valley and the Ager Lunensis rather than Etruria and Campania (Koot 1991b: 129–30).

A significant contraction of settlement appears to have occurred during the late Republican period. The Pontine Region Project places this as early as the second century BC (Attema 1993a: 237), whilst the Agro Pontino Survey suggests the first century BC (Koot 1991b: 130). The nature of this change is difficult to assess on the basis of the published data, especially due the reluctance of the latter to define sites, preferring instead to map findspots. In general, the Archaic/Roman transition receives far greater attention. The second century BC places this decline in the context of the area's decline as the principal grain supplier of Rome due to the acquisition of alternative sources, such as Sicily (Attema 1993a: 237). Consequently, it has been suggested that *latifundia* specialising in stock-raising developed on the plain, whilst the economy of the volcanic hills diversified into olive and vine cultivation, with an overall demographic decline (Attema 1993a: 237). Again, the evidence for this is difficult to assess independently. However, regardless of the date at which this trend started, it had intensified by the early imperial period, being more significant on the plain than the mountain slopes (Koot 1991a: 14). Various reasons for this abandonment of the plain have been proposed including the expansion of (malarial) marsh (Pliny *HN*. 3.59), however, early imperial sites do not appear to be situated in the optimal locations to avoid marsh encroachment. The interest of both surveys in the Roman period only extends as far as the early imperial period and assessment of regional development after this date is not possible.

4.1.2 Campania (Appendix 1.2)

4.1.2.1 Northern Campania (Appendix 1.2.1)

The survey area covers the territory of the indigenous Aurunci/Ausoni. Pre-Roman settlement consisted of small farmsteads, hamlets and fortified hilltop enclosures (Arthur 1991a: 30). The latter do not display any (proto-)urban characteristics and the general lack of settlement hierarchy is reflected in the small, family cemeteries and sanctuaries (*ibid.*: 31, 46). In contrast, less than thirty kilometres south east, was the major city-state of Capua. Within the survey area at least, there is little evidence for the pre-Roman

demographic expansion found in Etruria and Samnium (Arthur 1991a: 28); this is similar to the situation identified in the nearby Liri Valley (Hayes & Martini 1994b: 69). Despite this lack of extensive settlement, however, a major phase of erosion dating to the late Iron Age and/or early Roman period (Arthur 1991a: 17) suggests an expansion of landscape exploitation.

Following military conquest, Rome quickly consolidated control of the area with an extensive programme of colonisation. A Latin colony was founded at Suessa Aurunca (313 BC – Livy 9.28.7) and maritime (citizen) colonies at Sinuessa and Minturnae (295 BC – Livy 10.21.8; Figure 4.3). Despite historical evidence for the pre-Roman origins of the former two (Livy 9.25.4; 9.28.7), there is no archaeological evidence to this end (Arthur 1991a: 37). These centres were linked by the Via Appia (312 BC) and the wider area comprehensively centuriated, including six different alignments (Choquer *et al.* 1987: 169–180; Vallat 1987a). As well as strategic control, this huge investment may also have designed to develop the region as a grain supplier for the Roman market (Small 1985: xxiii; see Pontino, section 4.1.1.1). However, there is limited evidence for dispersed rural settlement associated with the initial colonisation (see Cosa, section 4.1.3.5; Fregellae, section 4.1.2.2), though the colonies themselves are likely to have significantly increased overall population levels.

During the late third/early second centuries BC, a dramatic expansion of settlement rapidly filled out the landscape (Arthur 1991a: 100; Table 4.4). Large sites, clearly outnumbered smaller settlements and included monumental villas on terraced platforms of polygonal masonry, with considerable investment in agricultural equipment (e.g. wine presses/*torcularia*) (Arthur 1991b: 157; Vallat 1987a). However, such evidence for intensive wine production is restricted to the southern Massico and the coastal strip, including the lower Volturno (Crimaco 1991: 21) – where another maritime colony, Volturnum, was founded after the Second Punic War (Small 1985: xxiv). Growth around inland areas, such as Suessa, Teanum and Cales, although notable, was comparatively modest (Arthur 1991b: 157; Compatangelo 1985). However, it was these areas, which took advantage of the expanding Roman economy, through the development of Black glazed ceramic production and export to the Etruscan and Roman markets from the second half of the third century BC, (Morel 1981: 87–95; Small 1985: xxiv). If such production and export was achieved parasitically on the back on the wine trade (Morel 1981: 88), it indicates an earlier date for the start of agricultural specialisation than the villa evidence (see Rathbone 1983: 164).

Wine amphora production was focused along the coast (see Ager Cosanus, section 4.3.1.5, Ager Brundisinus, section 4.2.2.1). During the second quarter of the second century BC, production switched from Graeco-Italic to Dressel 1A amphorae indicating a major intensification in wine production and export (Arthur 1991a: 64). The separation of amphora production and winemaking suggests that wine was transported to the coast before being bottled at the point of export; the location of the amphora industry reflects a proximity to raw materials and harbours. Sinuessa and Minturnae monopolised this export trade, compensating for the eclipse of their original strategic functions. In contrast to the vigour of this Roman landscape, the last pre-Roman sites were finally abandoned at this time (*ibid.*: 100).

Despite the disruption of a series of veteran colonies and settlement schemes during the first century BC, for example, Urbana in the Ager Falernus and a series of (re-)foundations and reinforcements by Caesar, Augustus and Claudius (*ibid.*: 62–3, 83), the area underwent continued economic growth. Numbers of settlements, particularly villas further increased and coastal amphorae production reached unprecedented levels, servicing a hinterland as far inland as Cales (*ibid.*: 73; Small 1985: xxvii). The Francolise villas at Posto and San Rocco, near Cales, were founded at this time, demonstrating that economic growth was neither limited to the coastal plain (Cotton 1979: 16–7; Cotton & Métraux 1985: 78), nor directly involved with the wine export trade (Small 1985: xxx). By the first century BC, as in the Ager Cosanus, epigraphic evidence suggests extensive tracts of coastal, but not inland, areas were held by families from central Italy (e.g. the Latin *gens Caedicia* and Etruscan *gens Paconia*) (Arthur 1991a: 66–9, 101; Morley 1996: 134).

General urban and rural prosperity continued into the early imperial period, the foundation of large coastal villas compensating for the abandonment of smaller sites in marginal areas (Arthur 1991a: 64, 101; Figure 4.6b). However, significant changes in the production and export of wine are apparent. Amphorae production shifted from the coast to the vineyards of the interior, becoming a ‘by-product’ of coarseware manufacture (Arthur 1991b: 157). This shift coincides with a switch from Dressel 1B to 2–4 and a decreasing frequency of stamps. Together, these changes suggest a shift in the control of distribution from *negotiatores* to estate owners (Arthur 1991a: 75–6). The more circumscribed distribution of these new amphorae around the western Mediterranean indicates a decline in exports, possibly reflecting a change in emphasis from quantity to quality (Arthur 1982: 32). Despite this, comparison of Augustan and Flavian deposits at Ostia suggests that

Campanian amphorae comprised a similar percentage of overall imports throughout the first century AD (Jongman 1988: 125).

Settlement decline becomes noticeable by the end of the first century AD and accelerated rapidly into the later imperial periods, effecting both coastal and inland settlement (Table 4.4). Decline of smaller sites was most pronounced, with surviving villas thus coming to dominate the settlement hierarchy (Arthur 1991a: 89). The same pattern is found further inland in the Ager Calenus (Compatangelo 1985: 18); the villas of Posto and San Rocco were abandoned c.AD 160 and AD 210 respectively (Cotton 1979: 55–6; Cotton & Métraux 1985: 83–4). There was a similar decline in settlement numbers along the lower Volturno, though the majority of villas appear to have remained in occupation (Crimaco 1991: 30). Textual and epigraphic evidence suggests that landownership was concentrated into fewer hands than ever – especially wealthy families from central Italy, including the emperor himself. Along with declining settlement numbers, this has been seen to signal the development of less-intensively exploited *latifundia* (Arthur 1991a: 66–9, 81). The decline of wine trade also affected towns, arguing against a rural-urban shift (Arthur 1991b: 156) and, despite a decline in diagnostic pottery, demographic decline by the second or third centuries AD seems likely.

A series of reasons for the decline of the wine trade and associated settlement and demographic contraction are proposed – provincial competition, over-specialisation, crisis in slave mode of production, increasing tax burden and climatic and environmental change (Arthur 1991a: 102). In general, over-specialisation is supported by the less dramatic, though nonetheless significant, settlement decline in those inland areas which retained a more diverse agricultural base (*ibid.*: 101; Arthur 1991b: 158). Yet, the limited reliance on imported staple goods throughout Antiquity suggests the area at least remained self-sufficient (Arthur 1991a: 77–8, 86). This has two consequences – first, the collapse of the wine trade did not lead to a general collapse of subsistence agriculture and, secondly, later periods may be particularly under-represented.

4.1.2.2 Liri Valley & Fregellae (Appendix 1.2.2)

By the time the Liri valley became the focus of the historical conflict between Rome and the Samnites in the late fourth/early third centuries BC, the area had been a cultural melting pot for centuries. After the decline of Etruscan influence, first Volscian and then Samnite groups had occupied parts of the valley leading to a complex mosaic of cultural identities (Frederiksen 1984; Hemphill 1994: 16–7). The Liri Valley Survey found only

limited evidence for pre-Roman activity, whilst the smaller Fregellae Survey, found no certain pre-Roman evidence at all. During the fourth century BC, as in other areas of the central Apennines, a series of hillforts developed (Wightman 1994b: 15; see Oakley 1995). There was also nucleated settlement of some form at Aquinum, Roccasecca and Casinum. Their emergence was not accompanied by the dramatic expansion of rural settlement in the Biferno Valley (section 4.1.3.2) or at Roccagloriosa (section 4.2.2.4) and it is difficult to postulate the contemporary demographic expansion found in Etruria, Latium and Samnium. This settlement pattern survived the Roman conquest and colonisation, persisting into the second century BC (Hayes & Martini 1994b: 69).

In 328 BC, the Latin colony of Fregellae was founded in the valley (Livy 8.22.1). No doubt intended to secure Rome's control of the area, it also provided a springboard for further action against the Samnites. Its foundation is cited as one of the principal reasons for the outbreak of the (Second) Samnite War (Livy 8.23); a second colony was founded at Interamna Lirenas in 312 BC (Livy 9.28.8; Figure 4.3). The location of these Latin colonies indicates the first major clearance and settlement of the valley floor. However, as at other colonial sites from across Italy, there is limited evidence for contemporary dispersed rural settlements (e.g. Cosa, section 4.3.1.5; Northern Campania, section 4.1.2). The abundance of diagnostic pottery of the late fourth and third centuries BC from urban contexts lends support to this negative evidence (Wightman & Hayes 1994a: 36; 1994b: 45), as does the intensity of the Fregellae survey.

The 'frontier' rapidly advanced further into Samnium, leaving the valley free to develop as a communication route; the Via Latina appears to have been completed around the mid-third century BC (Wightman 1994d: 31; Figure 4.7a). However, based on diagnostic pottery, it was not until the second and first centuries BC, that there was any significant expansion of dispersed settlement. The subsequent doubling of site numbers focused, in particular, on the previously unoccupied plains including villages and a small group of villas (Crawford *et al.* 1986: 50; Wightman 1981: 281; Wightman & Hayes 1994a: 35–7; Figures 4.7j). The Iron Age centre of Roccasecca developed into a large straggling village (c.25ha) dominated by a terraced platform villa (Figure 4.7p); another village (c.10ha) emerged during the third century BC on the Via Latina (*ibid.*: 38). West of Fregellae, early Republican (c.300–125 BC) settlement density was particularly high (at over 5 sites per km²; Figure 4.7r), though the higher survey intensity must be acknowledged. Overall, the evidence suggests some demographic expansion, though both late and modest in comparison to areas such as nearby Samnium. In the Biferno Valley, for example, sites

were larger and overall density greater and from as much as two centuries earlier (section 4.1.3.2). Site occupation in the Liri Valley was also comparatively unstable, and might generally therefore be considered more comparable to Northern Campania (section 4.1.2.1) or Venusia (section 4.2.2.7) than the areas such the Biferno Valley, Rieti Basin (section 4.3.3.3) or Tuscania (section 4.3.1.6).

Villas were modest in comparison to those in Etruria or Campania, though locally they formed major focal sites distinguished by size and significant investments such as terracing. In contrast with the Biferno Valley, the majority was located at new sites (*ibid.*: 37), suggesting a more significant transformation. Local amphora, imitating Greco-Italic and later Dressel 2–4 forms (Hayes & Martini 1994a: figures 63, 65), and dolia suggest surplus production, but there is no evidence for its exportation (Wightman & Hayes 1994b: 45).

The most infamous incident in the valley's history concerns the revolt, and subsequent destruction, of Fregellae in 125 BC (Livy *Per.* 60; Crawford *et al.* 1986: 47–50). Both surveys note high levels of settlement discontinuity between the late Republican and early imperial periods, though overall numbers within the wider valley were maintained through the foundation of a substantial number of new sites. However, to the west of Fregellae, there was both significant discontinuity and a fifty percent decline in numbers (*ibid.*: 48). Here, the majority of Black Gloss dates to the third century and first quarter of the second century BC and there is limited early imperial material in comparison to the wider valley. The surveyors have therefore suggested that rural settlement around Fregellae was abandoned or destroyed at the same time as the colony (*ibid.*: 49–51). However, there must be suspicion that the interpretation of this evidence has been heavily influenced by the historical record. The amounts of diagnostic pottery are low and there is consequently a danger that individual sites will produce discontinuous settlement histories. Further, nearly fifty percent of sites are of generic Roman date (Table 4.5). An equally feasible interpretation might be the impoverishment of rural sites because of Fregellae's destruction. Activity continued at the site of Fregellae, historically, as village, market and religious centre (temple of Neptune) (Strabo 5.3.10) and archaeologically, there is evidence for a cistern and a number of graves (Crawford *et al.* 1986: 43). However, the centre of activity was relocated to the new colony of Fabrateria Nova, founded nearby in the following year. Conspicuously it was only a third of the size of its predecessor and located at less defensible site.

A decline in the number of early imperial sites is also visible in the eastern area of the Liri Valley Survey. However, there is an increase around Interamna (cf. Figures 4.7m, 4.7n) and overall late Republican/early imperial site numbers remain stable (Hayes & Martini 1994b: 71). This localised variation continues into the second century AD, when the number of sites around Interamna and Fregellae decline, but increase significantly in the Gari valley, where previously occupation had been thin (Figure 4.7o). Despite such variations, from the late second century/early third century AD, the overall trend is a decline of settlement numbers, especially small rural sites. Larger settlements, frequently of Iron Age origins, demonstrate greater resilience, though the *vicus* at Roccasecca was abandoned (Wightman & Hayes 1994a: 38–9). The surveyors are reluctant to envisage demographic decline, emphasising the lower visibility of sites as a result of reduced access to imported finewares (Wightman & Hayes 1994b: 45). However, combined with the contemporary decline in urban vigour (e.g. Interamna, Figure 4.7q), it is difficult to avoid the conclusion of some form of contraction.

Comparison of colonial and pre-existing centres demonstrates the relative social and economic weakness of the former. During the early imperial period, despite the common status of *municipium*, Casinum and Aquinum were far larger than the colonies of Interamna (c.30–40ha) and Fabrateria Nova (c.25–30ha) (Wightman & Hayes 1994a: 35). The latter compare more directly in terms of size to the village at Roccasecca. Although there is little difference between these pre-existing and colonial centres in terms of the number of associated rural settlements, there is some variation in the size and status of these sites (*ibid.*: 37). This is supported by epigraphic evidence that suggests the consolidation of land in the hands of the pre-existing Oscan populations (Wightman & Hayes 1994b: 41). Arguably, once the strategic significance of the valley had been eclipsed by political events, the importance of these colonies to Rome declined considerably. Without this role – or support – they were required to sustain their existence through local economic and social integration (Wightman & Hayes 1994a: 35). At this, they appear less than successful. Urban munificence at Interamna is contemporary with the general trend, though overall it demonstrates fewer public buildings and inscriptions; surface material suggests a contemporary contraction in size (Hayes & Wightman 1994: 171; Wightman & Hayes 1994a: 35; Figure 4.7q). Combined with their earlier need for reinforcement, these colonies never demonstrate the urban vigour found at Aquinum and Casinum (Hayes & Martini 1994b: 71).

This is reflected in the realignment of the Via Latina. *Contra* the suggestion that the colonies declined as a result of changes in the course of the road (Wightman 1994d: 32), it is more likely that these changes reflected, rather than caused, this decline (see Witcher 1998: 63). The lack of settlement attracted to the road (cf. South Etruria, section 4.4.2; Agro Pontino, section 4.1.1.1) supports the impression that the main economic axis of the area was between Aquinum and Casinum, not Interamna and Fabrateria. On a wider scale, despite the valley's potential as a communications route (Figure 4.3), the limited quantities of imported material and/or cultural influence have been taken to indicate the area was comparatively isolated (Wightman 1981: 286). It is possible that coastal contact between Rome and Campania effectively 'by-passed' the valley. However, processes such as urban munificence indicate its participation in wider cultural developments, as well as its sound economic base. However, the latter was never oriented towards external considerations as either producer or consumer.

4.1.2.3 *Comparison of Northern Campania & Liri Valley*

The development of the middle Liri Valley demonstrates both similarities with, and differences from, Northern Campania (section 4.12.1). In many ways, the relationship between the areas is comparable to that between the coastal Ager Cosanus and the upper Albegna valley (section 4.3.1.5). Neither Northern Campania nor the Liri valley demonstrate high (visible) pre-Roman populations; both were colonised during the late fourth and third centuries BC, with dispersed settlement subsequently developing in the late third and second centuries BC. Overall settlement numbers peaked during the first century BC, with indications of urban and rural decline during the early imperial period, which accelerated significantly by c.AD 200 (Arthur 1991b: 158; Wightman & Hayes 1994a: 38). Beyond these trends, there are important areas of difference. The Liri Valley was not involved in the surplus production of wine for export and rural settlement never attained the size, density or prosperity attested on the coast.

Given the geographical proximity of the two areas, much exchange might have been considered likely; however, archaeological evidence for this is limited. The lack of Campanian amphorae or Black Gloss in the Liri Valley has been taken as negative evidence for the latter's self-sufficiency. However, like many areas of central Italy, Black Gloss was produced locally (at Fregellae and Interamna – Hayes 1994: 127). The absence of amphorae is not altogether surprising given the coastal location of amphorae production and bottling; the export of Campanian wine upstream is unlikely to have involved

amphorae. More generally, imports to both areas are low throughout Antiquity (Arthur 1991a: 29, 78, 86; Hayes 1994: 127, figures 60, 63). However, whereas the limited demand for these goods on the coast can be considered as an active choice, this decision is likely to have significantly constrained such decisions in the Liri Valley, blocking access to the market. The apparent isolation and self-sufficiency of the valley might therefore have been an imposed necessity rather than a free choice. In contrast, the comparative abundance of African Red Slip at inland centres such as Aquinum and Suessa contrasts with coastal Minturnae. This suggests greater long-term stability in those areas of limited involvement in wine production for export (Arthur 1991b: 158; Hayes & Wightman 1994: 172).

4.1.3 Abruzzo & Molise – Samnium (Appendix 1.3)

4.1.3.1 San Vincenzo (al Volturno) (Appendix 1.3.1)

Little evidence for pre-Roman settlement was identified by the survey, though it should be stressed that interim reports focus on the Roman and medieval periods; assessment of the impact of Roman conquest is therefore currently not possible. However, a series of hillforts were spaced along the length of the valley (Oakley 1995: 18–64) and there was a late Bronze Age/early Iron Age hilltop settlement at the confluence of the Vandra and Volturno (Hayes 1985: 132).

The claim that the Roman settlement system was strongly influenced by the earlier *vicus* system implies a nucleated pattern (Patterson 1985: 221). During the Roman period, these *vici* were supplemented by dispersed farmsteads and medium-sized villas, though considerable geographical diversity is apparent. In the Scapoli area, two Republican sites increased to eight in the early imperial period; in contrast, the Valle Porcina produced a series of Republican sites, but a single early imperial example (Patterson 1985: 220). Overall, there was a significant decline from twenty-two sites producing Campanian black-glaze ware, to twelve with *terra sigillata* and just five with African Red Slip (Patterson 1987: 136); no information is currently published concerning generic coarseware sites. This contraction may be related to a process of estate agglomeration, associated with the élite of nearby Venafrum (Figure 4.8; section 5.3.4.1).

Beneath the later monastery, a large (c.10ha) late Samnite/early Republican *vicus*, with monumental structures, dominated the Rochetta plain (Hodges 1985: 5–6; alternative interpretations include villa or sanctuary – Patterson 1985: 219). In general, settlement

concentrated on the drier edge of the plain and the surrounding ridges. The wetter floor of the plain was used for arable production, with pastoral exploitation of the surrounding hills (Hayes 1985: 131; Patterson 1985: 218; cf. Rieti Basin, section 4.3.3.3). During the early and mid-imperial periods activity at the San Vincenzo *vicus* was dramatically reduced, shifting south and developing as a compact villa. Such early imperial *vicus* abandonment is attested elsewhere in Samnium (Patterson 1991a: 152; section 5.3.4.1). During the late fourth and early fifth century AD, this, and the other villa on the plain, was abandoned and the earlier *vicus* site reoccupied (Hodges 1985: 6–9). This late imperial nucleation was identified in all the areas surveyed and, again, reflects broader changes across Samnium.

The lack of imported finewares and amphorae, and the longevity of the *vicus* system, has been taken to indicate the area's isolation and poverty (Patterson 1985: 221). Without a catalogue of the quantities and variety of material recovered, it is difficult to evaluate such statements. However, the broad ratios of sites with black gloss, *terra sigillata* and African Red Slip are similar to the Biferno Valley (section 4.1.3.2), which has received interpretation that is more positive. Overemphasis of the area's isolation is also challenged by the presence of villas and the production of oil and wine for export (Patterson 1985: 214–5; Tagliamonte 1996: 243), as well as proximity to the Via Latina, Venafro and Isernia. Indeed, it has been argued that the late Roman settlement nucleation and its reduction of agricultural capacity is related to the contraction of the (Roman) market (Hayes 1985: 133). Therefore, despite localised diversity, the overall trends appear to follow the broader regional patterns, which will become clearer in discussion of the following surveys.

4.1.3.2 Biferno Valley (Appendix 1.3.2)

The Biferno Valley survey will form a detailed case study in Chapter Six. Discussion of survey metadata and results is therefore somewhat extended in comparison to that provided for other surveys. The following is based primarily on Barker (1995a) summarising the surveyors' interpretation of these data. Based on analysis in Chapter Six, some alternative interpretations are presented in Chapter Seven.

Iron Age activity focused on the lower valley, consisting of several major village sites and series of small domestic scatters (Figure 4.9c). These indicate demographic expansion and agricultural intensification, including viticulture and wool production and, in the lower valley, oleoculture (Barker & Suano 1995: 162, 169–71). Funerary evidence suggests the emergence of male-dominated, élite groups; whilst a general increase in the range of

artefacts and ceramics indicates some specialisation in craft production and wider trading contacts beyond the valley.

This nucleated settlement pattern continued until the later fourth and early third century BC – that is, the period of the Samnite Wars. By this period, the historical sources make a distinction between the upland Pentri, and the Frentani of the hills and coastal strip to the east. At this time, there was a dramatic expansion in the number and type of sites, including hillforts, sanctuaries and small dispersed settlements (Figures 4.9d, 4.9e). However, there was also strong continuity in the occupation of Iron Age sites. This expansion of settlement reached its peak during the third and second centuries BC. The general developments of this period represent an intensification of many of the trends noted for the Iron Age – demographic expansion, agricultural intensification, increased social stratification, craft specialisation, increased volume and diversity of imports, and enhanced participation in general Italian and Mediterranean cultural developments. In the lower valley, a rapid process of urbanisation led to the emergence of the town of Larinum.

From the third and second centuries BC, a series of villas developed across the valley, frequently at pre-existing sites. In general, they were small and utilitarian by comparison with those from Campania and Etruria and appear to have been involved in the production of oil, wine and cereals for local markets rather than export (*ibid.*: 203; Lloyd 1991c: 205, 232). Faunal evidence also indicates a shift towards market pastoral production (Lloyd 1995a: 203; 1995b: 242; Millett 1997: 345).

By the first century BC, after the Social War, there had been a dramatic decline in the number of settlements (Figures 4.9f–g); activity at hillforts and rural sanctuaries was also scaled down. However, rather than a decline in population, it is suggested that a process of settlement and population nucleation occurred as a result of estate agglomeration. In particular, the development of several urban centres may have absorbed some of the rural population (including Larinum, Fagifulae, Saepinum). Despite the large decline in settlement numbers, the majority of Early Roman sites were occupied during the previous period and continuity is considered the dominant trend. Urbanisation demonstrates some limited pre-Social War development at both Frentanian and Pentrian centres (Lloyd 1995a: 208).

By the second century AD, the number of settlements had dropped still further, being dominated by nucleated population centres – villas and *vici* (Figures 4.9h–i). Despite this, it is difficult to avoid postulating some population decline. Although settlement numbers

were maintained in the Late Roman period, most sites were abandoned long before AD 600. These processes are particularly stark in the upper valley, suggesting a sparsely occupied landscape. This may have been associated with the development of *latifundia* and a new emphasis on pastoralism. Geomorphological evidence supports this expansion and contraction of intensive agriculture in the valley. Erosion increased substantially during the Samnite period, reflecting intensive clearance and agricultural exploitation, and then declined during the mid-imperial period, indicating the re-generation of scrub and woodland and the contraction of arable production (Hunt 1995: 66, 75, 82). It also suggests that there has been limited alluvial/colluvial disturbance on the coastal plain and in the upland Boiano and Sepino plains. As such, settlement identified is more likely to represent a genuine pattern, though sampling issues are still significant.

4.1.3.3 Sangro Valley (Appendix 1.3.3)

In the lower valley, *impasto* has been recovered from around three-quarters of sites discovered during the first five seasons of the current project. The dating of this material may be as broad as Bronze Age to third century BC and therefore encompasses Iron Age, Archaic and immediately pre-Roman activity (Faustoferri & Lloyd 1998: 17). These sites indicate a relatively nucleated system of villages, hamlets and necropoleis, with a few possible dispersed farmsteads. The situation is broadly imitated in the upper valley; here excavation of the large Archaic cemetery at Val Fondillo suggests some, though not extensive, social stratification (*ibid.*: 15; Lloyd *et al.* 1997: 24–6). The high ratio of *impasto* to Black Gloss recovered from individual sites, and across the wider region, may indicate that the period of greatest demographic expansion was somewhat earlier than in the Biferno Valley (Iron Age/Archaic period, section 4.1.3.2) or, alternatively, that there is greater conservatism in the use of ceramics.

During the Samnite(Italic)/Roman Republican period, scatters of locally produced Black Gloss demonstrate an increase in the number of smaller sites, though possibly a slight decline in the overall figure (*ibid.*: 18); despite this, there is strong continuity in the location of individual sites. The development of dispersed rural settlement and the continuity of earlier sites is mirrored in the Biferno Valley, though in the latter area these phenomena were accompanied by a substantial increase in overall site numbers.

The emergence of the vast (c.35ha) hillfort at Monte Pallano represents a major shift in the settlement hierarchy of the lower valley. Its chronology is still unclear: fourth century pottery has been recovered (Faustoferri & Lloyd 1998: 12) and, on analogy with similar

Samnite centres, it may well have been enclosed at this time (Oakley 1995: 135–8). On the grounds of size alone, it dominated the local and regional settlement hierarchy from an early stage. As in the Biferno Valley, evidence for sanctuaries and cemeteries from the lower in this period is limited (Faustoferri & Lloyd 1998: 17–8), possibly suggesting the centralisation of these functions and an enhancement of social stratification. In the upper valley, there is no evidence of any hillforts though there may have been a centre at modern Opi; there was certainly some hilltop settlement (e.g. Sant'Ianni), though activity appears to have focused close to the rivers and the possible sanctuary near I Casali appears to have been quite isolated (Lloyd *et al.* 1997: 29–32).

In contrast to the Biferno Valley, villas (or large, wealthy sites) are rare. The lack of social and/or economic stratification in the rural context is reinforced by the dissimilarity of material from Monte Pallano and settlement in its hinterland. In comparison with, for example, Metaponto (section 4.2.1.1) and Oria (section 4.2.2.1), assemblages from rural settlement demonstrate none of the wider trading links or diversity identified at the former (e.g. amphorae are largely limited to Monte Pallano). This adds further weight to the impression of the strong centralisation of economic and political power. In the upper valley, as well as a small range of nucleated and dispersed settlements, large road revetments and a possible land division scheme (*ibid.*: 28–9) possibly indicate some form of centralised (imperial?) investment in the area which is not recognisable in the lower valley.

Recent excavations at Monte Pallano have revealed a series of major (public?) buildings of mid-first century BC – early first century AD date (Faustoferri & Lloyd 1998: 10) suggesting continued occupation and central place functions into the imperial period. These structures are of comparable size and form to those at Iuvanum, the nearest *municipium* (Figure 4.3), and bear increasing comparison to Larinum in the Biferno valley (section 7.1.2.4).

As in the Biferno Valley, there was a significant decline in rural settlement during the early imperial period (first century AD – Faustoferri & Lloyd 1998: figure 11). However, the coarsewares are yet to be fully assessed and these may substantially alter this pattern. Variation in the supply of finewares may also be significant (Lloyd *et al.* 1997: 48; see section 6.2.10). By the mid-imperial period (second/third centuries AD), the number of sites had declined significantly throughout the valley. There are also indications of a contraction in site size (Ambrosi *et al.* 1997: 3; Faustoferri & Lloyd 1998: 19; Andrew

Wilson pers. comm.). Evidence for activity at Monte Pallano also declined during the second century AD (Faustoferri & Lloyd 1998: 20), indicating the closeness of the relationship between the centre and the settlements of its hinterland (Lloyd *et al.* 1997: 41, 45).

4.1.3.4 *Ligures Baebiani*

This is an additional survey discussed in section A.1.3.5.

4.1.4 Central Southern Italy – Summary

From the above survey synopses, a series of similarities and differences can be identified. The most obvious is a general mid-first millennium BC demographic expansion. However, the timing of this varies across the region – for example, the Archaic period expansion in the Pontino is more closely allied with processes in (South) Etruria (section 4.4.2). The associated historical migration of this period also demonstrates varied results – Volscian occupation, and the ensuing wars with Rome, appear to have destabilised the Pontino. In contrast, the fusion of Samnite and pre-existing communities led to a more vibrant culture in Campania. To be placed in this wider context, there are also general trends towards increased social stratification, agricultural intensification and urbanisation. Again, these developments appear to have emerged earlier, and to a more significant degree, in areas such as the Pontino and central and southern Campania. Similar processes commenced later and developed more slowly in Samnium, though accelerated significantly during the late Republican period. Beyond these general trends, their specific manifestation, through historical and archaeological evidence, demonstrates considerable diversity, from the large Latial cities of the Monte Lepini, to the hillforts of Samnium and the Greek-influenced urbanisation of parts of Campania.

During the Roman period, the appearance of the traditional indicators of Romanization suggests some social, economic and political convergence across the area. However, assessment of the detail of these trends and their localised contexts belies a range of different economic and political motives and suggests continuity of earlier heterogeneity. In part, this is related to extensive colonisation along the Tyrrhenian coast, both in areas of earlier urbanisation (Pontino, central and southern Campania) and more decentralised tribal structures (northern Campania). There was also colonisation on the border between Samnium and Campania (e.g. Aesernia, Beneventum, Fregellae, Venafrum). This instigated major changes to social and economic structures across large parts of the region.

In particular, this opened up some areas to extreme external economic demand, whether administered (Pontino) or market-led (Northern Campania). This is visible through the commodification of land (centuriation) and development of specialised agricultural and craft production.

Considerable change can also be identified in un-colonised areas. In Samnium, for example, the construction of villas began not long after their development on the Tyrrhenian coast. However, despite similarities in form and date, these villas must be considered in very different contexts. Comparatively isolated from the major economic potential of external markets – and the same environmental affordances – villas in Samnium were more closely associated with élite competition and emergent urbanisation (section 5.3.4.1). As will be demonstrated in Chapter Five, the degree of similarity or dissimilarity, and of continuity or change, is largely a product of scale. At one level, during the Roman period, the whole region demonstrates a considerable homogenisation in terms of material culture and social and economic structures; at another, it is possible to recognise continuing diversity.

4.2 Southern Italy (Appendix 2)

4.2.1 Magna Graecia (Appendix 2.1)

4.2.1.1 Metaponto (Appendix 2.1.1)

Metaponto was founded by Achaean Greeks from Sybaris in the mid-seventh century BC. The *chora* was partitioned, along the prevailing geology, during the sixth century BC and delimited by a series of sanctuaries (Carter 1998: 7). Already in political decline during fourth century BC, it was captured by Dionysius I (390 BC) and then by the Lucanians. From 370 BC it came under Tarentine domination as a member of the Italiote League of Greek cities. Despite this, during the second half of the fourth century BC, possibly as late as 325 BC, there was a dramatic expansion of settlement, filling out every available area (Table 4.7). This coincides with evidence for settlement and demographic expansion elsewhere in central and southern Italy (*ibid.*: 15), though on a considerably larger scale, given the fine periodisation and limited potential for the creation of settlement palimpsests. The colony's history closely reflects rural patterns, both reaching their greatest extent and prosperity during the late sixth century BC, and after a brief decline, peaking again during in the fourth century BC. Subsequently, both contracted dramatically (Carter *et al.* 1985: 281).

The farmsteads of the fourth century BC are typified by that excavated at Fattoria Fabrizio. This consists of a square structure (c.13x13m) of three rows of modular rooms with foundations of stone and tile and floors of beaten earth. There is little evidence for a developed settlement hierarchy, though clusters of farms might be considered as villages (Carter 1981; 1990: 414, 426, figure 2; Di Siena 1990: 306). At this time, pollen and archaeobotanical evidence suggests a substantial shift from pastoral to arable production (grain, olive, legumes), though there is less association between settlement and (Greek) land division (Carter 1981: 170, Carter *et al.* 1985: 305), than to springs and the edges of tributaries and gullies (*ibid.*: 284). During this period, the entire landscape was in occupation and rural sanctuaries at their peak, despite historical difficulties with the Lucanians. At the end of the century, Fattoria Fabrizio was suddenly abandoned, without destruction (Carter 1990: 413), though other sites demonstrate more violent ends (Carter *et al.* 1985: 298; Table 4.7).

This disruption coincides with historical evidence for renewed military disruption – in 302/1 BC, the city was captured by Cleonymus of Sparta who invited the Lucanians into the *chora* (Diod. Sic. 20.104.1–3). Finally, the city was taken by Rome, after the Pyrrhic War, in 272 BC. The sharp settlement decline after c.300 BC, combined with the lack of evidence for associated growth in site size (Carter 1985: table 16.1) suggests demographic contraction. However, the relevant diagnostic pottery is currently under revision (Carter 1983; 1998: 17) and part of this trend may relate to a reduction in visibility. Metaponto remained a *socio* until 212 BC when it rebelled during the Second Punic War, becoming a base for Hannibal armies for five years (Carter 1998: 17; Cornell 1995: 363; Hornblower & Spawforth 1996: 968). Large parts of southern Italy were laid waste during the war and were subsequently confiscated by Rome (e.g. Livy 26.16.5–8). This had been argued to have led to the area's long-term economic decline (Toynbee 1965). The archaeological evidence does indeed suggest a major decline in settlement numbers during the late Republican and imperial periods, as well a reduction in the vitality of urban centres across the wider area. Pollen and archaeobotanical evidence also suggests a contemporary decline of arable production and renewed pastoral emphasis (Carter 1990: 421–2, figure 8), especially in the first century BC (Carter *et al.* 1985: 298). However, the surveyors reject the traditional explanations of 'class struggle' or long-term influence of Roman control and Hannibalic devastation. Instead, they favour of problems caused by agricultural over-specialisation (Carter 1990: 441). Yet, this places much weight on palynological and archaeobotanical evidence. More generally, there has been an emphasis on social and

cultural explanations for this ‘decline’, for example, estate agglomeration, longer term regional cycles and isolation from the new political centre at Rome (Carter 1981: 167–78; Di Siena 1990; Lomas 1993: 120).

Hellenistic/Republican (second/first century BC) sites were not significantly larger than their Classical (Greek) predecessors (Carter *et al.* 1985: table 16.1). However, these figures are ‘regionalised’ and there is no evidence of individual sites increasing in size. Regardless, late Republican and early imperial settlement is dominated by a few large, though comparatively modest, villas and rural industries (e.g. tile factory at Pizzica – Carter 1981: 172; Carter *et al.* 1985: 298). The frequent location of this settlement at previously occupied sites, if not on the actual foundations, suggests some stability of landownership (*ibid.*: 303), though the reuse of non-domestic sites is also noted (e.g. early sixth to late fourth century BC sanctuary at Pantenello replaced by farmstead – Carter 1990: 418; 1998). There is no evidence for land being owned by families from central Italy or of any participation in production for the export trade.

The imperial history of Metapontum is far less prominent than its Greek predecessor. Roman Metapontum comprised a small *castrum* (c.14ha), with an associated port, in the corner of the Greek city (c.141ha – Carter 1998: figure 1.2; Di Siena 1990: 305). The latter was completely abandoned by the first century BC (Carter 1998: 5). Nonetheless, the Roman town was no smaller or less prosperous than many other contemporary centres in Italy, and it is important to consider the town in its contemporary context, rather than in the light of its earlier Greek history.

4.2.1.2 Croton (Appendix 2.1.2)

The Greek colony of Croton, about two hundred kilometres south west of Metaponto, forms the focus of a related survey. Although few methodological details or results are available, it provides an important comparison to Metaponto.

Details of Roman settlement are limited, but the points of similarity and difference between the earlier Greek settlement of the two colonies suggest that generalisations about rural settlement around the Greek colonies may be unwise. At Croton, the greatest density of Greek sites dates to the late sixth/early fifth century BC, a period when Metaponto’s territory was thinly occupied. Conversely, fourth century BC rural occupation at Croton was limited whilst Metaponto demonstrates intensive rural settlement (Carter & D’Annibale 1985: 146, 150, 156; Carter *et al.* 1985: 284–5). More generally, Greek sites

at Croton are larger and more closely spaced than at Metaponto (Carter & D'Annibale 1985: 156). On this basis, although assessment of the impact of Rome is not possible, it is clear that Roman imperialism in Magna Graecia was received into a range of different contexts and, as such, uniform post-conquest development is unlikely. The reasons for this earlier diversity are as yet unclear. Metaponto was a city of greater historical prominence (Carter *et al.* 1985: 284–5) and may have had an enhanced ability to defend its territory in the particularly unstable conditions of the mid-first millennium (Small 1992b: 11).

4.2.2 Bruttium, Lucania & Calabria (Appendix 2.2)

4.2.2.1 Oria (Appendix 2.2.1)

From the late seventh to late fourth century BC, Oria was the only settlement within the survey area (Yntema 1993a: 173; Figure 4.17a). Material culture, religious practices and socio-political structures indicate extensive 'Hellenization' and 'proto-state' development during this period. By the late fourth or early third century BC, Oria (and other Messapian centres such as Muro Maurizio and Valesio, section 4.2.2.2) had become a sizeable walled town or *polis*. Unlike the Greek cities, however, Oria supported no rural settlement. This dearth of activity is unlikely to be entirely a product of visibility, as early fourth century BC pottery is particularly diagnostic and survey intensity is high (Yntema 1993a: 41, 174). As such, Oria's hinterland was probably cultivated from the town (i.e. an agro-town – Yntema 1993a: 173–6; section 5.3.2). Contemporary funerary evidence indicates enhanced social stratification (Yntema 1993a: 173, 177).

Around the end of the fourth century BC, forty-six small (c.1000m²) settlements were established across the hinterland (Figure 4.17b), indicating significant population growth and agricultural intensification (Yntema 1993a: 189–90). The fine survey periodisation limits the possibility of settlement palimpsests. The abruptness of this development, and the limited settlement hierarchy, have been taken to suggest capital investment beyond the means of the peasant class, indicating tenant farms on fragmented élite estates (Yntema 1993a: 190–2; see Alcock 1993: 61). Broadly, this expansion is contemporary with that identified across the wider area (e.g. Botromagno, section 4.2.2.6; Metaponto, 4.2.1.1; cf. Yntema 1993a: 235). The similarity of urban and rural assemblages, as at Metaponto, suggests production and marketing were locally centralised (Yntema 1993a: 193) and that rural populations were closely integrated in the social and economic fabric of the *polis*.

The area was subjugated in the aftermath of the Pyrrhic War in 267/6 BC (Livy *Per.* 15). Despite the traditional emphasis on disruption (e.g. Toynbee 1965) and the abandonment of some sanctuaries at this time, there is no convincing evidence of a decline in settlement numbers until the second century BC (Figure 4.17c; Table 4.9). The foundation of Brundisium (246 BC) appears to have had a more significant influence on settlement as it quickly established itself as the dominant regional economic centre. Concurrently, Oria (Roman *Uria*) and other urban centres declined in importance (Yntema 1993a: 195, 210). However, the slight decline in the rural settlement numbers is accompanied by an increase in average size.

Continuing rural activity and declining urban vitality demonstrates a shift in the relationship between town and country. This may relate to the area's integration into the Roman economy, with the élite developing new agricultural regimes based on larger farms, increased efficiency and specialisation aimed at market-oriented, cash-cropping for the overseas market (Yntema 1993a: 204–8). This is seen more clearly in the hinterland of Brundisium where survey has identified a second century BC villa economy, comparable to that in parts of Campania and Etruria (Manacorda & Cambi 1994: 289; Morel 1989: 498; published details of the survey, which commenced in 1990, are currently limited; Figure 4.17f). The area appears to have produced and exported oil for Cisalpine Gaul and, especially, the Roman army in the East (Yntema 1995: 175). Few amphorae were recovered from around Oria, but the concentration of kilns on the coast (Manacorda & Cambi 1994: 284–7), as in Northern Campania, suggests surpluses were transported to the coast for packaging (e.g. mule trains – Varro *RR.* 2.6.5; Yntema 1993a: 44, 206). More generally, such agricultural development did not boost the prosperity of pre-existing urban centres. Although they retained their localised market functions – Oria issued its own coinage during the second century BC (Yntema 1993a: 197–8) – specialised production and other functions centralised at Brundisium. In comparison with Oria, the diversity of settlement in the colony's hinterland indicates enhanced economic and social inequalities (Manacorda & Cambi 1994: 287–90; Yntema 1993a: 211).

Whilst the villa system of the Ager Brundisinus declined significantly during the first centuries BC/AD, settlement numbers at Oria stabilised (Figure 4.17d). However, by the second century AD, settlement numbers were in decline here as well (Figure 4.17e; Table 4.9), though their associated increase in size (roughly doubling to c.7–12000m²) and material enrichment, has been considered indicative of the development of a villa system (Yntema 1993a: 222). This would represent a major contrast with the coast and with

similar situations in Campania and Etruria, though until more details of the Brundisium survey are available, the situation cannot be properly assessed. The point at which Yntema applies the labels of (Catonian) villa and *latifundia* appears rather arbitrary, especially solely based on surface evidence. Not least, as in the Biferno Valley, most develop from pre-existing settlements, making the identification of such a change in status difficult. Despite this, the pattern of declining numbers and increasing size continues into the fourth century AD, when some of the remaining eight sites reach over six hectares (Yntema 1993a: 223). This mitigates the need to argue for any substantial demographic decline until well into Late Antiquity.

4.2.2.2 Valesio (Appendix 2.2.2)

There are strong similarities between the historical development of Valesio and Oria. Both developed rapidly during the fourth century BC (Classical period) emerging as major *poleis*, or ‘proto-states’ (Boersma *et al.* 1990: 94). Apart from a rural sanctuary, Valesio lacked associated rural settlement before the late fourth century BC (Boersma *et al.* 1991: 127). Subsequently, as at Oria, there was a dramatic expansion of dispersed settlements (averaging c.800m²; Figure 4.18a; Table 4.12). Again, settlement and funerary evidence suggests significant demographic expansion, agricultural intensification and enhanced social stratification (*ibid.*: 130). These processes intensified significantly during the early and mid-third century BC. At this time, occupation of the urban centre of Valesio was at its greatest extent (c.25ha), with a series of discrete habitation, funerary and storage areas, with a central concentration of architectural fragments (Yntema 1993b: 61; Figure 4.18d).

The rapid expansion of late fourth/third century BC rural settlement is identifiable around both centres, but settlement density at Valesio is five times higher (cf. c.0.70 sites per km² at Oria, c.3.44 at Valesio). Although the Valesio Survey was of higher intensity, this may not fully explain the difference. An important consideration is the coastal location of the territory and its subjection to the potentially exaggerated economic fluctuations of such areas. The involvement of the Ager Brundisinus, to the north, in the production and export of oil may form an important consideration in this respect (Manacorda & Cambi 1994: 289). Indeed, the abundance of amphorae contrasts to the situation further inland. Nonetheless, as at Oria, expansion during the early years of Roman domination gave way to decline during the last two centuries BC, with a halving of dispersed settlement and contraction of urban occupation to c.2–3ha (Roman *Mutatio Valentia* – Boersma *et al.* 1991: 128–9; Yntema 1993b: 65–6; Figures 18b, 18e, 18f; Table 4.12). The trend is far

more marked at Valesio (Boersma *et al.* 1990: 94), though this may relate to the aggregation of settlement figures within a broader periodisation (cf. Tables 4.11, 4.12).

During the imperial period, rural settlement numbers continued to decline and occupation at Valesio itself was negligible (Figure 4.18c). However, there was a significant increase in the size of surviving rural settlement (*c.*2000m²) and a series of large and luxurious villas suggests the development of major estates. As late as the fourth century AD, a substantial and well-appointed bathhouse was constructed within the walls of the old urban centre. The intensity of survey coverage suggests that the negative evidence for small imperial settlement is a genuine pattern. A major transformation of political and economic landscape is clearly attested during the first centuries of Roman control, in this case, closely associated with the foundation of Brundisium.

4.2.2.3 Salento Isthmus Project (Appendix 2.2.3)

Muro Maurizio, midway between Oria and Valesio (Figure 4.19a) was first occupied in the early Iron Age and rapidly expanded to cover, discontinuously, *circa* seven hectares. During the Hellenistic period, its area doubled in size, reaching its greatest extent by the late fourth and third century BC, when walls enclosing *circa* thirty-five hectares were constructed (Burgers 1992: 113; Figure 4.19b). Like Oria and Valesio, settlement was tightly nucleated from the Early Iron Age to the Hellenistic period, dispersing during the late fourth and third century BC (*ibid.*: 116). There was a substantial reduction in activity during the late Republican and early imperial periods (second century BC–first century AD). By the mid-imperial period, a large villa (*c.*1ha) occupied the intramural area (Burgers 1995: 422).

The unwallled site of Li Castelli di San Pancrazio lies south of Muro Maurizio (Figure 4.19c). It was first occupied during the Late Bronze Age, reaching its greatest extent (*c.*14ha), at the same time as Muro Maurizio, Oria and Valesio, with a similar dispersal of rural settlement. The subsequent third and second century BC decline, whilst significant, was less marked than Muro Maurizio or Valesio. Yet, despite continuing activity during the Republican period, the site was abandoned by the end of first century AD (Burgers 1992: 116). The history of development attested at Muro Tenente, is very similar to that outlined for Muro Maurizio, with a major contraction of the occupied area during the late Republican period and imperial periods (Burgers 1994: 150–1; Figures 4.19d–f).

Across the Salento peninsula, settlement differentiation in the Iron Age and Hellenistic periods led to the development of a four-level settlement hierarchy by the fourth and third centuries BC. This ranged from major walled towns, smaller fortified sites, large, unwallled/multi-focal settlements to dispersed farmsteads (Burgers 1992: 112). This pattern was transformed by the first century AD, with widespread urban contraction and/or abandonment and an emphasis on large rural settlement, including villas. This left three principal urban centres – Brundisium and the much contracted Tarentum and Uria. Despite the differences of individual settlements, however, the similarity of general trends is striking. In contrast to this settlement nucleation, preliminary results from the Southern Messapia Survey indicate some density of Roman rural settlement (Roller 1994: 355; 1995: 418).

4.2.2.4 Roccagloriosa / Mingardo Valley Survey (Appendix 2.2.4)

The major hillfort of Roccagloriosa lies less than ten kilometres from the Gulf of Policastro, on the border of modern Campania and Basilicata. The coast, of what was later Lucania, had been settled by the Greeks with the major colonies of Poseidonia/Paestum and Elea/Velia to the north. However, development of inland areas contrasts with that identified on the Salento Peninsula (sections 4.2.2.1–3). Here, settlement and funerary evidence do not indicate any substantial population growth until the later Iron Age (late fifth to early third century BC) (Gualtieri & de Polignac 1991: 195). In this respect, the area has more in common with central southern Italy (section 4.1.4). The focus of this was Roccagloriosa, a major fortified and monumental centre, which emerged during the fourth century BC (*ibid.*: 196). At this time, imported goods, including Punic amphorae, suggest trading contacts were oriented south. From the third century BC, as the Lucanians were brought under Roman control, Campanian imports suggest a realignment towards the north (Gualtieri & Fracchia 1990: 287–8). During the mid-fourth to mid-third centuries BC, dispersed and dependent settlement developed around Roccagloriosa, indicating agricultural intensification and enhanced central authority (Gualtieri & de Polignac 1991: 197; Figure 4.20c).

Roman involvement began in the third century BC, though was not formalised until the foundation of the coastal colony of Buxentum (194 BC, re-founded in 186 BC – Livy 39.23.3–4). From the third to first centuries BC, the surveyors claim a notable decline in the dispersed settlement around Roccagloriosa and a shift in focus to the hinterland of the new colony (Gualtieri & Fracchia 1990: 200; Gualtieri & de Polignac 1991: 196–7; see

Patterson 1991b: 178). This is not immediately obvious from the published maps (Figures 4.20a–d); further, sampling of the hinterlands of Buxentum and Roccagloriosa differs making direct comparison difficult. Roccagloriosa itself contracted in size during the Republican period and was abandoned by the early Empire (Gualtieri & de Polignac 1991: 201). In comparison, little is known of the urban development of Buxentum. Despite this, the two centres demonstrate different relationships with their hinterlands. Whereas Iron Age settlement clustered closely around Roccagloriosa, Roman settlement around Buxentum was all over five kilometres distant (*ibid.*: 197) suggesting the immediate area may have been farmed from the colony. The low number of rural settlements associated with the initial colonisation reflects the situation at several other colonies (e.g. Cosa, section 4.3.1.5; Fregellae, section 4.1.2.2), through there is no evidence for any significant subsequent expansion either (e.g. Luni, section 4.3.1.1).

During the early imperial period, there was some growth in settlement numbers, especially in the lower Bussento valley, including villas and *vici* (*ibid.*: 198; Figure 4.20a). This is considered to relate to the integration of the local economy into the wider macro-regional system (*ibid.*: 198). However, in contrast to other parts of the Tyrrhenian coast (e.g. Northern Campania), there is limited evidence for surplus export production. Indeed, the maintenance, even growth, of settlement in the mid-imperial period is more comparable to San Giovanni (*ibid.*: 201; section 4.2.2.5).

4.2.2.5 San Giovanni di Ruoti (Appendix 2.2.5.1)

Located in the middle of ancient Lucania, the late Iron Age settlement pattern was dominated by a series of sizeable ‘quasi-urban’ villages averaging three-quarters of a hectare (Roberto & Small 1994: 19; Small & Buck 1994b: 30). Across the wider area, there is no evidence of the type of urban centres identified at Oria or Botromagno, nor of extensive hilltop occupation. The area passed under Roman control during the early/mid-third century BC, coinciding with a period of intensive growth. This supplemented the nucleated Iron Age settlement with a range of new villages, dispersed farmsteads and later villas, peaking in numbers c.200 BC (Roberto & Small 1994: 19; Table 4.15). However, average settlement size increased to over a hectare (c.12 000m²) indicating the continued, if not increased, dominance of large sites. As in many parts of central southern Italy, this was a period of significant demographic expansion.

This development was short-lived and the period from the mid-second century BC to the Principate was one of decline. Villas persisted longer, but even these were abandoned by

the early Principate – just two sites produced early *terra sigillata* (*ibid.*: 20; see Freed 1985: 181). From the early first century AD, settlement began to expand again (Figure 4.22b). It is likely that this early imperial lacuna relates to variation in the supply of *terra sigillata*. The fine chronological distinction made between ceramic forms may be unsuitable given the limited quantities involved. Other surveys may well have assumed continuity if individual sites were reoccupied, though this cannot be assessed on currently available evidence. This general problem may explain the initial occupation of the San Giovanni villa during the first century BC, when all other settlement in the area was being abandoned.

The settlement pattern of the early imperial period was again dominated by large nucleated centres, though overall numbers and average size were smaller than during the Iron Age. There were few urban centres across the wider region of Lucania, the nearest to San Giovanni being Potentia, fifteen kilometres as the crow flies, but substantially more on the ground (also Volcei, c.25km). Generally, this situation had been associated with extensive pastoral production (i.e. sheep ranching – Toynbee 1965: 286–95), though on the basis of survey evidence for dispersed rural settlement, this is now disputed. Nonetheless, the scarcity of towns, continuity of *vici*, and significant numbers of villas, suggests a very different socio-economic situation to that found in Etruria or Samnium (cf. sections 4.1.2, 4.3.4).

Settlement numbers continued to expand into the mid-imperial period. A peak in the mid-second century AD has been suggested (Roberto *et al.* 1985: 143; Figure 4.22c), though the statistical method used is controversial. The majority of new sites are considered as *vici*, dependent on villa estates (Roberto & Small 1994: 21). In contrast to areas such as Samnium, their size and number indicate some demographic expansion at this time. Again, this development was short-lived and another decline in settlement began in the late second and third century AD; by c.AD 300, only seven villages remained in occupation. However, this observation must be placed in context. These settlements still constitute a well-populated landscape in comparison with, for example, the Biferno Valley (section 4.1.3.2). There was yet another brief period of expansion, including villa reoccupation, during the second half of the fourth century, though such patterns are not visible in Small's (1991) standard regional periodisation (Table 4.14). These phases of activity have been suggested to reflect the villas' narrow profit margins and fluctuations in the wider market (Small 1994: 42). However, they are both physically distant from such markets, and their size and wealth does not immediately suggest they existed on an economic knife-edge.

Indeed, the dating and explanation of these villas is likely to be highly localised. At Buccino, c.30km to the east, the peak of prosperity was during the late Republican period. There was a slight contraction in early Principate and accelerated decline in the later Roman period (Dyson 1985a: 69–74); there is no evidence for cycles of expansion and contraction.

4.2.2.6 Gravina, Botromagno & Fosso Bradanica (Appendix 2.2.5.2)

As at San Giovanni, the Iron Age landscape of this area was dominated by a series of large villages and a thin spread of dispersed settlements. During the Hellenistic period, there was a notable increase in dispersed rural settlement, including farmsteads and further *vici* (Small 1992b: 11; Figure 4.23a). In part, this may relate to the increased diagnosticity of finewares (Vinson 1972: 89). At the same time, during fourth century BC, Botromagno emerged as an urban centre. The site developed rapidly and by the end of the century was enclosed with a masonry wall (c.140ha). There is no evidence for a monumental centre, though its function as a central place is indicated by the issue of its own coinage (Small 1992b: 10–2, 15, 26). This trajectory is paralleled across southern Italy and parts of central Appennines.

Urbanisation at Botromagno was comparatively short-lived and intramural occupation began contracting from the mid-third century BC. By the mid-second century BC, the site had been cleared for the construction of a villa with a series of dependent houses within the town walls (Small 1992b: 18; see Monte Irsi – Small 1977; Doganella – Perkins & Walker 1990: 77, 91; section 4.3.1.5). However, these settlements were soon in decline themselves and the whole site was abandoned no later than the early first century AD (Small 1992b: 18; Vinson 1972: 87). In the countryside, there was a slight decline in the number of sites during the late Republic and a more significant decline, especially of small sites, during the Augustan period (Vinson 1972: 89; Figure 4.23a). Vinson's figures (Table 4.17) suggest a major post-Augustan settlement expansion, though Small's (1991; Table 4.16; Figures 4.23b–d) reassessment of those sites around Botromagno (the Gravina area) indicate this figure to be the result of a palimpsest. Small (1991: 271) considers the area around Botromagno to have been thinly occupied in the Roman period (cf. San Giovanni, section 4.2.2.5; Venosa, section 4.2.2.7). However, in a wider Italian context, any maintenance or increase of settlement numbers during the imperial period is of note (cf. Samnium, section 4.1.4) and the area therefore bears comparison to San Giovanni.

4.2.2.7 Venosa (Appendix 2.2.5.3)

Founded in 291 BC (Dion. Hal. 17–18.5.2; Vell. Pat. 1.14.6) to split the Samnite Hirpini from the Lucanians, the Latin colony of Venusia formed an important part of Rome's strategy to contain the Samnites and stabilise southern Italy (Salmon 1969: 60). Notably, it was established before the Third Samnite War had been concluded. The military instability surrounding its foundation was continued by the subsequent Pyrrhic and Hannibalic Wars.

Notably, survey has identified a significant number of dispersed pre-Roman sites, concentrating in the main (Venosa) river valley (Figure 4.24d; Table 4.19). This contrasts with the situation in, for example, Northern Campania (section 4.1.2.1)) and emphasises the disruptive impact of colonisation, with clear discontinuity of the location and number of sites (Table 4.21). Also different from many colonised areas, is the extensive evidence for dispersed rural settlement contemporary with the earliest phases of colonisation known historically and through urban excavations (Figure 4.24e; Figure 4.19).

The high percentage of settlement discontinuity associated with the colonisation of the area is possibly to be expected, but it remains the dominant trend throughout, with never more than forty percent of settlement from any period demonstrating earlier occupation (Table 4.21). This contrasts, for example, with the Biferno Valley (section 4.1.3.2) and Rieti Basin (section 4.3.3.3). Colonisation may have initiated a long-term destabilisation of settlement, though the predominance of small sites (*c.*65% <400m²; Table 4.20) may have implications for their consistent recognition, especially given variation in diagnostic material (Marchi & Sabbatini 1996: figures 100–3).

The dense dispersed settlement of the Republican period focused on the colony (Figure 4.24e). However, by the first century BC (Triumviral period) settlement was beginning to disperse more widely and by the imperial period had thinned considerably and spread evenly across the whole area (Figures 4.24f, 4.24g). In contrast, Vinson's data (and Small's re-dating) suggest a peak in settlement numbers in the post-Augustan period, even the second century AD (Small 1991: 12; Figures 4.24a, 4.24b; Tables 4.17, 4.18). This may reflect the bias of this lower intensity work towards larger sites of greater stability and longer occupation. Contemporary to the decline of the colony's influence on settlement location is the development of a series of large villas. Despite the initial prevalence of dispersed settlement, their decline during the early imperial period increased the overall percentage of villas from the Triumviral (*c.*14%) to the Late Antique periods (*c.*32%)

(Marchi & Sabbatini 1996: figure 94). Along with the associated increase in average site size, this pattern is reflected across southern Italy, and more generally in Samnium and Etruria.

4.2.3 Southern Italy – Regional Summary

As with central southern Italy, the general mid-first millennium BC trends of demographic growth, social stratification, agricultural intensification and urbanisation can all be identified across southern Italy. The direct presence, however, of the Greek colonies forms an important point of difference. Their general influence on indigenous settlement and social structures extended around the Italian peninsula. However, it was particularly important in promoting the nucleation of settlement and the enhancement of social stratification in Puglia, especially the Salento peninsula. The similarity of pre- and post-conquest trends in both Greek and non-Greek/indigenous areas indicates their close integration, as does their use of material culture (Yntema 1995: 155). Indeed, much of the distinction is the result of the colonial texts of both Greeks and Romans (Lomas 1996b: 142–3).

In the Salento peninsula, the immediately pre-Roman landscape comprised a developed settlement hierarchy of closely spaced towns and villages with high densities of dispersed rural settlement. The contemporary picture on the Tyrrhenian coast is restricted to the evidence from Roccagloriosa, though this also demonstrates the emergence of a major ‘proto-urban’ centre during the fourth/third centuries BC, with associated rural settlement and enhanced social stratification and centralised authority.

Following the conquest by Rome in the first half of the third century BC, there were major changes in settlement across the area, both Greek and non-Greek. Urban centres demonstrate a near universal decline in size and/or vitality – including Greek colonies, indigenous centres, inland and coastal locations. The exceptions are the Roman colonies of Venosa and Brundisium. There is also a widespread contraction of rural settlement, again with the exception of the colonies. In the past, there has been a tendency to correlate such change to historical references made authors such as Strabo (*Geogr.* 6.5.3) and Cicero (*Amic.* 13); these emphasise depopulation and de-urbanisation and claim them to be the result of long-term military disruption (e.g. Toynbee 1965). There is no reason to believe this area was any more or less disrupted by war than other parts of Italy and such disruption does not presuppose ‘decline’. The drawn out conquest of Samnium, for example, coincided with a notable demographic growth. In the Greek context, it has been

demonstrated that the impact of warfare on agriculture was principally experienced through disruption of human labour, rather than any other resources (Hanson 1983: 191). Indeed, the contraction or abandonment of towns must be distinguished from depopulation, and neither should be considered indicative of economic decline.

The abandonment or contraction of urban centres must, therefore, be placed in context. The density of these sites, especially in the Salento peninsula, was particularly high. Along with the process of urbanisation, this indicates high pre-Roman populations. It should be allowed for this area to have followed its own regional demographic cycle, as found, for example, in the Po valley (Dyson 1985b). Indeed, demographic decline was subsequently experienced across large parts of peninsular Italy. It may also be possible to consider 'decline' as more of a rationalisation, as contacts with the Hellenistic world were broken down and the area brought into Rome's political orbit. From an administrative and economic perspective, the same density of urban centres was not feasible within this new order. Indeed, the post-conquest contraction of large urban centres has been argued to represent a shift to a Roman model of urbanism (Lomas 1996b: 141). The decline in the numbers of dispersed rural settlement during the third and second centuries BC (Gualtieri & de Polignac 1991: 197) has also been used to argue for a reduction in population. This may be more apparent than real, owing to issues of archaeological visibility. Nonetheless, nucleated (village) settlement remained a dominant trend, especially in the interior. The maintenance of site numbers during the imperial period in the interior is a notable contrast to the situation in central southern Italy.

It is also possible to locate the pre-conquest, non-Greek communities of southern Italy within a core-periphery framework with the Greek coastal colonies (Herring 1991). Although Rome had sustained relations with the Greek cities for decades, conquest was a comparatively sudden experience for many indigenous communities and must have destabilised their relations with the colonies. In particular, this may have affected the social basis of urban structures. Similarly, the conquest is likely to have disrupted core-periphery relations between the Greek colonies and the Greek mainland; nor can the dissolution of the Italiote League have helped to stabilise the area. The contemporary situation in the interior (Basilicata/Lucania) is much less clear. There is some abandonment of nucleated centres, but others emerge for the first time in the post-conquest period, for example, Potentia.

The historical argument for post-conquest demographic and economic decline is also questioned by changes in agricultural strategies and rural settlement. Whilst settlement hierarchies disappeared in the Salento peninsula, there is evidence for their enhancement in the interior, through the early development of the villa, possibly pre-dating its emergence in Campania, Etruria and Latium (Small 1994: 42). These are unlikely to have developed in the context of external (imperial) markets as argued for other areas, more probably representing a new means of élite display. More generally, they fit comfortably into the long tradition of nucleated settlement, which persisted throughout Antiquity. They also demonstrate far greater long-term stability than their coastal counterparts. The latter show considerable variation in date, context and function. In the hinterland of Brundisium, during the second century BC, they relate to the intensification of agriculture for surplus oil production for the army and the East. Late Republican examples have also been identified in the *territorium* of Metapontum, though their involvement with the export market is less clear. Villas around Oria, and even on the coast at Valesio, did not develop until the imperial period, though were substantial examples when they eventually did.

As such, archaeologists and historians have been too quick to take the ancient texts at face value and to correlate this evidence with the very different archaeological signatures of the south. More significant than supposed decline, are the differences in the way local élites responded to Roman domination. There was no clear post-Social War municipalisation in the south – urban munificence in the Greek colonies is best conceived as a legacy of previous urban traditions than a specifically Roman innovation. Nor was there any clear ambition for, or success at, political life in the Senate (section 5.3.4.1). An informative difference concerns the role of villas. Their relationship with urbanisation is very different to that identified in Samnium or, for the most part, the Tyrrhenian coast (section 5.3.5). In the largely un-urbanised interior, villas may have acted as substitute central places – if so, their expression of private, as opposed to public, wealth is a notable contrast to élite strategies elsewhere (section 5.3.4.2).

4.3 Northern Peninsular Italy (Appendix 3)

4.3.1 Tuscany & Northern Lazio (Etruria) (Appendix 3.1)

4.3.1.1 Luni (Appendix 3.1.1)

Evidence for pre-Roman activity was limited to lithic material (Delano Smith *et al.* 1986: 98–100); however, a rich Iron Age cemetery, known prior to the survey, indicates some

occupation (*ibid.*: 93). The colony of Luna was founded in 177 BC with strategic, and quite possibly commercial, considerations in mind. Excavations within the Republican and imperial centre demonstrate a prosperous town, with extensive public and private construction (*ibid.*: 82, 142; Ward-Perkins 1981). In contrast, there is limited evidence for a densely settled or heavily exploited hinterland (e.g. Buxentum, section 4.2.2.4). A number of farmsteads and a few villas concentrated along the hill slopes and ridges above the coastal plain and river valleys (Delano Smith *et al.* 1986: 100–2), but the lack of agricultural land here suggests viti- and oleoculture rather than cereal production (Table 4.22). The lack of settlement on the coastal plain (Figures 4.28b, 4.28e) – subject to greater coverage than the hill zone – suggests this area was farmed from the colony (Mills 1981: 266–7). The general scarcity of villas would also appear to constitute valid negative evidence (Delano Smith *et al.* 1986: 106).

Excavation at the site of one scatter (Site 9; Figure 4.28a) in the hill zone identified a mid-first century BC farmstead (c.9x10m+) with a hall or courtyard flanked by rooms, built over an earlier second century BC farmstead. The structure comprised stone foundations/dwarf walls with sun-dried brick superstructure, probably of two storeys (*ibid.*: 109–18). A lean-to shed covering a *dolium* pit indicates agricultural production and a range of amphorae, including south Italian and African, demonstrates integration into the wider Roman economy. The absence of late coarsewares, amphorae and African Red Slip suggests abandonment by the mid-first century AD. Though small, the construction of this and similar settlements, and their associated agricultural terraces, indicate substantial investment (*ibid.*: 116). The site is not fully published, but it is clear that its excavation recovered a wider range of pottery than the surface collection (see *ibid.*: 117). Most importantly, no Republican finewares were recovered during surface survey, considerably underestimating the length of the occupation of the site.

From the later first and second centuries AD, rural settlement in the hills was abandoned, leaving a thin scatter of sites on the coastal plain (*ibid.*: 107). The similarity of this timing to the contraction of settlement (and wine production) in other areas of the Tyrrhenian coast has been taken as to indicate the area's earlier involvement in wine export (*ibid.*: 108). Although no local amphorae are known, Pliny (*HN.* 14.8.68) refers to the excellent wines from the area. However, the limited numbers of rural sites suggest even if they were involved in the export trade, the area was peripheral to the dramatic economic development further south (e.g. Ager Cosanus, section 4.3.1.5).

In contrast to the limited evidence for rural prosperity, Luni itself flourished from the first century BC until at least the third century AD (Mills 1981: 261) and clearly did not depend upon the export of the agricultural produce of its *territorium*. This prosperity appears to have been based upon its role as a port for the exportation of marble; the principal Italian source lay a few kilometres inland (*ibid.*: 267; Delano Smith *et al.* 1986: 142). In Antiquity, the area was famed for its white Carrara marble which was supplied to Rome, Italy and the Empire. Marble was first used for architectural decoration at Rome during the late second century BC, though not in quantity until the Augustan period (see Suet. *Aug.* 28). It was in this period that the quarries, under imperial control, were first exploited (Morel 1989: 503). However, when demand for this product declined during the later imperial period, as evidenced by the use of *spolia*, the colony inevitably suffered (Ward Perkins 1981: 185). Without a local role as an agricultural market centre, decline was even more pronounced (Delano Smith *et al.* 1986: 143).

The limited rural settlement hierarchy contrasts with many areas of pre-Roman and Roman Italy. The density of settlement is also low in comparison to many other colonised area (e.g. Venusia, section 4.2.2.7). In terms of cost-distance, the area was significantly closer to Rome than many parts of inland Etruria and Samnium and the wealth of its élite, as evidenced through urban benefaction, was no less than that of other areas. The reason for this comparative agricultural under-development may well therefore lie in the existence of a far more profitable alternative investment – marble.

4.3.1.2 Cecina Valley (Appendix 3.1.2)

Further south along the Tyrrhenian coast lies the Cecina valley, running due west to the Etruscan city of Volaterrae. As elsewhere in Etruria, this centre emerged during the eighth to sixth centuries BC (Terrenato 1998b: 95). However, there is limited diagnostic pottery for the period before the third century BC with which to assess rural settlement patterns. As usual, the emphasis is on funerary evidence. Consequently, the significant increase in settlement numbers during the Hellenistic period (third century BC – Figure 4.29a) may, in part, relate to increased visibility. The majority of these sites were small farms (100–2000m²) with a few villages around Volaterrae. The city is known to have been a *foedus* by 205 BC, though had probably entered such an agreement earlier in the century. Some time after this, a small group of villas developed on the coast, along the Via Aurelia (Figure 4.29a), but rural settlement hierarchy was limited in all periods (*ibid.*: 95).

The city was sacked by Sulla, but recovered and underwent a phase of major ‘Romanization’ during the first century BC. However, it was during the first century AD that major public buildings, such as the theatre, were constructed and a local family, the *Caecinae*, entered the Senate at Rome (*ibid.*: 108). Around Volaterrae, only a few settlements were abandoned during the early imperial period, though new farms replaced them. There was a modest increase in the number of villas on the coast (Figure 4.29b). Overall, however, the limited numbers of villas and their co-existence with pre-existing farmsteads suggests that earlier modes of production persisted, largely unaffected by the villas which did develop (*ibid.*: 96). Further, élite burials suggest villa owners were of Etruscan origins (*ibid.*: 101–2) and, overall, the conservatism of the rural landscape suggests the strong continuity of Etruscan social, economic and even legal frameworks (*ibid.*: 109). Evidence for the influence of Rome is more explicit within the urban centre itself (*ibid.*: 105, 109).

This general stability of settlement contrasts strongly with areas such as South Etruria (section 4.4) and the Ager Cosanus (section 4.3.1.5) and even areas of supposedly strong continuity, such as the Biferno Valley (section 4.1.3.2) and Rieti Basin (section 4.3.3.3). Even during the imperial period, the decline of settlement numbers was very gradual. This general observation is reinforced by excavation of a farmstead at San Mario. The site was selected for excavation on the basis that it represented a typical surface scatter (c.500m²) of good stratigraphic potential. The two-room structure and associated yard and cistern were built during the late fourth century BC and were still in occupation in the fifth century AD – nearly a millennium later. The construction technique was stone bound with clay, with a tile roof, the total structure covering c.12x12m (*ibid.*: 102–3). Despite the lack of expenditure on the physical structure, a large and varied assemblage of imported finewares and other artefacts attest integration into the wider Roman economy. The small-scale, sustainable agriculture reconstructed on the basis of archaeobotanical evidence contrasts with the intensive regimes of the Ager Cosanus, though the artefactual evidence indicates some surplus production (*ibid.*: 103).

4.3.1.3 Montarrenti (Appendix 3.1.3)

The Montarrenti Survey was located to the south west of Siena, in the upper reaches of a tributary of the Ombrone. Indeed, Saena/Siena was the nearest Etruscan city; contemporary settlement in the survey area was restricted to a series of small farms, the largest measuring half a hectare. Little is known of the Roman conquest of the area,

though this must have occurred at some point during the third century BC. During the Roman period, the number of settlements declined considerably (Figure 4.30c). Just one major Roman site (c.1ha), without architectural elaboration, was identified and other sites were significantly smaller, some considered to be simple sheds or huts (Barker & Coccia 1989: 43; Bartoloni 1984: 285; Barker *et al.* 1986). The limited evidence for Roman settlement contrasts strongly with the evidence from many other areas of central Italy. Although alluviation on the valley floors is significant in some areas (e.g. Piano di Rosia), this does not constitute a clear bias against Roman settlement. More specific interpretation is hindered by the lack of historical sources and the publications' emphasis medieval and methodological issues.

4.3.1.4 Lower Pecora Valley / Scarlino (Appendix 3.1.4)

The archaeology of the early Etruscan (Orientalising) period is dominated by funerary evidence (Cucini 1985: 285; Figure 4.31c). Social stratification was limited, though intensive metallurgical activity indicates economic specialisation, possibly oriented towards an external economy. The nearest Etruscan cities to the area were Vetulonia (c.12km as the crow flies, but further on the ground) and Populonia (c.32km). There was no major *polis* within the area and the Etruscan population was divided between three small centres. At the end of the fourth century BC (Hellenistic period), two 'hillforts' were constructed, though there is no evidence for associated rural settlement (*ibid.*: 286; Figure 4.31c). From the early third century BC, there was a dramatic change. As in the Cecina Valley (section 4.3.1.2), a dense series of farms developed, particularly around the edge of the plain (Figure 4.31d). These were small (up to 1ha) and undifferentiated; combined with the lack of urbanisation, there is still no indication of significant social stratification (*ibid.*: 290). This, and the lack of urban development, is perhaps surprising given the extensive evidence for specialised metallurgy, especially ironworking, apparently for export. This activity was concentrated along the coast, including one particularly large industrial complex (*ibid.*: 288).

During the late second and early first centuries BC, a number of Hellenistic/early Republican sites were abandoned, though overall numbers were maintained through the foundation of several large villas at previously unoccupied sites (Table 4.23). Cucini (1985: 290) considers these to represent an addition to, rather than replacement of, the existing system. Van Dommelen (1992: 872) envisages a more profound change in social and economic relations similar to that found in the Ager Cosanus (section 4.3.1.5). These

villas were significantly larger than earlier settlements and their assemblages demonstrate abundant (imported) pottery and building materials (Cucini 1985: 292). In particular, two huge villa complexes – La Pieve (c.25,000m²) and Vignale (c.40,000m²) demonstrate the significance of change in the rural hierarchy. On a far more modest scale, were two new nucleated population centres, including Puntone Nuovo. This is likely to have been a *statio* on the Via Aurelia, as well as a port and metallurgical centre (van Dommelen 1993: 179), but at less than a hectare was a fraction of the size of Vignale. Dispersed rural settlement consisted of a small dependent sites associated with villas and larger farmsteads (Cucini 1985: 296; Figure 4.31e). Republican metalworking sites continued production during the imperial period. Settlement peaked during the first century AD, though extensive African imports attest the continued prosperity of the area into the mid-imperial period.

The wealth of the region appears to be closely based upon iron extraction and processing throughout Antiquity. Despite this, even during the Roman period, no major urban focus developed in the area. It is possible such functions were monopolised by the colossal villas of La Pieve and Vignale. Within the context of C.A. Smith's *Regional Analysis* (1976; section 5.4.4), the area's economy demonstrates some distortion in terms of the uneven spatial distribution of agricultural and economic development (van Dommelen 1993: 180). However, the abundance of amphorae (Cucini 1985: figures 57, 61–3) and the size and wealth of villas suggests involvement in the surplus production and export of wine. In this respect, the location of the Pecora valley between the less developed Cecina Valley (section 4.1.3.2) and the remarkable economy of the Albegna Valley (4.3.1.5) is potentially instructive.

4.3.1.5 Ager Cosanus / Albegna Valley (Appendix 3.1.5)

The transition from the Orientalising to Archaic period (sixth century BC), was characterised by urbanisation, agricultural intensification and demographic expansion across the area. In the second half of the century, Doganella developed to dominate the lower valley, although minor centres emerged at Talamone, Ghiaccioforte and Orbetello (Attolini *et al.* 1991: 143). Here, centralisation of economic and social functions based on the redistribution of surplus is suggested by amphorae evidence (Figure 4.32d), rich necropoleis, craft specialisation and limited dispersed settlement or rural hierarchy (*ibid.*: 143; Perkins 1991: 139–41; Perkins & Walker 1990: 68). At Doganella itself, dense and discrete concentrations, often identifiable as individual buildings, demonstrate long-term

respect towards a main street and indicate possible planning (*ibid.*: 18; Figure 4.32k). Individual scatters produced a wide, but homogenous, range of artefacts, with wasters, slags, loomweights and querns indicating the co-existence of domestic, industrial and agricultural activities (Perkins & Walker 1990: 53).

In the upper valley, Saturnia developed as a small urban centre during the fifth century BC (Perkins 1991: 141–2). A hierarchy of associated settlement, including farmsteads (e.g. Podere Tartuchino – Attolini *et al.* 1991: 144; Perkins & Attolini 1992) and villages suggest less marked social and economic centralisation. Finally, on the coast – the later Ager Cosanus – villages, interspersed with a few smaller settlements, suggest power was held by village-based élites, possibly part of a hierarchy of kin/client relationships focused on Vulci (Perkins 1991: 135–9; Figure 4.32a).

Rome defeated the Etruscan cities of Vulci and Volsinii in 280 BC, confiscating land and imposing treaties. Although the number of settlements had declined by the time of the Roman conquest (c.280 BC), overall population levels probably remained high. The greatest reduction concerned tombs and sites with the smallest population (Table 4.28). However, the subsequent century demonstrates a halving of settlement numbers, including the violent destruction of Saturnia and Ghiaccioforte. The abandonment of these centres has a strong influence on population estimates, which fall by as much as three-quarters (Perkins *in press*). Whether Doganella's abandonment pre-dates the conquest is still debated (cf. Barker & Rasmussen 1998: 265, Perkins *in press*). However, the abandonment of the site seriously lowered the regional population, assuming it was not dispersed to unidentified rural sites.

The Latin colony of Cosa was founded soon after the area's conquest (273 BC – Vell. Pat. 1.14.7) on land appropriated from Vulci; the fertile coastal plain of its *territorium* was also centuriated (Brown 1980: 1–2, 8). Its location, between the Vulci, Roselle and Orbetello, was clearly intended to control their interaction. The colony's name appears to derive from the latter site, probably Etruscan *Cusi* or *Cusia* (Brown 1980: 8). Significantly, the two sites thrived alongside each other until at least the first century BC (*ibid.*: 8), though the nature of this relationship is surprisingly under-researched. The number of colonists is not recorded, though on analogy was c.2500–4000 (c.7,500–12000 including families¹). The city wall was rapidly constructed in the 'Latin-style' of closely fitted blocks; Old

¹ Brown (1980: 2) suggests 2500 colonists, totalling c.9000 people – this figure is used in subsequent calculations.

(Etruscan) Cosa was also fortified at this time, using the same construction techniques and enclosing an even larger area (*ibid.*: 20–1). Only after the completion of the wall, did attention shift towards public buildings. These demonstrate a rich infusion of Latin and Hellenistic styles (*ibid.*: 26).

Despite the evidence for activity at the urban centre, third century BC rural settlement is scarce (see Northern Campania, section 4.1.2.1; Fregellae, section 4.1.2.2; Figure 4.21e). It has been suggested that between only an eighth and a quarter of the colonists could have lived within the city walls (*ibid.*: 18; Salmon 1970: 35–8, generally, Frederiksen 1976: 342); by implication, the majority resided in the *territorium*. The lack of evidence for third century BC settlement, from either survey, is therefore problematic. This absence has been explained by the low visibility of small and short-lived colonial farmsteads (Dyson 1978: 259). This is supported by ceramic sequences from Cosa, which suggest limited quantities of third century BC Black glaze, coarsewares and amphorae (Brown 1980: 25). The Albegna Valley Survey has not addressed this issue in publications to date, claiming they were based at Cosa (Attolini *et al.* 1991: 144).

During the second century BC, rural settlement underwent a dramatic fivefold increase in number (Figures 4.32f, 4.32g; Table 4.28). Some, but not all, of this expansion may be explained by an increase in the visibility of sites. A large (c.1ha) villa was constructed at Doganella, c.100–200 years after the city's destruction (Perkins & Walker 1990: 77, 91) and a dense network of small farmsteads emerged throughout the valley (e.g. Giardino Vecchio, consisting of a c.500m² structure set around a courtyard, with a wine press and granary, Attolini *et al.* 1991: 144). So great was this growth, that rural populations may have exceeded town-dwellers for the first time since the seventh century BC (Perkins *in press*). This was despite the presence of Cosa, and two new colonies, Saturnia and Heba which were colonised and their *territoria* centuriated on the same alignment as Cosa's grid during the second century BC (Attolini *et al.* 1991: 145).

During the third century BC, the distribution and abundance of Greco-Italic amphorae had been increasing (Figure 4.32h). This trend peaked during the second century BC indicating the (re-)emergence of commercial wine production in the region – Doganella had exported wine extensively, but especially to Gaul, c.625–375 BC (*ibid.*: 144; Perkins & Walker 1990: 41–6). However, the switch from Greco-Italic to Dressel 1 amphorae during the second half of the second century (Figure 4.32i) – slightly later than in Northern Campania (Arthur 1991a: 64; section 4.1.2.1) – coincided with a major intensification of

(wine) production. This is attested by the abundance and distribution within the valley and around the Western Mediterranean (Attolini *et al.* 1991: 147; Tchernia 1986: map 4).

The Ager Cosanus was the origin of a series of wine amphorae with the stamp of *Sestius* (Manacorda 1978: 129; Tchernia 1986: map 6), ranging from the late second century BC to the early first century AD (Attolini *et al.* 1991: 148; Brown 1980: 72; Manacorda 1978: 128). The principal export market was South Gaul (Cunliffe 1988: 69–71; Tchernia 1986: map 6; Whittaker 1998: 509). Although the kiln sites of this area are less well understood than those in Northern Campania (section 4.1.2.1), production was similarly focused on the coast and the same basic range of Greco-Italic, Dressel 1 and 2–4 amphorae was produced (cf. Albinia, Ager Cosanus – Attolini *et al.* 1991: 148; Sinuessa, Northern Campania – Arthur 1991a: 64; generally Tchernia 1986: 46).

This surplus production for export was based upon a series of large and wealthy villas. These developed in the lower valley and across the coastal plain, especially around Cosa, Portus Cosanus and along the Via Aurelia, between the later second and mid-first century BC (Attolini *et al.* 1991: 149). The discrepancy in the dating evidence between amphorae and villas for the commencement of intensive wine production and export arguably relates to the observation that villa construction is not directly related to the productive capacity of an estate. Amphorae therefore offer a more sensitive guide to surplus production (Morley 1996: 132).

The most famous of these villas, Settefinestre, was constructed during the Caesarian/Triumviral period (Carandini 1985b: 9). The villa was divided into *pars urbana* and *pars rustica*, the latter demonstrating extensive evidence for oil, wine and grain production (e.g. mills, presses, vats, cisterns, granaries – Ricci 1985). However, Settefinestre is unlikely to be representative of most villas, even in the Ager Cosanus. Dyson (1978: appendix 1, Site 19) considers it as a Class A villa – one of just five in the region (Table 4.25). The huge investment and coherent planning evident are suggestive of established wealth, rather than accumulated profit. It may well have been developed by a central Italian senatorial family – possibly the *gens Sestii* (Attolini *et al.* 1991: 149; Brown 1980: 73; Carandini 1985a: 52).

Despite the size and number of these villas, smaller sites continued in occupation alongside them and a range of localised settlement patterns can be identified even within the Ager Cosanus (Dyson 1978: figure 6). The coexistence of these sites had been (reluctantly) taken to suggest that large estates (*latifundia*) were the exception not the rule (cf. App. B.Civ. 1.7–8; Plut. *Ti.Gracc.* 8, Brown 1980: 71; Dyson 1978: 260). Subsequently,

however, this issue has been extensively covered (e.g. Foxhall 1990b: 97; Rathbone 1981: 11) and the interdependence of free and slave labour – and large and small sites – is now widely accepted. The alleged ninety percent reduction in the number of small sites in the Valle d'Oro (north east of Cosa), as early as the second half of the second century BC (Celuzza & Regoli 1982: 41) must be considered exceptional. Although the general trend may be correct, this fertile and well-located area formed the long-term focus for the largest villas of the region (Figure 4.32c). Villas also emerged in the upper valley, but in contrast to those down-river and in the Ager Cosanus, most developed at former Etruscan sites. Combined with epigraphic evidence, it has been suggested that the owners of these villas were of Etruscan descent (Attolini *et al.* 1991: 151). There is little evidence these villas were involved in the export of either wine or grain, possibly retaining mixed or pastoral regimes.

Following the reinforcement of Cosa in 199 BC, the prosperity of the colony and its *territorium* had been closely associated. However, this relationship had broken down by the first century BC, when a rift can be identified between public urban and private rural (villa) investment. It has been suggested that whilst rural areas were highly productive, profit from the wine trade was not invested in local public munificence, but siphoned out of the region, possibly for élite competition at Rome (Morley 1996: 178). Having survived the Social and Civil Wars unscathed, c.75–50 BC, the colony was devastated by fire and possibly even temporarily abandoned. Subsequent occupation was on a reduced level within refortified walls (Brown 1980: 73). Regardless of the cause of this destruction, the colony's strategic importance had lapsed – the 'frontier' was far to the north and the Etruscans well under control. Nonetheless, the largest villas continued to focus around the city (*ibid.*: 73; Dyson 1978: 260).

During the first century BC, the majority of small dispersed settlement, especially on the coast, was abandoned (Dyson 1978: 262; Table 4.26). This has been attributed to estate (*latifundia*) agglomeration (Attolini *et al.* 1991: 149). At the same time, there was a switch to Dressel 2–4 amphorae (Figure 4.32j) – slightly earlier than in Northern Campania – and subsequently, Portus Cosanus, the area's principal port, also demonstrates evidence for decline (*ibid.*: 147–8; McCann 1987). By the first century AD, villas were also in decline (Attolini *et al.* 1991: 50).

Though the very richest villas were at their most prosperous at this time (Dyson 1978: 260), this arguably relates to the consumption, rather than production of wealth. An

increase in imported amphorae (i.e. wine) also suggests a dramatic decline of local production (Attolini *et al.* 1991: 150; Manacorda 1978: 131; Ricci 1985: 73–92, cf. Northern Campania, section 4.1.2.1). By the end of the second century AD, there had been a more dramatic contraction of settlement including large villas (Dyson 1978: 260), suggesting (further) estate agglomeration (Attolini *et al.* 1991: 151). Some villas diversified production – including pig breeding at Settefinestre (Carandini 1985a: 179) – others developed into *vici*, though most were abandoned. A slight decline in settlement numbers in the Ager Cosanus was also accompanied by a major discontinuity of site location (Table 4.24).

In the upper Albegna Valley, the decline of small sites in the first century BC, and villas in the second century AD, was less pronounced and some villas continued into the fourth century AD and later. Similarly, while Cosa declined in the second century AD, Heba continued well into the third century, and Saturnia into the fourth (Fentress 1994: 250). This enhanced stability has been related to the isolation of the area from the fluctuating economic conditions of coastal areas. In the upper valley, villas were well-appointed residences, rather than slave-based production units. However, one suggested reason for their survival in the late Roman period may have been pastoral production for the Roman market (Attolini *et al.* 1991: 151; Barnish 1987; Morley 1996: 133).

In general, both surveys identified unstable settlement patterns; in contrast to areas such as the Rieti Basin (section 4.3.3.3) and the Biferno Valley (section 4.1.3.2). Large numbers of sites, of all sizes, demonstrate comparatively short-term occupation. This may relate to a range of issues – the violence of the Roman conquest; colonisation, the dramatic expansion of profit-oriented, slave-based agriculture and the draining of these profits from the local economy by external agencies. It should be apparent from the surveys discussed so far, and the theoretical stance outlined in Chapter Two, that no area can be considered ‘typical’. However, the Ager Cosanus must surely be more atypical than most. As with the South Etruria survey, the frequent projection of these results onto other areas of Italy is therefore highly questionable.

4.3.1.6 Tuscania (Appendix 3.1.6)

The small (c.8.5ha) Etruscan centre at Tuscania, circa seventy-five kilometres north west of Rome, lay between the major centres of Vulci and Tarquinia. During the Etruscan period, settlement consisted of a series of undifferentiated farmsteads in a discrete agricultural hinterland of c.12km² around Tuscania (Figures 4.33c–f). Cemeteries also

clustered around the town (Barker 1988: 778). However, the town itself was probably subject to the much larger city of Vulci.

The Roman conquest, of the early third century BC, did not involve major any restructuring of the landscape (cf. Ager Cosanus, section 4.3.1.5). The existing trends of settlement and demographic expansion and agricultural intensification peaked during the late Etruscan and Republican period, in the fourth to first centuries BC (Barker *et al.* 1993: 253; Barker & Rasmussen 1988: 38–9; Rasmussen 1991: 113). At this time, settlement spread evenly across the area, suggesting a shift in agricultural practices and town/hinterland relations (Figures 4.33c–f). A quarter of Roman sites (71) demonstrate continuity from the previous Etruscan period, whilst a further 116 sites were located on land previously used for Etruscan agriculture (Vullo & Barker 1997: 6). The distribution of sites suggests their immediate dependency upon Tuscania was relaxed as the system was opened up to the demands of the Roman economy (Barker & Rasmussen 1988: 39). The long-term impact can be therefore be considered in terms of an increase in prosperity, in particular associated with the construction of the Via Clodia (*ibid.*: 39).

As in many other areas, there was an increase in site size during the early imperial period. However, there is no evidence for an associated decline in settlement numbers (cf. Biferno Valley, section A.1.3.2) and this argues against the historical development of large estates at the expense of peasant landowners (*ibid.*: 271; Rasmussen 1991: 112). Indeed, the largest Roman sites are only medium-sized farms without clear hierarchical organisation and few have produced high status or ‘luxury’ material culture (e.g. mosaic tesserae, marble – *ibid.*: 112; Vullo & Barker 1997: 6). Mid- and late imperial period decline is also modest compared with many areas (Rasmussen 1991: 112) and the high levels of African Red Slip contrast with areas such as South Etruria (section 4.4.2).

Tuscania, therefore, represents another different landscape in Roman Etruria. Here, conquest did not disturb pre-existing trends, but modestly enhanced them. In comparison with coastal areas, this more limited expansion permitted stability well into the imperial period. The lack of rural hierarchy also forms a significant contrast to other areas. This may be linked with the long-term stability of settlement by suggesting the disruptive influence of élite competition on the economy was not a significant consideration. This might imply that such élite activity was focused elsewhere (?Vulci) and that Tuscania formed a self-contained and more balanced system within a larger social network.

4.3.2 Umbria (Appendix 3.2)

4.3.2.1 Gubbio Basin (Appendix 3.2.1)

Located in Umbria, c.160km north east of Rome, the Gubbio Plain is a small intermontane basin. Between the eighth and fourth centuries BC, domestic settlement was restricted to the (pre-urban) settlement around Gubbio (Malone & Stoddart 1994: figure 5.10); sanctuaries were dotted around the uplands (*ibid.*: 210). The funerary record suggests a 'proto-élite' emerged during the mid-first millennium BC, though this social stratification was not maintained.

Another period of centralisation and political independence may have immediately preceded the Roman conquest of the early third century BC (*ibid.*: 212). Following subjugation, during the third and second centuries BC, settlement developed across the valley, including dispersed farmsteads and villages. The San Marco Romano farmstead occupied from the late Republic to the third century AD, demonstrates a wide of imports, especially in the imperial period, including south Italian, Spanish and North African amphorae (*ibid.*: 192–4; cf. Liri Valley, section 4.1.2.2). Despite the remoteness of the region, limiting both bulk imports and exports (see Malone & Stoddart 1994: 186), the area shows close involvement with the wider Roman economy.

Large and wealthy sites formed only a small part of the settlement hierarchy (the category Large Farms/Villa constitutes c.6%; Table 4.29). Whilst these sites clustered on the valley floor (Figure 4.34b), villages developed between the hills and valleys. These locations, and the distribution of off-site material, suggest mixed agriculture was practised in the basin, whilst settlement in the uplands concentrated on pastoralism.

The loose agglomeration of settlement at Gubbio itself rapidly urbanised (as Roman Iguvium), with substantial domestic structures from the late second century BC, and major public monuments from the mid-first century BC. Together these indicate the presence of an élite and its participation in urban munificence (*ibid.*: 177–81). The lack of larger sites in the immediate hinterland of town, combined with a dense manuring scatter, suggests that this area was farmed from the town itself (*ibid.*: 197). The ritual functions of the periphery were also centralised during the Roman period, with Gubbio developing as a sanctuary town (*ibid.*: 171, 212). More generally, the expansion of both urban and rural settlement indicates significant demographic expansion during the late Republican period (*ibid.*: 210–1).

Despite its geographical remoteness, Gubbio appears to have been strongly influenced by Roman domination and closely involved in the wider economy. The full publication of results – and the basic methodological data – will provide an important comparison for the results of the Rieti Basin Survey (section 4.3.3.3).

4.3.3 Sabina (Appendix 3.3)

4.3.3.1 Farfa (Appendix 3.3.1)

The area on the east bank of the Tiber was thinly occupied in the late Iron Age and Sabine periods. Only a few small sites were identified in the area around the monastery (Monti Sabini) and on the Tiber terraces and plain (Moreland 1986: 337; 1987: 412). Nearly all of these sites continued into the Roman period (starting c.290 BC), when they were supplemented with a significant expansion of settlement. The majority probably dates to the second, rather than third century BC (Moreland 1987: 412). The earliest of these were small farms, but by the second century BC they included large and wealthy villa complexes on the Tiber terraces, at a density of around one per square kilometre (Moreland 1986: 337; 1987: 412). Their location by the river was ideally suited for the production of cereals, oil and wine and their transportation downstream to Rome and is mirrored by similar developments downstream at Cures Sabini (Muzzioli 1980: 41). In the hills around Farfa, sites were smaller and less opulent, possibly dependants of the terrace villas (Moreland 1987: 412).

By the end of the Republican period, overall site numbers had increased further still, with most earlier settlements continuing in occupation. Settlement numbers peaked during the first centuries AD (*ibid.*: 413; Figure 4.35b). At this stage, the density of villas on the terraces increased to around two per square kilometre and, although most demonstrate evidence of active production, their density is such that their contemporary occupation is in doubt. Some may have been primarily residential (*ibid.*: 413). During the second and third centuries AD, settlement numbers began to decline, with smaller sites being the most affected (Moreland 1986: 337). This has been related to the rise of provincial competition and a greater emphasis on extensive cereal production, with former villas reduced to the status of storehouses (Barker & Mattingly 1989: 37; Moreland 1987: 414). This decline of surplus production appears slightly later than that experienced in the Ager Cosanus (section 4.3.1.5) and Northern Campania (section 4.1.2.1) and may reflect the continuing demand from Rome. Settlement and population levels continued to decline into Late

Antiquity, before the foundation of the important monastery at Farfa during the early medieval period.

4.3.3.2 Eretum (Appendix 3.3.2)

The small Archaic centre of Eretum was located at a critical communication point, near the Tiber, in territory disputed by the Etruscans, Faliscans, Romans and Sabines. After extended political and military manoeuvring, Eretum came firmly under Roman control by the end of the fifth century BC (Livy 3.26.2, 3.29.7, 3.38.3; Ogilvie 1965: 72, 80). Pre-Roman dispersed settlement had clustered along communication routes (Figure 4.36a). During the Republican period, a series of new roads opened up the landscape and dispersed settlement increased and spread more evenly (Figures 4.36b, 4.36c). Roman Eretum developed on a less defensive site, below the Archaic centre. This new focus flourished during the Republican period, though at less than two hectares was particularly small. However, by the first century AD, the town had declined into an insignificant roadside settlement (*ibid.*: 80–1). In the surrounding countryside, the dispersed Republican settlement developed into a series of large and densely-spaced villas (Val. Max. 2.4.5; Ogilvie 1965: 80) similar to the situation further north at Farfa (section 4.3.3.1) and Cures (Muzzioli 1980: 40–4; Figure 4.36f, 4.36g). Many of these villas continued through the early and mid-imperial periods – in contrast, Eretum declined to little more than a roadside settlement. However, as in South Etruria, across the river, late Red Polished Ware/*terra sigillata chiara* (i.e. African Red Slip) was scarce across the area (Ogilvie 1965: appendix 3).

4.3.3.3 Rieti Basin (Appendix 3.3.3)

Lying around sixty-five kilometres north east of Rome, the Rieti Basin is an intermontane basin at c.371–400m above sea level. During the Archaic period, settlement was characterised by proto-urban (i.e. Rieti) and nucleated (e.g. Site 9) settlement with small associated rural sites, focusing on the foothills at the edge of the basin (Figure 4.37c). The area was of particular importance due to the presence of the Via Salaria, leading from the cities of the Tyrrhenian coast, over the Apennines to the north and east. The settlement pattern of the immediately pre-Roman Sabine period is less clear. Through indirect measures (A.3.3.3) it has been characterised as demonstrating continuity from the Archaic period, with further expansion of dispersed rural settlement (Coccia & Mattingly 1995: 114; Figure 4.37c; Table 4.32).

The area came under Roman control in 290 BC and Rieti (Roman Reate) developed as a centre of some prosperity and importance. No colonies were founded in the area, though there was extensive work to drain the basin floor and a possible centuriation south of the town indicating that the agricultural potential of the area was not ignored (Alvino & Leggio 1997: 22–3; Coccia & Mattingly 1992: 219–20). Indeed, the agronomist Varro – one of Rieti’s several famous sons – discusses the agricultural practices of this area, in particular, pastoralism (e.g. Varro 2.6.2, 3.2.7). Rural settlement of the Republican period demonstrates consolidation and further expansion of the pre-Roman situation (Figure 4.37d). Three quarters of pre-Roman sites continued in occupation, whilst new foundations increased overall numbers by a third (Coccia & Mattingly 1995: 115). There is clear evidence for the development of settlement hierarchy of city (Rieti), small towns/*vici* (Sites 241, 243), villas, farms and farmsteads, the latter becoming the predominant site type (Table 4.30). Some demographic increase is therefore likely, though was limited in comparison to areas such as the Biferno Valley (section 4.1.3.2).

Despite its comparatively small size, Rieti was probably a *municipium* by the Augustan period (Coccia & Mattingly 1992: 219) and is likely to have benefited significantly from the patronage of the three emperors (Vespasian, Titus and Domitian) who originated from here. During the early imperial period, there was a slight decline in settlement numbers, though a number of villas developed at this stage. Geophysical and surface collection at one example (Site 1) demonstrates previous occupation, possibly commencing in the fifth or fourth centuries BC; the evidence from other villas suggests similar origins (*ibid.*: 246, 273; Mattingly & Coccia 1995: 42). Around the late first century BC and first century AD, the Site 1 villa expanded significantly. Its size (structures alone covering c.1.62ha) and the wealth of artefacts (including large amounts of imported marble veneers) suggests a substantial and wealthy agricultural and residential complex. This was presumably built and owned by a member of the local élite (Coccia & Mattingly 1992: 248–51; Mattingly & Coccia 1995: 43). Such villas clustered on the lower slopes, interspersed with smaller sites that extend further into the hills (Coccia & Mattingly 1992: 247; Figure 4.37f).

The majority of generic Roman material findspots are believed to represent off-site scatters (Coccia & Mattingly 1995: 119; Figure 4.37b). In particular, the concentration of this material in a band at c.380–480m has been taken to support the manuring hypothesis (Coccia & Mattingly 1992: 274). In contrast to this intensive agricultural activity, the limited evidence for off-site activity on the basin floor, combined with geomorphological work that indicates large parts of the basin remained wet or prone to flooding, suggests the

basin floor was used mainly for grazing – possibly Varro's (2.1.17) *Rosea Campestris* (Coccia & Mattingly 1992: 274).

From the second century AD, site numbers began a steady decline (Figure 4.37d; Table 4.32), being most noticeable amongst smaller sites, with larger settlements forming a greater proportion of those remaining in occupation. Although the nucleation of settlement questions demographic and/or agricultural decline at this stage, the halving of site numbers in the late Roman period, despite more abundant diagnostic material, indicates some contraction. However, only around half of the late Roman sites were occupied in the immediately preceding period and nearly all new sites reoccupy locations of some earlier occupation (Coccia & Mattingly 1995: 117). Given the poor diagnostic material for the mid-imperial era, it is possible that activity from this period is under-represented and that these late abandonments and reoccupations are a product of visibility.

4.3.3.4 Cicolano Mountains (Appendix 3.3.4)

South east of Rieti, in the central Apennines, the Cicolano Mountains are one of the more remote areas explored by surface survey in Italy. After reasonable evidence for Bronze Age activity, there is none at all for the Iron Age and immediately pre-Roman period. This may relate to the dearth of diagnostic material for the same period in the nearby Rieti Basin (section A.3.3.3). Evidence from the Roman period is more substantial (Figure 4.38b). Nine sites, averaging c.900m², indicate a range of domestic, agricultural and lime-working activities (Barker & Grant 1991: 34–7), though overall, settlement is sparse and impoverished in comparison with the Rieti Basin. Ethnographic studies show current landscape exploitation is based upon a range of activities (e.g. timber, charcoal, arable & pastoral production), rather than a single enterprise. This model fits well with the Roman period evidence.

Identifying the impact of Roman control on the area is difficult to assess given the lack of pre-Roman evidence. However, the presence of *terra sigillata*, African Red Slip and second century AD coarsewares indicates the area was integrated in some form into the wider imperial economy. In particular, it has been suggested it specialised in pastoral products, especially wool, for the Roman market (*ibid.*: 85). It is difficult to distinguish between long-distance transhumance to the coastal plains (*pastori transumanti*) and short-distance grazing between villages (*pastori stanziali*) on the archaeological evidence (*ibid.*: 26). However, due to political instability, long-distance transhumance is unlikely to pre-date the Roman period.

4.3.4 Summary of Northern Peninsular Italy

As in central southern and southern Italy, the mid-first millennium BC was a period of demographic expansion and social stratification. However, these trends were earliest and most pronounced in Etruscan, and subsequently Sabine, areas. Umbrian and other inland communities were slower to display these trends, in some cases not developing until after Roman conquest. The pre-Roman communities of some areas, such as at Luni and in the Cicolano Mountains, are more difficult to assess, because of limited evidence.

The impact of Rome was, unsurprisingly, highly variable. In southern and coastal Etruria direct state intervention – colonisation, road building, centuriation – significantly disrupted social and economic structures. This relocated areas within a much wider imperial framework including access to, and demand from, the markets of Rome and the western Mediterranean. This opened up the economies of these areas to new possibilities and pressures. The importance of market demand is illustrated by the density of villas in the *suburbium*, especially in South Etruria and Sabina which supplied Rome's growing demand for wine and perishables (e.g. Ager Veientanus, Cures, Farfa – Strabo 5.2.28; Varro *RR.* 1.8.6; Alvino & Leggio 1997: 23–6; Kahane *et al.* 1968; Muzzioli 1980: 40–4). Beyond to the north and east, there were fewer villas, and pastoralism played a more significant role (e.g. Rieti Basin, Cicolano Mountains – Alvino & Leggio 1997: 26).

However, proximity to Rome and/or the coast, did not determine such changes alone, as variation in the development of the Tyrrhenian coast demonstrates (cf. Luni, Cecina Valley, Lower Pecora Valley, Ager Cosanus, and further south, the Pontino, Northern Campania and Roccagloriosa/Mingardo Valley). Environmental considerations offer some explanation – the major investment required in maintaining the drainage of the Pontino (and its abandonment) and the alternative resources of marble at Luni and iron in the Lower Pecora Valley. However, more importantly, the specific detail of each colonial encounter needs to be assessed, hence the extensive colonisation of the Ager Cosanus contrasts with the Lower Pecora Valley (though colonisation alone did not guarantee such expansion, cf. Roccagloriosa/ Mingardo Valley). Notably, research along the coast has focused on areas of colonisation, making it difficult to assess the dialogues that are more evident in the interior. The completion of the Cecina Valley Survey should help to address this issue. However, it appears that the Tyrrhenian littoral – even if just a narrow band – was profoundly changed as a result of colonisation and villa construction, whether for market production or for luxury residential purposes.

Inland, the picture is more varied; from the continued and steady expansion of Tuscania – lying between the developed economies of the Albegna Valley and South Etruria – to the more marked growth the Rieti and Gubbio Basins. Even the communities of the Cicolano Mountains, were brought into the wider economy – as both consumers and producers. This relocation in the larger framework of Roman imperialism can be seen in the way that the élite of Volaterrae, Iguvium and Reate all participated in urban munificence – and in the latter areas at least, villa building – with the ambition of access to political power at Rome. Notably, the latter enterprise was realised for all these towns during the late first century BC and early first century AD. However, such similarities should not dominate interpretation – these developments were located in radically different contexts. Volaterrae had been an important urban focus for a highly stratified society for five or six centuries by the time of its participation in these processes. In contrast, although Reate predated the Roman conquest as a centre, though its pre-Roman urban credentials are far from clear; at Iguvium, urban status was a purely post-conquest development. Thus the similarity of the date and form of these élite strategies does not relate to a sudden ‘Romanization’ of these communities, but to the opening up of such opportunities at Rome and the possibilities these offered within local social and political contexts. At Volaterrae, participation has been seen as an attempt to maintain existing status, under the specific patronage of Cicero (Terrenato 1998b: 106). At Reate, it offered the opportunity to consolidate emergent stratification, whilst at Iguvium, such activity may be considered as an attempt to establish credible and significant social power for the first time.

4.4 South Etruria (Northern Lazio) (Appendix A.4)

4.4.1.1 Ager Veientanus (Appendix 4.1.1)

Veii is the largest and best known Etruscan city of South Etruria, lying just fifteen kilometres from Rome. During the Etruscan period, its hinterland was one of the most densely settled areas in South Etruria (Figure 4.40b). After a long siege, Veii was conquered in 396 BC when it may have been briefly depopulated, though large-scale activity appears to have continued until at least the second century BC. Some rural settlement was abandoned at the time of conquest, but the majority continued in occupation, supplemented by a significant rise in overall numbers and a shift in focus towards the new Via Cassia and Via Flaminia (Kahane *et al.* 1968: 145–6; Figure 4.40d).

It has long been argued that Roman Veii was much smaller than its Etruscan predecessor, despite its promotion to *municipium* status by Augustus (e.g. *CIL* 11.3797; Kahane *et al.* 1968: 145; cf. Ward Perkins 1961: figures 15, 16). However, the nature of Etruscan occupation is itself unclear – it may well be that a series of distinct settlement foci was replaced with a single (monumental) urban focus, as happened at several centres in southern Italy. Indeed, recent excavations of Roman period sites, which Ward Perkins (1961: figure 16) labelled villas, suggests possible public functions (Helga di Giuseppe pers. comm.). In the *territorium*, the early imperial period is marked by an intensification of dispersed settlement (Figure 4.40e). By the end of the first century AD, settlement had reached ‘saturation point’, densely packed with settlement of all sizes (Kahane *et al.* 1968: 150). By the second century AD, small sites were in decline and estate agglomeration seems likely (*ibid.*: 151); simultaneously, the prosperity of surviving settlements, as indicated by architectural pretension, was growing. The statement that ‘it was a poor farmhouse which did not have its walls painted and plastered and its floors paved with herringbone tiles or with simple mosaics ...’ (*ibid.*: 151) contrasts sharply with the evidence from areas such as Samnium and southern Italy. Large unproductive *latifundia* are not a feature of the landscape until Late Antiquity (Kahane *et al.* 1968: 157; Figure 4.40g).

Some rather negative historical references to Veian wine (Hor. *Sat.* 2.3.143; Martial 1.103.9, 2.53.4, 3.49), and evidence such as vine trenches, supports the interpretation that many of these villas were producing for the Roman market (Kahane *et al.* 1968: 158; Etruria – Barker 1988: 782). Despite these general trends, however, some localised diversity in the distribution of settlement and villas can be observed (Figure 4.40a). Sites continued to be attracted to roads and there is great variation in terms of the ratios of villas and farms between neighbouring areas (Kahane *et al.* 1968: 157). Assuming no major changes in methodology, such diversity informally suggests that the survey was sensitive enough to identify patterning in the archaeological record. Nor can these differences simply be attributed to rational economic explanation. Clearly, there were many social and political considerations that might be expected to shape the development of the immediate hinterland of Rome.

4.4.1.2 Sutrium (Appendix 4.1.2)

There is negligible evidence for dispersed pre-Roman rural settlement beyond the small Etruscan urban centre of Sutrium. It has therefore been suggested that the Etruscan

population was concentrated at Sutrium itself (Duncan 1958: 92). This would contrast with the situation in other areas of South Etruria (see Figure 4.39c), though it is unclear as whether this is a problem with survey intensity and/or diagnostic material. The town appears to have replaced an earlier lowland centre at La Ferriera, some time during the fifth century BC.

Sutrium fell into Roman hands at the beginning of the fourth century BC and a Latin colony was founded in 390 or 383 BC. During the Republican period, dispersed settlement clustered around the town spreading over the Faliscan plain to the south (Figure 4.41b). As a result of the minimal evidence for dispersed Etruscan settlement, the sudden expansion of Republican settlement must be treated with caution. The lack of settlement to the north has been taken to suggest the heavy forestation of the area – the historical Ciminian Forest (Livy 9.36.1; Duncan 1958: 96; Figure 4.41b). Pre-third century BC dispersed settlement is considered unlikely (*ibid.*: 92–3), though this may be more historically-informed, than archaeologically evident: a dearth of third century BC diagnostic material was noted in the Ager Veientanus (section A.4.4.1.1) and the Ager Faliscus (section A.4.4.1.4)

After the Social War, the town became a *municipium* and subsequently received a Triumviral colony. The latter may explain the significant dislocation of individual sites – around two-thirds were abandoned at this time. However, the overall expansion of settlement numbers, especially to the north of the town is suggestive of large-scale clearance of the wooded hills (*ibid.*: 96). Even during the imperial period, most sites were small and only two merit the label villa – Casale Castellaccio and San Giovanni a Pollo. Both had their own private paved roads; the latter had a bathhouse (*ibid.*: 97). A significant percentage of sites produced only generic coarsewares; the majority of sites which did produce diagnostic finewares were associated with more substantial evidence such as cisterns (*ibid.*: 98; see Thomas & Wilson 1994), concrete foundations, *opus reticulatum*, or *selce tesserae*. In contrast, little wall plaster or marble was identified (Duncan 1958: 96). In numerical terms, settlement numbers peaked, slightly later than neighbouring areas, during the second century AD (Potter 1979: 133). As at Capena (section A.4.4.1.3), uneven periodisation may have led to a palimpsest of mid- and late Roman settlement (Duncan 1958: 95). Given the almost chronic instability of individual settlements in comparison to other areas, such a pattern is not unlikely.

4.4.1.3 *Ager Capenas* (Appendix 4.1.3)

Etruscan Capena was at the centre of relations between the Etruscans, Umbrians and Sabines. The pre-Roman settlement pattern consisted of a series of nucleated and defensively located *pagi* with a small number of tightly clustered rural settlements (Figure 4.42a). The town fell to the Rome, along with Veii, in the early fourth century (Jones 1962: 123–4). There was a substantial expansion of settlement in central and southern *ager* during the Republican period (Figure 4.42b), notably clustering along ridgelines (*ibid.*: 117). During the first century BC, a Caesarian colony was founded at Lucus Feroniae and during the early imperial period, dispersed settlement developed on the nearby plain, and in the northern *ager* (Jones 1963: 131–3; Figure 4.42c). Settlement numbers peaked during the second century AD with a decline in numbers thereafter (*ibid.*: 133).

The majority of sites consisted of small scatters of pottery and tile, with most sites interpreted as small farms. One – Monte Forco – was excavated, producing a small (c.11x5m) tuff *opus reticulatum* structure, constructed c.50 BC–AD 30 (*ibid.*: 147–58). It was one of six farms spaced at c.150–250m along a ridge, possibly as part of the Caesarian settlement programme (*ibid.*: 157). The structure was soon converted into a barn, before being abandoned by the second century AD. More generally, the two sherds of *terra sigillata* recovered from the excavation (*ibid.*: 155) serve as a warning about the visibility of sites – the best dating evidence was the *opus reticulatum* construction technique.

There was also a number of large villas similar to those across the river at Farfa (section A.4.3.3.1) and Cures Sabini (A.4.3.3.2). However, three excavated examples demonstrate that despite well-appointed *pars urbana*, these were also productive villas; all underwent major expansion during the early imperial period of both production and residential areas (Monte Canino, Giardino, Villa of the Volusii – Jones 1962: 183–5, figure 19; Potter 1979: 127–31, figure 38).

4.4.1.4 *Ager Faliscus* (Appendix 4.1.4)

As well as the Etruscans, there were a number of other cultural and ethnic groups in South Etruria, including the Faliscans. The distinctiveness of this group and its language (more closely related to Latin than Etruscan) was commented upon in Antiquity (Strabo 5.2.9) and is supported by the restriction of Faliscan inscriptions to the Treia watershed. The origins of the group may relate to the Appennine Bronze Age, as distinct from the Villanovan origins of the Etruscans (Potter 1979: 54–5).

The immediately pre-Roman landscape consisted of fairly dense dispersed settlement, though this clustered around the nucleated centres of Falerii Veteres and Narce, or along isolated ridges (Figure 4.39c). Despite Roman incursions, a truce had retained the independence of the area; this expired in 242 BC and was quickly followed by bloody conquest the following year. At this time, Falerii Veteres and Narce were forcibly depopulated and citizens massacred or distributed across the countryside (Zonar. 8.18; Potter 1976: 22, 29–35; 1979: 98–9). A new town, Falerii Novi, and road network were laid out as part of an imperial landscape (Frederiksen & Ward Perkins 1957). The number of rural settlements declines sharply in this period, though this may well relate to a significant reduction in diagnostic pottery. Nonetheless, this dislocation appears to have been more significant than that experienced in other areas. Some limited activity continued at Falerii Veteres, where two pre-Roman temples remained in use; a cemetery and kilns occupied the site in the second century AD (*ibid.*: 132). Such maintenance of ‘officially-nullified’ places in the landscape might be viewed as acts of resistance.

Regardless of earlier fluctuations, the later Republican period demonstrates a significant increase in settlement numbers (Figure 4.39d) such as the second/first century BC timber farmhouse at Valledlunga (Potter 1979: 123). By the early imperial period, the area was as wealthy as any other in South Etruria with villas (Figures 4.39e, 4.43), constituting *circa* a fifth of all settlement (e.g. luxurious Augustan villa at Monte Gelato – Potter & King 1997: 421).

4.4.1.5 Cassia-Clodia (Appendix 4.1.5)

The area was crossed by a series of important roads that linked Rome to the north and west. Dispersed Etruscan settlement was thin, concentrating in the eastern part of the survey area near Veii (Hemphill 1975: 130; Figure 4.44a). As in the Ager Veientanus, the majority of Etruscan sites remained in occupation after the Roman conquest; however, there was a dramatic increase in overall settlement numbers (Figure 4.44c). The construction of a series of new roads through the area opened up the landscape, which was now more evenly settled, including a significant number of villas (*ibid.*: 155; Figure 4.44g). The joint processes of road construction and settlement foundation continued into the early imperial period (Figure 4.44d) and new areas were still being brought into occupation during the second century AD (Figure 4.44e). However, by c.AD 300, settlement decline was well underway (*ibid.*: 156–7; Figure 4.44f)

4.4.1.6 South & West of La Storta (Appendix 4.1.6)

There was no major urban centre in this area in any period, though it forms an important communication link between Rome and Veii. Dispersed Etruscan settlement concentrated mostly in the south and east of the area, in particular along the Rome–Veii road (Figure 4.45b). During the Republican period, there was a modest increase in settlement numbers; sites spread a little more evenly across the area, though the linearity of settlement distribution, along the narrow ridges, became pronounced (Figure 4.45c). The intensification of these trends can be identified during the early imperial period, when settlement reached its most dispersed (Figure 4.45d). There was a slight decline of settlement numbers during the mid-imperial period, associated with some instability of individual site locations, before a dramatic decline in settlement numbers after c. AD 400 (cf. Figures 4.45e, 4.45f).

4.4.2 South Etruria – Regional Summary

The following section aims to provide a summary of settlement in South Etruria; in the light of some of the metadata issues discussed in sections A.4.1 and A.4.1.7, this can only be superficial. The current re-evaluative work of the Tiber Valley Project will render it rapidly redundant (Patterson & Millett 1998).

Despite the methodological diversity of these surveys, it is clear that there is substantial chronological and spatial variation between them. The Etruscan/Faliscan period was characterised by widespread population and settlement growth (Potter 1979: 69–92); settlement hierarchy also developed to include major cities, *pagi* and farmsteads. In this context, the development of city walls during the fifth and fourth centuries BC can be seen as much for population control as defence (wall circuits appear only just to pre-date the Roman period (i.e. fifth century BC onwards – Barker & Rasmussen 1998: 273–4; Potter 1978: 106; 1991a: 195). Funerary evidence also suggests extensive social stratification.

The conquest of South Etruria was a protracted affair; important communication centres and ‘ideological’ enemies came under Roman control from an early stage (e.g. Veii, 396 BC; Nepi and Sutri, c.383 BC). Other areas, such as the Ager Faliscus (241 BC) were incorporated at a comparatively late stage. In contrast with northern Etruria, colonisation of the area was extensive (e.g. Nepi – Edwards *et al.* 1995) and several pre-existing centres were relocated (e.g. Falerii Novi). An extensive road network was constructed across the area, both making use of pre-existing routes and imposing new ‘trunk’ roads to the north (e.g. Frederiksen & Ward-Perkins 1957). Many of the latter bypassed previously

important centres (e.g. Capena, Falerii Veteres, Veii), but gave new importance to others (e.g. Sutrium), as well as attracting new settlement (e.g. road stations – Potter 1979: 116–20).

Development of the landscape during the Roman period demonstrates three phases. The initial military conquest and its aftermath, during the fifth to third centuries BC, had a variable impact (Table 4.35). Some areas were largely unaffected (e.g. Ager Veientanus; also in Sabina at Cures); others were significantly disrupted with urban and/or rural decline (e.g. Ager Faliscus; also in Latium at Crustumerium; see Morley 1996: 102–3). In general, it is possible to recognise comparatively high levels of instability at individual sites during the Roman period, both as a result of the initial conquest and the new social and economic conditions of the Roman period (e.g. Potter 1978: 105–7; 1979: 17). This contrasts markedly with areas such as the Biferno Valley (section 4.1.3.2) or the Rieti Basin (section 4.3.3.3), and even Farfa (section 4.3.3.1) on the opposite bank of the Tiber.

During the second century BC, those areas which had previously escaped disruption experienced part of a wider economic, and possibly demographic, decline. However, the evidence for this period is particularly problematic and neither Potter's (1979: 95) interpretation of conservatism of ceramic form, nor Morley's (1996: 102–3) demographic collapse, is convincing. Reassessment of this critical period will be fundamental to understanding the impact of Roman imperialism/colonialism. Finally, the late Republican and early imperial periods were a time of (recovery and) prosperity (Table 4.35). However, there is significant variation in this process – it begins during the late second century BC in Latium and Sabina (e.g. Crustumerium, Cures, Farfa, Fidenae, Tibur; further afield, Northern Campania, section 4.1.2.1; Ager Cosanus, section 4.3.1.5) but develops slightly later in South Etruria from the mid-first century BC (Morley 1996: 102–3; also Rieti Basin).

This growth peaks during the first and second centuries AD and is most clearly witnessed through the construction of large numbers of well-appointed villas. The majority of these locations demonstrate pre-Roman occupation, though there was considerable variation in number and form across the area. They constitute a third of sites in the Ager Veientanus, *circa* a fifth in the Ager Faliscus and an eighth around Sutri (Potter 1979: 123). The wider economic context of this expansion is likely to be the massive growth of late Republican Rome and its demands for goods, especially those which could only be supplied locally (Morley 1996: 103). In contrast to the traditional historical interpretation of the Roman

Campagna as an area of agricultural malaise, the density of contemporary small rural settlement suggests that the unproductive *latifundia* of the historical literature did not develop (Potter 1979: 125). On the other hand, the market pressures of Rome should not be over-estimated. There was significant variation in development around the area and the bringing of new land into cultivation as late as the second century AD suggests that market forces did not reign supreme. Triumviral settlement (e.g. Lucus Feroniae, Sutrium – Keppie 1984) also suggests that the associated disruption of such schemes was not considered a problem for Rome's food supply.

Within these general trends, it is possible to identify more localised patterns of development. For example, there is a decline in the quality and quantity of finds (e.g. marble) and the overall status of sites (e.g. villas), between the immediate vicinity of Rome and northern areas such as Sutrium (e.g. Jones 1962: 343). Urban centres demonstrate a variety of different trajectories. Some, for example Sutri and Nepi, clearly prospered from their location within the new road system (Potter 1979: 94). In contrast to northern Etruria, many towns in South Etruria were abandoned or activity severely curtailed at the time of conquest (e.g. Falerii Veteres, Narce). Despite the granting of municipal status and the foundation of colonies, this trend continued into Augustan times (e.g. Veii – Strabo 5.2.9, 5.3.1; Barker & Rasmussen 1998: 275; Kahane *et al.* 1968: 147; Potter 1978: 107). Migration, from town to country, and to nearby Rome, may account for much of this. A range of economic and political processes therefore served to destabilise and reorient urbanisation in South Etruria. This included deliberate de-urbanisation (Potter 1979: 93), the usurpation of regional urban functions by the metropolis (Morley 1996: 180) and the siphoning of local produce, wealth and population to Rome.

In summary, there was considerable and continuing diversity across the area from the Etruscan to late Roman periods. In part, this may relate to methodological issues. However, the close proximity of the area to Rome meant that it was subject to the processes associated with Roman expansion from an early date. There was a possible intensification of diversity during the early Republican period as Rome gradually subjugated the area by various political and military means. However, during the late Republican and imperial periods, under the more uniform economic influences of the Empire, there was greater homogenisation (Morley 1996: 97–8); nonetheless, diversity clearly persisted.

4.5 Chapter Summary

The approach adopted in this chapter is considered as a first step towards the detailed and critical case studies necessary before meaningful synthesis can be attempted. Ideally, each survey would be reassessed from the ground up, re-dating artefacts in the light of current typologies, consulting original records, reconstructing methodologies, and even conducting new fieldwork to improve knowledge of existing data. Just such an ethos lies behind the reassessment of the South Etruria Surveys as part of the current Tiber Valley Project (Patterson & Millett 1998).

Clearly, the surveys and results summarised in this chapter demonstrate exceptional methodological, historical and archaeological diversity. Lewit's astonishing statement that Italy displays 'no discernible regional patterns' (Lewit 1991: 18, 88) – admittedly at a coarse scale of analysis – can be comprehensively dismissed. However, there are also points of overlap and similarity. On the basis of this, the following chapter discusses a range of models for the interpretation and synthesis of these surveys.

Chapter Five

MODELS OF ROMAN IMPERIALISM / COLONIALISM

5.1 *Introduction*

This chapter assesses a series of models in order to illustrate the diversity of landscape and settlement identified across Roman Italy in the previous chapter. The frameworks derive from a range of contexts – some have been developed by surveyors for specific surveys; some are more generic; others have been adapted from non-archaeological disciplines. In each case, the applicability of each survey's data is assessed within the context of the metadata discussed in Chapter Four/Appendix. As the possibilities and problems of certain surveys are better understood than others, some projects will be discussed more frequently¹. Those models relevant to the Biferno Valley will be developed in more detail in Chapter Six.

The approach adopted here is thematic, attempting to move away from the narrative structure of traditional studies. In particular, scale is stressed as a means of understanding the effects of Roman imperialism, both historically and archaeologically. By considering Roman Italy at a range of different scales, it is possible to identify a series of overlapping patterns and to locate Roman imperialism within a series of different contexts (see Alcock 1989: 34). These shift spatially from the Mediterranean and Western Europe down to individual localities and temporally from the *longue durée* to *l'histoire événementielle*. The aim is to provide a balance between general, regional and localised trends and to consider the relationships between them.

5.2 *Macro-Regional Trends & Models*

The need to contextualise regional survey results within wider spatial and temporal frameworks – the Mediterranean and *longue durée/conjunctures* respectively – is increasingly articulated (Bintliff & Snodgrass 1988; Champion 1989: 18; Gualtieri 1987:

¹ The surveys and results cited are not referenced in detail, and the reader is referred to Chapter Four and the Appendix for fuller sources and references.

30; Millett 1992: 2; Woolf 1992: 351; Yntema 1993a: 236). Indeed, it is to the assessment of the medium- to long-term that survey data are most suited to explore (e.g. Cherry 1983: 388). Although such a perspective has been argued to threaten historical particularity (Mouritsen 1998: 74–5) or to undermine the concept of agency (Barrett 1997a: 4), it need not be in conflict with such approaches. Rather this broader perspective provides a context in which to locate the historical and unique.

5.2.1 Settlement Dispersal & Demographic Growth

The relationship between settlement and demography is not direct (Bintliff 1997: 25; Bintliff & Sbonias in press; Halstead 1987; Patterson 1991b: 179; Perkins in press; Roberts 1996: 21). However, the widespread growth and dispersal of settlement in parts of Latium, Samnium, Umbria, Etruria and southern Italy during the fifth, fourth and early third centuries BC, suggests significant demographic expansion. Similar contemporary developments have been identified across Europe (e.g. Greece – Bintliff 1997: 14; Spain – Carreté *et al.* 1995: 273–5; parts of Hallstatt/Early La Tène Temperate Europe – Collis 1997). These stress that changes in Italy – and their potential relationship with Roman imperialism – did not occur in a vacuum, but in the context of far wider demographic shifts (Bintliff 1997: 37). Historical evidence also indicates population growth through references to the emigration and/or colonisation of the Celts, Latins, Etruscans, Samnites and Romans. In particular, the fifth century BC is characterised by the aggressive expansion of the Sabellian peoples of the central Appennines (Cornell 1995: 305; Lomas 1996a: 2; Salmon 1967: 35–6; Tagliamonte 1996: 17–21)².

The first major demographic expansion (from the fifth century BC) in those regions where the data allow such observations to be made, are mapped in Figure 5.1. This indicates substantial spatial and chronological diversity³. In Greece, it has been suggested that such demographic expansion represents medium- to long-term ‘regional growth cycles’ and that the impact of Roman imperialism can be located in this context (Bintliff 1997: 22; cf. Alcock 1993). Areas already undergoing demographic, economic and settlement expansion as part of an upturn in regional cycle were able to grasp the social and economic

² Including Lucanians, Bruttians to Magna Graecia; Samnites (Campani) to Campania; Volscians to southern Latium (Liri valley, Monte Lepini, Pontine Marshes); Vestini, Hirpini, Marrucini, Paeligni, Frentani to the Adriatic coast; Aequi to the east of the Tiber; Sabines to the north-east of Rome (Cornell 1995: 304–8; Lomas 1996: 4).

³ Note that shading of Figure 5.1 indicates the date at which expansion commenced and that symbol size is intended only as rough approximation of the size of individual surveys.

opportunities of Roman imperialism; areas already declining at the time of conquest demonstrate an aggravation of pre-existing trends (cf. Greece – Boeotia, Crete).

This model is less successful at accommodating the diversity of regional development in Italy. The most obvious exceptions concern those areas subject to colonisation, which caused fundamental economic and demographic change, dislodging pre-existing systems (e.g. Fregellae, Venusia, sections 4.1.2.2, 4.2.2.7). The (associated) economic boom based on surplus production for export, in areas such as Northern Campania and the Ager Cosanus (sections 4.3.1.5, 4.1.2.1) was unrelated to pre-existing trends. Complete changes of trajectory are also apparent in non-colonised regions, for example, in the Gubbio Basin (section 4.3.2.1), where dispersed settlement only developed after, and apparently as a result of, Roman conquest. Conversely, during the third/second centuries BC, conquest appears to have stopped and/or reversed the substantial settlement and population expansion of the fifth and fourth centuries BC around Roccagloriosa and in South Etruria (sections 4.2.2.4, 4.4).

However, in other areas, particularly those not subject to colonisation or extreme economic disruption, the model finds some support. For example, the expansion of settlement in the Biferno Valley (section 4.1.3.2) during the late fourth and early third century BC was intensified after conquest; a similar situation is found at Tuscania and in the Rieti Basin (sections 4.3.1.6, 4.3.3.3). The evidence from Magna Graecia is more difficult to assess (section 4.2.3): possibly as a result of finer resolution periodisations, a particularly unstable pattern of expansion and contraction has been identified. Assessing the effects of Roman imperialism is therefore complicated, as there are no clear pre-existing trends against which to measure it. In other areas still, assessment of the model is not possible at all, for example, where there is no evidence for pre-Roman settlement (e.g. Cicolano Mountains, section 4.3.3.4). Similarly, pre-existing settlement may be of a type not suited to surface survey, for example, nucleated and/or hilltop locations (e.g. Liri Valley, section 4.1.2.2).

It is therefore clear that, where the data are suited to the assessment of the model, a more varied range of responses can be identified than is the case in Greece, including major disruption to, or even the reversal of, regional development trajectories. This may well relate to differences in the nature of the Roman imperialism/colonialism in Italy and Greece. In general, despite the historical picture of extensive disruption – conquest, invasion, civil war, economic pressures – large parts of Republican Italy demonstrate continued or enhanced demographic and economic expansion. This situation has been

considered problematic, conflicting with historical evidence for the depopulation of late Republican Italy – especially during the second century BC (e.g. Plut. *Ti. Gracc.* 8; Suet. *Aug.* 46). However, this situation makes more sense if the equation is reversed; that is, the historical disruption of the second half of the first millennium BC should be seen against the background of regional population expansion. Indeed, survey data suggest that, after Egypt, early imperial Italy was one of the most densely populated areas in the Mediterranean (cf. Nicolet 1994: 605, 608, 619).

5.2.2 Consolidation, Nucleation & Demographic Decline

After widespread settlement and demographic growth during the mid-first millennium BC, a general reversal of these processes can be identified any time from the late Republic to the mid-imperial period (Fentress 1993: 369; Greene 1986: 109). This is frequently associated with an increase in the size and/or status of surviving rural settlements (e.g. Oria, Tuscania). Even where this cannot be directly assessed, larger sites at least constitute a more significant proportion of the settlement hierarchy as smaller sites disappear (e.g. Biferno valley). Initially at least, there is little evidence for, or need to suggest, demographic decline. Indeed, census figures suggest modest population growth during the early Principate (Brunt 1971: 44–91, table 1) and the urbanisation of areas such as Samnium, and the continued expansion of the city of Rome, may have absorbed a significant percentage of former rural populations. However, by the mid- to late Roman period, settlement numbers in most regions are so low as to make significant population decline unquestionable – especially when combined with evidence for contemporary urban contraction (e.g. Northern Campania – Arthur 1991b: 156; Liri valley – Wightman & Hayes 1994a: 35).

As with the original expansion of settlement and population, the timing of this decline varies significantly from one region to the next. Parts of Magna Graecia (e.g. Oria, Valesio, Metaponto) commence as early as the mid-Republican period, with parts of South Etruria being among the latest, during the late second century AD (e.g. Sutrium). A few areas, such as San Giovanni al Ruoti, resist this trend even longer with stability or even growth during the mid-/late Roman period. However, by the mid-first millennium AD, even these areas demonstrate limited settlement evidence.

From the perspective of the *longue durée*, this decline of settlement, population and economy might be considered as the logical corollary of their expansion during the mid-first millennium BC. However, its diversity of timing and the presence of shorter-term

cycles within this framework (e.g. South Etruria, Metaponto) requires additional explanation. Specific historical considerations have already been indicated for individual surveys in Chapter Four; more generic frameworks for relating these changes to Roman imperialism are discussed below, for example, the Lowland Boom-Bust model (section 5.3.3). In this way, it is intended to illustrate the presence and interaction of Braudel's temporal scales as one way of assessing historical development.

5.2.3 Upland 'Boom-Bust' Model

Anthropological research into the demographic structures of upland/mountain communities has recently been applied to the results of Greek regional survey (Bintliff 1997: 30–2; Viazzo 1989). In particular, two basic systems, or modes, have been postulated – the 'Closed' mode attempts to adapt population to resources; the 'Open' mode involves the development of relationships with lowland areas which allow such limitations to be overcome (Table 5.1). The distinction of Open and Closed is highly simplistic – few upland regions have no contact with lowland areas (see Braudel 1972: 24). Rather these modes concern relative degrees of contact. It has been suggested that an emphasis on the Closed system is a more 'normal state' of affairs, with periodic and excessive external interaction leading to greater emphasis on the Open system. Oscillation between these two modes can be considered within the context of historical and regional cycles of development (Bintliff 1997: 32).

The relevance of this model for Roman Italy is suggested by the archaeological and historical evidence for the Open mode. Clearly, not all of the criteria listed in Table 5.1 are visible through these sources, but the expansion of dispersed settlement and increasing importation of goods such as amphorae are significant. For example, the presence of *terra sigillata*, but not Black glazed wares, in the Cicolano Mountains can be argued to represent a shift towards the Open mode (section 4.3.3.4).

Attempting to distinguish the causes and effects of demographic expansion is frequently a sterile exercise. But whatever the causes of demographic expansion (see *ibid.*: 30–1), such situations usually involve attempts to balance population to finite resources: these may take one of three courses (Collis 1997: 126): (a) consolidation of social developments through the emergence of urbanism or state formation; (b) migration; or (c) population collapse. Emigration (including the *ver sacrum*) is widely attested in the historical sources; in conjunction with this 'export' of population, raiding served to increase 'income' in order to balance the equation. As such, successful means were consistently found to accommodate

demographic pressure and maintain an Open mode. This averted the need for fundamental social change such as state formation and/or urbanisation (Van Der Vliet 1990: 242).

Roman control shut down traditional options such as raiding and the *ver sacrum* (Lloyd 1995a: 220). However, the levy on military manpower may have constituted a form of ‘institutionalised emigration’. By the Principate, the politically-motivated urbanisation of the central Appennines may have accommodated remaining demographic pressures – as must the constant immigration required by Rome to maintain its population (see Morley 1996: 51–2). Indeed, by this date, regional survey suggests a stabilisation of population (e.g. Volturno and upper Biferno Valleys, sections 4.1.3.1, 4.1.3.2). By the mid- to late imperial period, areas such as the Gubbio and Rieti Basins (sections 4.3.2.1, 4.3.3.3) demonstrate significant demographic decline, indicating a return to the Closed mode. The historical evidence for late Roman transhumance (Barnish 1987) is clearly not a strategy intended to maintain high populations.

Although historical considerations may impinge upon the timing of this transition, from a long-term perspective, it may be considered as the downturn of a much longer cycle (see Dyson 1992: 28, 80). In terms of providing a general context, this model is of particular interest both for its archaeological and historical support and because it emphasises that relations between Rome and these upland groups did not originate simply as a result of aggressive Roman expansion. Rather these upland communities were themselves actively involved in initiating contact for their own purposes (Bintliff 1997: 32).

5.2.4 Core-Periphery Model

An important generic model for exploring relations between regions, and of particular importance in imperial contexts, is the core-periphery model (Bintliff 1997; Champion 1989). The general premise underlies several subsequent models. Its principal aspects are the asymmetrical exploitation of the periphery by the core and the major socio-political change this instigates in both areas, though particularly at the periphery. Within the long-term frameworks outlined above, it will be argued that Rome instigated a series of core-periphery relations with Italian communities which, in some cases, transformed local economic and demographic trajectories.

Much discussion of core-periphery relations has concerned economic issues; however, social and political dependency is of integral significance (e.g. Champion 1989: 11; Friedman 1994: 6; Hedeager 1992). By considering changes in the means through which

social status was maintained – social reproduction – it is possible to assess the dependency of periphery upon core (Friedman 1994: 8). It is the inherent inequality or asymmetry of these relations which constitutes dependency, for whilst a core area may call upon a series of peripheries to meet its needs, peripheries are often denied access to more than one centre. Ensnared in unequal relationships, they are dependent for both economic and social reproduction (Champion 1989: 14). A ‘social’ example of this may be found in the way in which the Samnite élite turned towards competition for access to the Roman system (section 5.3.4.1). An ‘economic’ example might be found in the decline of economic activity in the second century BC in South Etruria and the Pontino, as the city developed alternative grain supplies (section 5.3.1).

The degree to which periphery is dependent upon core, particularly in terms of social reproduction, may be measured in terms of the social and/or economic cost to the former of extricating itself from the relationship (Champion 1989: 14). The most obvious means of escaping such a relationship is armed rebellion, a phenomenon identified around the Empire. The near universal failure of these revolts relates not simply to dominant Roman force, but to the fact that these communities were already dependent upon Rome for their own social reproduction. The real unity of Roman Italy lay not in its economic or administrative union (*contra* Hopkins 1980), but in the social and political dependencies created between Rome and its allies.

5.2.4.1 *Economy*

It has been suggested that (pre-capitalist) Roman economic and technological development limited the economic power or influence that could be wielded over the periphery (cf. First/Third World relations – Thomas 1992). This can be recognised in the continuity of localised and/or regionalised economic and demographic cycles that indicate un-integrated economies (Bintliff 1997: 33; Champion 1989: 12; generally, cf. Hopkins 1980: 112; Woolf 1992: 289–90). This situation was maintained by the autonomous administrative structure of the Italian communities. After the Social War, this system was standardised rather than centralised – critically, administrative functions were devolved to local municipalities (Crawford 1992: 119; Millett 1990: 3–7). Combined, this evidence suggests a lack of any systematic economic exploitation of the periphery; indeed, there is little indication of any systematic financial planning throughout the Roman period (Millar 1992: 196–201; Nicolet 1994: 640; Patterson 1987: 133). Despite this, major economic restructuring can be identified in many areas.

Related to core-periphery systems are development and under-development. The former occurs where the economy of an area undergoes expansion; the latter situation concerns areas which have the potential for expansion or development, but are held back by economic exploitation within a core-periphery framework (Alcock 1993: 221–2; Deman 1975; Thomas 1992: 6–7; Thompson 1982). In the Italian context, some areas underwent significant development as a result of their relocation within the Roman economy (e.g. Northern Campania and Ager Cosanus, sections 4.1.2.1, 4.3.1.5); the impact in other areas was more modest (e.g. Tuscania, Rieti Basin, sections 4.3.1.6, 4.3.3.3). In other areas still, contraction of settlement is suggestive of economic breakdown (e.g. Agro Pontino, second century BC South Etruria, sections 4.1.1.1, 4.4). Regional under-development might be instigated by an ‘internalisation’ of regional economy (in Greek context, Crete – Bintliff 1997: 32). However, the possibility of any area remaining uninfluenced by the military and economic presence of Rome made such isolation in Italy far less likely. Evidence from rural areas around Volaterrae may demonstrate extraordinary long-term stability (Gabba 1987: 122; Terrenato 1998b: 95–112, section 4.3.1.2), but along with even physically remote areas (e.g. Cicolano Mountains, section 4.3.3.4), all were integrated into the Roman economy to a greater or lesser degree.

5.2.5 Taxes & Money

It might have been expected that low taxation, the lack of military presence (at least in the imperial period) and the overall size of the market, would have encouraged the Italian economies to prosper, especially during the early Empire (Duncan-Jones 1982: 187–98; Garnsey & Saller 1987: 58). Yet, with allowance for variation in timing, this is a period of settlement and population decline.

Two principal reasons for this situation can be proposed. First, it is important to distinguish between Rome and the Italian communities – they cannot be treated as an undifferentiated tax-importing core (*contra* Hopkins 1980: 101). Whilst taxation of the Italians may have been low, they only indirectly benefited from the flows of capital between the provinces and Rome (e.g. through the patronage of the emperor or through local élites who had moved to Rome). Secondly, the major stimulus to the economic development of any conquered region is likely to be taxation – in particular, agricultural production is often intensified to produce greater surplus (e.g. Greece – Alcock 1993: 19–24; North Africa – Mattingly 1997c: 134). Further, the physical presence of the army could also promote development (Greece – Alcock 1989: 27), though its long-term

occupation could lead to social and economic destabilisation (Britain – Millett 1990: 100–1; Rhine frontier – Groenman van Waateringe 1983: 147–50).

This places the economic development of Italy in a different light. Through the possession of an empire, Rome had access to a range of supply sources which relieved the pressure of demand on the Italian economy. Most importantly, Italy was spared the most important stimulus to economic development – (monetary) taxation. Roman citizens were exempt from taxes and the universal achievement of this status by first century BC significantly reduced the tax burden. More generally, there was no property tax and *tributum* was no longer exacted after 167 BC (Cic. *Off.* 2.76; Brunt 1971: 35, 113; Duncan-Jones 1982; Wells 1992: 143). It was not until the early fourth century AD that Italy's special tax status finally ended. The principal taxation of Republican Italy was manpower. As a tax-in-kind, this did little to stimulate monetisation or commercialisation. Neither did it promote urbanisation or the division and specialisation of labour, nor did it stimulate agricultural and craft production within long-distance exchange networks (Hopkins 1980: 102). Notably, those areas that demonstrate accelerated expansion during the Republican period (e.g. Northern Campania, Ager Cosanus, sections 4.1.2.1, 4.3.1.5) do so because of external (market) demand and capital investment.

From the beginning, Rome's relations with the Italians were structured in such a way as to inhibit, rather than promote, economic development; this situation was only intensified over time. Combined with the significant economic distortions, which resulted from their proximity to the Roman market, the stagnation and/or instability of the Italian economies becomes more explicable. Nonetheless, as stressed above, Roman Italy remained one of the wealthiest and most urbanised areas of the Empire – it is the relative decline of economic activity between Republic and Empire that constitutes the basis of this model.

5.3 Roman Imperialism & Italian Agriculture

Regardless of the process of urbanisation, the basic economic activity of Roman Italy remained agriculture – similarly, it continued to form the primary source of social status. However, significant changes in agricultural strategies can be identified; the role of imperialism in this transformation forms a central theme of this chapter. As Alcock (1993) has illustrated for Roman Greece, the study of economic and agricultural history is vital to any assessment of the impact of imperialism. General trends in Achaia include a decline in the overall number of rural settlements, especially the smallest sites, but an increase in the size of continuing sites and villa construction (*ibid.*: 71–2). All of these basic changes can

be identified in Italy, though tend to be later and more varied in their distribution. This can be related to the significant differences in the timing and nature of conquest, taxation and market demand.

In Italy, the massive disruption widely identified in Achaia (*ibid.*: 77) is almost exclusively associated with areas of colonisation (e.g. Northern Campania, Venusia, sections 4.1.2.1, 4.2.2.7). In many other areas, both individual sites and overall settlement patterns demonstrate high levels of continuity (e.g. Biferno Valley, Tuscania, Rieti Basin, sections 4.1.3.2, 4.3.1.6, 4.3.3.3). This stability and longevity of occupation may be related to enduring economic strategies, sustainable agricultural regimes, systems of enduring land-ownership, geographical inertia, the historical significance of place, or any combination of the above (Alcock 1989: 22; 1993: 56–8; Roberts 1996: 21, 32, 52, 126; Tuan 1976). Colonisation clearly has the potential to disrupt such situations through its thorough and frequently un-negotiable transformation of the landscape; however, it is the influence of imperialism upon pre-existing communities and landscapes through the means of dialogue which is of greater interest.

In particular, assessing the influence of Roman imperialism on Italian agriculture concerns several related strands: (a) Rome's demand for agricultural and other resources; (b) the possibility of Rome satisfying this demand from non-Italian sources; (c) the importation of capital (including slaves) derived from overseas imperialism; (d) demand from those areas which imperialism brought into the Empire; and (e) changes in pre-existing social and economic structures.

5.3.1 Demand from Rome

Supplying Rome's demand for agricultural products has long been a topic of historical concern (see Rickman 1980). In contrast, archaeological research has focused on agricultural production for export to the provinces (e.g. Arthur 1991a; Dyson 1978). In part, this reflects the nature of the evidence; historical references to Rome's grain supply (*annona*) are more abundant than references to the export of wine to the provinces. Archaeologically, the latter is far easier to identify through the distribution of wine presses and amphorae. Most recently, Morley's (1996) synthesis has emphasised the utility of archaeological data for assessing the impact of the Roman market upon Italian agriculture; indeed, he considers demand from the metropolis to be the primary influence on Italian agricultural development.

The growing demand of Rome during the Republican and imperial periods could be supplied in two basic ways. Up to a certain point, increasing demand can be met by simply extending the size of the productive hinterland and/or the percentage of it under cultivation. This strategy is seen through Rome's imperial expansion, but land is a finite resource and the expense and difficulty of transporting bulky and/or perishable agricultural goods limits the utility of this option as a complete solution to increasing demand. Therefore, the adoption of agricultural strategies of higher productivity is likely (Morley 1996: 56). These can include intensification (higher productivity within same regime), crop specialisation and/or the improvement of communications. It has been suggested that the high level of rural-urban migration – not least to Rome itself (e.g. Sall. *Cat.* 37.4–7; Patterson 1994: 251) – demanded a substantial increase in the productivity of Italian agriculture. One estimate is for a ten percent increase between the second century BC and first century AD in order to both supply Rome and mitigate the declining rural workforce (Morley 1996: 51–2). This needs to be considered alongside a general decline of settlement numbers (section 5.3.2).

With these two considerations in mind, the chronological development of the supply of Rome's grain requirements can be summarised thus. During the fifth and fourth centuries BC, agricultural demand was met from coastal and inland Etruria, Latium and Campania (e.g. Pliny *HN.* 18.86; Varro *RR.* 1.96; Rickman 1980: 29–30, 101–4), specifically the Agro Pontino and the *suburbium* (sections 4.1.1.1, 4.4). Indeed, through colonisation, the latter may have been developed as grain supplier for the city – a dramatic increase in dispersed rural settlement and its expansion onto marginal soils indicates significant intensification (Livy 6.21; Attema 1993a: 237).

As Rome acquired overseas territories, alternative grain supplies became available – Sardinia and Sicily from the end of the third century BC, Africa from the mid-second century BC and Egypt under Augustus (Rickman 1980: 36–41, 104–19; see van Dommelen 1998: 26). In terms of 'cost-distance', large stretches of the Tyrrhenian coast of Italy and the North African littoral were as close to Rome as parts of inland Latium, Etruria and Apulia (Morley 1996: map 1; Figure 5.2). Historical sources suggest these alternatives were quickly developed (e.g. Sicily from end of third century BC – Polyb. 28.2). The construction of harbours and warehouses at Rome, and the foundation of Puetoli (194 BC), attest the expansion of Rome's population during the second century BC and the large-scale importation needed to supply it (Morel 1989: 506; Nicolet 1994: 607, 629).

Concurrently, during the third and second centuries BC, Etruria and Latium cease to be mentioned in relation to Rome's grain supply (Morley 1996: 90). It is unlikely that Italian grain production was abandoned as a result of provincial imports, but rather formed a smaller percentage of the overall market (*ibid.*: 57, 114). However, archaeological evidence from the *suburbium* suggests a decline in production and/or productivity. Amongst other reasons, this situation may relate to the removal of the direct pressure to supply Rome.

From the mid- to late second century BC, parts of coastal Etruria and Campania were in the early stages of a massive economic expansion based upon the production of wine for export. Slightly later, there was also expansion in South Etruria, Sabina and other parts of the *suburbium*, stimulated specifically by the Roman market, though such developments in the Pontino were limited. As well as environmental decline, it has been suggested that the area was unsuited to the kind of specialised agriculture required for export production (Attema 1993a: 237). Its production of grain for Rome had been 'officially-sponsored' and its decline, when alternatives became available, tends to support this suggestion. Apart from grain, however, Italian agriculture provided for most of Rome's other agricultural needs until the early imperial period when provincial production of wine and oil developed (Morley 1996: 57, 114; Nicolet 1994: 165).

Such increased demand as a stimulus to agricultural change must be placed in context. First, the amount of land needed to supply Rome's conjectured demand is more limited than has frequently been implied. It has been suggested that less than seven percent of Italy's agricultural lands could have supplied all of Rome's wine and oil demands, without allowance for provincial imports (Morley 1996: 146–7). It is unlikely that any area produced solely for the Roman market – only a proportion of yields were marketed and self-sufficiency must have been the principal consideration for rich and poor alike. What varied with distance from Rome was not, therefore, the types of crop grown, but the proportion destined for the market. The fall-off in the density of villas with distance from Rome and/or the Tiber may indirectly reflect this (cf. Farfa, Rieti Basin, Ager Veientanus, Sutrium, sections 4.3.3.1, 4.3.3.3, 4.4.1.1, 4.4.1.2).

To this estimated figure of *circa* seven percent, distributed over a wide area, must be added some grain production and a full range of perishable produce that had to be grown locally. Finally, the whole must be set against the agricultural suitability of Rome's immediate hinterland. Although the Roman market must have monopolised a significant percentage

of the agricultural produce of Italy, this demand was finite. Indeed, Rome's early imperial population constituted much less than half the Italian total (Brunt 1971; Morley 1996: table 1; Whittaker 1994: 135). The real significance of Rome's influence on the Italian economy pertains to the concentration of this demand at a single location, making traditional means of supply unfeasible, as well as opening up new opportunities.

Elsewhere in Italy, demand for agricultural produce was met locally (Morley 1996: 71). The low returns offered by cereal production especially, meant it was not open to the same competition, as wine and oil (Spurr 1986: 144). Similarly, perishable goods had to be produced near the point of demand. As such, it seems likely that each town was dependent upon its immediate hinterland for the provision of basic agricultural supplies. However, the nature of this relationship may have varied widely in terms of social and economic strategies (e.g. urban-based peasantry or dispersed tenants – section 5.3.2). Away from Rome, the circumscribed economic stimulus of urban centres on the agricultural strategies of nearby areas is emphasised by the close proximity of major population concentrations and under-developed rural economies. For example, during the fifth and fourth centuries BC, the size of the city-state of Capua stands in contrast to the limited (agricultural) development of nearby Northern Campania.

Having placed an order of magnitude on the extent of Rome's potential influence, it is clear that there must have been significant spatial variation in its effects. Such a situation is also expected on the grounds of classic economic theories and by considerations of cost and transport. For example, the cost-distance map in Figure 5.2 suggests a significant upland/lowland divide in the impact of this demand. However, such a simple cost equation disguises important social and economic relations between such areas. These are most obviously articulated in the form of transhumance. Through these indirect means, areas far beyond those considered 'economically-viable' might experience and respond to demand. Inland Italy is therefore likely to have been more closely integrated with Rome's economy than Figure 5.2 suggests. Indeed, the widespread distribution of finewares from remote areas such as Cicolano Mountains supports this. In particular, higher value goods can absorb higher transport costs. Products such as livestock, which can be walked to market, are likely to have significantly extended the proposed economic zones (Morley 1996: 68; e.g. Rieti Basin or even southern Italy, section 4.3.3.3). Although pastoralism and transhumance have been the subject of much attention (e.g. Barker 1989; Barker & Grant 1991), less attention is focused on the subjects here. These issues are particularly difficult to document through survey data, even in areas of historical and epigraphic evidence (e.g.

Biferno Valley, Rieti Basin, section 4.3.1.2). Undoubtedly, pastoralism played an important part in the economy, but the historical emphasis on long-distance transhumance (e.g. Varro 2.2.9) and evidence for *tratturi* have occupied a disproportionate amount of attention. More work is needed on localised transhumance and pastoral techniques (e.g. Cicolano Mountains) and on pre-Roman strategies. More generally, interpretation that polarises peoples between pastoralists and agriculturists is no longer acceptable. It is the balance between these strategies that is of interest.

In assessing changes to agricultural strategies, it is therefore important to consider local social factors as well as economic concepts. In particular, certain social groups are likely to have been better able to identify and respond to demand than others. Hence, élite landowners were better placed to assess the market and recognise demand than peasant farmers. The latter also lacked the necessary capital for investment in, for example, wine presses and were more vulnerable to the risks of specialisation (Morley 1996: 71; Roberts 1996: 159; Vallat 1991: 13). Short-term tenancies may have also deterred such investment (Dyson 1992: 134). In contrast, wealthy landowners had capital to invest, but little incentive to use it to intensify or specialise production. Status was derived from the consumption of capital, not its investment for the production of further wealth. Further, whilst agriculture offered low returns *per se*, extensive landholdings and low-risk strategies constituted a significant and secure gross income (Duncan-Jones 1982: 3; Garnsey & Saller 1987: 57; Millett 1992: 2; Morley 1996: 115, 176). It has therefore been suggested that that peasant farmers played a limited role in supplying the Roman market – if they did, it was through the central function of the periodic market (*ibid.*: 166–9; see Frayn 1979; Sack 1986: 73). Similarly, larger landowners retained more extensive means of landscape exploitation. Rather, it was the owners of medium-sized farms who were able to perceive and react to demand from the Roman market (Morley 1996: 124).

However, this model presents several problems. First, it demonstrates a rigidly individualistic attitude towards the identification of, and response to, demand, ignoring the societal context in which these agents were located. In particular, it pursues an inflexible distinction between peasant and tenant and insists upon the historical predominance of the former. This model takes no account of possible élite pressure on dependants for changes of agricultural strategy, nor does it relate such decisions to local social and political contexts. Secondly, it makes an arbitrary (ideological) distinction between peasant/subsistence and market production strategies (Davis 1991: 86–7; Foxhall 1990b: 99–100). In part, this relates to the tendency to polarise rural populations into wealthy

landowners and subsistence peasants (see Lewit 1991: 15–6). This ignores the historical evidence for an ‘intermediate class’ (e.g. the Alimentary Table from Ligure Baebiani includes landowners holding *c.*50–80 *iugera* – Morley 1996: 80). Further, the diversity of site size and morphology attested archaeologically by individual surveys also suggests a range of different property sizes and statuses co-existed. It is increasingly clear that Italian agriculture embodied a plurality of strategies (Foraboschi 1994: 218; Nicolet 1994: 611; Terrenato 1998b: 112) which were not segregated into discrete physical areas or economic sectors (*contra* Morley 1996: 81), but overlapped in terms of labour and market (Rathbone 1981: 15). Finally, there is some confusion about the social status of the people involved in these developments (cf. Carandini 1981: 253, Morley 1996: 75–7). It may have been socially unacceptable for the élite to be involved with commerce, but the need for laws restricting the number of ships that aristocrats might own is significant (e.g. *lex Claudia*, 218 BC – Cic. *Off.* 1.150–1; *Verr.* 5.44–6; Livy 21.63.4). Further, the use of intermediaries could easily overcome such restrictions and, generally, the behaviour of the senatorial class was more flexible than has often been acknowledged (Rathbone 1983: 166). Agronomists’ manuals, such as Cato’s *De Agricultura*, effectively instructed on ways of investing wealth from, and exploiting the further possibilities of, imperial expansion. Indeed, although Morley (1996: 108) places much emphasis upon the unrealistic, ideal scenarios discussed by these writers, arguably they also represent a response to élite demand for knowledge of these matters.

However, unadulterated market demand – and its rational supply – did not constitute the sole basis of Rome’s impact on Italian agriculture. As with the impact of taxation on regional economies, local context shapes such responses to external considerations. Hence, redistributive economies based upon surplus production will have responded differently from decentralised subsistence economies. Limited demand might be accommodated by increasing production within pre-existing strategies; greater demand might lead to specialisation or collapse.

Undoubtedly colonised areas demonstrate the most impressive economic expansion. Colonisation swept away pre-existing structures – people, land-owning customs, agricultural strategies – creating the potential for economic expansion (though for diversity even here, cf. Liri Valley, Ager Cosanus, sections 4.1.2.2, 43.1.5). That other areas did not simply discard pre-existing social and economic structures in the pursuit of supplying demand and/or making profit demonstrates the importance and influence of earlier arrangements. This can be seen in the physical continuity of individual settlements and

wider landscapes (e.g. Biferno Valley, San Giovanni, Rieti Basin, sections 4.1.3.2, 4.2.2.5, 4.3.3.3); in the Cecina Valley, the physical structure of the farm at San Mario endured from before the Roman conquest to the collapse of the Western Empire (Terrenato 1998b: 102–3, section 4.3.1.2). Indeed, both historical and archaeological evidence also points towards the preservation of pre-existing laws, social relations and modes of landownership (Polyb. 2.17.12; Gabba 1989: 236; Nicolet 1994: 611). The fragmented landholdings of the imperial period imply the continuation of earlier systems of tenure and ownership (Alcock 1989: 8; Foxhall 1990a: 207; Garnsey & Saller 1987: 69–9; Yntema 1993a: 192). Thus, although rational economic considerations can elucidate some aspects of agricultural history, demand, even in colonised areas, was ultimately negotiated into the social organisation of local (pre-existing) communities.

5.3.2 Production & Productivity

The relationships between agricultural practice, landholding and settlement pattern are brought together by Halstead (1987) and Davis (1991) through two basic models of Mediterranean agriculture – the Traditional and Alternative systems. The former is based upon scattered, unconsolidated landholdings cropping wheat and barley, with localised vine and olive production. The grazing of significant livestock numbers is not easily integrated with this mosaic of land units, leading to transhumance. This deprives arable areas of valuable manure, necessitating bare fallowing (see Spurr 1986: 125–32). This poor integration of arable and pastoral economies leads to under-productivity (Davis 1991: 138; Halstead 1987: 79). In contrast, the consolidated landholding of the Alternative system permits greater productivity through the integration of these two strands of the economy. Whilst still focusing on cereals, smaller herds of animals can be kept locally; legumes enhance soil fertility and provide animal fodder (Davis 1991: 138; Halstead 1987: 83–4). Although the Alternative system is still a subsistence strategy, it is more productive, if not necessarily of greater overall production (Davis 1991: 139).

These two strategies are associated with distinct settlement patterns (*ibid.*: 138, 202–3; Halstead 1987: 82–3). The Traditional system presupposes a central, nucleated settlement from which farmers commute each day to their dispersed holdings. This model resembles the agro-town common in later Mediterranean history (Houston 1964; Figure 5.3). In contrast, the Alternative model presumes a dispersed settlement pattern, whereby farmers work consolidated holdings around dispersed farmsteads. Dense rural settlement is therefore likely to be indicative of higher productivity, whilst the absence of rural

settlement might imply the Traditional system. However, identification of the latter requires fieldwork of a minimum intensity that allows valid statements to be drawn from negative evidence.

Although there is scepticism about Roman period agro-towns (Duncan-Jones 1982: 260; Halstead 1987: 80–3), the model has attracted some attention from surveyors (e.g. Gualtieri & de Polignac 1991: 197; Yntema 1993a: 190). In reality, the Traditional and Alternative strategies must be considered complementary, not mutually exclusive (Halstead 1987: 87; Roberts 1996: 19) – it is the balance between the two that informs about wider social and economic changes.

Davis develops the models further to identify a relationship between agricultural strategies, settlement systems and types of landownership. He suggests that the Traditional strategy relates to situations where the majority of land is owned by a social minority – an élite – who have little incentive to increase agricultural productivity (Davis 1991: 198–9). The Alternative strategy is used by free peasantry. Although Archaic Oria, and possibly Etruscan Sutrium, did not support rural settlement, all Roman urban centres have some associated settlement. This suggests that élite control over the agricultural workforce was not as strong as it might have been (Smith 1976; section 5.4.4). However, in reality, settlement nucleation and dispersal are not related solely to agricultural strategy or landownership. For example, nucleation can result from defensive needs or strategies of social control (Roberts 1996: 35–7; Yntema 1993a: 192). Further, problems such as palimpsests are likely to reduce the ability to implement these models. Generally, however, the nucleation of settlement, recognised across early imperial Italy, is suggestive of a decline in productivity. The (historical) development of pastoralism in the late Roman period supports such an interpretation (see Barnish 1987: 157–60).

Such a decline contrasts with Morley's (1996: 51–2, section 5.3.1) assertion of an increase in productivity during the early imperial period in order to supply demand from Rome. It may therefore be that Morley's calculations of demand and its impact are too generous or that complicating factors diminish the utility of Davis' equation. For example, the use of slave labour questions its applicability to the situation in the Ager Cosanus (section 4.3.1.5). Nonetheless, it offers a useful framework for beginning to conceptualise changes in agriculture, land-owning and social relations.

5.3.3 Lowland 'Boom-Bust' Model

The basis of this model has been discussed in section 2.6.3. This section intends to explore its explanatory and interpretative power within the geographical limits of the historical and archaeological evidence; in particular, the latter is given rather more weight as a counterbalance to the general historical emphasis.

The archaeological evidence for this 'boom' is based upon the surplus production and export of wine as embodied in the market villa (for detailed application of this model to Ager Cosanus – Manacorda 1981). These medium-sized, market-oriented estates based upon the slave mode of production (Morley 1996: 142) constitute the classic Varronian/Catonian villa. Even so, there is still huge diversity within this class (cf. Settefinestre, Villa Sambuco – Carandini 1985a; 1985b; Östenberg 1962). This classification is clearly idealised and needs further subdivision by geographical region and by social and economic context.

The archaeological distribution of market villas is restricted to a narrow and discontinuous strip of the Tyrrhenian littoral (principally Etruria and Campania), the *suburbium* (including the Tiber valley) and parts of the Adriatic coast (van Dommelen 1993: 183; Morley 1996: 108; Vallat 1987b: 180–204). In particular, there is a close correlation with areas of extensive colonisation (Gabba 1989: 238). As discussed above, this led to major changes in landholding, a loosening of social relations with the land and the reduction of the latter to a saleable commodity.

Beyond specific areas of colonisation, this shift in agricultural production is explicitly located in the context of Roman imperialism. First, overseas conquest generated capital that the élite invested in the acquisition of large estates staffed with another imperial commodity – slaves (Cunliffe 1988: 79; Hopkins 1978: 48–9). Secondly, imperialism opened up large markets around the Mediterranean and at Rome itself. There is some debate as to whether this market was led by consumers (Morley 1996: 137) or producers (Carandini 1989: 16–7; Cunliffe 1988: 79). However, both perspectives assume modern market principles were in operation. Apart from the *annona* it has been suggested that of all Rome's demand for agricultural produce was met through private, market-based channels (Morley 1996: 166). Indeed, the merchant fleet was not state-regulated until 57 BC (Nicolet 1994: 629) and demand from the provinces was never centrally-controlled. However, such a situation does not necessitate a fully-developed market economy. Further, such approaches require a level of emphasis on the accumulation of profit which

cannot be supported by the historical sources (Varro *RR.* 1.4.4–2) where a distinction between profit (i.e. self-sufficiency) and profit maximisation can to be observed.

As implied above, those involved in production for the export market are likely to constitute a diverse group including well-to-do peasants, large landowners, members of the senatorial and equestrian classes, and even tenants. The precise context in which slaves came to be used for agricultural production and the consequences are much debated. It has been argued that they were used to farm land left uncultivated by the decline of the peasant class and, conversely, that the decline of the peasantry was the result of the development of slave-based estates. The economic benefits of slave labour are also disputed (Finley 1973; Morley 1996: 126–9; Rathbone 1981: 22; Rostovtzeff 1957: 19). In the light of archaeological evidence for the coexistence for large and small sites, the former debate is highlighted as an ideological opposition of peasants and slaves – both modern and ancient – which might be laid to rest. The latter dispute may be dismissed because, regardless of the profitability of slave labour, it was principally their availability that determined their use. Despite this, slavery must have significantly disrupted pre-existing social structures and labour arrangements (Gabba 1989: 232), already weakened by colonisation, emigration and urbanisation.

The use of slaves, combined with the emphasis on colonised areas, suggests that the involvement of local populations in this economic expansion was minimal. Epigraphic evidence indicates that large areas of Northern Campania and the Ager Cosanus were owned by senatorial and equestrian families from central Italy (e.g. *Sestii* – Attolini *et al.* 1991: 151; Morley 1996: 134, sections 4.1.2.1, 4.3.1.5). In contrast, epigraphic and prosopographical evidence from nearby areas, such as the upper Albegna and middle Liri Valleys, suggests landownership by local populations, some even (re-)acquiring land after colonisation (see Pollard 1998: 68; Wightman & Hayes 1994b: 41, section 4.1.2.2). All this combines to suggest that this dramatic economic expansion was promoted by external demand and agency.

Traditionally, the development of these villas has been located in the late third and early second centuries BC, coinciding with the period of greatest Roman expansion (see Vallat 1991: 13). However, survey has repeatedly identified the later second and early first centuries BC as the most intensive period of villa construction (Northern Campania, Ager Cosanus, South Etruria, Sabina; see Curti *et al.* 1996: 177, sections 4.3.4). This may place greater emphasis on growing demand from Rome (see Morley 1996: 137), rather than

production for export to the new markets of the imperial periphery. The swiftness with which many villas developed, their coherent design and execution, and the capital expenditure involved, are also suggestive of established wealth. This ‘intrusion’ into the landscape is corroborated by the location of many, though not all, on previously unoccupied sites (cf. Northern Campania, Ager Veientanus – Potter 1979: 123).

The construction and prosperity of market villas in coastal Etruria and Northern Campania peaked during the first century BC, before declining during the first and second centuries AD (Paterson 1991: 134). In contrast, villas in South Etruria and Sabina appear to have been at their most prosperous during the first and second centuries AD (Moreland 1987: 413, Muzzioli 1980: 42; Potter 1979: 123–33; Potter & King 1997: 422). Arguably, the delayed and/or sustained prosperity of the latter relates to their proximity to Rome. Here, the first century AD improvements to the *pars rustica* at the Villa of the Volusii at Lucus Feroniae (Potter 1979: 130–1), and the extension of land under cultivation at Sutrium and in the northern Ager Capenas (sections 4.4.1.2, 4.4.1.3) suggest demand remained high. As the *annona* system broke down in the late Roman period, new pressures may have been exerted on the area (Moreland 1987: 409, 414). Nonetheless, the density and size of late Roman settlement indicates both demographic decline and a de-intensification of production.

As well as exporting wine, coastal areas of Campania, Latium and Etruria also developed specialised ceramics industries producing amphorae for the wine trade and highly standardised black-glazed wares. The distribution of the latter, especially Campanian A ware, around Italy and the Mediterranean commenced as early as the end of the third century BC, peaking during the subsequent century (Hayes 1997; Morel 1989: 486, 500–1). The precise relationship between the production and markets of wine and ceramics is unclear, though is likely to focus on the subsidised transportation offered by the former (see Rathbone 1983: 165–4).

Generally, it has been suggested that the profits of these exporting economies were spent on urbanisation and munificence (e.g. Morley 1996: 52; Patterson 1987). However, urban vigour, in terms of public munificence, was comparatively restricted in these areas. In contrast, much was spent in the private context of rural villa architecture. A significant amount of wealth was probably exported from the region altogether, to fund competition at Rome itself (see Whittaker 1994: 140).

Roman imperialism therefore instigated massive specialisation and intensification within restricted parts of the Italian economy leading to ‘hyperactive pockets of profit-generating agricultural and manufacturing activities’ (Terrenato 1998b: 113). From its origins in the second century BC, this export trade peaked in the first century BC with indications of decline detectable soon after. These became more obvious in the early first century AD with a reduction in the quantity and distribution of exported amphorae and changes in settlement pattern. By the early second century AD, production of wine for export in Italy appears to have ended (Arthur 1991a: 84–7). The whole cycle was therefore comparatively short-lived in terms of the duration of the Roman Italy (Paterson 1991: 134). However, it was no less profound for this, especially from the perspective of the individual.

Interpretation of the cause and severity of this early imperial decline varies. Marxists have focused on the collapse of the slave mode of production asserting that as imperial expansion slowed, the supply of slaves decreased and their economic viability reduced (Carandini 1989: 19; generally, Giardina & Schiavone 1981). In their place, a system of tenancy was developed; Fentress (1993: 369) has argued that in some areas this may have been unsuccessful because of a lack of free peasantry with which to replace slave labour. However, both these arguments place too much emphasis upon generalised historical models. The coexistence of peasants, tenants and slaves is neither historically nor archaeologically improbable. Most of the emphasis on the ‘collapse’ of this system results from the elaborate ideological constructs used to postulate its existence in the first place.

Another theory, promoted originally by Rostovtzeff, cites the rise of competition from provincial agriculture in Spain, Gaul and Africa, which broke Italy’s monopoly over the economies of the western Mediterranean (Attolini *et al.* 1991: 150; Carandini 1989: 18–9; Morley 1996: 137). Hence, by either creating or responding to demand, both at the core and on the periphery, these areas underwent dramatic development – yet, they were entirely dependent upon these markets for the maintenance of that prosperity. However, competition alone is insufficient to explain the decline of intensive slave-based viticulture – why were these areas unable to compete effectively with provincial production? In particular, given their rapid and thorough adaptation to the market in the late second century BC, why did they not reorganise production in order to compete more effectively during the imperial period? There is some evidence for attempts at diversification of production, for example, pig breeding at Settefinestre in the Ager Cosanus (Carandini 1985a: 179) and a shift in focus from bulk to quality wines in Northern Campania (Arthur

1982: 32, sections 4.1.2.1, 4.3.1.5). However, the overall reduction in villa numbers is compelling and the end of export production is not in doubt.

A more pertinent approach may be to question the underlying basis of the entire model. It is highly modernist in outlook. For example, the fact that villas did not diversify is problematic largely because of the assumption that profit was their sole function. In contrast, villas around the rest of the Empire are routinely interpreted within social and political contexts (e.g. Smith 1995). Further, there is no evidence that *élite* status decreased as a result of the decline of exportation – in general, the gulf between the *élite* and majority was enhanced during the mid- and later imperial periods (Cameron 1993; Jones 1964). Hence, the decline of slavery or losses to provincial competition did not entail an abandonment of social power; not least, alternative strategies offered new means of social and economic control. For example, new emphasis on tenancy provided both legal and socio-economic power which reinforced the *élite*'s position (Foxhall 1990b: 111–2).

More generally, there has been comparatively little attention towards the identity of those involved in the development of provincial agriculture and it is not inconceivable that, in part at least, the Italian *élite* themselves were major participants. There is evidence for their acquisition of substantial tracts of good-quality land in the provinces and such possessions may have offered economic, social and political benefits over Italian property – ownership of the latter was frequently disrupted by the instability of Rome's politics (e.g. Gracchan reforms, veteran settlement – section 2.3). In contrast, provincial property offered not only more stable conditions, but also permitted the opportunity to create new social and economic relations without the burden of Italy's historical and legal framework. Hence, rather than an externally-imposed recession, an alternative conception of this agricultural and economic shift from 'core to periphery' might therefore be a change in the emphasis of strategies by the Italian *élite*.

Therefore, parts of the Lowland Boom-Bust model offer useful ways of approaching the dramatic economic expansion attested in restricted areas of the Italy. However, altogether too much attention has been focused on the collapse of this system and not enough on the reasons for its original development. More significantly, it has been assumed, rather than demonstrated, that market principles were in operation, leading to a lack of clarity about the mechanisms through which demand was articulated and supplied. In particular, these explanations neglect social considerations and are insensitive to local diversity. More

generally, so-called ‘decline’ – and the wider catalogue of supposed agrarian ‘crises’ – may be better conceptualised as transformations in land use and social organisation (Vallat 1991: 15; see Patterson 1987). By locating this ‘decline’ within its wider economic and demographic cycle, it can also be argued that this change coincides with a broader downturn and period of contraction, which was subsequently experienced across most of the rest of the peninsula.

Finally, it is useful to contrast this model with the Upland Boom-Bust model. First, these models work at a very different temporal scales – the former concerns long-term demographic cycles, whilst the latter addresses much shorter phases of economic expansion. In particular, the Lowland model suggests that coastal areas were subject to more intense and erratic economic pressures than inland areas. This can be considered simply in terms of the geographical isolation of the mountainous interior and the lack of navigable rivers diminishing the viability of the supply/demand equation. Further, more conservative social responses might be expected in higher risk environments (Arthur 1991a: 102; Attolini *et al.* 1991: 151; Patterson 1991b: 178). However, in the light of previous discussion of the Upland model, it is clear that such areas also demonstrate similar social and economic instability in both the short- and long-term, but especially when involved in exploitative core-periphery relations. The key to understanding these developments is therefore to consider the range of different processes in action (political, economic, social), their relative strength and the different scales, and therefore contexts, at which they operated.

5.3.4 Urbanisation & Estates

The Lowland Boom-Bust model has monopolised discussion of Italian agriculture, despite its limited geographical applicability. It is therefore important to consider the evidence from other regions where polyculture and subsistence agriculture continued and, indeed, remained dominant (Hopkins 1980: 104; Nicolet 1994: 611).

5.3.4.1 Samnium

For a specifically Samnite context, Patterson (1987: 140–4; 1991a; also Lloyd 1991a) has presented a model which explicitly relates changes in rural settlement and agricultural strategies, with urban development and élite social mobility. During the post-Social War period, especially the first century AD, the emergent urban centres of Samnium were monumentalised through acts of munificence. As elsewhere, though slightly later, this was

the result of intense élite competition. However, epigraphic evidence suggests that, in Samnium, such munificence was promoted by the aspiring senatorial class in an attempt to gain access to the Roman political system (Patterson 1991a: 155–7). Elsewhere, such work was associated with local municipal magistrates (Gabba 1987: 125; Lomas 1998: 74–5; Whittaker 1994: 138). The particular enthusiasm with which this competition was conducted is attested by the density of inscriptions and urban centres (Figures 5.4, 5.5). In particular, the rapid urbanisation of Samnium during the Roman period, contrasts with a reduction in the number of towns in Etruria (Figure 5.5, section 4.4.2). Both urbanisation and munificence can be linked with the instigation of Roman colonial relations and they clearly attest to its wider discrepant impact on settlement patterns and social organisation.

In Samnium, it is suggested that funding for this munificence was derived from the surplus of larger rural estates – indeed, the Senate maintained a wealth/property qualification (100,000 HS) (Patterson 1991a: 156; Whittaker 1994: 139 *contra* Gabba 1987: 121). Archaeologically, the development of these estates is manifested through villas and a reduction in the number of small rural sites (e.g. San Vincenzo, Biferno Valley, sections 4.1.3.2, 4.1.3.1). Evidence is also found in the Trajanic Alimentary Table of Ligures Baebiani (Duncan-Jones 1982: appendices 1, 4, 6; Patterson 1987: 124–33; also the Alimentary Table from Velleia – Duncan-Jones 1982: appendix 3).

The decline in the number of smaller sites may represent one of several different processes: (a) a reduction in the status of peasants to that of bonded tenants or *coloni*; (b) the replacement of peasants with slaves; and/or (c) the displacement of peasants to towns (Patterson 1987: 142–4). The first two suggestions may involve material impoverishment and thus a reduction in the archaeological visibility of agricultural labourers. Regardless, this appears likely to have instigated significant changes in their social and economic status. However, new arrangements such as tenancy should not be seen as entirely exploitative – they also offered access to power networks and reduced overall risk (Foxhall 1990b: 101–3, 111–3). The third suggestion – displacement to towns, both local and to Rome itself – also required the development of strategies to accommodate new social and economic realities (Greece – Alcock 1989: 32). In this case, peasants may either have commuted daily to cultivate fields around the town or become labourers on urban construction projects (Patterson 1987: 142).

Contemporary to the reduction in the number of small settlements, a thin but nonetheless significant spread of villas developed across large parts of Samnium. The earliest

developed during the second century BC, with the majority appearing during the first centuries BC/AD. Chronologically, they overlap significantly with the lowland market villas, especially those in South Etruria. They also share an architectural vocabulary in terms of general plan and construction techniques such as *opus reticulatum*. Further, the combination of *pars rustica*, *pars urbana* and specialist equipment such as wine presses suggests there was some similarity of social and economic function, including production. They clearly, therefore, shared in a wider cultural and economic phenomenon. However, these ‘Samnite’ villas also demonstrate significant differences in terms of archaeological form and socio-economic context. They are generally smaller, less architecturally complex and more modest in terms of associated material culture. Many developed from pre-existing settlements (e.g. Matrice in the Biferno Valley, Lloyd forthcoming) possibly indicating social continuity and certainly indicating different attitudes towards place and landscape. Further, many remained in occupation well into the late Roman period forming long-term landscape foci (e.g. Biferno Valley, San Vincenzo).

Their ‘cost-distance’ from Rome limited their potential as profit-making ventures based upon the supply of bulky produce for the Roman market. Any increase in production and/or productivity is therefore best understood in the context of the contemporary urbanisation of Samnium. This itself was a product of the élite’s (ambitions for) participation in the wider political economy. In contrast to Morley’s interpretation of the market villa system (section 5.3.3), munificence was not a ‘side-effect’ of commercial profit, but the principal stimulus to agricultural intensification. However, if, unlike the market villa, the success of these villas was not dependent upon the demands of the wider imperial economy, the Samnite villa was nonetheless vulnerable, being based upon élite aspirations towards the unstable world of Roman politics.

During the second century BC, laws had been passed to keep the Italians out of Roman politics; indeed, few successfully entered the Senate before the Social War (Gabba 1989: 242; Patterson 1991a: 152–4). Subsequently, the ‘municipalisation’ of Italy, and the monopolisation of power by dictators such as Caesar effectively limited access. Augustus also took steps to ensure this group remained where Rome needed them – in local communities. Such administrative reforms had important implications for Samnite settlement: the promotion of certain *vici* to the *municipium* status (Frederiksen 1976: 347–52; Laffi 1974) focused élite munificence upon this restricted group of higher status settlements (Patterson 1991a: 152–3). Those chosen appear to have flourished as a result of élite patronage, developing as market, population and administrative centres (e.g.

Rufrae, Castel di Sangro). Conversely, many of the unselected *vici* declined or were abandoned (e.g. San Vincenzo). Under personal patronage, some Samnites entered the Senate during the first century BC (e.g. Statius under Sulla – Wiseman 1971: 263). However, it was not until the first century AD, especially the Flavian period, that Samnites reached the Senate in any numbers. This was the result of their successful competition and transformation (Patterson 1991a: 154).

Both settlement and agricultural structures were significantly altered as a result of the involvement of the area with Rome. In particular, the relationship between town and country – at least in those areas which received élite patronage – became particularly asymmetrical and exploitative (Patterson 1987: 144). The realisation of élite aspirations was achieved at the cost of significant rural disruption, leading to the pauperisation, and eventual legal bondage, of the rural workforce. The vulnerability of urban settlement, agriculture and the socio-economic status of the poor, to these élite cultural and political activities, is clear.

Although Patterson's model provides a convincing, if generalised, example of the potential for the integration of historical and archaeological data, his analysis places much weight upon counts of site numbers in order to identify the growth of estates. As discussed in Chapter Three, such methods are inadequate, though often unavoidable due to the nature of current evidence. Patterson's association of the growth of larger estates and the enrichment of the élite also need to be refined. In terms of Davis' and Halstead's models (section 5.3.2), the dramatic reduction in settlement numbers found in Samnium is suggestive of a decline in production and/or productivity; certainly, it is difficult to identify any increase. More generally, Patterson diminishes the significance of pre-Social War urbanisation, despite increasing evidence to the contrary (cf. Lloyd 1995a: 208–12; Larinum – De Felice 1994; Monte Vairano – De Benedittis 1990; 1991a; 1991b; Saepinum – De Benedittis *et al.* 1984). Although none of these points need necessarily undermine the basic model, the current evidence does not allow emphasis to be placed on the negative evidence of absent rural settlement. In general, however, Patterson's model is useful because it conceives of local and regional development as the result of the intersection between imperial processes, and their subversion for local requirements, through the means of dialogue. This model is discussed in more detail in the context of the Samnite centre of Larinum (see sections 7.2.4–6)

5.3.4.2 Southern Italy

Some support for this model of agricultural development is provided by comparison of Samnium with southern Italy – the inland areas of Puglia and Basilicata. Here, again, it is possible to identify the development of a significant number of villas which share the same basic architectural form found across Italy. However, in terms of date and context, they are clearly different to both the Samnite and market villas discussed above. Chronologically, they may be amongst the earliest in Italy, commencing in the late third century BC, slightly pre-dating their development in Latium, Etruria and Campania. This is interesting, not least because villas were believed to have been ‘exported’ from central Italy to the rest of the peninsula (see Purcell 1997: 273). Like Samnium, the area was too remote to have exploited the Roman market on a profit basis (*contra* Small 1994: 42), though the significance of Adriatic trade is still poorly understood. The later chronology of these villas also differs to the rest of Italy. For example, there is a decline in construction during the first half of the first century BC, when villa building was at its peak in practically every other area of Italy (cf. Biferno Valley, San Giovanni, Ager Cosanus, sections 4.3.1.2, 4.2.2.5, 4.3.1.5). Similarly, during the mid- and late Roman periods, the number of villas increased, or at least remained constant, whilst other areas declined.

However, if these villas were not involved in the export market, nor did they share the same relationship with urban development found in Samnium. In Puglia and Basilicata, there is a notable lack of late Republican and early imperial urbanisation – in some areas, there is even ‘de-urbanisation’. There is also an increase in overall settlement numbers in strong contrast to Samnium and parts of Etruria. Together, this evidence lends support to Patterson’s interpretation of the situation in Samnium. The absence of élite ambitions for participation in Roman politics removed a major incentive towards urbanisation or agricultural intensification (Patterson 1991b: 178) and the pre-existing *vici*-based settlement patterns persisted throughout. In contrast to Samnium, and other parts of Italy, conspicuous consumption was focused on the private rural arena, rather than via acts of urban munificence. Nonetheless, as elsewhere, these villas indicate some agricultural intensification and their phases of economic growth and contraction indicate that, like market and Samnite villas, they were an unstable settlement form. However, it is the longer-term continuity of both individual sites and wider settlement pattern that distinguish this area.

5.3.5 Summary of Villas

Inherent in the above models, are several different forms of villa – market, Samnite and those of inland southern Italy. These illustrate the diversity of Italian agriculture and emphasise the vague meaning of the term villa. Yet, they represent just a few of the classifications proposed and fewer still of those required. Others include the opulent residential villas and/or *villae maritimae*, which developed in the imperial period in the *suburbium* and along parts of the Tyrrhenian littoral (e.g. Egidi 1985: 110), as well as villas around the Greek coast and *latifundia*. There is much anachronistic use of the latter term. It is not employed before the first century AD (Crawford 1992: 99; Garnsey & Saller 1987: 66) and even ancient authors are inconsistent in their usage of the term (cf. Pliny *HN*. 18.4, 18.35 relating the term to landholding of over 500 *iugera* and to type of exploitation respectively). Its archaeological recognition is complicated by its reliance upon negative evidence (i.e. a lack of dispersed settlement).

Despite this diversity, most villas represent an attempt to maintain or further pre-existing social status; apart from a small group of entrepreneurs involved in the construction of Market villas, it appears that the majority were established by pre-existing élites. They do not appear to have offered a means of ‘buying into the system’. The architectural form and chronology of these villas are also similar enough to suggest they formed part of wider system, but their development was spread over two to three centuries, and they persisted much longer in some areas than others. It is also clear that despite the diversity of contexts in which villas developed, all remained vulnerable to changes in wider social, political and economic organisation. Finally, the realisation that villas are not an homogenous category should warn against similar generalisations concerning other settlements (e.g. van Dommelen 1993: 169; Frayn 1979: 115–28). In particular, there is a need to recognise the presence of medium-sized properties (Lewit 1991: 15–6; Morley 1996: 81, 99), between peasant smallholding and élite estates.

5.3.6 Summary of Agriculture & Imperialism

It is therefore possible to trace a range of social, political and economic transformations in settlement and agriculture that are intimately related to Roman imperialism. Through political and military expansion, local and regional economies were relocated within a much larger system. However, the precise way in which each area developed must be contextualised as a dialogue between global and local (Paterson 1991: 133; Terrenato 1998b: 112). Beyond colonisation, Rome did not impose economic development to a

standard model. In summary, therefore, in Samnium, settlement was *politicised*, and on the Tyrrhenian coast and in South Etruria, it was *commercialised*. The settlement and agricultural patterns of inland southern Italy appear to have been less affected by the short-term economic and social distortions associated with Roman expansion or at least better able to accommodate them.

5.4 Urbanisation & Central Places

Although the over-riding achievement of regional survey has been to emphasise the density of rural settlement during the Roman period (Greene 1986: 98–141), the integral importance of urban evidence cannot be overlooked. Indeed, to isolate rural and urban evidence is to study arbitrarily wider settlement hierarchies (see also section 7.2.2). The relationships between town and country, especially in the context of Roman imperialism, inform upon wider changes in social and economic structures (e.g. Alcock 1993: 93; section 2.4.4). The following section emphasises the overall diversity of urbanisation in Roman Italy (see Curti *et al.* 1996: 179; Gabba 1987) and locates at least some of this difference in the context of Roman imperialism.

The many and complex relationships between urbanisation, nucleation, colonisation, language, statehood and imperialism have been the subject of much research (*inter alia* Cornell & Lomas 1994; Damgaard Andersen *et al.* 1997; Malone & Stoddart 1994: 177; Parkins 1997; Van Der Vliet 1990: 236). Here, these issues may be discussed only briefly. Debate over the last two decades has become fixated with the ‘consumer city’. This model, promoted by Finley in reaction to Rostovtzeff’s modernising approach to the Roman economy, derives from Weber’s distinction between the producer city (based on economic production) and the consumer city (based on consumption of rural surpluses; see Grahame 1997: 151–3). As with more general theories of the Roman economy, discussion has polarised into two ideological extremes (section 2.6.3). More recently, attempts to subject all urban development to such universal models have been dismissed (papers in Parkins 1997). Not least, the consumer city model conceives of urbanism as a primarily economic, rather than social and/or cultural, phenomenon. There is also little attention to the concept of agency (Clarke & Robinson 1997: 163–4; Grahame 1997: 151–3; also Whittaker 1994: 134). Interestingly, however, alternative approaches have focused on the urban centre with limited consideration of the relationship between town and hinterland (e.g. Clarke & Robinson 1997; Grahame 1997; Haüssler 1999; Lomas 1998). This is

surprising given the importance placed on this issue in more general studies of Roman imperialism and in the definition of survey regions.

In spite of theoretical objections, the inappropriateness of generalising theories of urbanism is questioned by a brief survey of the historical and archaeological evidence. Several areas of pre-Roman Italy supported urban centres (Gabba 1987: 109–14; Potter 1987: 63–93). The Greek colonies (*poleis*) of Magna Graecia (Yntema 1995: 160–4) appear to have stimulated or influenced settlement both in their immediate hinterland (Messapic centres, section 5.4.2.2) and in Campania, Latium and Etruria. The development of urbanism in the latter two areas has been traced to a nucleation of settlement during the early first millennium BC, leading to the development of city-states, including Rome, from the late seventh century BC (Alvino & Leggio 1997: 16–7; Cornell 1995: 92–4, 100–1; Damgaard Andersen *et al.* 1997). In contrast to the unplanned growth of these centres, Etruscan colonies as far as the Adriatic (e.g. Marzabotto, Spina), and subsequently Latin and Roman colonies (see Table 2.2; Figure 2.3) demonstrate rigid orthogonal planning (Gabba 1987: 111). In contrast, there is no contemporary evidence of similar urbanisation in Appennine Italy (Lloyd 1995a: 208; Lomas 1998: 65). Nonetheless, the construction of polygonal masonry walls around many hillforts in this area during the fifth and fourth centuries BC coincides with walling of urban centres from Etruria to southern Italy (Barker & Rasmussen 1998: 274; Oakley 1995: 135–8; Yntema 1995: 158). It is in the context of this diverse urban development that Roman imperialism operated; unsurprisingly, the impact of conquest and domination was therefore also variable.

5.4.1 Colonies

The most obvious relationship between Roman imperialism and urbanism pertains to colonisation – however, this connection was by no means straightforward. Colonisation was equally concerned with rural development and the ideology of the peasant. For example, the early colonisation of the Ager Falernus functioned without a single, formal urban centre for nearly three centuries and the subsequent foundation of Urbana appears to have failed (Small 1985: xxvi). However, where such colonisation was associated with an urban focus, it adopted a very specific form, intimately associated with the exercise of Roman power. Whether intended as examples of *romanitas* or not (Harris 1971: 158), by their nature, these colonies constituted a form of ‘sanctioned’ urbanism – they embodied the socially-stratified city-state with which Rome worked best. Despite this, specific differences of context and morphology reveal the diversity of even this form of urbanism.

At a general level, it is possible to recognise the legal distinction between Roman and Latin colonies through the historical development of public buildings. As autonomous city states, Latin colonies had government buildings from an early date (e.g. the *fora*, temples of Jupiter and circular *comitia* at Cosa and Paestum from the mid-third century BC). In contrast, Roman colonies were theoretically dependent upon the metropolis and the development of certain public buildings was consequently delayed (cf. Roman colony of Sinuessa to nearby *municipia* and Latin colonies – Crimaco & Gasperetti 1993; Small 1985: xxv; see Curti *et al.* 1996: 173–4). Historical records of associated land assignments reinforce this distinction. Citizen colonies received small plots, supplemented by common land, which helped to preserve the inherent inequalities and dependencies of these model communities. The larger plots assigned at Latin colonies were more suited to the development of autonomous societies (Gabba 1989: 215–6).

A contextual approach, exploring the specific morphology and location of individual colonies, indicates some diversity of intended function and subsequent development. For example, comparison of the Pontine colonies of Norba, Setia and Cori demonstrates the distinctiveness of the former (section 4.1.1.1). Norba's early foundation, inaccessible location, substantial walls and rigid town-plan suggest it was conceived in a primarily military context. Limited rural settlement implies that the colony did not develop a market function, and the dearth of munificence indicates a lack of élite patronage. The abandonment of the colony by the late first century BC (Attema 1993a: 233) was arguably a result of its failure to develop alternative functions when this military *raison d'être* was eclipsed. In contrast, the more accessible locations and morphology of nearby Setia and Cori are suggestive of less militaristic origins; their public architecture indicates vibrant élite activity, whilst associated rural settlement indicates central place functions well into the imperial period.

The importance of such economic and social integration with local and regional systems – and its variable success – is illustrated across the peninsula. Colonies such as Minturnae and Sinuessa (section 4.2.3) found new economic functions in the production of amphorae and the export of wine. Others, such as Brundisium and Puteoli, were founded with port functions in mind, though had to wrest their regional dominance from Tarentum and Naples respectively. Competition between colonies and pre-existing centres can also be identified in the Liri Valley (section 4.1.2.2). Here, the economic and social energy of the area gradually shifted away from Interamna Lirenas and Fregellae/Fabrateria Nova back to the earlier settlements of Casinum and Aquinum.

However, perhaps the most obvious indication of the vulnerability of these colonies, especially during their early years, were requests for reinforcements to maintain population. This is suggestive of closed societies un-integrated into local demographic systems and unable to sustain themselves (e.g. Cosa, section 4.3.1.5). The need to re-found some colonies – whether due to the failure of population to reproduce or to enemy action – emphasises this isolation (e.g. Buxentum, section 4.2.2.4). However, such refoundation also stresses the importance of these colonies to Rome. For example, Fregellae was ‘re-founded’, as nearby Fabrateria Nova, a year after its destruction – at a time when colonisation was restricted to the extremes of the peninsula. This implies the continuing significance of even the earliest colonies to Roman control of Italy. Yet, the destruction of Fregellae also indicates that this importance concerned the wider system rather than any emotional attachment to individual colonies.

Despite their imperial sponsorship therefore, the long-term success of these cities was not guaranteed. The increasingly personal and political, rather than state military, reasons for the foundation of colonies from the time of the Gracchi to the end of the Civil Wars served only to worsen this situation. All Italian cities were drawn into the political factionalism of this period; however, contemporary colonies, founded by specific individuals or factions, were strongly partisan by nature and therefore even more vulnerable to the rapidly changing political and military climate (see App. *B.Civ.* 1.95–103; e.g. Fioccaglia di Flumeri – Johannowsky 1990: 269).

A pattern observed around many colonies is the ‘invisibility’ of the earliest colonists in their *territoria* (e.g. Ager Cosanus, Liri Valley, Northern Campania). This has led to the suggestion that these settlers were located within associated urban centres. However, where this can be assessed – most clearly, at Cosa – it is clear that historically-attested populations could not have all resided at the urban focus. These missing colonists have been explained by reference to their low(er) levels of material culture in comparison to later periods and the small and short-lived nature of earlier settlements, many encumbered by later activity. Obviously, the suitability of such explanations must be studied in the specific context of individual cases, their urban evidence and variation in the supply of diagnostic ceramics. Nonetheless, the widespread occurrence of this phenomenon is notable. One reason may be the uncritical way in which historical and archaeological data have been integrated; the invisibility of rural colonists could be argued as the result of forcing archaeological evidence into historical frameworks. More problematic is the

possibility that survey is simply not sensitive enough to detect this activity and such a situation underlines the issue of using survey to recognise *l'histoire événementielle*.

5.4.2 Non-Colonial Urbanism

As well as colonisation, many pre-Roman urban centres continued in occupation after conquest. Here, to illustrate the diversity of their development, two areas are detailed – Etruria and southern Italy. The urbanisation of Samnium is explored in more detail in Chapter Seven.

5.4.2.1 Etruria

In comparison to its status as one of the most urbanised areas of pre-Roman Italy, the density of urban centres in post-conquest Etruria was low (Figure 5.5). This was particularly the case in South Etruria; here, the overall number of urban centres declined (e.g. Narce – Potter 1976; 1979: 110). Following conquest, urban activity continued at the site of Veii, though on a much reduced scale (*ibid.*: 114–5; Ward Perkins 1961: figure 16; section 4.4.1.1). A similar reduction of urban area has been identified at Cerveteri during the late Republican and early imperial period (Barker & Rasmussen 1998: 274; also Cures – Muzzioli 1980: 40; Eretum – Ogilvie 1965: 78–81, section 4.3.3.2). Similar urban change can be identified in central and northern Etruria; at Roselle, the late first century BC colony occupied only a small area of the earlier city (Barker & Rasmussen 1998: 275) and Roman control of the Albegna Valley involved major urban reorganisation (section 4.3.1.5). Here several centres were abandoned before, or destroyed as a result of, the Roman conquest (e.g. Ghiaccioforte, Doganella) and the dominance of others was compromised (e.g. Vulci) through the foundation of colonies (Cosa, Saturnia, Heba). The latter were often smaller and economically- and socially-vulnerable in comparison to earlier centres – a similar situation has been identified in the middle Liri Valley (cf. Interamna Lirenas, Casinum, section 4.1.2.2). However, generalisation, even within such a small area, is difficult. Cosa co-existed with the nearby Etruscan centre of *Cusi/Cusia* for at least two centuries, before both cities declined simultaneously during the first century BC. Further inland, Heba was not abandoned until the third century AD, whilst Saturnia, in the upper valley, continued until at least the fourth century AD (Fentress 1994: 250). Similar localised diversity is found across the peninsula, in Sabina (cf. Cures, Eretum, Trebula Mutuesca – Alvino & Leggio 1997: 22), South Etruria (cf. Capena, Nepi, Sutrium – Potter 1979: 94, 115–6, section 4.4) and Latium (cf. Norba, Sezze, Cori, section 4.1.1.1).

Two new urban centres were imposed at Falerii Novi and Lucus Feroniae and several towns were the focus of veteran settlement during the first century BC (e.g. Sutrium). Lucus Feroniae was located at a sanctuary site, before the deduction of a veteran colony during the late first century BC. Despite its new monumental centre, however, there is limited evidence for a significant population (Potter 1979: 110–4). This situation is paralleled at the ‘new town’ of Forum Novum further north in Sabina. Here, geophysical survey has revealed typical public buildings, but little evidence for domestic occupation. Combined with its small size, this suggests an administrative settlement with a limited population (Vince Gaffney and Paul Roberts pers. comm.). This may reflect the negligible role in tax collection played by these towns and, consequently, their limited economic attraction for migrating rural population, especially in comparison to the possibilities of nearby Rome (Patterson 1994: 251).

Further north, other Etruscan centres, such as Volaterrae, continued as important central places well into the Roman period. However, these have been labelled as ‘socially conservative’ (Terrenato 1998a: 25) for their strong social, economic and cultural continuity in comparison to coastal centres such as Populonia and Pisae. These demonstrate more dramatic change, the latter, for example, through its involvement in the *terra sigillata* industry. Broadly speaking then, urban centres in the north and inland areas of Etruria demonstrate greater continuity than those of southern Etruria and coastal areas (Barker & Rasmussen 1998: 275; Potter 1979: 116–7).

5.4.2.2 *Magna Graecia & Messapia*

Largely on the basis of the historical sources, the Roman conquest and subsequent Hannibalic War have been argued to have instigated a major decline of the Greek cities of Magna Graecia (e.g. Toynbee 1965). Although the Roman commentaries comprise literary *topoi* (Lomas 1993: 14–6; also Alcock 1993: 29; Dench 1995), archaeological evidence from the cities suggests a dramatic transformation nonetheless. For example, the *castrum* of Roman Metapontum enclosed a tenth of the area (c.14ha) of the vast area of Greek colony (c.141ha – Carter 1998: figure 1.2; section 4.2.1.1). This represents a shift towards a more nucleated ‘Roman-style’ of urbanism. A similar pattern has been identified at several Messapic centres in southern Italy (section 4.2.3). The process is particularly noticeable in this area (and Etruria) given the large and dispersed nature of urbanism in comparison to the smaller and more compact cities of Latium (see Cornell 1995: table 3).

Many Messapic centres emerged during in sixth century BC under influence from the Greek cities (Gabba 1987: 114) and the majority reached their greatest extent by the fourth century BC. However, there was considerable diversity of size (cf. Botromagno, c.140ha; Muro Maurizio, c.35ha; sections 4.2.2.3, 4.2.2.6) and significant overlap with the Greek colonies (e.g. Metaponto, c.141ha). Many, but not all (cf. Li Castelli, Muro Maurizio), were enclosed with masonry walls, surrounding large areas of discontinuous occupation interspersed with agriculture and necropoleis (Lomas 1998: 68). At the time of the Roman conquest, in the early third century BC, many Messapic centres were destroyed and/or abandoned (e.g. Botromagno, Cavallino, Monte Sannace). Those that remained in occupation underwent significant change during the early second century BC. For example, as at Metaponto, Herdonia was replaced with a compact, 'Roman' town (Lomas 1998: 68). Meanwhile, villas developed at abandoned sites (e.g. Botromagno – Small 1992b; Monte Irsi – Small 1977; and in the imperial period, Muro Maurizio – Burgers 1995: 422). Hence, a whole range of centres was re-positioned within local and regional settlement hierarchies (see section 5.4.2.4).

5.4.2.3 *Municipalisation*

It is clear that urbanism cannot be treated as a uniform phenomenon; nor can Rome's historical association with it. If urbanism formed a strategy through which Roman power was extended, it must be recognised as a highly diverse approach involving the creation, reorganisation and the physical and political destruction of urban centres.

Although urban munificence was already in progress in areas such as Campania during the second century BC (Lomas 1998: 72), it was the settlement of the Social War which established the city as the primary social, political and economic unit of Roman Italy and munificence as the basic means of élite competition (Gabba 1987: 119–22; Lomas 1996a: 6). This process of municipalisation was intimately associated with the granting of Roman citizenship to the *socii* after the Social War, though the extensive colonisation of the post-bellum period should not be underestimated as a stimulus to the process (e.g. Pompeii – Laurence 1994: 20–7). The pervading influence of municipalisation is demonstrated by the common trends in construction priorities. During the late Republican period, the priorities of urban construction were wall circuits, towers, gateways and temples. In the subsequent imperial period, attention shifted to temples of the Imperial Cult, triumphal/commemorative arches, roads, basilicas, *curiae*, theatres and amphitheatres (Lomas 1998: 70–1). This shift also charts the wider changing political context – the

military instability of the late Republic and the *pax* of the early Principate (cf. Cracco Ruggini 1987; Gabba 1987).

Despite this, there were considerable differences in the timing at which Roman urbanisation commenced – in the central Apennines, there was little development until the early first century AD (Patterson 1987: 144). In part, this diversity reflects the extent and nature of pre-existing urbanism. It also relates to its differing agents and their motivations, for example Civil War veterans and pro-Roman élites with ambitions for political careers at Rome. However, the majority of this activity was locally-promoted, not centrally-imposed (Lomas 1998: 73). Through dialogue between core and periphery, the central agenda of administrative organisation, was subverted to meet the needs of the local communities, or at least their élite (Lomas 1996a: 8; 1998: 74). It has been suggested that in Samnium and parts of southern Italy, urbanisation was imposed as part of a Roman policy aimed at the suppression of non-urban indigenous identity (Lomas 1996a: 2; 1998: 66–8 *contra* Patterson 1987). Yet, urbanisation did not develop until a similar date in parts of Sabina and Umbria, which were, historically, on better terms with Rome (Lomas 1996a: 5; 1998: 67). It may be that urbanisation simply took longer to develop in the specific social and economic contexts of Samnium. In other areas, the Roman model of urbanism, as defined through the colony, had limited success. For example, in Magna Graecia, this has been related to the longer tradition of urbanism and the limited participation of the élite in Roman politics (Lomas 1993: 168).

Municipalisation and urban munificence were therefore a locally-promoted means of status competition (Lloyd 1991a; Lomas 1998: 74–5; Patterson 1991a: 151–4) – but they also served to enhance and extend Roman power by tying local social relations into a much wider core-periphery framework. Although the urban fabric of Italy became more homogenous (Lomas 1998: 68), this superficial similarity should not dominate interpretation; it is a generalised observation – there was significant diversity in the stimuli to these processes.

5.4.2.4 *Settlement Hierarchies*

An important consequence of Roman imperialism was the breaking down of regionalism. This served to relocate communities within much wider networks, forcing them to ‘relativise’ themselves with reference to others and to restructure both internal as well as external relations (see Golledge & Stimson 1997: 113; Roberts 1996: 159). This can be seen particularly well through urbanism as the wealth of different urban statuses was

slowly subjected to a more uniform structure (e.g. *lex Rubria*, 49 BC – Frederiksen 1976: 342).

On a Mediterranean scale, late Republican and imperial Rome was several times larger than its nearest rivals (Antioch, Alexandria, Carthage). Within Italy, no city came close – estimates put Rome up to twenty-five times larger than its nearest competitor (see Morley 1996: table 1). In terms of rank-size analysis, such a strongly primate pattern often indicates a system which has not fully matured. Given the rapidity of Rome's expansion within Italy (section 2.3), this may offer some explanation. However, defining the boundaries of such systems is difficult – Rome's 'hinterland' probably lay well beyond Italy. Nonetheless, it is notable that the next largest cities of Roman Italy lay in the north (Gallia Cispadana (Aemilia), Gallia Transpadana and Venetia – Figure 2.2). It is therefore likely that urbanisation in central and southern Italy was significantly distorted by the very size and strength of Rome as an urban centre.

For some pre-existing centres, however, Roman imperialism offered opportunities for economic promotion, especially those well-located to control new inter-regional relations. For example, the small pre-Roman centres of Reate (section 4.3.3.3) and Sutrium (section 4.4.12) both benefited from their locations on major roads, though such prosperity was not automatic as the contraction of centres such as Eretum (section 4.3.3.2) and Valesio (section 4.2.2.2) demonstrates. Indeed, many centres suffered as their functions were usurped or eroded, especially by changes to legal or political status (e.g. Capua – section 2.4.2.1; Veii – section 4.4.1.1), to communications (e.g. the re-routing of the Via Appia and Via Traiana) and due to the foundation of new settlements. The latter includes both colonies (section 2.4.4) and unplanned settlements (e.g. *fora*, road stations).

As a result of these changes, settlement hierarchies, both local and global, were transformed. For example, the foundation of Brundisium radically altered the pre-existing settlement hierarchy of south east Italy. The colony developed by wresting control of communications with the East from Tarentum (Yntema 1993a: 195). Having lost this monopoly, the latter declined – a similar situation is the replacement of Naples by Puteoli as the premier Campanian port (Nicolet 1994: 630). However, the strong centralising influence of Brundisium also undermined the functions of other urban centres, such as Oria and Valesio (sections 4.2.2.1, 4.2.2.2), and disrupted their relations with their own hinterlands. Whilst these towns lost their local market functions and manufacturing

capacity and declined as a result, the overall rise in demand for agricultural produce boosted rural economic activity.

Clearly, context is all important in such an assessment and diversity is the dominant trend. However, some general trends can be stressed. In all areas, there was significant change, but the reasons for this vary. In Etruria and Latium, pre-existing urbanism appears to have weakened, whilst the density and diversity of rural settlement reached unprecedented levels – this appears to relate to the disruption caused by the strength of political centralisation at Rome and the city's enormous economic demand. In Samnium, emergent urbanisation was selectively boosted by political involvement with Rome; this undoubtedly brought the area closer to wider developments across Italy, though was strongly rooted in pre-existing structures. The pre-Roman centres of southern Italy were transformed into a more 'Roman' form of urbanism, though here the social and economic motivations are currently far less clear. In all areas, however, colonisation caused profound disruption.

5.4.2.5 *Decline*

Measured in terms of public building and munificence, there is an apparent decline in the vitality of Italian towns from the second century AD. This has been related to the concentration of land into increasingly few hands, frequently of the emperor himself (Whittaker 1994: 138–9; cf. Lomas 1998: 74). The importance of élite patronage and urban munificence for the success of these centres emphasises the fundamental weakness peculiar to Italian urbanism – the absence of a tax-collecting role. Limited taxation relieved communities of critical economic stimulus (Whittaker 1994: 136; also Alcock 1993: 19–24). It also implies that there need be no direct link between rural and urban prosperity (Whittaker 1994: 136). Although towns were dependent upon their hinterlands for the majority of supplies, it was social patronage which maintained their existence. Increasingly, this could be funded from income made thousands of miles away in the provinces.

This breakdown of urban and rural relations can be seen at both specific locations during the late Republican period (e.g. Oria, Cosa, Veii; sections 4.2.2.1, 4.3.1.5, 4.4.1.1) and across Italy more generally during the mid-imperial period, when the decline of urban munificence is matched by the development or continuity of wealthy rural villas (e.g. Biferno and (inland) Cecina Valleys, South Etruria; sections 4.1.3.2, 4.3.1.2, 4.4). The process of urbanisation was therefore a primarily social and political, not economic, phenomenon and highly dependent upon local élites. It follows that urban decline should

also be considered in the same way (*ibid.*: 134). Nonetheless, one motive for the élite's declining interest in local urban communities is likely to have been the increasingly onerous financial burden this entailed as a result of the political and administrative reforms of mid and late imperial periods. Other changes in the wider political climate included the increasing centralisation of power (first at Rome, and then at Constantinople, with a consequent rise in the importance of northern Italy) the increasing political and economic influence of the provincial élite and the changes in the status of the wider population, in particular the development of *coloni* or bonded tenants. All of these considerations meant that the patronage of small towns was increasingly undesirable, unnecessary or unfeasible. Ultimately, such urbanisation was created for, or made to serve, the short-term needs of the élite in its new imperial role.

5.4.3 Town & Hinterland

The increasing emphasis placed upon town/hinterland relations in the assessment of Roman imperialism has been stressed throughout (also Gabba 1987: 122; Keay 1991; Potter 1991a). More detailed assessment of several examples illustrates the way in which assessment of such local relations must be located within much wider political and economic contexts.

Urban centres such as Cosa, Veii (sections 4.3.1.5, 4.4.1.1) and Cures (Muzzioli 1980: 41–4) had flourishing hinterlands with large numbers of substantial villas, yet comparatively small urban foci. In contrast, the area around Saturnia in the upper Albegna valley demonstrates more complementary rural/urban prosperity, including active élite participation in urban munificence and an increase in the number of sites during the first century AD. The critical difference is the relative social and economic position of these areas to the wider economy (see Patterson 1987: 139; section 5.3.3). Through supplying the export markets, the Ager Veientanus, Ager Cosanus and the hinterland of Cures underwent dramatic economic expansion. Yet, this undermined the economic and social role of Veii, Cosa and Cures as local market centres and as arenas for élite patronage and competition. The latter was conducted, not through public munificence, but the private medium of villa architecture. Greater use of slavery is also likely to have created different social relations, in comparison with, for example, Samnium. However, a significant proportion local wealth was also siphoned out of the area to fund competition at Rome. In contrast, Saturnia appears to have been cushioned from the extreme economic demands of the metropolis by social, as well as geographical, considerations. Production was locally-

oriented, with towns serving as vibrant local market centres and the focus of élite competition (Pollard 1998: 65–8). It is only by assessing town/hinterland relations on such a range of scales and contextualising them within local social structures and the wider political economy that the impact of Roman imperialism can be understood.

The importance of this range of contexts is illustrated by other town/hinterland relations. At Luni, the contrast of urban prosperity and relatively undeveloped hinterland (Mills 1981: 267; section 4.3.1.1) was the result of a specialisation in the marble trade. As the main point of export, the colony became prosperous, but also vulnerable to wider economic and social change. In contrast, the dearth of rural settlement around Etruscan Doganella and Archaic Oria suggests an urban-based land-owning élite exerting particularly strong control over rural production (Perkins & Walker 1990: 69–70; section 4.2.2.1) – far stronger than that found at later Roman colonies. The reduction of settlement around Roman towns in Samnium indicates the direct exploitation of the countryside for the purposes of urban munificence (Frederiksen 1976: 354; Patterson 1987: 144).

This diversity of town/hinterland relations is crudely summarised in Table 5.2. The basic combinations of economic and social ‘success’ of town and hinterland are grouped into four classes. Clearly, this is a static representation of a set of dynamic relationships (it models the late Republican/early imperial period). These classifications should be seen as the extremes of a spectrum – most town/hinterland relations are located somewhere between the examples shown. However, it serves to illustrate the variety (and distribution) of Roman town/hinterland relations.

5.4.4 Regional Analysis

If the relationship between town and hinterland is of central interpretative importance, evidence such as the *indices nundinarii* serves as a reminder that these town/hinterland units did not exist in isolation. These *indices*, or market calendars, refer to cycles of market days for a large group of towns in Campania, southern Latium and western Samnium (Figure 5.6). The towns were locked together in a variety of exchange networks (Morley 1996: 169). However, these should not be seen as purely economic – control over when and where markets are held an important device for social control as well as economic activity (Smith 1976: 335).

The anthropological research of C.A. Smith (1976) has attracted some attention in the interpretation of pre-modern settlement patterns (e.g. van Dommelen 1993: 172; Hodges

1990). These are of interest both for the study of individual central places and larger regional groups. In particular, Smith (1976: 310–2) has proposed a series of exchange networks, premised upon the (Marxist) notion that stratification is the result of differential access to, or control of, the means of exchange – that is, the ways in which the non-producing élite extracts a surplus from the producers. Theoretically, each model has distinctive spatial correlates (Figure 5.7). The models are considered relevant for peasant societies and may therefore be suited to the investigation of Roman Italy. In this context, ‘central place’ need not refer solely to urban sites, but may also include estate centres and sanctuaries. The five basic exchange networks are summarised in Table 5.3.

Two applications of this work to Roman Italy can be cited. In the Pecora valley (section 4.3.1.4), van Dommelen (1993: 180) has identified dendritic and solar central place exchange systems (at Puntone & La Pieve respectively), coexisting during the late Republican and early imperial period. The close proximity of these different systems is taken to emphasise the unevenness of economic development and its localised impact. Smith’s models provide a heuristic device to assess variation in the spatial distribution of economic change and the way in which these local economies connect and disconnect with the wider imperial system. At San Vincenzo (section 4.1.3.1), Hodges (1990: 433–4) uses these models to interpret a major shift in the economy over time. The decline of production and the distribution of (imported) material culture during the early medieval period is taken to indicate a change from the interlocking central place system of the Roman period to an unbounded hierarchical network. This shift is associated with the collapse of state apparatus and the rise of local and regional economies.

It would appear that van Dommelen and Hodges make slightly different interpretations of Smith’s basic schema, with the former being more cautious about the application of criteria. There has also been some criticism of Smith’s general thesis and its applicability to historical periods: in particular, her basic data, unavoidably, concern peasant societies that are already enmeshed in modern (globalised) economic settings. However, the basic framework provides a useful means of conceptualising spatial and chronological diversity in the social and economic impact of Roman imperialism.

5.4.5 Urbanisation Summary

Traditionally, a strong relationship has been assumed between Roman imperialism and urbanism/urbanisation. Partially this is the result of interpretations derived within provincial contexts being projected onto the Italian situation. Nonetheless, Roman

urbanism in Italy demonstrates some fundamental weaknesses; in many respects, it was less stable and less significant than some earlier urban development. Most importantly, it was undermined by a lack of local economic functions (i.e. taxation). More specifically, some colonies were unable to sustain their populations or to integrate themselves into local economies and social contexts after their original function was supplanted. There was little attraction for the rural poor to move to local towns and, once access to power at Rome had been achieved, little incentive for the élite to participate, especially when later legal changes made public duties financially onerous. Further, ‘politicising’ urbanism as a tool of imperialism – directly through colonisation and indirectly through élite competition – Rome fundamentally undermined the long-term stability of much (pre-existing) Italian, as well as Roman, urbanisation. Rome’s relationship with urbanism was ambiguous to say the least. In the future, a series of case studies will facilitate the characterisation of the evidence and increasingly subtle models, beyond the consumer city, will allow this diversity to be assessed and synthesised.

5.5 Chapter Summary

It should be clear from Chapters Four and Five that the evidence for Roman Italy is highly diverse. This requires a multitude of models and a range of scales in order to encompass its full scope. It is by exploring each locality in detail that the dynamics of Roman imperial dialogues can be assessed. However, it is only in the context of broader synthesis, that the significance of this detail can be understood. Scale is therefore of fundamental importance.

Two other points also require emphasis. First, it may be wrong to assume that this diversity is purely regional; much of the variation found can be considered to be ‘social’ and, therefore, local. For example, there may have been greater inequalities of wealth and variation in the means of landholding within rather than between regions (Thompson 1982: 389). That is, regardless of location, the economic gap between rich and poor may have been more significant within individual societies and areas than between core and periphery (see Duncan-Jones 1990: 140). Again, this requires more detailed analysis of local situations, as well as their comparison with other areas, in order to assess their wider significance. Secondly, given the historical interpretation of disruption and change, it is perhaps the continuity of pre-existing landscapes, not new Roman landscapes, which is in need of explanation (see Shanks & Tilley 1987: 212). The identification of the exercise of power is comparatively straightforward in physically-colonised landscapes (e.g. roads,

centuriation). Others, that is the majority, were not directly reshaped. Arguably, these landscapes are the key to understanding Roman imperialism. After analysis of the wider Biferno Valley Survey database in the first half of Chapter Six, a case study in the second part takes one such landscape, in the vicinity of Larinum in the lower valley, and explores this issue further.

Chapter Six

THE BIFERNO VALLEY SURVEY

6.1 Introduction

This chapter develops the issues of survey interpretation discussed in Chapter Three through the detailed analysis of a single project – the Biferno Valley Survey (hereafter BVS). The intention is to illustrate the importance of considering survey data within the context of their appropriate metadata. Discussion of these data is provided in sections 4.1.3.2 and A.1.3.2. This chapter seeks to extend current understanding of the valley's development by exploring the survey database in the light of this information. Through a detailed deconstruction of the data, it will be possible to gain considerable new insights into their structure, the nature of their present interpretation, and to offer alternatives. This demonstrates that understanding of even comparatively well-published surveys can be refined through simple contextual analysis. The second half of the chapter develops a case study, within a GIS framework, of the area around modern Larino in the lower valley. In particular, this explores the relationship between the BVS and a second survey – the *Forma Italiae* (hereafter *FI*) – in terms of methodology and interpretation.

6.2 Analysis

The BVS gazetteer provides a large dataset that has been subject to minimal statistical analysis or even basic summaries (Millet 1997: 346; see Bertonecello 1992; Pizziolo 1997). This half of the chapter concerns the computerisation of these data (database and DTM analysis).

6.2.1 Data Preparation & Database Entry

Records in the gazetteer required some work before they could be computerised (an example of a gazetteer record is provided in Table 6.1). 'Duplicate' records for parts of the same site were amalgamated on the basis of comments included in notes. The gazetteer's alphanumeric Site Code was replaced with a purely numeric code (New ID)¹ and unique

¹ Codes starting A, became 3000 + *n*, B became 4000 + *n* etc. The original gazetteer codes are quoted in text.

IGM grid references derived for use within the DTM/GIS². Amalgamated records took the grid reference of the clearly ‘dominant’ record (e.g. largest, highest status), or the most central of a group.

Where inconsistencies were recognised between the gazetteer and final report (section A.1.3.2), the former was taken as definitive, though the presence of these problems was taken into account. The data were then entered into a relational database (Access 7.0; Figure 6.1).

6.2.2 Summary Statistics – Site Numbers & Settlement Dynamics

For initial database analysis, there is limited reference to spatial aspects of the data, not least because minimal information regarding the extent or location of the sampling of different gazetteer variables (e.g. geology) is known. This issue is addressed in the case study. The following work, therefore, focuses on changes in site attributes over time, not the attributes *per se*: in other words, relative, not absolute considerations. Nor is the long, thin and discontinuous shape of the survey area (Figure 4.9a) conducive to formal spatial analysis. The unsystematic sampling and low intensity of survey coverage also mitigate against such analysis – the sites identified are considered a bare minimum (Lloyd 1995a: 193).

The first objective was a basic survey of the number of sites by period and their spatial distribution. For reference, Table 6.2 lists the BVS periodisation and Figure 6.2 illustrates the principal modern towns and geographical features of the Biferno valley. Figure 6.3 summarises the number of scatters by Archaeological Interpretation and Period³. It is clear that Samnite settlement was particularly numerous in comparison with other periods. Iron Age, Samnite and Early Roman periods also demonstrate large numbers of small sites and off-site (Sporadic) material. More generally, the length of the Samnite period, especially in comparison to the Early and Mid-Roman periods should be noted (Table 6.2). Its 420 years fully encompass Rome’s initial contact with the area, the duration of the Samnite, Hannibalic and Social Wars, as well as the processes of ‘Hellenization’ and ‘Romanization’. The application of ethnic labels to these periods is also problematic – Samnium had been involved with Rome for *circa* three hundred years by 80 BC. The

² In the gazetteer, these are recorded in millimetres from the top left hand corner of each map sheet. These were converted to unique eastings and northings using an Excel spreadsheet.

³ In order to distinguish between the specific terminology of the report, and more generic usage of terms, the former is capitalised – for example, ‘Archaeological Interpretation’ refers specifically to that field in the gazetteer.

concession of citizenship at this time is unlikely to have led to a sudden change in ethnic identity.

Spatial distribution of settlement included in the BVS gazetteer (Barker 1995b) by Period is illustrated in Figures 6.4 to 6.11. For the purposes of visualisation, these have been displayed using ArcView 3.1 on background coverage derived from the IGM 1: 100 000 maps. For clarity, the Iron Age, Samnite and Early Roman periods are divided between upper and lower valley, whilst the thinner settlement patterns of the Mid- and Late Roman periods are presented on individual maps. Figure 6.12 provides some context for this settlement, illustrating additional hillforts, sanctuaries and towns.

In the Iron Age context (Figures 6.4, 6.5), it should be noted that the Archaeological Interpretations of Villa and Town are a legacy of the structure of the data in the BVS gazetteer. In reality, although concentrations of Iron Age activity are attested (e.g. at Larino), these were certainly not towns in the later sense. Similarly, settlement of the Samnite period is a palimpsest with a major break during the late fourth and early third century BC (Figures 6.6, 6.7), Samnite period villas are unlikely to have been in occupation from 500 BC; excavated examples favour a first century BC date (Table 4.6).

Iron Age settlement, especially in the lower valley, was polarised between larger nucleated settlements, smaller farms, and domestic sites (Figure 6.4). A series of large cemeteries were previously known in the area (e.g. Monte Arcano – Coarelli & La Regina 1993: 301) and further examples appear under-represented in this dataset. The more limited evidence of the upper valley (Figure 6.5) may relate to the lower visibility of hilltop occupation – it is possible that subsequent hillfort construction was preceded by such settlement (see Figure 6.12).

Massive expansion in the Samnite period filled out the entire landscape in the late fourth/early third centuries BC – coastal plain, inland plateaux and upland basins (Figures 6.6, 6.7). These were mainly small settlements, though several larger sites emerged; there is also extensive evidence for ‘off-site’ (Sporadic) material. As earlier, settlement in the upper valley is likely to be under-represented due to hilltop occupation (see Figure 6.12; Oakley 1995) and funerary sites appear limited throughout in comparison the previously known examples (e.g. Termoli, Guglionesi – Tagliamonte 1996: 105–16). On the basis of excavated examples, villas developed during the first century BC, not around towns such as Larinum (cf. Cosa, section 4.3.1.5), but on the river terraces and neighbouring plateaux (Barker *et al.* 1978: 44; Lloyd 1995a: 210; Tagliamonte 1996: 162–3).

There is a sharp reduction in the number of recorded scatters by the Early Roman period, though this mainly concerns non-site material (Sporadic) and small settlements (Domestic) (Figures 6.8, 6.9). Overall, the basic distribution of activity is maintained. There is a further sharp contraction in the Mid-Roman period (Figure 6.10), leading to increased emphasis on larger settlements (see Figure 6.3), though again the same basic distribution persists. The number of recorded scatters remains largely stable into the Late Roman period (Figure 6.11), though the (re-)occupation of some Villas and Villages shifts the focus of settlement towards the lower valley. The distribution of generically-dated material does not show any distinct spatial patterning, sharing the same basic distribution as settlement illustrated in Figures 6.4–6.11.

Rather than considering the Early Roman period to represent a major settlement contraction, it may be better to consider the exaggerated growth of the Samnite period to be the phenomenon in need of explanation. In this sense, the Early Roman period represents a return to previous settlement levels (Figure 6.3). This may be considered in the context of regional demographic cycles. It may well also concern the comparative visibility – in terms of diagnostic pottery – of the Samnite period (section 6.1.10). Breaking down these figures into continuing, abandoned, new/reoccupied sites demonstrates their dynamic (Table 6.3).

Apart from the Samnite period, the bulk of sites in each period demonstrate occupation in the previous period; there are few new settlements. The reoccupation of abandoned sites is similarly insignificant, except for the Late Roman period. Generally, this may be a function of the low numbers of new occupations, though the comparatively large number of reoccupied sites in the Late Roman period cannot be explained by a rise in the overall number of new settlements. This may be suggestive of a phase of abandonment during the Mid-Roman period. Alternatively, given the limited diagnostic material of this period, there is a suspicion that Mid-Roman occupation has been underestimated (section 6.2.10).

It is apparent that, on the basis of these figures, the notion of continuity can be defined in different ways. For example, the majority of individual Early, Mid- and Late Roman scatters demonstrate occupation from the preceding period, suggesting strong continuity. Yet, concurrently, the transitions between the Samnite and Early Roman, and Early to Mid-Roman periods, demonstrate substantial reductions, implying discontinuity. It is therefore important to distinguish between the continuity of individual sites and of the overall settlement pattern (Roberts 1996: 127). Although there is fluctuation in the latter, some individual sites demonstrate long-term stability. This may be considered to represent a

thinning out of the settlement pattern, rather than its complete replacement (cf. Cosa, Venusia, section 4.2.2.7).

6.2.3 Settlement Histories

The range of settlement histories is summarised visually in Figure 6.13 to indicate their variety and numerical significance. Although some forty-four different combinations of the five basic periods, and their various generic groupings, are attested, just under sixty percent of scatters are contained in two categories – Classical (7/10) and Samnite period (7) only. This observation should be considered alongside the generally discontinuous nature of other combinations and compared to the interpretation of this landscape as one of continuity (Lloyd 1995b: 249). As discussed above, continuity is a complex and ambiguous term.

A new field, Number of Occupations, was derived by a simple count of the number of period records per scatter. The value ranges from one to five. The results are displayed with and without Sporadic data in Figure 6.14. In the former case, single period sites represent over half the total sample. The exclusion of Sporadic data greatly reduces this predominance, reflecting their strong correlation with single phase (frequently generic) occupation (section 6.2.5). However, the distribution remains biased towards scatters of one or two periods of occupation; sites of three or more periods are a minority.

A coarse index of settlement stability can be obtained by dividing total Number of Occupations by the number of scatters to derive an Average Number of Occupations (Table 6.4). A maximum of five implies each scatter was occupied in every period; the minimum is one, that is, each scatter has only a single occupation. The former may suggest a stronger sense of place, and all this entails in terms of social, political and economic support systems. The latter may indicate settlement of less stable character, probably subject and vulnerable to different and more extreme forces.

These figures provide another perspective on the issue of continuity. Although only *circa* fifteen percent have four or five periods of occupation (Figure 6.14), the average Number of Occupations for Mid- and Late Roman sites is just less than four. The higher average during the Roman periods suggests that despite the overall decline in numbers, individual settlements were comparatively stable. This is suggestive of a group of 'core' sites and a cycle of smaller, less stable settlements, resulting in palimpsests, especially for the Samnite period.

The Average Number of Occupations by Archaeological Interpretation (Table 6.5) demonstrates a clear pattern. Lower status settlements demonstrate the least stability, being the most vulnerable to economic and political trends. Larger sites are more stable, with occupation attested in all five periods at Town sites. The notable exception is Village (or *vicus*) – this may relate to the process of *vicus* abandonment associated with post-Social War administrative reforms (Patterson 1987: 145; section 5.3.4.1). The discrepancy between the averages for Villa/Village and Village may suggest that rather than the former representing a ‘compromise’ between Villa and Village, this category may constitute a valid class in its own right (see section 6.2.11/Table 6.19 (1 & 2) for the less significant relationship between Number of Occupations and settlement Size).

Finally, the Average Number of Occupations for Topography and Geology (Table 6.6) demonstrates some patterning. The combined low Averages for Alluvium, Plain and Basin Floor may be related via the less stable settlement of these ‘high-risk’ riverine environments. These areas are also vulnerable to post-depositional disturbance that may lower visibility. In contrast, Hilltops and Spurs demonstrate slightly higher Averages, suggesting settlement was more stable; these may have been prime landscape locations. However, it should be noted that none of these relationships is statistically significant (section 6.2.12.2).

6.2.4 Generic Sites & Occupations

Due to the imprecision with which some ceramics can be dated, a substantial number of generically-dated scatters, or phases of occupation on otherwise well-dated sites is a common feature of survey work. The inclusion or exclusion of these data has the potential to change the histories of individual sites and therefore inter-period relationships. For example, a site dated as Samnite (7), generic Early/Mid-Roman (8/9) and Late Roman (10) can be interpreted as being occupied continuously from the Samnite to Late Roman period. Alternatively, it may have been abandoned during the Early and Mid-Roman periods, and then reoccupied in the Late Roman period. Cumulatively, such decisions smooth and/or exaggerate changes in the wider settlement pattern (see discussion Figure 6.15 below). Given their large number, inclusion of these data in some form is important (e.g. Cherry *et al.* 1991: 328; van Dommelen 1993: 177).

A series of chi-squared tests were used to assess whether variation in ability to date scatters is related to archaeological considerations, such as post-depositional disturbance or to a genuine absence of diagnostic finewares (Table 6.7). In terms of both geology (1) and

topography (2), there is no significant difference between closely- and generically-dated sites; that is, statistically, they may be considered as two samples from the same population. At a coarse level of analysis, this suggests that there is no obvious geological or topographical reason for post-depositional variation in the precision of dating. Nor is there any significant difference between the two groups in terms of Size (3). In contrast, there is a strong relationship with Density (4), with fewer Heavy Density, generically-dated scatters, and more Heavy Density, well-dated scatters than expected.

This pattern may be related to sampling, with scatters of heavier density producing larger assemblages and thus recovering more diagnostic sherds. Heavier Density scatters may also relate to higher status sites that had access to greater quantities of ceramics. The provision of a single Density figure per scatter means all these relationships are highly generalised. Density is a complex variable strongly associated with Archaeological Interpretation, but not Period, Number of Occupations or Size (see section 6.2.8). This suggests difference in the range, quantity and discard of diagnostic finewares relates to the status of the inhabitants of a site, rather than when, and for how long, it was occupied. This lends informal weight to the possibility that some of these scatters were sites in their own right, existing outside the fineware market.

Figure 6.15 illustrates the (quantitative) importance of including generically-dated scatters, and two alternative methodologies for doing so. The first assumes that each individual period within a generic dating bracket represents clear occupation. Hence, the Iron Age, Samnite, Early, Mid- and Late Roman periods are all assumed to have been occupied within the dating bracket Classical (7/10). Alternatively, a single phase of occupation may be divided across this dating bracket. The former approach assumes that a site was unambiguously occupied during each individual 'sub-period'. The latter approach uses 'fractions' to account for length of period and the likelihood that a site was in occupation in any specific sub-period. Thus it is possible to acknowledge some form of occupation without assuming it to have been continual; this is important given the limited amounts of pottery involved. Each method affects individual periods differently, though it can be seen from Figure 6.15 that the use of fractions has a less distorting overall effect on the data. The larger number of better-understood Roman period coarsewares lessens the significant discrepancy between the number of Samnite and Roman settlements. More generally, this analysis stresses the importance of complementary excavation for the assessment and interpretation of surface evidence.

6.2.5 Unequal Periodisation / Temporal Density

Basing survey periodisation on diagnostic ceramics frequently results in periods of unequal length. In conjunction with the character of settlement (e.g. mobile, short-lived, nucleated, etc.), this may exert a significant influence on the number of sites identified.

A one sample chi-squared test was used to derive the number of scatters expected in each period on the assumption their quantity was directly related to period length (Table 6.8); that is, it was assumed longer periods produce more scatters. The results suggest this is not the case; there are far more scatters than expected in the Samnite period, and less in the Early and Late Roman periods ($Calc \chi^2 = 156.3$; $\alpha = 0.01$; $df = 4$; $p = 0.000$; $\Phi^2 = 0.300$). To develop this observation, the number of scatters per standard unit of time was measured by dividing the number of scatters per period by period length. Thus, ‘temporal density’ can be expressed as n occupations per t units. Some attention is placed on this measure as, despite its widespread use (e.g. Italy – Arthur 1991a: 18–9; Carter 1990: figure 3; Greece – Alcock 1993: figure 11), there is comparatively little discussion of its significance.

Any measure per standard unit of time implies the existence of a rate of events, that is the relative speed with which events – occupations – occur over time. This does not imply that for every unit of t , only n scatters will be in occupation. Rather, every t , n scatters will become newly occupied, regardless of whether existing scatters remain occupied or not. As such, there is no assumption of a fixed lifespan or contemporary occupation as with spatial density.

When compared to spatial density (Figure 6.16), this measure demonstrates a contrast in the relationship between periods, in particular, reversing that between the Samnite and Early Roman periods. All other things being equal, had the Early Roman period been as long as the Samnite period, it might be expected that the number of sites occupied in the former would have been substantially greater. The exclusion of the generically-dated scatters does not affect this basic inversion of the relationship between periods, as the Number of Occupations added to the Early Roman period far exceed those added to the Samnite period. Given the strong continuity of individual sites between periods (Table 6.4), the assumption that each period begins with a *tabula rasa* is not suited to the BVS data. From the Samnite period, it is difficult to conceive of accelerated growth; reversing the model as a rate of decline might better fit the overall trend.

It is likely that the emphasis this measure places on the Early Roman period is a product of the closer dating, and shorter periods of circulation for early imperial ceramics. As such, it

does not clearly circumvent the problem of unequal periodisation (an observation which is of importance for understanding the use of this model elsewhere). However, the measure is developed below by re-conceiving the 'event' as individual diagnostic sherds, in order to model temporal variation in discard.

6.2.6 Sporadic Data

At the bottom of the hierarchy of Archaeological Interpretation are those scatters classed as Sporadic (SP) or off-site. The BVS report defines this class as the 'result of cultivation practices, herding, hunting and gathering and industrial activities such as charcoal-burning and lime-burning' (Barker 1995e: 46). This category therefore forms a generic class designed for those scatters which do not bear the weight of interpretation as settlement sites. Chi-squared tests were performed in order to assess whether these 'non-site' scatters are significantly different from site scatters in terms of a range of attributes (Table 6.9).

These figures show that sites and non-sites are significantly different in terms of Size (1); in particular, there are more Small sites and Large non-sites than expected. There is even greater difference between sites and non-sites in terms of Density (2) with far more Low Density non-sites than expected. This suggests sites are smaller, discrete locations, whilst Sporadic scatters concern more extensive areas. The two groups are also distinguished in terms of geology and topography. In particular, there are fewer sites, and more non-sites on Alluvium (3). This may relate to post-depositional disturbance and/or, if Sporadic material represents agricultural activity, the preferential location of cultivation on these soils. There are also more sites than expected on Hills/Cols and Spurs, and more non-sites than expected found on Plateau and Basin (4). The preference of sites for elevated locations may represent the choice of commanding positions on raised topographies for settlement sites (e.g. Liri valley, Sangro valley), with agricultural activities focused at flatter locations.

Sites and non-sites are also significantly different in terms of the ability to date closely or generically (5) and in terms of the Number of Occupations (6). These results would appear to be related to the lower than expected Artefact Diversity of non-sites (7), which would preclude precise dating and limit the number of datable occupations. Those Sporadic scatters that can be dated, suggest a strong association with the Samnite period (8). Given the higher relative visibility of the diagnostic material used to date this period (i.e. Black Gloss; section 6.2.10), the association of the peak in sites and non-sites numbers in this period is potentially significant. Sporadic scatters constitute a third of Samnite period

records (33.94%), less than a quarter of Iron Age data (22.50%) and just a sixth of Early Roman records (16.24%). Therefore, the limited number of Roman period Sporadic scatters may represent a decline in amounts of diagnostic material, rather than lower agricultural intensity. In general, however, the small quantities concerned, even from the Samnite period, mean that reliable quantification of such material is extremely difficult. Indeed, the low amounts of (diagnostic) material recovered at some excavated settlement sites (Table 4.6) questions the assumption that even these larger sites should be consistently recognisable as surface scatters.

In terms of distribution, Sporadic scatters have the same basic distribution as settlement sites with the exception of a concentration on the Piano di Larino to the north of the Samnite/Roman town of Larinum (Figure 6.6). This is explored in greater detail in the case study (see section 6.5.5.1). However, the chronological insensitivity of much of this material makes it difficult to assess precise relationships.

Although these analyses suggest that Sporadic scatters are significantly different from settlement sites, they still represent a diverse group and are likely to include a variety of manuring scatters, eroded and temporary sites. This alone makes the identification of patterning unlikely. Future fieldwork might usefully focus upon a selection of such scatters to assess this issue. For example, Small, Heavy Density Sporadic scatters of high Artefact Diversity, isolated scatters, or scatters in areas of high erosion potential might be ‘unrecognised’ sites. In summary, Sporadic scatters are spatially extensive and activity is low level; settlement sites are smaller and demonstrate greater intensity of use. As documented throughout, their inclusion and exclusion from statistical analysis often has a major influence on the statistical significance of test results.

6.2.7 Archaeological Interpretation

Archaeological Interpretation provides a basic indication of the type of activity associated with each scatter; these categories form a loose hierarchy from Sporadic through to Town. However, no explicit criteria for the definition of these classes are provided and their inherent characteristics and relationships are assumed. The following section examines how the ratios of these classes change over time. Archaeological Interpretation is then considered in terms of other variables, permitting a ‘deconstruction’ of the overall hierarchy and a characterisation of individual classes and the relationships between them.

The basic number of scatters by Archaeological Interpretation and Period are illustrated in Figure 6.3. The most obvious aspects of these data are the predominance of Samnite

evidence and the fluctuation in the number of smaller settlements. Table 6.10 assesses the statistical significance of these figures. It is possible to identify a clear relationship between Period of Occupation and Archaeological Interpretation (1). In particular, there are more 'low status' and less 'high status' sites than expected in the Iron Age and Samnite periods, and the reverse in the Mid- and Late Roman periods. This general shift is caused, not by an increase in the number of settlements at the top of the hierarchy, but a major decline in the number of smaller settlements and Sporadic scatters. The exclusion of Sporadic data reduces the strength of this relationship, but not significantly (2).

The changing shape of the settlement hierarchy is emphasised in Table 6.11 by providing the phi-squared value for pairs of different periods. It is clear that there is less difference between consecutive periods than non-consecutive ones – that is, the difference or 'distance' between Samnite and Early Roman settlement is less than between Samnite and Late Roman settlement. This might be interpreted as a gradual transformation of settlement from the Iron Age to the Late Roman period, rather than the sudden changes indicated by simple counts of site number.

6.2.8 Certainty (Period & Archaeological Interpretation)

The gazetteer provides both Period and Archaeological Interpretation with a degree of Certainty using a question mark; this was incorporated into the database as a Boolean field. Figure 6.17 demonstrates that the percentage of uncertain data is remarkably consistent across the five basic periods, apart from the Iron Age, which shows a particularly high level of uncertainty. As such, chi-squared tests to assess the relationship between Period and Archaeological Interpretation (Table 6.12) were performed both with and without the Iron Age data. Their exclusion dramatically reduces the chi-squared values for both variables. The generic dating brackets show more diversity, though those relating to the Classical and Roman periods demonstrate greater certainty, no doubt reflecting the better knowledge of coarsewares from these periods. The high percentage of certainty for the Classical period (7/10) reflects the use of this class as a particularly broad dating bracket for the more abundant, if undiagnostic, Samnite and Roman material.

The Certainty of Archaeological Interpretation is summarised in Figure 6.18. This demonstrates both the structure of the underlying data and the way in which they have been interpreted. Villas are either manifested more clearly in the archaeological record than other categories, and/or can be interpreted with the least ambiguity. Uncertainty increases towards either end of the hierarchy, before declining sharply for Sporadic and

Town. The categories around which the others are defined are therefore Sporadic, Villa and Town. The first constitutes a generic category for those scatters not considered to be settlement sites; by their nature, therefore, they are nearly all considered to be Certain, that is, *not* sites. In contrast, Villa and Town are ‘historical’ categories (see Millett 1997: 346). Therefore, uncertainty at the lower end of this hierarchy concerns whether a scatter can be considered a site; further up the hierarchy, uncertainty concerns how well a scatter relates to a preconceived (historical) framework. The diversity of Villa scatters, and the difficulty of distinguishing them from Villages (hence, the hybrid Villa/Village) supports this assertion. Even excluding the Iron Age data, this patterning remains significant (Table 6.12 (3, 4)). Beyond methodological reasons for the classification of Certainty, there is no clear spatial patterning in the distribution of scatters by Period or Archaeological Interpretation. This may suggest that Certainty is related to social and economic factors – such as access to diagnostic pottery – rather than (regional) location.

6.2.9 Artefact Diversity

A simple count of the number of different artefact categories and distinct types of pottery was used to derive a new field – Artefact Diversity – for each scatter record. The relationships between this measure and a range of other attributes were assessed using chi-squared tests (Table 6.13). Both including and excluding Sporadic data, there is a significant relationship with Period (1, 2); Samnite period scatters have fewer artefact types than expected, and Mid- and Late Roman period scatters have more. Far more significant is the relationship between Artefact Diversity and Number of Occupations (3, 4); sites with more occupations produce a significantly wider range of artefact types. Although some degree of association is inevitable – the identification of each period requires at least one additional artefact type – the relationship cannot be taken for granted.

Frequently the exclusion of Sporadic scatters reduces the significance of relationships. However, their exclusion from assessment of the relationship between Artefact Diversity and Size (5, 6) depresses the number of Large, low Diversity sites, with the consequent increase in Large, high Diversity sites making the relationship statistically significant. The greater Artefact Diversity associated with larger sites may indicate the consumption and discard of a genuinely wider range of material culture. Alternatively, larger scatters may produce large samples, increasing the probability of finding a wider range of material (Schiffer 1987: 354; section 6.2.10.1). Density also demonstrates a strong association with Artefact Diversity (7), with far more than expected Sporadic scatters of Low Density and a

single artefact type (8), but the exclusion of Sporadic data accounts almost entirely for this relationship. The lack of association may be a genuine pattern, but again methodological considerations may be significant – such low Density scatters are statistically unlikely to produce a wide range of artefact types (section 6.2.10.1). Collectively, these figures therefore suggest that at least some of the diversity in Artefact Diversity relates to methodological issues.

Overall, there is a strong relationship between Archaeological Interpretation and Artefact Diversity (9, 10). In particular, Farms, Villas and Villa/Villages demonstrate higher than expected Artefact Diversity and Domestic sites lower than expected. Obviously, Archaeological Interpretation is not entirely independent of Artefact Diversity, but these results provide some weight to the distinction between clear settlement foci (i.e. Farmstead and Villa) and the more uncertain activity at Domestic sites.

6.2.10 Ceramics

This section explores the ceramic records from the gazetteer database and, in particular, assesses the issues of limited diagnostic material and the influence of variation in its abundance upon survey interpretation. The sampling, collection and recording strategies employed by the survey were not always systematic (Lloyd & Barker 1981: 290); consequently, the data are not sufficiently robust to sustain advanced statistical analysis (e.g. Carreté *et al.* 1995: 253; Millett 1991a). Here, the emphasis is upon the characterisation of the data through simple statistical measures.

Around five percent of ceramic records are unquantified, being classed as Several or Many. The majority of these records concern assemblages of undiagnostic Classical coarsewares from large sites. Informally this adds to the impression that smaller sites may have been more thoroughly sampled than larger ones, where the emphasis was upon the collection of diagnostic finewares (see Barker 1995e: 46). In order to facilitate proper quantification of the remaining records, these unquantified data were held in a separate database table (see Figure 6.1). Despite the omission of unquantified records, coarsewares still clearly outnumber finewares (and other diagnostic material), in terms of overall abundance, the number of locations at which they occur, and the amounts per location.

The comparative rarity and uneven diagnosticity of the ceramic evidence raises questions about the socio-economic circulation of this material and its representation in the archaeological record. This demands consideration of the origins, overall abundance and length of circulation. The most important diagnostic ceramics are *impasto*, Black Gloss,

Italian *terra sigillata*, African Red Slip and Red Painted wares. The diverse origins of these wares would suggest some variation in the socio-economic context of their use and discard, and consequent unevenness in the visibility of different periods and groups. *Impasto* and the majority of Black Gloss were produced in the valley itself (De Felice 1994: 42; Lloyd 1995a: 183). The far less abundant Italian *terra sigillata* was imported to the valley, though only half can be attributed to the major production centres of northern Italy, the rest possibly originating from nearby Apulia (Di Niro 1991b: 265; Lloyd 1995b: 248). African Red Slip was imported from North Africa along with a few amphorae, whilst contemporary Red-Painted wares were probably locally-manufactured (Lloyd 1995b: 215). Over time, therefore, the origins of the basic diagnostic finewares become increasingly remote from the valley. This is likely to be associated with an increase in the value of these different wares (*ibid.*: 225), with a consequent narrowing of their socio-economic distribution. Similarly, the diagnosticity of coarsewares is not even, with considerably more known about Roman period wares.

Table 6.14 summarises the number of scatters at which each ware is found, its frequency and the average number of sherds per scatter of occurrence. Some interesting patterns stand out. For example, although Red Painted ware is found at only a third of the locations in comparison with the contemporary African Red Slip, its average number of sherds per scatter is over double. More generally, it is noticeable that, although there is a wide range of (imported) finewares, several are represented by a single sherd or findspot (e.g. Eastern Sigillata B). There is also considerable variation in the absolute quantities of diagnostic wares. Although this may relate in part to the differences in physical visibility and/or survival, in some cases, the scale of this difference suggests genuine variation in the abundance (cf. Black Gloss, Italian *terra sigillata*).

In order to assess whether the differing periods of circulation account for differences in overall quantities, the ‘rate of deposition’ for each of the basic diagnostic wares was modelled through the use of a one sample chi-squared test (Table 6.15; see Cherry *et al.* 1991: 328, 331; Millett 1991a). As with settlement above (section 6.2.5), a constant rate of deposition was assumed within and between periods. The results, however, suggest there was significant variation in these rates ($Calc \chi^2 = 1104.929$; $\alpha = 0.01$; $df = 4$; $p = 0.000$; $\Phi^2 = 0.36$). In particular, the Samnite period demonstrates far higher discard than expected: at 3.56 sherds per year, this period is represented by two and a half times more than the Early Roman period, suggesting it is of considerably higher overall visibility. Further, the majority of Black Gloss dates to the third and second centuries BC, limiting the period of

circulation and making discard even higher. However, the generally low figures for all periods – the Mid-Roman period is represented by just half of one sherd per year – demands caution in the quantification of these data.

Hence, both in terms of total sherd count, and when weighted for unequal periodisation, the Samnite period appears to be of significantly higher visibility because of its diagnostic material. In terms of both socio-economic distribution and overall abundance, diagnostic material from other periods is likely to underestimate the extent of settlement in comparison. This discrepant visibility has obvious implications for the interpretation of settlement change between periods, but especially the transitions to and from the Samnite period. In part, this situation is mitigated by coarsewares (Barker 1995b: 131–5; Lloyd 1995b: 215; MacDonald 1995: 26–7). For this reason, the integration of generically-dated coarseware sites is particularly important (see Figure 6.16).

6.2.10.1 Relationship Between Sherd Number & Pottery Type

It has been suggested several times that probability could explain patterns observed in the data. In particular, larger assemblages might be expected to produce a wider selection of pottery types because there is a greater probability of rarer types being represented (Schiffer 1987: 354; see Table 6.14). However, this relationship may not hold true across all scales – for example, higher status sites may not consume and discard pottery in the same way as smaller sites. Given the limited quantities of some pottery types – of nineteen wares, eight have less than fifteen sherds in total – it might be expected that the relationship would plateau out, with larger sites using a basic set of wares, plus one or two of the rarer types.

The number of sherds recovered from each scatter was therefore regressed against the number of distinct pottery types. Only scatters where all pottery records were fully quantified were included in the regression: 109 scatters were therefore excluded. Six records produced noticeably high residuals: the database records were checked and all found to have been produced by ‘incompatible’ sampling strategies – test pitting and material collected by farmers (see Shennan 1997: 151–5). The database was then searched for any similar records; reassuringly, the regression had identified all those listed as donated by farmers and the product of undifferentiated surface and sub-surface investigation. In particular, it is clear that the former consisted, either of large numbers of a single ceramic type, or a wide range of types each attested by a single sherd. This recommends the use of regression for the identification of particularly anomalous records

from similar datasets. The six records with high residual values were excluded and the regression repeated (Figure 6.19). This produced the following equation:

$$y = 1.343 + (0.030x)$$

$$R^2 = 0.341, n = 661, r = 0.584$$

where y equals the number of different pottery types and x equals the total number sherds per scatter.

The R^2 value of 0.341 effectively indicates that only thirty-four percent of variation within the dataset is explained by the fitted line; however, the large number of samples ($n = 661$) means that the linear correlation coefficient (r) is significant. Therefore, as would be expected, higher numbers of sherds result in a wider range of pottery types. However, two-thirds of variation (66%) between number of sherds and pottery types comes from other sources (e.g. sampling, site status). It was therefore considered that a higher R^2 value might be produced by regressing the total number of sherds and pottery types for individual classes of Archaeological Interpretation. However, this was not found to be the case, increasing suspicion that sampling may be the major contributor to this relationship. Generally, large assemblages are poorly represented within the (fully-quantified) dataset and the significant number of sites where small assemblages have a high diversity of pottery types may be the signature of an unsystematic ‘grab sample’ strategy. Indeed, some sites were revisited to collect more dating material (Barker *et al.* 1978: 42), though these artefacts are not distinguished in the gazetteer.

Overall, the regression emphasises a high degree of variation within the data, both as a whole, and individual classes of Archaeological Interpretation. Combined with those scatters without proper quantification and the apparent inconsistency of sampling, any attempt to construct a new hierarchy on the basis of the pottery data alone is considered inappropriate (see Gillings & Sbonias in press). This was confirmed by experimentation with clustering to assess whether any clear, recurrent groups of ceramic types could be identified. Principal Components Analysis – which seeks to summarise a set of variables with a smaller number of variables and thus assess whether covariation exists – was also explored (see Shennan 1997: 234–60, 269–87). Unsurprisingly, however, the results were distorted by the large disparities in the quantities of different pottery types (see Table 6.14). Although these could have been removed from the analysis, it was felt that the probable inconsistencies of sampling on the quantification of material would invalidate the exercise.

6.2.11 Size & Density

The gazetteer divides both Size and Density into three classes (Tables 6.16, 6.17 respectively) – that is, they are categorical variables. However, as only a single value is provided for each of these variables for each record unit, regardless of the number of periods of occupation, there is no scope for these values to change across the history of an individual site. These values are therefore effectively averages, fixed in one of three categories (section 3.8.4). Quantified data concerning size in hectares is available for around thirteen percent of records. Though biased to the Small category, and inadequate for statistical assessment, the wide range of these quantified sizes is notable, and could only be expected to increase further if more data were available.

In terms of Density, it might be expected that the longer a site was in occupation, the longer the period over which discard could accumulate, and the greater the Density of artefacts. Yet, chi-squared tests (Table 6.18) indicate no relationship between Density and Number of Occupations (1, 2) or Period of Occupation (3, 4). However, the classification of Density for an individual site cannot vary over time – it is only possible to assess variation in the deposition of diagnostic material (section 6.2.10), whilst it is generic coarsewares which effectively determine scatter density (Lewarch & O'Brien 1981: 305).

An alternative approach to Density is to assume variation relates to differential access to material culture. The relationships between Density and both Archaeological Interpretation (5, 6) and Size (7, 8) are statistically significant. However, Size is not a free variable either and Archaeological Interpretation is presumably not technically independent of either Density or Size. Despite this, all combinations of Size and Density occur. Some clear trends include the strong influence of Sporadic data on the relationship (7). However, even when excluded, the association of Size and Density is statistically significant (8); in particular Low Density scatters tend to be larger than expected, though it might be expected that Small, Low Density scatters are harder to find.

Unlike Density, Table 6.19 shows that Size is unrelated to Period (1, 2). Again, as a variable which is not free to vary over time, in effect, it is only possible to see the crudest levels of change (i.e. foundation, abandonment, see Roberts 1996: 117). Despite this, the large number of abandonments and newly-occupied locations make it unlikely that any significant change would be completely disguised by this compression of temporal variation. Where this relationship has been tested, there is no clear evidence for an expansion of size to compensate for the decline in settlement numbers during the Mid- and

Late Roman periods (e.g. Matrice, Saepinum – Lloyd 1995b: 225). Although there is a clear decline in the number of lower status settlement over time, the broad ratios of Small, Medium and Large sites are maintained throughout, even if the actual number declines (cf. Figure 6.3, Table 6.19 (1, 2). This is not the classic signature of *latifundia*, where a change in the ratio of small, but especially medium, sized sites might be expected (e.g. Lewit 1991: 15). In contrast, Size demonstrates some association with the Number of Occupations (3, 4) and Archaeological Interpretation (5), especially when Sporadic data are excluded (6).

More generally, the problems of relying solely on settlement size as an indicator of status can be demonstrated by several examples. The lower valley village of San Giacomo degli Schiavoni (B102) was around twenty-five hectares in extent, and therefore about the same size as the town of Saepinum in the upper valley. In contrast, the Villa of Neratii, near Saepinum, is far larger than many of the villages discovered by the survey. Size alone is therefore not a good guide to status, though contextual analysis of relative size may be of significance (van Dommelen 1993: 174).

6.2.12 Environmental Attributes

A particular interest of the BVS was the relationship between society and environment. Of the environmental variables presented in the gazetteer, the most useful are Geology and Topography: it is unclear whether Elevation has any inherent significance due to localised differences in topography.

6.2.12.1 Geology

Earlier publications of the BVS promoted an environmentally-determined approach to settlement, arguing that the light sandy soils of the valley pre-disposed settlement towards a dispersed pattern (Lloyd & Barker 1981: 292; also Barker *et al.* 1978: 45; also Patterson 1988: 115–6). This perspective is noticeably restrained in the final report.

In the gazetteer, Geology is classified as ten generalised classes. No information regarding their extent or sampling suitable for GIS input, or their potential significance for settlement, is provided (see Figure 4.9j). Again, emphasis is therefore placed upon relative use over time. In this respect, the most significant aspect of their exploitation is their stability of use. The patterns established as early as the Iron Age were largely still present in the Late Roman period (Figure 6.20). These are, of course, percentage use patterns; the overall number of sites declines sharply (see Figure 6.3). The pattern of Geology usage

over time is largely stable, with slight rises or declines in category usage from the Iron Age, peaking or bottoming out in the Mid-Roman period, and reverting to earlier levels in the Late Roman period. The low number of samples for the Mid- and Late Roman periods should be noted (Figure 6.20) and a chi-squared test confirms this lack of statistical significance (Table 6.20 (1, 2)).

Geology had no clear influence on the success or failure of settlement over time; whether it exerted influence on location requires a spatial element (section 6.5.4.1). This stability suggests a thinning of the existing pattern, rather than its replacement. During periods of retrenchment, it might be expected to find poorer land abandoned. This is not the case in the valley as a whole, where all classes continue in occupation in broadly the same ratios. However, this may be a reflection of the generalised nature of the classes under examination or, alternatively, their lack of relevance to such agricultural decisions. More generally, it is unclear whether the minor changes in the relative use of classes relate directly to Geology or to other positively-correlated variables (e.g. topography).

Figures 6.21–6.24 group settlement evidence at each period transition into new, continuing and abandoned in order to illustrate the detail of settlement dynamics in terms of Geological class. These are presented as a ‘stack’ of pie charts to illustrate the changing ratios of class use, though attention should be paid to the actual figures. Patterns – although not statistically significant – include a ‘cycle’ of abandonment and refoundation on the class Predominantly Clays at the transition from Iron Age to Samnite. This may relate to the economy of these sites requiring localised shifts of location. There is also an expansion on Marine Conglomerates and Colluvium. At the transition from the Samnite to Early Roman periods, there is another cycle of settlement, this time on Alluvium, with a large expansion on Predominantly Sands. Figures for the Mid- and Late Roman periods are low, but it is possible to identify an expansion on Limestone and Mixed Sands & Clays, and a contraction on Predominantly Sands and Marine Conglomerates.

A chi-squared test to examine the relationship between the Number of Occupations and Geology indicates no statistical significance (3, 4). In contrast, Archaeological Interpretation demonstrates some association both including and excluding Sporadic data (5, 6). For example, more Sporadic scatters than expected are located on Alluvium and fewer Domestic sites and Farmsteads on Mixed Sands & Clays; there are also less Sporadic and more Villas and Villages than expected on Marine Conglomerates.

6.2.12.2 *Topography*

As with Geology, in terms of percentage use, there is strong stability in the use of classes of Topography over time (Figure 6.25). This might be taken to suggest that neither Topography nor Geology as defined in the gazetteer, at least singularly, exerted significant influence over settlement.

The use of topographical classes over time shows no major change in the percentage usage (Figure 6.25). A rise in settlement on Plateau Edge between the Iron Age and Samnite period continues into the Early Roman period, whilst there was a decline in the use of Slope over the same period. The figures for the use of River Floodplain, River Terrace and Saddle/Col are low throughout, and this may explain their less stable histories. However, a chi-squared test to assess the relationship between Topography and Period (Table 6.21(1, 2)) suggests there is no significant relationship. The Topography of settlement in the Biferno valley can therefore be summarised as largely stable, though less so for the riverine environments (Figures 6.26–6.29).

Topography and Archaeological Interpretation, both with and without Sporadic scatters (5, 6), indicates an association between higher status sites and elevated topographies (Ridge, Spur) suggesting these as preferred settlement locations. In contrast, Sporadic scatters demonstrate a preference for Plain and Basin Floor and Villas for Plateau Edge.

The other main environmental variable listed in the gazetteer is Aspect (9 classes, including no aspect). Again, there is no background data concerning the area of each aspect sampled or their extent within the valley as a whole. Only change over time can therefore be assessed. A chi-squared test suggests there is no relationship between the Period of Occupation and settlement Aspect (Table 6.22). In contrast, there is some association between Aspect and Archaeological Interpretation, both including and excluding Sporadic. There are, for example, more south-west facing Domestic sites and more south-east facing Farmsteads. However, at the generalised level of the valley it is difficult to interpret the potential significance of such patterning. This issue is explored in more detail as part of the Larino case study.

6.2.12.3 *Environmental data summary*

The stability of settlement in terms of environmental variables over time may be read in diametrically opposed ways – either to suggest strong environmental influence or, conversely, its irrelevance. The principal limitation is the lack of information regarding

the spatial diversity of these variables; this is addressed below as part of the Larino case study.

The stability of settlement in terms of the environmental categories defined in the gazetteer may indicate that a range of other factors influenced settlement location, for example, geographical inertia, 'sense of place' and political situation. In particular, it is important to stress that choice of settlement location is rarely free or a purely rational economic consideration. Rather, it is historically- and socially-informed. However, there are some indications of patterning within the data, for example, the preference of Villas for Plateau Edge. These stress the importance of developing the spatial aspect of such work.

The patterning observed is suggestive of a thinning of existing settlement, possibly a nucleation, rather than the abandonment of specific areas of the landscape. The thinning of settlement, rather than its replacement, has implications for the nature of Roman imperialism. At Venusia (section 4.2.2.7), for example, despite the long-term stability in the environmental niches occupied, colonisation was associated with a profound dislocation of individual settlement sites. A similar situation of limited correlation between settlement and environment has been identified at Tuscania (section 4.3.1.6). Here, with the benefit of much improved sampling and spatial control, Barker has suggested environment did not exert any particular constraint or potential for settlement location (Vullo & Barker 1997: 6; see Ager Tarraconnensis Survey – Carreté *et al.* 1995: 243–5). Such an interpretation for the BVS would be interesting given the original emphasis placed upon environment during the survey and its interpretation.

6.2.13 Temporality & Regionalisation of Data

Nearly all of the variables discussed above are influenced by the loss of true temporal variation and 'regionalisation' of data (see section 3.8.4). The definition of Archaeological Interpretation is a particularly good example. It is associated with a range of variables including Period (see Table 6.10, 6.11), Certainty (Table 6.12), Artefact Diversity (Table 6.13) and Size and Density (Tables 6.18, 6.19). However, as the ability of the last three variables to vary over time is effectively fixed, it is apparent that Archaeological Interpretation of individual sites is not free to vary as it should. Although change in Archaeological Interpretation is identifiable between general periodisations (Prehistoric, Classical, Roman), only eleven records – out of over 740 – demonstrate a change of Archaeological Interpretation within the Classical period. This would seem unlikely and is amply disproved by excavation (see Table 4.6). Change, therefore, can only be assessed at

the aggregated level of the region and then inferred back to individual hypothetical sites. For example, the apparent growth in the size and status of settlement through the Classical period is almost entirely the result of the abandonment of smaller, lower status sites. This causes the attributes of a core group of larger, higher status sites to exert greater influence on the average. In reality, there is limited evidence to suggest that any individual pre-existing site increased in size. Consequently, statistical association, such as that between Archaeological Interpretation and Period, must be treated with caution.

Leading on directly from this, is the observation that period transitions with greater change in settlement number and location – that is, abandonment, new foundations and re-occupations – are potentially able to achieve greater change in aggregated or regional settlement characteristics. This is exactly the pattern found; the transitions from the Iron Age to Samnite, and Samnite to Early Roman periods, involve both the greatest change in site location and number *and* the most significant shifts in overall settlement interpretation. This is not to deny that there were major changes in settlement characteristics, but that the visibility of such change between periods is not even.

6.2.14 Spatial Variation

In order to assess the validity of the distinction between upper, middle and lower valley used in the final report, the settlement dynamics for each area are summarised in Tables 6.23–6.25 (their statistical significance is summarised in Table 6.26). These areas are never strictly defined in the report and divisions are therefore made on the basis of comments provided in the text (Barker 1995d: 34; Figure 6.30). The division between the upper and lower valley is particularly arbitrary. Comparison with one another, and Table 6.3, demonstrates the very similar percentages of scatters continuing, abandoned or newly-occupied at the transition from each period to the next. The greatest discrepancies concern the later periods where scatter numbers (and amounts of diagnostic pottery, section 6.2.10) are particularly low and percentages may disguise or exaggerate the strength of patterns. Probably the strongest pattern is the low percentage of abandonment and high percentage of new sites at the end of the Mid-Roman period in the middle valley. Those figures relating to the Iron Age, Samnite and Early Roman period demonstrate particular similarity.

To broaden this analysis, chi-squared tests were used to assess whether scatters from the upper, middle and lower valley demonstrated such similarity in terms of a range of variables (Table 6.26). A chi-squared test to assess the independence of scatter location

(i.e. upper, middle, lower valley) and Period differs from an investigation of the processes or dynamic through which those numbers were created. It takes each period as a static snapshot, with no assumption of chronological order, and assesses whether there is significant difference in the overall number of scatters in each area.

This demonstrates that there are more Iron Age scatters than expected in the middle valley, more Samnite scatters in the upper and lower valleys, more Mid-Roman in the upper valley and more Late Roman in the middle valley. The Cramer's V^2 shows this association is far from absolute, but it indicates that the apparently minor differences (Tables 6.23–6.25) can lead to overall change in the distribution of settlement across the valley.

In contrast, there is no clear difference between the upper, middle and lower valley in terms of the distribution of sites at which the four basic diagnostic ceramics occur (2). Although the amounts of pottery consumed on individual sites may have varied (i.e. the test uses simple presence or absence), the ratios of scatters at which each type of pottery is identified is even by period and area. There are significantly more scatters in the middle valley with five or more artefact types (3), with more than expected scatters of a single type in the upper valley. The distribution by Number of Occupations is only just significant, with a greater than expected number of scatters of three and five occupations in the middle valley (4). There are more than expected Large scatters in the lower valley, and more Small scatters than expected in upper valley (5); Density is also only just significant (6). The disproportionate number of Large scatters in the lower valley, may relate to the greater than expected number of Sporadic scatters in the area and more intensive agricultural practices (7).

It is clear that there are differences between upper, middle and lower valley. However, these are by no means large. Overall, there is no inherent reason that any of these variables should not be free to vary by several orders of magnitude across the three areas. There is even less still that the processes of abandonment, continuity and foundation should be so similar, especially given wider knowledge about changes in settlement patterns (e.g. hillforts, colonisation, urbanisation) and the ways in which pottery types were produced and marketed. This might be explained in two, not necessarily mutually exclusive ways. The general similarity of the distribution of settlement across the valley indicates that each area was participating in the same general trends (e.g. population growth, agricultural intensification). It is not possible to argue that each area underwent a different series of processes which, by chance, led to a similar ratio of settlement, as the processes of abandonment, continuity and foundation were clearly similar. Indeed, these trends are so

similar as to suggest the possibility that, rather than mapping settlement *per se*, the distribution of scatters is a product of diagnostic pottery – that is, these figures are an artefact of the relative visibility of the different types. For example, Black Gloss is visible on *circa* three times more sites than *impasto* and twice as many as Italian *terra sigillata*. They are, therefore, so generic in their distribution as to be synonymous with the identification of settlement in – and hence the processes behind – each period (see Terrenato 1998a: 25).

As stressed above, there is no inherent reason that amounts and ratios of pottery should not vary across upper, middle and lower, but these would have to be significant changes in order to register. Consequently, it might be argued that the general similarity identified across the valley is the result of a combination of genuine patterning and its suppression through reliance upon a set of standard ceramics. The greatest changes in settlement pattern concern those sites least suited to survey work – hillforts, towns, sanctuaries – but which exert disproportionate influence on overall settlement and demographic patterns. This stresses the importance of fully integrating these data with the rest of the settlement hierarchy (Chapter Seven).

6.3 *Biferno Valley Survey Summary*

The above analysis provides the basis for a critical re-examination of the BVS data. On a general level, there must be some suspicion about the similarity of the type and date of settlement shift throughout the valley. The transition from the Iron Age to the Samnite period represents a significant increase in the spatial density of settlement, suggesting a period of population growth and agricultural intensification. However, this transition is also marked by a substantial rise in the amounts of diagnostic pottery in circulation. Theoretically, this is likely to lead to an increase in the visibility of scatters, but especially smaller sites and off-site or Sporadic material – this is exactly the pattern found. The preponderance of small, single-phase scatters, combined with the length of the period, also suggests a degree of settlement mobility within the Samnite period leading to a palimpsest.

The continuity between the Iron Age and Samnite settlement pattern, as indeed between all subsequent periods, relates specifically to the continuity of individual locations; in terms of the overall settlement numbers, there are significant discontinuities. However, this is not clearly reflected in environmental considerations, which may suggest a thinning of settlement, with maintenance of the same spatial extent. This tension between the continuity and discontinuity is mirrored by the contradictory influences of methodology.

Whilst the differing visibility of pottery promotes discontinuity, the compression of diversity creates continuity.

The transition from the Samnite to Early Roman period is characterised by a dramatic decline in settlement numbers. As with the Iron Age/Samnite transition, there are considerations that mitigate the strength of this pattern. The overall amounts of Early Roman diagnostic material in circulation are considerably lower, reducing visibility. However, the tighter chronologies for Roman finewares and a wider range of coarsewares offer compensation. More generally, the Early Roman period is substantially shorter than the preceding period, lowering the possibility of palimpsests. This observation is supported by the limited number of single occupation Early Roman period sites. Overall, therefore, this transition may be significantly less dramatic than the raw figures suggest. Combined with the strong continuity in terms of individual sites, this transition is best interpreted as a rationalisation of the existing settlement patterns. The possible under-representation of Early Roman off-site or Sporadic scatters therefore makes it difficult to apply the Davis/Halstead model (see section 5.3.2) and suggest any significant decline in the intensity of agriculture or decline in population.

The transition to the Mid-Roman period demonstrates another significant decline in the number of settlements. Again, there may be a reduction in visibility of sites because of the lower amounts of diagnostic material in circulation. However, this is limited in comparison to the difference between the Samnite and Early Roman periods. There is a similarly slight increase in the amounts of diagnostic material during the Late Roman period, accompanied by a slight increase in the number of sites. Many, however, were abandoned long before AD 600. The thinning of the settlement pattern during the Mid- and Late Roman periods presents a more compelling case for major agricultural and population change (possibly estate agglomeration/*latifundia* – Patterson 1987: 144). However, the likely under-representation of Mid-Roman settlement needs further research.

Overall, therefore, it can be seen that the patterns identified on the basis of site numbers alone are subject to contradictory influences simultaneously promoting continuity and discontinuity. In each case, visibility or the compression of variation serves to intensify existing trends making their significance more or less apparent. On the basis of limited quantifiable evidence, and even ‘anecdotal’ metadata, it has been possible to improve significantly understanding of the creation of this dataset, and hence the historical development of the valley. Although this work may not permit the ‘unbiasing’ of the

database – an untenable proposition for any data – it is possible, through the recognition of the influence of methodology, to facilitate more detailed interpretations.

6.4 Larino Case Study

6.4.1 Introduction

The final half of the chapter develops a case study, in order to explore in more detail some of the issues raised by analysis of the wider database. The modern town of Larino is situated *circa* twenty-one kilometres from the Adriatic coast, on a spur around five kilometres from the Biferno (Figure 6.2). Although now a relatively small town of c.8000 inhabitants, its Samnite and Roman predecessor, Larinum, lying above and about one kilometre to the west of the modern town, dominated the lower valley⁴.

6.4.2 Aims & Objectives

The choice of the Larino area was based on several considerations. First, the relationship between town and hinterland, as stressed in section 5.4.3, is central to consideration of Roman imperialism. A case study of the Larino area challenges the specifically non-central place model adopted by the original survey. In particular, Lloyd (1995a: 212) and Dench (1995: 121) both claim that, within the valley as a whole, the impact of Rome would have been felt most acutely around Larinum. This is an interesting suggestion given, for example, its comparative distance from Rome and the colonisation of the upper valley. At Larinum, there is limited evidence for direct Roman intervention in the form of colonisation, centuriation or road building. This focuses attention on the development of the vernacular landscape and the emergence of Larinum as an urban centre. Finally, further consideration of survey methodology and its influence upon results was considered important. The recently published *FI* volume for Larino (De Felice 1994) provides the opportunity to compare between two surveys of the same area.

6.4.3 Case Study Area Definition

The shape and extent of the study area (Figure 6.31) were dictated by a series of pragmatic issues. In order to minimise boundary effects and emphasise spatial relationships, a contiguous block of land was preferred to transects (cf. Bertoncello 1992). The extent of

⁴ Accordingly, 'Larino' is used with reference to the modern town and case study area, whilst 'Larinum' is retained specifically for discussion of the Samnite and Roman centre.

the study area was a compromise between ensuring it was sufficiently large to observe patterns of interest, whilst minimising the digitisation of un-surveyed areas.

The territory of Larinum is believed to have included the area west of the Biferno and north to the coast. To the south, it bordered Fagifulae's territory (De Benedittis 1991d; 1997: 15) and to the east, that of Teanum Apulum (Lloyd 1995b: 227; also Stelluti 1988: 22). The town's territory therefore focused more strongly towards the coastal plain rather than the hilly interior. The study area comprises *c.*130km² in the immediate vicinity of Larino and is therefore substantially smaller than the hinterland's supposed extent. However, for the purposes of identifying and exploring immediate town/country relations and general settlement shift, this area was considered sufficient.

The spatial intersection of the BVS and *FI* surveys forms the core of the study area; this comprises the IGM 1:25 000 Larino map sheet (FO 154 II NE). This area was enlarged with the inclusion of all land south of the Biferno on the Guglionesi sheet (FO 154 I SE). The aim was to include a variety of topographical and environmental units, and a range of different combinations of survey coverages – in particular, the area covered by the Guglionesi sheet is not included in the *FI*. The result is an irregular shape, stretching from the foothills in the south, down across the Piano di Larino, to the Biferno in the north.

6.4.4 Historical Context

Larinum was the principal town of the lower Biferno valley and wider Frentanian area. Strabo (5.4.2) claims the Frentani originated from a Samnite *ver sacrum* and links between the areas remained close (also Pliny *HN.* 3.105). Larinum is first mentioned in association with the Samnite Wars (Livy 22.8.24, 27.40.43), though there is no indication the lower valley was the focus of any military activity (general Samnite history – Cornell 1995: 345–62; De Felice 1994: 23–34; Stelluti 1988: 20–33; Tagliamonte 1996: 136–56, 297–302). Following the brutal suppression of Aequi, the Frentani surrendered to Rome *c.*304 BC, the town probably receiving *foedus* status at this time (Livy 9.45.1–4; Di Niro 1991a: 134). Subsequently, the Frentani were involved in the Pyrrhic War. Further military activity is attested during the Hannibalic War (Polyb. 3.100–2) and in the aftermath of the Social War (Cic. *Clu.*) and the Sullan reprisals (App. *B.Civ.* 1.95–103).

Nonetheless, following the Social War, the integration of the town into the Roman state intensified, with the granting of municipal status (Pliny *HN.* 3.103–7; De Felice 1994: 42); Octavian (later Augustus) became a patron of the town in the 30s BC (Lloyd 1995b: 249). Under Augustan administrative reforms, Larinum and the Frentanian area were formally

divided from Samnium by their inclusion in *regio II* (Apulia) rather than *regio IV* (Sabina & Samnium). The reasons for this decision are debated – it may reflect a genuine distinction from the Samnites or, conversely, have been intended to weaken relations.

The best known appearance of the town is in Cicero's *Pro Cluentio*. The text concerns a trial in 66 BC, though the events described concern the immediate aftermath of the Social War and the Civil War of Sulla and Marius. These concerned an alleged act of poisoning by Cluentius, a knight from the town, and the violent overthrow of the town's *quattorviri*. In particular, the text refers to agricultural estates around the town, indicating the presence of slaves and pastoral activities (e.g. Cic. *Clu.* 161, 198). However, the identification of slavery and pastoralism in the archaeological record is problematic. In particular, the recognition of the latter, especially long-distance transhumance, may not be suited to low intensity survey. Notably, the emphasis placed on the role of pastoralism in earlier BVS publications is not repeated in the final report. For example, it had been suggested that the large settlements on the Piano di Larino may have been 'sheep stations' or estate centres for 'big business' pastoralism (see Varro 2.2.9; Barker *et al.* 1978: 48). Indeed, the town lies on a *tratturo*, or transhumance route, between the Tavoliere and Abruzzo. However, in the final report, these sites are classified simply as Villas, without mention of their possible involvement with pastoralism. In part, at least, this may relate to the realisation that the soils of the Piano are not as unsuited to ancient cultivation as first thought (*ibid.*: 45). Not least, if Sporadic data do represent agricultural activity, the plain was extensively cultivated.

Historical sources for the imperial period, as with most areas of Italy, are comparatively limited, though epigraphic evidence in part compensates for this. Inscriptions from public monuments and buildings attest to intensive euergetism and the increasingly close relationship with Rome (see section 6.4.5).

6.4.5 Urban Evidence

Larinum is situated on the Piana San Leonardo, a plateau mid-way along a spur c.300 metres above the Piano di Larino and Biferno river (Figure 6.32), at a location at once defensible and accessible. It also forms a local and regional communications centre (Coarelli & La Regina 1993: 300–4; De Felice 1994: 34, 40) – the Roman coastal highway detoured inland to incorporate the town (Lloyd 1995b: 214).

The Iron Age evidence attests activity (mainly funerary) along much of the spur, with a clustering of settlement sites in the wider area (see Figure 6.4; Barker & Suano 1995: 163). By the fifth century BC, the material from these burials, such as South Italian fine pottery, suggests the Larino area was a regional entrepôt (Lloyd 1995a: 185) and that social stratification, in the form of a warrior aristocracy, had developed. From the end of the fifth century BC, there is more evidence for domestic activity. By the fourth century BC, the development of Larinum itself is indicated by private domestic structures, a sanctuary/temple and a street plan, which persisted into the imperial period (Coarelli & La Regina 1993: 301; De Felice 1994: 39–40; Tagliamonte 1996: 105). The funerary evidence suggests enhanced social stratification (e.g. Faustoferri 1989). During the third and second centuries BC, the settlement underwent significant expansion, developing as a major urban centre with public buildings, monuments and evidence for metalworking and ceramic production (De Felice 1994: 40–2; Di Niro 1991a: 133; Lloyd 1995a: 197; Tagliamonte 1996: 162). From c.270 BC, the town also issued its own bronze coinage with a variety of legends in Greek, Latin and Oscan (ΛΑΡΙΝΩΝ, LARINOD, LARINEI) (Cantilena 1991: 141; Lloyd 1995a: 197; Tagliamonte 1996: 162).

The settlement's urban status was enhanced through the construction of a substantial *agger* around the northern and eastern side of the site, supplemented with stretches of polygonal masonry. The *agger* was in existence by at least the third century BC, though on analogy with other (hillfort) centres, may have been constructed earlier, during the fourth century. Several distinct phases have been postulated, starting as early as the seventh/sixth centuries BC with a final phase of reconstruction during the first century BC (De Felice 1994: 40–1, 109–11). The structure exploits the topography of the site to produce a formidable boundary, providing both a defensive structure and impressive status symbol. At five kilometres in length and enclosing *circa* ninety hectares, the site bears comparison to Monte Pallano (*ibid.*: 43; Faustoferri & Lloyd 1998: 19). The actual urbanised area, at *circa* thirty-three hectares, compares favourably with Alba Fucens.

From an early stage, Larinum appears to have exerted a strong centralising influence over the area. For example, several extensive regional necropoleis were disused after the fourth century BC (e.g. Termoli). In part this relates to a general change in funerary practice, though on a more localised scale, the necropoleis in the immediate vicinity of Larinum were refocused on the town (Di Niro 1991b: 267). Remaining rural burials were

‘decentralised’ to small settlement-specific cemeteries (e.g. A121, A249, A269; see Lloyd 1995a: 201). The strong centralising influence of the town is also indicated by the limited evidence for (rural) sanctuaries in the lower valley (*ibid.*: 199–200; Figure 6.12). This contrasts with the upper valley and the extensive evidence for religious structures at Larinum itself (e.g. second century BC temple complex – Coarelli & La Regina 1993: 304).

The development of Larinum as a regional centre presupposes a substantial increase in urban population; there was also a significant contemporary expansion of rural populations. The majority of pre-existing villages remained in occupation, though none underwent the same urbanisation as Larinum. Despite its size, substantial structures and its possible role as a local market centre, San Giacomo degli Schiavoni (B102 – Barker *et al.* 1978: 41), on the opposite bank of the Biferno, did not share the same urban status as Larinum. Indeed, the very size of Larinum’s territory suggests the need for *pagus* centres (of which San Giacomo might be one) for the administration of outlying areas. New villages – and later, towns – were restricted to the upper valley (Figure 6.5).

Larinum appears to have developed urban characteristics early in comparison with other Samnite centres (De Felice 1994: 42). Several reasons have been proposed: favourable geographical location in terms of resources and contacts with Apulia and Magna Graecia, comparative isolation from military disruption, and the Frentani’s status as *civitas foederata* (Di Niro 1991a: 134; Lloyd 1995a: 182; Oakley 1995: 148). The influence of Rome is also indicated by use of Roman coinage and political terminology, and the Latin language, during the second century BC (Lloyd 1995a: 211). As a result of the town’s ‘unusual’ development, comparisons have been made to Samnite Pompeii on the Tyrrhenian coast (*ibid.*: 209; Rathbone 1992), rather than much closer centres such as Monte Vairano.

During the early imperial period, Larinum was extensively remodelled and monumentalised through the munificence of the local élite and *Augustales* (De Felice 1994: 45). Several local families achieved senatorial status at Rome, including the *Vibii* during the early first century AD (Wiseman 1971: 274). The most impressive of these monuments is the extant brick amphitheatre donated by a senator (*Capito*) during the late first/early second century AD (De Benedittis & Di Niro 1995: inscription 1; De Benedittis & Gaggiotti 1995; Lloyd 1995b: 225; Figure 6.33). There were also baths, a forum and other monumental structures. Early imperial wealth is also reflected in domestic buildings, attested particularly well through mosaics (Stelluti 1988: 33). Despite the town’s

involvement in wider urban trends, no ‘Roman-style’ town walls were constructed and the Samnite (earthwork/polygonal masonry) *agger* was apparently retained. This may relate to the comparatively late date at which the élite of the town – and of Samnium more generally – became involved with such munificence. The main period of wall construction was the late Republican period (section 5.4.2.3). The archaeology of the later Roman town is less clear, though occupation continued into the early medieval period (Lloyd 1995b: 238).

6.4.6 Data Preparation & Entry

The fieldwork for the *FI* volume was conducted, intermittently, between 1969 and 1989 (De Felice 1994: 11); the BVS was completed between 1974 and 1978. However, the precise relationship between the two projects is unclear – neither directly references the other, though both were in press at the same time.

As discussed in section 6.2.1, some BVS gazetteer entries were combined to create a single record for each individual site. However, as a central aim of the GIS analysis concerns spatial relationships with the *FI* data, it was considered important to re-divide such records into their constituent parts. Only one example was located in the study area, C257–C264: this was re-divided into its eight components for analysis of the relationship between the BVS and *FI* data, but retained as a single ‘site’ thereafter.

The *FI* records were assigned unique numbers, both internally, and in relation to the BVS database. Records related to the ancient and modern urban areas were also given identifiers to allow them to be included or excluded from analysis as necessary. Clearly, they relate to a specific archaeological context and derive from different methodologies (principally, urban excavation). The periodisation and artefactual evidence were ‘standardised’ according to the more explicit criteria of the BVS gazetteer (Barker 1995b; see Table 6.27) – these judgements were made explicitly and consistently, with any doubt accommodated by Boolean certainty fields. However, interpretations such as ‘Villa’ could not be reassessed on the basis of the available evidence. As with the Archaeological Interpretation field of the BVS, the surveyor’s classifications must stand. Another issue concerned confusion over the basic unit of record (or entity). In contrast to the BVS gazetteer, the *FI* varies inconsistently between groups of archaeological material (e.g. settlement/artefact scatter) and specific items (e.g. individual structures within sites). This problem was addressed by taking the archaeological group as the basic unit and organising individual items around them (Figure 6.34). The lack of consistent and quantified data regarding artefactual evidence means the structure is very simple.

The *FI* data demonstrate greater diversity than the BVS – for example, there are far more classes of Archaeological Interpretation. This limits the statistical analysis that can be undertaken. However, rather than forcing these data into the fewer categories of the BVS, a hierarchical structure was used to group records into increasingly generic groups. The broadest of these categories – Function – was also added to the BVS database in order to form a common field for comparison. Although versions of the databases were integrated as part of an assessment of the data recovered, these were greatly simplified and risked excluding detail and obscuring their methodological contexts. The majority of analysis therefore concerns the individual databases.

No grid references are provided by the *FI*; scatter locations were therefore digitised from the IGM 1:25 000 map. Although scatters are represented as areas, the hatching used (deliberately) avoids the demarcation of spatial extent with any precision. Combined with the comparatively small map scale, attempts to define and digitise areas were considered inappropriate and a centre point was taken for each. The derivation of grid references for the urban area was complicated by the presentation of this information on a 1:10 000 map with no (IGM) grid references. This required the map to be geo-referenced through the identification of features on both maps (1: 10 000, 1: 25 000) in order to tie this area into the IGM grid and derive location data. Such mixing of scales, and the methodology itself, is undesirable from a theoretical perspective (Vullo & Barker 1998: 4b), though no alternative was available. The extent of each survey coverage was digitised and then overlaid, to define a series of coverage combinations: no coverage; coverage by *FI* only; coverage by BVS only; and coverage by both *FI* and BVS. All of the BVS coverage within the case study area is classified as of intermediate survey intensity (see Box 4.8). There is no indication of any variation in the intensity of *FI* coverage.

A Digital Elevation Model (DEM) was derived from the IGM 1:25 000 map using twenty-five metre contours and spot heights to create a grid or raster coverage based on twenty metre cells. Additional five metre contours were used for subtle topographical features such as river terraces. From the DEM, a range of other data were derived including elevation, aspect, slope, drainage basins and ridge lines. Roads, springs and rivers were digitised from the 1: 25 000 map; geological data were taken from the IGM 1: 100 000 series. No land use data were available in a usable format (see Figure 4.49k).

The basic software used was PC Arc/Info 7.1 for data input and processing (e.g. DEM construction, patching maps). Digitising was completed on an A0 Calcomp Drawingboard III and PC and data then transferred to a more powerful Windows NT 4.0 workstation for

Arc/Info analysis. Some coverages were then exported for analysis in the raster-based package Idrisi for Windows 2.0. ArcView 3.1 (with Spatial Analyst extension and Avenue Scripting) was utilised extensively for further manipulation of data and, in particular, for its ability to communicate efficiently with both Arc/Info and Access (7.0), the latter through an SQL connection facility. Statistical analysis was completed in ArcView, Idrisi, Minitab and Excel. ArcView was also used as the primary means of on-screen data visualisation and of creating printed output.

6.5 Analysis

6.5.1 Larino Compared to Biferno Valley

As a preliminary analysis of the similarity or difference of settlement around Larino in comparison with the rest of the valley, all records within a ten kilometre radius of the town were reselected from the BVS database (see Figure 6.30). The dynamics behind these settlements are shown in Table 6.28. The similarity of settlement trends between the whole BVS database and this subset of records is strong (Table 6.3). The only deviation of any note concerns the transition from the Mid- to Late Roman period, which demonstrates comparatively lower abandonment and more new/reoccupied sites.

A series of chi-squared tests show that there are more than expected scatters occupied in the Iron Age and Samnite periods under ten kilometres from the town and more Early and Mid-Roman scatters over ten kilometres (Table 6.29(1)). There is no difference between areas under or over ten kilometres from the town in terms of basic diagnostic pottery (2). Areas close to Larinum had more than expected classes of high Artefact Diversity and areas over ten kilometres had more scatters with just one or two artefact types (3). The Number of Occupations does not demonstrate any significant association with scatters under or over ten kilometres (4). There are more Large scatters closer to Larinum than over ten kilometres (5), though Density does not show any association (6). The former probably relates to the higher than expected number of Sporadic scatters closer to the town, and the larger number of Domestic sites over ten kilometres (7).

Together these tests suggest that Larinum does not appear to have exerted any particular influence over the distribution (in terms of presence and absence) of diagnostic finewares. However, the higher Artefact Diversity suggests that individual sites in the area had access to a wider range of artefact types (not necessarily purely diagnostic, given the similarity of Number of Occupations). However, the concentration of Iron Age activity around the

town may relate to the origins of Larinum and the larger number of Samnite sites (along with their Large Size and Sporadic Archaeological Interpretation) suggests greater agricultural intensification in the area.

A significant problem with the interpretation of these settlement dynamics is that they are based purely on settlement numbers – they take account of neither settlement type, nor location. As such these tables present a useful point of departure for crude comparison with the wider database, serving to raise questions for further investigation. There are indications of difference between the immediate hinterland of Larinum and the wider valley. However, it should be noted that the difference, as with the distinction of upper, middle and lower valley (section 6.2.14), is still not particularly stark. The same basic trends and processes are clearly in operation. The difference is only one of degree. Whether this is a methodological issue is addressed below. In subsequent analysis, the case study area relates to that defined in section 6.4.3.

6.5.2 Spatial Intersection

The first issue addressed concerns the spatial overlap of the two surveys and a comparison the number and distribution of individual records identified by each. The spatial extent of the survey coverages is shown in Figure 6.35 and the numbers of records and their calculated densities summarised in Table 6.30.

The variety in the number of records and densities identified is of some interest. In particular, in the area covered by both surveys, the *FI* identifies *circa* fifty percent more records than the BVS. This disparity must relate to differences in survey objectives and methodologies and/or in the archaeological record itself. For example, the rapid erosion of surface material was noted at several sites subject to resurvey by the BVS (Lloyd & Barker 1981: 290). It is possible that surface archaeology changed considerably over the extended duration of the *FI* survey. Another reason for the discrepancy may concern the more comprehensive nature of the *FI*, which includes all known archaeological evidence, as well as those recovered through specific survey. Differences in site definition may also be significant – it is possible that some of the *FI* records would have been grouped together as individual sites by the BVS.

A final consideration is survey intensity; the recognition of a larger number of locations might suggest that the intensity of the *FI* was higher than the BVS (see Schiffer 1987: 146–50). As such, extension of the *FI* coverage to the area covered by the BVS alone (the Piano di Larino), might be expected to identify more, and smaller, scatters. In particular, it

might supplement the limited evidence for funerary sites, a problem recurrent throughout the BVS database.

In order to compare the size of scatters recorded by each survey, those *FI* data with recorded size were reclassified into the BVS categories (Table 6.16). A chi-squared test was then used to assess any difference between the datasets (Table 6.31). Notably there are fewer Large *FI* scatters than expected and more Medium-sized ones; the reverse situation was found for BVS records. However, there is no apparent difference in the number of Small scatters recognised. If the *FI* were of higher intensity, the greatest discrepancy between the two surveys might be expected to relate to this category, through its enhanced ability to identify small, unobtrusive scatters.

Another means of comparison is the ratio of sites of different obtrusiveness. Excluding urban data, the *FI* identified twenty-one standing structures out of 291 records (c.7.22%); in comparison, the BVS identified a single structure from 189 records, or less than one percent. On this basis, it might be suggested that the *FI* had the higher intensity. However, it is also clear from Table 6.30 that there is some spatial variation in the density of scatters identified by each survey. Most notably, the BVS records a higher density for the areas covered by it alone (the Piano di Larino) in comparison to areas also surveyed by the *FI* (the ridges around and to the south west of Larino). Assuming the intensity of each survey was internally constant, this variation must relate to spatial patterning within the archaeological record or its post-depositional disturbance. This is supported by a chi-squared test (Table 6.32) which suggests that those BVS scatters identified in the area covered by the BVS alone are significantly larger than those identified in the area covered by both surveys. There are also fewer than expected Medium Density scatters suggesting a possible polarisation between extensive off-site and intensive site activity. Surface archaeology on the Piano di Larino therefore appears to be slightly more obtrusive than that from further south.

Variation in the results of these surveys is therefore related to both methodological differences and the spatial (and possibly, chronological) diversity of the archaeological record itself. The *FI* has limited inferential power, as its sample and total populations are effectively the same. In contrast, the BVS does not provide any sophisticated means of moving from sample to total populations (e.g. through stratification) and is therefore similarly limited in inferential power, given the diversity noted within the sampled area. Neither survey can therefore provide formal insights into the archaeology of unsurveyed areas.

Having identified general differences in the evidence identified by each survey, the next step was to identify any 'duplicate' records for those areas investigated by both surveys. Using Arc/Info buffering and intersection commands, all records from one database located less than 150 metres from records in the other were identified and extracted from the database. The 150m cut-off is purely arbitrary and was chosen with reference to the precision of BVS gazetteer grid references (25m) and consideration of average scatter size. The results are shown in Table 6.33, along with a 300m cut-off point for comparison. The spatial distribution of these data is shown in Figure 6.36.

Only around twenty percent of each survey's records lie within 150m of one another and only forty percent within 300m. Given the surveys' claims to systematic coverage, these figures are low. The database attributes of each group of records were then compared. In those cases where records clearly referred to the same archaeological feature, entries were combined, using data from both, to create the most comprehensive record possible. In some cases, it was possible to use the evidence of one record, to improve knowledge of another. However, only a minority of records clearly referred to the same archaeological features. The remaining examples were therefore visualised in relation to a range of information derived from the DEM in order to assist interpretation. For example, Sporadic scatters found directly below large sites on steep slopes were considered likely to represent either an extension of the site or erosion of it. These cases were combined into a single record. Where doubt remained over the relationship between records, they were kept separate. A total of 659 records from the two separate databases (BVS $n = 189$; *FI*, $n = 470$) was reduced to 614 unique records⁵.

In effect, therefore, only five percent of the total records for both surveys were considered to relate to the same archaeological unit. Excluding the urban records of the *FI*, this figure is still less than ten percent. As discussed above, erosion of the surface archaeology may explain locations only identified by the BVS, though there is an equal number of locations only identified by the *FI*. Although the BVS claims only a fifty to seventy-five percent coverage of transects, the selection of fields on the basis of accessibility and visibility, make it unlikely that a completely different sample was explored.

Examination of the different periods and interpretations within each database strengthens this impression of diversity. It is clear that the BVS was more prepared to interpret than

⁵ C257–C264 was also recombined as a single site. Subsequent analysis of the BVS database therefore has 182 records.

the *FI*, where around half the records (excluding urban data) are ‘Unclassified’ in terms of date and function. Hardly any records are dated to a single phase of occupation, with emphasis on generic periods (Table 6.34). Notably, these are categories of limited usage in the BVS and this serves to stress the different contexts in which these surveys were completed – British academic research and Italian CRM.

Like the BVS, scatters where Black Gloss occurs, clearly outnumber those with diagnostic material from the Roman period (72 locations with Black Gloss, 3 with Italian *terra sigillata*, 7 with African Red Slip, including urban records). However, the number of locations with diagnostic material is considerably lower overall (cf. c.16% including urban records, c.42% for BVS). There are no figures for the actual abundance of artefacts and it is therefore difficult to assess whether the low number of dated sites relates to a lack of diagnostic material or an inability to identify its presence. As a result of this limited dating, the *FI* data are unsuited to several of the following tests.

Dating aside, the limited interpretation of settlement status and function in the *FI* is less easy to explain. On the basis of text descriptions, a large number of Unclassified records cannot simply be dismissed as off-site material and there is a genuine difference between the surveys in their willingness to commit to (or impose) interpretation. However, the *FI* is far more prepared to use the term ‘Villa’ than the BVS (cf. *FI* 5.27%; 2.57% for whole Biferno Valley Survey; 1.65% for the Larino study area). Just under fourteen percent (13.73%) of *FI* records concern funerary sites (tombs, cemeteries), compared to around two and a half percent (2.43%) of BVS records.

The two databases are therefore fundamentally different; a range of reasons may be relevant. The most obvious explanation is that the *FI* includes all previously-known archaeology, whilst the BVS only includes data specifically collected for the survey. Another likely influence is that coverages are not of the full extent claimed and/or that sampling was uneven. For example, neither survey explicitly considers visibility. Erosion and inter-annual variation in surface material are further possible influences. As such it is clear that neither database alone can form the basis of an in-depth analysis of either the area or its settlement hierarchy. Omissions in spatial coverage and types of material recognised mean that each possesses different strengths and weaknesses. As such, they must be considered complementary, each serving as a ‘control’ for the other, facilitating its characterisation. However, they cannot simply be integrated into one large database and used as a uniform or comprehensive dataset. For this reason, the majority of subsequent analysis retains the databases as separate entities.

6.5.3 Basic Statistics & DTM/GIS Analysis

The most significant aspect of both datasets, is the large number of undated or generically-dated scatters. Figure 6.37 illustrates the distribution of these. Disregarding the complexity of material from the site of Larinum itself, it is clear that although the *FI* fills out the areas not surveyed by the BVS, many of these scatters are generic (e.g. Classical) or even Unclassified. It would seem, however, that Hellenistic material has a more even distribution than Protohistoric, generic Roman and even Classical scatters. On the basis of the results from the analysis of the BVS data (see section 6.2.10), this may well relate to the greater abundance of diagnostic material from this period.

Given the imprecision of *FI* dating, Figure 6.38 presents the *FI* and BVS data by Archaeological Interpretation only. The distribution of BVS Archaeological Interpretation by Period has already been illustrated, at a smaller scale, in Figures 6.4, 6.6., 6.8, 6.10, 6.11. Perhaps the most significant pattern to emerge in Figure 6.38 is the emphasis on funerary activity, especially around Larinum. There is also a substantial increase in the number of villas particularly between Larinum and the Biferno. Another village site is also recorded south of the town; this is also included in the BVS gazetteer, even though it lies outside the area supposedly sampled. Its recognition, however, supports Schiffer's assertion about the relative visibility of larger, more obtrusive sites. More generally, it is apparent that all areas of the landscape were used, with a particular concentration of activity around Larinum itself. As discussed in section 6.2.12.2, a preference for raised topographies can be detected in the alignment of settlement with ridges and limited activity in the immediate vicinity of the Biferno and Cigno.

In order to give some indication of chronology of the *FI* data, records were grouped into four broad classes; these are shown in Figure 6.39 (excluding Unclassified scatters, see Figure 6.37). The overwhelming pattern is the lack of scatters with both Pre-Roman and Roman occupation. This lack of continuity contrasts sharply with evidence from the BVS, which emphasises the continuity of individual sites, if an overall reduction in their numbers. The other classes appear more evenly distributed, perhaps with an indication of a lack of pre-Roman activity on the edge of the Piano di Larino, especially in the north east corner of the survey area.

The dynamic of BVS settlement patterns, as represented by the four basic period transitions, is represented in Figures 6.40a–d (this provides a spatial component for Table 6.3). The transition from the Iron Age to the Samnite period (Figure 6.40a) demonstrates

limited settlement abandonment, distributed across the entire area. However, new settlement is clearly focused around Larinum, on the spurs and terraces overlooking the Piano di Larino and the Biferno and, especially, on the plain itself.

The transition from the Samnite to Early Roman period (Figure 6.40b) demonstrates an equally impressive abandonment of settlement in the same areas. Continuing locations are evenly spread, whilst the few new settlements are focused in the hills to the south. The shift from the Early to Mid-Roman periods, illustrating the limited numbers of settlement in this period (Figure 6.40c), shows no clear distribution of either continuing or abandoned sites. Finally, the transition from Mid- to Late Roman (Figure 6.40d) mirrors that between the Samnite and Early Roman periods, with several new settlements emerging in the hills south and west of Larinum, with minimal activity on the plain.

Something of the instability of settlement on the plain can be seen through the distribution of settlement by the Number of Occupations (Figure 6.41). Single period occupations clearly focus on the Piano di Larino with longer-lived settlements in the hills further south. However, there are two notable clusters of longer-lived activity on the plain. The first – the most northerly – represents an Iron Age and Samnite period focus; this was abandoned by the Early Roman period. Meanwhile, another cluster of sites – including two villas – had emerged around two kilometres to the south west during the Samnite period. Some of these remained in occupation into the Late Roman period, forming the main settlement focus of the plain during these periods.

It is unclear whether any of these settlements were in occupation throughout the entire periods in question. More generally, there is no indication that settlement in the immediate vicinity of Larinum (see Table 6.29 (4)) was any more or less long-lived than others. Possibly, settlements to the south and west of the town have a higher number of multi-period sites in comparison with the plain. Various reasons may be suggested. If, for example, the major expansion of settlement on the plain during the Samnite period indicates agricultural intensification, then its limited use in other periods may indicate extensive regimes, retrenching back to ‘traditional’ strategies in the hills.

6.5.4 Environmental Considerations

Through the construction of a DEM and digitisation of a geology map, it becomes possible to assess the BVS data in terms of the environmental attributes emphasised during the survey and its interpretation.

6.5.4.1 Geology

The classes of Geology provided by the BVS gazetteer are based on a generalisation of the 1: 100 000 IGM geology map. This map was digitised, with no grouping of different categories, and Geological classification regenerated for the BVS records through a simple overlay exercise. This information was also generated for the *FI* records. The new classes of Geology, their characteristics and relationship to the BVS categories are listed in Table 6.35; their spatial distribution in relation to BVS and *FI* records is illustrated in Figure 6.42. Through a simple overlay function, the area of each Geology class sampled by the BVS and *FI* was generated (Table 6.36). From this, one-sample chi-squared tests were used to generate and compare the expected number of settlements for each class and assess whether this was significantly different from the observed (Table 6.37).

All three tests are significant; that is, there is a relationship between the number of settlements and Geological class, though excluding the *FI* urban data dramatically reduces the chi-squared value. In all cases, however, the Cramer's V^2 value is low ($V^2 = 0.032$; 0.080 ; 0.013 respectively). The most notable patterns concern the much higher than expected number of BVS settlements on ancient Alluvial terraces (1) and the correspondingly limited number of records of either survey found on recent Alluvial soils (2). The lower than expected number of BVS sites on Limestone (1) may relate to its comparatively small sample; in general, higher chi-squared values are associated with large differences in the percentage of the class sampled.

An early discussion of the soils in this area (Barker *et al.* 1978: 45) suggested that arable cultivation was limited to the lighter, free-draining sandy soils of the ridges around Larino and on the edge of plain (i.e. Mixed Sands/Clays, Limestone). The heavier, silt soils of the Piano di Larino (i.e. Alluvium 1, 2) were considered to be more difficult to cultivate and were consequently devoted to pastoral exploitation. However, this situation contrasts with the results achieved here; the density of activity on the plain, during the Samnite period especially, is more suggestive of intensive arable exploitation. Although there may have been a retrenchment to the ridges and hills to the south in the Roman period (Figures 6.40a–d), this is not statistically significant (Tables 6.20, 6.21).

Changes in the percentage use of Geology over time are illustrated in Figure 6.43; comparison with the wider database (see Figure 6.20) indicates greater variation. This may relate to localised patterning associated with the presence of Larinum and, in particular,

with the concentration of Sporadic scatters on the plain (e.g. Figure 6.6). Regardless, the chart indicates the patterning lost through generalisation of data by regional analysis.

6.5.4.2 Land Use

No appropriate land use maps contemporary with the survey were available for the area; the simplified map of the final report (Figure 4.9k) is extremely small scale and un-georeferenced. As such, assessment of the influence of land use on survey results is necessarily limited. However, by plotting the recorded land use of individual BVS records (Figure 6.44) it is possible make some general observations. At the time of the survey, the Piano di Larino appears to have been devoted largely to vineyards, whilst the immediate hinterland of the town demonstrates mixed production of vine and olive. Site locations further south and west indicate these areas to have been comparatively wooded. A strong bias towards ploughed surfaces is apparent and it may be suspected that a higher percentage of survey transects was achieved on the agricultural plain, than the wooded hills. This may be significant given the density of scatters identified on the plain. The greater density of material identified by the *FI* in the hills to the south (section 6.5.2) is suggestive that survey intensity could have been significantly increased in this area.

6.5.4.3 Topography

Within the valley as a whole, it has been observed that settlement favoured certain topographical features (Lloyd & Barker 1981: 289). In particular, Barker *et al.* (1978: 44, figures 2, 3) refer to ‘necklaces of farmsteads’ strung along the ridges and spurs of the hills above the Piano di Larino. This correlation can be observed within the study area, by overlaying archaeological records with ridgelines extracted from the DEM (Figure 6.45). This correlation is particularly clear for the *FI* data. The relationship is quantified in Figure 6.46, showing the distances of unique archaeological records from both databases from the nearest ridge line. Whilst only between a quarter and a third (28.87%) of the area as a whole falls into this category, just less than fifty percent of sites are within 150 metres of a ridge (48.06%). Nor does this include settlement that is related to topography, but not specifically ridges. The shape of artefact scatters, where recorded, was not presented in a way which could be directly modelled in relation to the DEM. However, text descriptions and measurements suggest a close relationship with the topography, stretching along ridges and spurs (e.g. B260).

A similar pattern has been noted by other surveys in Italy and around the Mediterranean (e.g. Sangro valley, section 4.1.3.3; *Ager Tarraconnensis* – Carreté *et al.* 1995: 245). One implication is that the availability of water was not a major concern; indeed, there is limited evidence for hydraulic schemes in the Biferno valley or Samnium in general⁶. Defence may be another consideration, though the majority of sites are small open farmsteads occupying broad spurs and ridges of limited defensive capacity. An important issue developed below is the use of these ridges as lines of communication (section 6.5.6).

Topography is clearly significant in the positioning of sites, with a clear preference for elevated and/or dominant positions in the landscape. This patterning should be combined with the observation that there is limited shift in the ratios of Topography used over time (see Table 6.21 (1, 2)) to suggest such locations formed long-term landscape foci. A coarse measure of this relationship can be derived by measuring the average distance of BVS scatters by Number of Occupations from the nearest ridgeline (Table 6.38). Those with more periods of occupation lie closer to ridgelines; the limited number of sites with five occupations may account for the increase in distance associated with this class.

Topography, naturally, forms the principal influence on visibility within the landscape. A simple viewshed exercise, to assess the prospect from Larinum, produced several useful results (Figure 6.47). Five locations along the *agger* of the town were selected and viewsheds generated from each (10m surface offset). The resulting maps were overlaid to produce a ‘cumulative viewshed’. Two notable observations can be made. First, the topography of the landscape significantly restricts the prospect of the town to the immediate north (the Piano di Larino). To the south east, Monterone forms a dominant landmark restricting visibility towards the Cigno valley and beyond (this hill was a focus of activity from prehistoric times; large stone blocks may indicate Roman monumentalisation – De Felice 1994: 46). The neighbouring ridge curtails visibility to the south west. The best prospect is likely to lie north west towards Guglionesi on the steeper opposite bank of the Biferno. Secondly, the viewshed is particularly ‘ragged’, especially on the plain to the north east. This was unsuspected given the area’s apparent flatness compared to the hills further south. In fact, the plain is quite strongly dissected. In light of the general associations identified between settlement and Topography, this viewshed demands that even closer attention be paid to the subtleties of settlement location.

⁶ A similar dearth has been observed by the Sangro Valley project (Andrew Wilson, pers. comm.). An impressive exception in the Biferno valley is San Giacomo degli Schiavoni, B102 (Di Niro 1987: 26); see Table 4.6.

6.5.4.4 Slope

Slope was not recorded as part of the original survey, though is easily derived from the DEM. The resulting map was reclassified into three categories, less than ten degrees, ten to fifteen degrees and over fifteen degrees. It has been suggested that the latter cannot be cultivated without the use of agricultural terracing (Whitelaw in press); further, without maintenance, such land is prone to extreme erosion. Land between ten and fifteen degrees is also prone to erosion without terracing, though terracing is not necessary. This simple reclassification of slope therefore provides insights into the extent of land cultivable without the need for terracing and indicates areas of potentially high erosion. As with Geology, the area of each category sampled was derived and one-sample chi-squared tests used to assess any significant relationship between settlement and slope (Table 6.39).

In all three cases, it is possible to identify a relationship between slope and the distribution of settlement. The BVS scatters, and *FI* including urban data, are associated with flatter land with far more than expected under ten degrees, and less over fifteen degrees. In contrast, when urban data are excluded, the *FI* data demonstrate a significantly more than expected on land between ten and fifteen degrees. In theory at least, this should not relate to sampling. Combined with the large number of Unclassified *FI* scatters, this may suggest some are eroded sites.

Figure 6.48 shows the range and average slope for the survey areas, the BVS data by Period and Archaeological Interpretation, and the *FI* data. The area covered by the BVS alone demonstrates a lower average, reflecting its focus on the Piano di Larino. By Period, there is little difference in the average slope utilised over time; the contraction of range may relate to lower numbers of settlement and/or the abandonment of activity on the plain. Archaeological Interpretation demonstrates greater diversity, though again, this may relate to the low numbers for some classes. However, the high average and limited range for Villa/Village adds further weight to the impression that this ‘compromise’ classification actually represents a quite distinct category.

6.5.4.5 Aspect

Aspect, like slope, can be derived easily from the DEM. As with Geology, this information was generated for the first time for the *FI* data, though was regenerated for the BVS data for consistency. Again, one sample chi-squared tests were used to calculate expected settlement numbers for comparison with the observed (Table 6.40).

The results show a significant association between settlement and aspect for BVS records, but not the *FI*. In particular, more BVS records than expected are classified as north east and fewer to the south west. The former may relate to density of settlement to the north east of the town, on the slope down to the Piano di Larino. More generally, the lack of relationship with the *FI* data suggests that other variables influenced the location of these scatters.

6.5.5 Archaeological Considerations

6.5.5.1 Off-site (Sporadic) Data

Throughout, the strong influence of Sporadic or off-site data upon statistical analysis has emphasised the notably different nature of these scatters. On the assumption that they represent agricultural activity, three models were proposed. In the first, Sporadic scatters cluster around settlement sites, indicating distinct agricultural territories. In the second, Sporadic scatters and settlement sites are separate, possibly indicating areas dedicated to agricultural activity away from habitation areas. Finally, isolated Sporadic scatters may represent low intensity land use (or eroded sites). In Figure 6.49, ‘spider’ diagrams are used to assess these models. Each Sporadic scatter is joined to the nearest settlement site (blue dot) by a red line. To avoid boundary errors, records from around the case study area are also included. The chronological insensitivity of most Sporadic material means that this represents a composite of all periods.

The most notable pattern is the diversity of relationships. Generally, Sporadic scatters are much rarer in the hills to the south and around Larinum itself with no obvious relationship to settlement; this may correlate with the third model. There is no clear agricultural hinterland around the town. The large number of Unclassified *FI* data might change this pattern, but it is clear that many of these records would have been classified as at least Domestic sites by the BVS. On the Piano di Larino, the larger number of Sporadic scatters makes the identification of relationships more likely. Here, several sites appear to form the focus of a ‘halo’ of activity, suggestive of the first model, though there are several settlement sites without associated material. Perhaps the most convincing examples of the first model are found to the north and the east of the case study area. The spatial distribution of Sporadic data therefore supports the assertion in sections 6.2.6 and 6.2.7, that this category may well consist of a range of scatters of different types and functions.

6.5.5.2 *Distribution of Artefacts*

The BVS report identifies a series of scatters which consist solely of pottery, (i.e. no construction materials such as tile, brick or rubble), tentatively interpreted as temporary, possibly seasonal, activity associated with pastoralism (Barker *et al.* 1978: 42). As such, the BVS records were divided between those with only pottery, both pottery and construction materials, and those with only construction materials (Figure 6.50). Over half of scatters produced both pottery and construction materials (58.24%), whilst over a third produced only pottery (38.46%); scatters with just construction materials constitute less than five percent (3.30%). The latter is comparable to the same statistic for the whole BVS database (3.37%), though pottery only scatters are less than the average (45.07%), and those with both pottery and construction materials higher (51.55%). In general, the high proportion of scatters with both pottery and construction materials is reassuring with respect to the question of whether such material represents (permanent) settlement. Those scatters without construction materials may represent temporary or less substantial sites or off-site material. Some support for the latter is derived from a chi-squared test to assess the existence of a relationship between Archaeological Interpretation and whether pottery and construction materials were identified (Table 6.41).

Far more Sporadic scatters than expected consist of pottery only, whilst far more than expected Sites are represented by both pottery and construction materials. The concentration of both Sporadic scatters (Figure 6.38) and scatters of pottery only (Figure 6.50) on the Piano di Larino supports the argument for this area as an important agricultural focus. More generally, however, both scatters with and without construction materials are found in all sampled areas.

The importance of finewares for dating has already been stressed. The distribution of the three basic types (Black Gloss, Italian *terra sigillata*, African Red Slip) is shown in Figure 6.51. The mapping of diagnostic material more generally is inherent within Figures 6.4 to 6.11; see Table 6.14). The first impression gained from Figure 6.51 is the dominance of Black Gloss across the area and for individual scatters. In comparison, Italian *terra sigillata* and African Red Slip are rare, though they demonstrate fairly even distribution. Similarly, the ratios of finewares to coarsewares, shown in Figure 6.52, show no clear spatial distribution either.

6.5.5.3 Size & Density

It has been noted in section 6.5.2 that there is a discrepancy between the size of scatters identified by the BVS and *FI*. Figure 6.53 shows the distribution of these records by size (*FI* reclassified to BVS Size classes). The concentration of large BVS scatters on the Piano di Larino is striking. The BVS records from the hills to the south demonstrate greater diversity, with large and small scatters in close proximity. The same trend is even more apparent for the *FI* data. This is reassuring because it implies that both surveys, but particularly the *FI*, identified a full range of scatter sizes in most areas.

More generally, it is clear that surface archaeology is very discontinuous. Figure 6.36 clearly demonstrates this pattern, using a seventy-five metre buffer around all records (the equivalent of a generous 1.77ha per scatter). Although the intensity of both surveys is low by more recent standards, it is clear that there is no continuous ‘carpet’ of material. Combined with the then recent introduction of deep-ploughing, the discreteness of scatters mitigates some concerns regarding site definition.

The distribution of Density for BVS scatters is illustrated in Figure 6.54. Again the three classes share the same overall range, however there may be a polarisation of Density on the Piano di Larino between Light and Heavy, reflecting the contrast between agricultural scatters and settlement sites. Further south, in the hills, there appear to be more scatters of higher density. Given the greater susceptibility of this area to erosion (section 6.5.4.4), this may reflect either the particularly dense nature of surface materials and/or comparatively limited modern agricultural activity (section 6.5.4.2).

6.5.6 Landscape of Experience – Paths & Movement

A major theoretical issue with the handling of survey data is the dominance of cartographic representation and its influence on interpretation. This is especially problematic for older surveys, which have tended to represent settlement as dots. Such distribution maps are sterile in terms of the interpretation of experience or power relationships because they are remote from the people who dwelt in the landscape. Thus, while ‘vectors’ have been used to investigate movement (e.g. roads – Witcher 1998: 66–7) and bounded areas interpreted in terms of territory (e.g. Purcell 1990), approaches to the point data produced by many surveys remain static and descriptive. In particular, landscape theory has stressed the importance of movement in the definition of place (Barrett 1994: 14–5; Sack 1986: 64; Tilley 1994: 31; also <http://www.bufau.bham.ac.uk/BARROWS/>). In contrast to the perspective of the distribution map, everyday landscape experience is centred on the body,

encountering and interpreting places sequentially as a spatial narrative (Rodaway 1994: 19; Thomas 1996: 85–9). The works of Bourdieu (1977) and Lefebvre (1991) in particular, stress how the spatial organisation of activities, objects and concepts, serves to define social relations.

A critical problem is the identification of ancient pathways in the landscape, linking the sites recovered. Frequently the evidence for these is limited, requiring alternative means of identifying movement and site relationships, for example the generation of least cost paths or cumulative paths using GIS (e.g. Lock *et al.* in press).

To begin to address this issue, two localised areas were identified for closer examination with the intention of investigating the types and sequences of settlement and activity along certain pathways through the landscape. In both cases, movement is addressed through the *FI* evidence for ancient roads and pathways (De Felice 1994: 34–7). Overlaying these routes on the DEM, demonstrates their close relationship with topography, following ridgelines from north to south (Figure 6.55). The evidence for these routes derives from a variety of sources, including aerial photography, *mulattiera* and the presence of cuttings and road surfaces; there is also clearly some conjecture involved.

6.5.6.1 Path One

The ridge on which Larinum is situated provides the first case study (Figure 6.56). As discussed above (section 6.4.5), the location of the town represents a compromise between accessibility and defence, rising high above the Piano di Larino, though lower and more accessible than neighbouring ridges. The site of the town itself, on a small plateau midway along the length of the ridge (Piana San Leonardo), is flanked by steep slopes. To the south, the town is dominated by the peak of Monterone (c.470m) at the end of the ridge.

The majority of scatters can only be generically-dated to the Classical period and this necessarily limits the chronological sensitivity of the exercise. Nonetheless, it is possible to identify some general changes over time, as well as diversity of settlement along the ridge. Several roads, rising up from the river (north west) and plain (north east) converge on the ridge. Here, attention is focused on the four which approach from the north and north east. A ridgeline, extracted from the DEM is also considered. Moving from the river, up the ridge towards the town, the traveller first arrived at Monte Maulo (Figure 6.56). This small hill had been the location of extensive prehistoric settlement, but was subsequently the site of a probable villa perched above the plain. The site is bypassed by all the roads, possibly because of the relatively steep approach. Indeed, one of the roads

climbs the side of the ridge to the town, using its full length, to provide a notably lower gradient than the others.

Moving along the ridge, farms and agricultural activity are indicated by a series of scatters. In contrast to this 'domestic and productive' landscape, the traveller then arrived at Monte Arcano, the focus of an extensive Iron Age and Hellenistic/Samnite cemetery (Coarelli & La Regina 1993: 301; Di Niro 1991a: 131). A series of low stone mounds (Barker & Suano 1995: 172) advertised the function and antiquity of this site. Continuing up the ridge, joined by the traffic from another road, the traveller passed through further areas devoted to agricultural activity, including another possible villa. On Colle San Pietro, the traveller encountered a small archaic necropolis of tumuli, and not far beyond, immediately outside the town, extensive cemeteries of the second/first centuries BC. This area, and that to the east of the town, formed an extensive funerary zone throughout the late Samnite and Roman periods. The centralisation of funerary activity in the immediate vicinity of the town must have impressed upon the traveller, having passed the disused, though possibly still visible evidence of earlier funerary activity further down the ridge. These places were now physically and historically peripheral to the new urban focus of Frentanian life. Subsequently, a series of stele with standard Roman formulas (e.g. *Dis Manibus*) were set up in this area (De Felice 1994: 176). Although there is continuity in the location of burial from the Samnite period, these served to redefine the identity of the area and advertise the social and political pretensions of its inhabitants.

The presence of the town itself was marked by the *agger* (*ibid.*: 108–11; section 6.4.5). However, the structure was only glimpsed as the traveller moved up the ridge (see Figure 6.47) – its full impact was reserved for comparatively close to the town. Having passed through the *agger*, the topography of the site focused the traveller's attention south west towards Monterone. The peak, although comparatively low, dominated the townscape and was the focus of intensive activity.

Movement along the ridge involved the experience of a range of contemporary and historical landscapes – domestic, funerary and agricultural. Although there is some spatial separation of these activities, in contrast to parts of pre-Roman South Etruria, there is no major difference between their physical and symbolic accessibility (Belcher *et al.* in press). The acute awareness of past landscape activity may have constituted something akin to 'social memory' with regards the historical development of the area and its people (see Alcock 1997; Derks 1997).

6.5.6.2 Path Two

The ridge in the south-west corner of the study area provides another interesting case study (Figure 6.57). The ridge itself runs due south-north for around three kilometres at just under 700m above sea level. The next three kilometres descend steeply to the Biferno, 600m below. Below the flat crest of the ridge, on its sheltered eastern side, a *mulattiera* of some antiquity runs parallel to the topography. A series of sites are located along the route, lying broadly between a band of springs and the headwaters of the streams which drain the eastern slopes. There is also a (related) change in geology along this line, from Mixed Clays/Sands to Limestone (see Figure 6.42). After two kilometres, the *mulattiera* bifurcates; one fork continues along the eastern side of the ridge, whilst the other passes over it by means of a saddle. The two forks continue down on the plain, passing either side of Monte Cece (c.700m), a prominent hill at the end of the ridge. Given the close relationship between settlement and such topographic features, the lack of activity at this location is notable, despite its elevation. In contrast, there is much activity around its lower slopes. The hill falls within the area sampled by both surveys, though such a location may well have been wooded and inaccessible to survey and/or settlement.

There is limited evidence for prehistoric activity along either the ridge or the routes just described. The most notable pre-Samnite evidence is a domestic settlement on the crest of the ridge and cluster of activity sites on the western fork, just above the plain. During the Hellenistic/Samnite period, previously occupied locations were abandoned and a series of extensive activity sites came into occupation immediately below the route. The distinction of settlement sites from agricultural activity is not possible, though it is unlikely that all Unclassified *FI* scatters represent off-site material. There is a possible concentration of funerary activity on the western fork.

During the Roman period, the nature of settlement becomes clearer, including the development of a hierarchy of farmstead, villa and village. Most notable is a large villa and/or village just below the route (C317, ?Sicalenum). A scatter of at three-quarters of a hectare indicates intensive activity near a perennial spring, including associated funerary areas. Its development may be related to the demise, at some point after the fourth century BC, of the vast (c.11ha) Iron Age and early Samnite centre on the ridge two kilometres to the east (?Kalena – Polyb. 3.101.3).

Moving north along this route, the traveller passed a series of farmsteads, possibly every few hundred metres, and will have been aware of the cultivated slopes below. Villas may

have provided some indication of the private investment of wealth, though the focus of élite activity – Larinum – was out of view. The Villa/Village community suggests a substantial population centre, though small by the standards of its possible predecessor. Notably, the location of the earlier Village at ?Kalena is visible from ?Sicalenum. As with the presence of earlier funerary sites at Monte Arcano, the physical remains of ?Kalena may have emphasised the major shifts in the area's development.

Descending steeply from the ridge, by means of either fork, the traveller arrived at the edge of the plain. In contrast with the Villages of the higher ridges further south, the eastern fork included several Villas. The change in topography was emphasised by a possible centuriation scheme (De Felice 1994: 164). On surface evidence, it does not appear to have been exploited as intensively as the Piano di Larino proper. However, if genuine, this highly political, as well as economic or agricultural, land division contrasts sharply with the evidence from the rest of the case study area.

Ultimately, the chronological insensitivity of much of the data renders this exercise less effective than it might otherwise be. However, it is possible to begin to consider movement within this landscape, and the possible ways in which this experience changed over time.

6.6 Chapter Summary

This section summarises the methodological issues raised through the present chapter. Interpretation of the historical development of Larinum and the Biferno valley are presented in the concluding chapter.

Through the entry of the BVS gazetteer and *FI* volume into a relational database and GIS, and their subsequent analysis, it has been possible to enhance understanding of the historical development of the Biferno valley by exploring the relationship between methodology and results. The requirements of the more formal architecture of a database environment were less problematic for the BVS than for the *FI*, stressing the difficulties of reducing diverse 'real world' data into simple categories. This was partly a result of the disparate nature of the data itself and partly a lack of willingness by De Felice to interpret and/or classify these data. More generally, and especially in the context of GIS, the exercise has stressed the problems of subjecting data collected within very different methodological and interpretative frameworks to new types of analysis. In particular, the lack, or inappropriate format, of spatial data was notable.

From the outset, it was suspected that the low intensity of the BVS and its highly irregular shape meant that spatial statistical analysis was inappropriate. Comparison of the dataset with the *FI* reinforces this observation. The discrepancies between the results of the two surveys are significant, but neither surprising nor unprecedented (section A.1.2.1.2). However, rather than conceiving of this as a negative conclusion, such comparative work is considered as a useful means of characterising each dataset. For example, the *FI* may have been too eager to describe scatters as Villas, whilst the BVS appears to have underestimated the extent of funerary activity. Such work therefore stresses the need to incorporate all archaeological knowledge from an area in order to develop the most comprehensive analysis possible – simple counts of settlement figures are insufficient. However, the methodological origins of these data must be actively maintained. The influence of methodology on these data cannot be removed by subjecting them to the same classification schemes or housing them in the same database structures.

Generally, the discrepancy of the BVS and *FI* results is likely to relate to the instability of surface archaeology and the fact that as little as half of the BVS transects may have been walked. Combined with the recording of scatters outside these transects and the major shift in methodology instigated towards the end of the survey, it is likely that the BVS grid represents a rationalisation of less systematic work. This would urge that statistical relationships be treated with particular caution. In contrast with the discrete nature of scatters identified by the BVS, the erosion of surface material may, in part, account for the polarisation of the *FI* interpretation between Unclassified and Villa. Further, the clarity with which sites were defined shortly after the commencement of deep ploughing during the 1970s may alleviate some of the more recent concerns regarding site definition. As the additional locations identified by the *FI* emphasise, more problematic is the issue of exactly how comprehensive BVS coverage was, and therefore how complete is the overall pattern.

More specifically, the development of a GIS case study has facilitated the ‘implementation’ of the theoretical framework of the original BVS survey – and an evaluation of it – in a way not achieved in either the final report or other assessments (e.g. Bertonecello 1992). Without any detailed assessment of the spatial extent and sampling of each environmental variable listed in the gazetteer, their significance is limited to the assessment of changing usage over time. The absolute influence of environment on settlement can only be facilitated through analysis such as that conducted within the study area. This demonstrates that there is an association between the location of settlement and

some environmental variables. At a generalised level, at least some of this can be related to post-depositional disturbance and uneven visibility. However, other trends, such as the density of activity on the Piano di Larino may represent trends that are more genuine.

The isolation of a case study area within the valley has illustrated the way in which the regional approach risks glossing over subtle, but nonetheless important, patterns. However, the problems of using such regional data for higher resolution analysis are also apparent. For example, at the level of the region, the aggregated data suggest an increase in settlement size through the Roman period. The inadequacy of such an observation in the interpretation of a case study area is emphasised by the lack of any actual examples to support this pattern. In particular, the BVS was established as a regional survey intended to avoid the influence of central place on the interpretation. The data themselves are too coarse to study the detail of relations between individual sites. Indeed, the lack of a detailed site-based case study in the final report has been noted (Oakley 1997: 278); the Matrice villa excavations remain unpublished pending the completion of the pottery report (Lloyd forthcoming).

In terms of general interpretation, the most serious limitation concerns the lack of information regarding dating and changes in the nature of settlement over time. Further, significantly different amounts of diagnostic material from each period mean the effects of this problem are not evenly distributed. The concurrent smoothing and exaggeration of diversity over time (temporal generalisation), as well as spatial generalisation (regionalisation), means each period transition is affected in a different way. In particular, it is important to note that the transition from the Samnite to Early Roman period has especial potential for demonstrating stark change through a combination of shifts in the nature of settlement and its archaeological visibility. To some degree, these trends pull in opposite directions, making the data both more and less comparable, though it is unclear how far they cancel each other out. These datasets are therefore to be treated as artefacts in themselves and, by conceiving of them as such, a new starting point for their interpretation has been facilitated.

6.6.1 Future work

This research has also highlighted several areas of potential fieldwork that could improve understanding further still. For example, analysis of the nature of the settlement hierarchy frequently identified the Archaeological Interpretation of Villa/Village as a distinctive category. Limited fieldwork might attempt to take a sample of such sites and compare

their current archaeological evidence both with the results of the original survey and sites classified as Villa and Village. Specific Sporadic or off-site scatters might also be isolated for assessment of the diversity inherent within this category. The rapid erosion of many of these scatters, both in the Biferno and across Italy more generally, serves to emphasise this database as a unique record. Such qualitative data are quite possibly no longer extant on many of these sites. However, through a more quantitative approach, placing particular emphasis on formation processes, it may be possible to increase, substantially, understanding of the database as a whole.

Such work is beyond the resources and, more importantly, the technical abilities, of an individual. If the results of older surveys are to be more fully understood, their deconstruction and reinterpretation requires a range of specialist input, but particularly by ceramics experts, re-dating consistently, using current typologies and dating schemes. A good example is the current Tiber Valley Project (Patterson & Millett 1998). In the identification of such issues and case studies, GIS has already played a major role. However, in the type of potential work just outlined, it has a further and more significant function as an interactive research tool.

Chapter Seven

FRAGMENTS OF EMPIRE: ARCHAEOLOGIES OF ROMAN IMPERIALISM & COLONIALISM

7.1 *Introduction*

This final chapter draws together the preceding discussion of theories, models and survey results to offer a synthesis of Roman imperialism and colonialism. It is not intended to identify or propose generalised laws concerning the nature of Roman expansion. Rather, by acknowledging specific regional and historical contexts, the similarities and differences between imperial experiences will be emphasised.

Throughout, this thesis has stressed the theoretical shortcomings and practical difficulties of writing a grand narrative of Roman imperialism. The influence of post-nationalist/post-colonial readings of Roman history and archaeology stresses the diversity rather than the uniformity of imperial experiences. Having identified the inadequacy of normative models and generalisations, and advocated (a return to) localised case studies, Terrenato (1998a: 23) finds himself confronted with the same problem of synthesising the diversity of Roman Italy.

The solution adopted here has been to take an ‘hierarchical’ approach. In demonstrating the need for specific case studies to illustrate the dynamics of Roman imperialism, this thesis has moved from the general to the particular (Chapters Two, Four and Six). In its conclusions, it is therefore necessary to proceed back from the particular to the general – from Larinum, to the Biferno valley, Samnium and finally, Italy as a whole.

Consequently, ‘fragmented’ seems a particular apt term for the current understanding of Roman Italy. From a theoretical perspective, it is clear that there can never again be a single view or theory of Roman imperialism; there are only multiple, competing, even conflicting, readings. In terms of the archaeological evidence, especially surface survey, it is apparent that understanding is partial and difficult to compare with data from other areas

as well as with the historical sources. Currently, therefore, we are dealing with fragments (our view is not incomplete because it can never be total) of an archaeology of Roman imperialism/colonialism.

This fragmented perspective must mimic experience of the Empire in the past – then as now, it was always perceived from the viewpoint of a subject, encountered in partial and contradictory ways. Attempting to ‘sum’ these fragments to create an objective or single narrative of Roman imperialism is therefore clearly nonsensical. However, such relativisation need not paralyse studies. Indeed, accepting that these data may be suited to a range of, often scale-dependent, models and frameworks permits wide new possibilities for their interpretation. In this research, a series of scales and approaches has been used to illustrate this point. In particular, a hierarchy of perspectives acts as the spatial equivalent of Braudel’s temporal rhythms.

7.1.1 Larinum

The general trends of settlement and population recognised around Larinum broadly reflect those identified within the wider Biferno valley. This may in part be an artefact of the regional and environmental ethos of the original BVS survey. However, combined with the additional evidence of the *FI*, it is possible to recognise some of the more subtle developments associated with the emergence of Larinum as a major urban focus.

As in the rest of the valley, and central Italy more generally, the mid-first millennium BC was a period of significant demographic expansion. This was accommodated through a substantial extension, and change in the nature, of the previously simple settlement hierarchy of villages and small domestic sites. The sixth and fifth century BC necropoleis dotted along the Larinum ridge demonstrate widespread contacts with the upper valley, Campania and Daunia, and the emergence of a warrior élite (Stelluti 1988: 24–5; Suano 1991; Tagliamonte 1996: 121). Sometime during the fourth century BC, these funerary foci were replaced by a concentration of domestic settlement (Di Niro 1991a: 134). From these origins, Larinum must have developed rapidly – it was already a notable centre by the time of the Samnite Wars. In the wider area, individual Iron Age settlements demonstrate strong continuity into the Samnite period, indicating intensification within an existing framework, rather than a significant break.

During the third and second centuries BC, urban development accelerated in close association with the expansion of rural settlement and agricultural intensification

(production/productivity). Surplus from the latter was invested at the urban centre in the form of monumental construction, including a substantial agger and religious buildings. The dearth of rural sanctuaries or other towns in the lower valley suggests that Larinum exerted a strong centralising influence from an early stage (see Figure 6.12).

The precise nature of the relationship with Rome is ambiguous – there is no direct pre-Social War historical evidence on this issue. However, there are no indications that these relations were in any way disadvantageous in terms of taxation or the extraction of manpower. Indeed, the ability to maintain the latter levy, alongside a substantial increase in dispersed settlement and intensified agriculture, emphasises the extent of demographic and economic growth. However, if there is no clear evidence for surplus production for export to the East or the Po valley (cf. Ager Brundisius, section 7.1.2.1), nor can the economy of the area be considered isolated or internalised. The area demonstrates major cultural contacts both within Italy and around the Mediterranean and participation in wider cultural trends.

The range of rural settlement was increased during the later Samnite period through the development of villas. On comparison with other parts of the valley, and other towns in Roman Italy (e.g. Cosa, section 4.3.1.5), the evidence for these sites in the immediate vicinity of the town is relatively limited. This may indicate a strong élite focus in the urban centre. However, villas do exist, evidencing a new private investment of wealth in contrast to that spent on urban monumentality. Analogy to excavated examples from the lower valley suggests their construction was only slightly later than the market villas of the Tyrrhenian coast. Despite their evidence, there is no indication that these were oriented towards production for markets beyond the immediate region. However, they undoubtedly indicate a major transformation of the means of production, patterns of consumption and the wider political economy. The context of these developments was the relocation of the area within the wider Roman (political) economy.

The prominence of villas increased during the Early Roman period, largely because of a significant decline in the numbers of dispersed settlements. Combined with historical evidence for estate formation, this has been seen to be part of an élite strategy to develop agricultural production for increased profits, in order to fund the competition required for entry into the Senate. However, the reduction in dispersed settlement is not an obvious indicator of a significant increase of either production or productivity. Clearly a reduction in the archaeological visibility of landscape activity has a significant influence on this issue

and excavation of Samnite farmsteads which are supposedly abandoned at this point could shed much light on this issue. The large numbers of generic Roman/Classical sites must also be taken into consideration. However, if it is not possible to argue for a decline in productivity, it is difficult to argue for any increase. Further, at Larinum at least, it is clear that the substantial agricultural surplus of the third and second centuries BC was already being spent on the monumentalisation of the town, long before the supposed influence of municipalisation. Similarly, there does appear to be any clear *vicus* abandonment associated with the transfer of élite competition from surrounding villages to the newly promoted *municipium* of Larinum. This suggests that the dominance of the town as a local and regional focus of élite competition, agricultural surplus, religious activities and production was established well before the first century BC. The continuity of surrounding villages indicates that they had been subject to the political and economic dominance of Larinum for centuries. This hierarchy was not prone to the same disruption as found elsewhere in Samnium and they may well have played an important function in Larinum's control over the area in the imperial period. More generally, the lack of colonisation or veteran settlement spared the town the disruption evidenced elsewhere and it remained the principal regional centre throughout.

Nonetheless, without any evidence for an associated expansion of rural production or productivity, the extent of social stratification and the intensity of élite competition appear to have increased substantially (e.g. villas, urban benefaction, inscriptions, achievement of senatorial status). It is implicit in Patterson's model (section 5.3.4) that élite relations with the peasantry became increasingly exploitative. This aspect deserves greater attention, at least in the context of Larinum. Given the continuity of the largest rural settlements (villas and villages), and a probable increase in the population of Larinum, the decline in the numbers of dispersed settlement during Early Roman period does not indicate any significant demographic change. However, the nucleation of population and the stability, if not reduction, in levels of production and productivity, implies major changes in socio-economic relations, including landownership. Not least, the nucleation of population at villages, villa/estate centres and Larinum itself can be seen in the context of enhanced social, and hence economic, control (e.g. Roberts 1996: 112). It is possible to detect a change in the way in which agricultural surpluses were managed through an extension of control over the means of production – the peasantry. This may well have taken place within the context of a long-term shift from communal to private (Roman-style) ownership of land associated with enhanced social stratification (Sack 1986: 60–70). Hence, although

there is no obvious increase in production and/or productivity, through a change in the way these resources were exploited, the élite was able to fund its competition for political status at Rome. This potential refinement of Patterson's basic model elaborates on the longer-term context of social relations and the ability of the élite to enrich themselves and their urban basis without any significant increase in productivity.

The character of the later imperial town is less clear, making it difficult to assess the significance of further reductions in rural activity. Again, a change in archaeological visibility may be significant here, but the contraction is so marked that some demographic decline is highly likely. This may be associated with a general downturn in the long-term regional economic and demographic cycle. Another consideration might be the relaxation of élite control over agricultural surplus, possibly after accessing power at Rome and developing alternative means of income and status. Further settlement nucleation in the Mid- and Late Roman periods may indicate the declining influence of Larinum over settlement in the area. Elsewhere, such a phenomenon has been associated with the lack of tax collecting functions or the increasing economic burden that public duty placed upon local élites. More generally, the declining density of settlement must reflect changing agricultural strategies. Geomorphological work suggests reduced erosion during the mid imperial period, possibly connected with an intensification of pastoral production for the export market (Lloyd 1995b: 242; see Barker 1989; Barker *et al.* 1978; Barnish 1987; Morley 1996: 143–58). Further, in the thinly populated landscapes of the later imperial period, such exploitation may have offered the élite new means of social control (Alcock 1989: 29).

In contrast with many areas of Roman Italy, the landscape around Larinum does not bear the evidence of any direct intervention by Rome (except for a small area of possible centuriation). However, this lack of blatant colonial interference does not presuppose this was an apolitical, conservative or unchanging landscape. The previous discussion has emphasised the profound influence of urban development and the integration of the local élite into the wider political economy. In particular, the continuity of settlement patterns and individual sites should not be simply reduced to a measure of social stability (cf. Alcock 1993: 72) or environmental determinism. For example, the strong and enduring relationship between topography and settlement also suggests the long-term maintenance of pathways and specific movement within this landscape. Through changes in the nature of the settlement and its specific location, these pathways accrued rich historical significance. Effectively, as prescribed routes in the landscape, they constitute spatial

narratives with the potential to impress the nature of current social relations (e.g. tombstones lining the road to Larinum) or emphasise the passing of earlier systems (e.g. the physical separation of the Monte Arcano necropolis from the later town).

Finally, it is possible to consider the evidence from Larinum in the context of C.A. Smith's regional analysis models (section 5.4.4). The lack of detail regarding the distribution of material culture means that this is necessarily a generalised application; nonetheless, it serves to characterise some of the major shifts. During the Iron Age, the Larino area comprised a series of large villages and scattered farms; burial evidence suggests wide, if socially-restricted, trading contacts. This correlates with a bounded hierarchical network. The urbanisation of Larinum appears to have occurred rapidly. The intensification of rural production and the distribution of the élite in both urban and rural (villa) contexts points to the development of an interlocking central place system possibly as early as the second century BC. The survival of villages in the Samnite period is important evidence for an interlocking central place model. Such centres are required for the fully competitive rural exchange which distinguishes the system from the tightly élite-controlled dendritic model (Smith 1976: 354). During this period, cultural ties with other parts of Italy were increasing ('Hellenization' and/or 'Romanization'), leading to the development of a culturally distinct and increasingly competitive élite.

It has been argued above, that during the early imperial period, élite competition for access to political power at Rome led to a tightening of social control over the means of production and a shift in the relationship of town and country to the benefit of the former. This externalisation of élite activity from the local area, reduction of rural production and enhanced centralisation is suggestive of a dendritic central place system. Clearly, to claim that the economy of the imperial period was less integrated and competitive (in short, 'less-developed') than the Samnite and late Republican period contradicts many approaches to the Roman economy. However, such an interpretation fits well with the indirect enhancement of Roman colonial control after the Social War, and especially under Augustus. This shift to a dendritic system might, therefore, be considered to reflect the integration of a dynamic regional interlocking central place system (restricted to western central Italy), into a wider, and more conservative, political economy (Roman Italy). More generally, the mid- and late imperial breakdown of inter-regional exchange, polarisation of social and economic resources and the decline of urban centres across Italy clearly reflects a less integrated economy. The evidence from Larinum suggests that the chronology of this phenomenon in this area may be of a somewhat earlier date.

7.1.2 Urban Comparisons

Following the line of argument pursued throughout, that comparison provides a vital means of characterisation, it is important to compare the situation at Larinum with other urban centres.

7.1.2.1 Oria

Despite their similar locations with regard to the coast, comparison of this interpretation with the situation at Oria provides a revealing contrast (section 4.2.2.1). The survey methodologies are very different and the difficulties of comparing between them should not be underestimated (cf. Boxes 4.8, 4.13). In particular, the Oria survey was of much higher intensity and specifically developed to address the relationship of town and hinterland. The periodisation for Oria is also of higher resolution allowing greater subtlety in assessment of changing settlement patterns.

The urban history of the two centres presents an initial contrast. Under influence from the Greek colonies, Oria had developed as a central place from as early as the late seventh century BC, the site being enclosed by the late fourth century BC. Larinum did not emerge as a clear urban focus until at least the late fourth century BC, though was quickly enclosed, at the same date as, or shortly after, Oria. Indeed, Yntema (1995: 162) characterises Oria as a ‘tribal hillfort’ as late as the fourth century BC, suggesting comparison between the two is not implausible. However, whilst urban centres were comparatively numerous in the region around Oria, the accelerated development of Larinum quickly distinguished the town from the contemporary network of Iron Age villages.

Oria was the only settlement within the survey area from the late fifth century to the late fourth century BC. During this time it acted as an agro-town (Traditional strategy – Yntema 1993a: 173, 192; section 5.3.2). From the late fourth century BC, its hinterland rapidly filled with dispersed settlement, indicating an intensification of production likely to be associated with the Alternative strategy (*ibid.*: 181, 190). Settlement numbers peaked during the fourth to second centuries BC. Subsequently there was a halving of settlement numbers and, in some cases, a doubling of size (*ibid.*: 202). This has been related to a centralisation of regional urban functions at Brundisium and externalisation of the economy (*ibid.*: 195; Yntema 1995: 172–5).

At Larinum, the emergence of the town as an urban focus was paralleled from the start by a major expansion of dispersed rural settlement. This is suggestive of the Alternative strategy. Like Oria, settlement numbers peaked during the fourth to second centuries BC. Unlike Oria, however, the lack of colonisation in the immediate area left the town as the principal regional centre. Indeed, during the Roman period, there is evidence for enhanced centralisation. In particular, this may have included a nucleation of rural population at Larinum itself, possibly representing a shift towards the Traditional strategy. Such an interpretation for Roman Larinum, based as it is upon negative evidence (i.e. a lack of sites), can never be as secure as it is for Archaic Oria, where higher intensity survey allows significant weight to be placed on such evidence.

Oria and Larinum therefore demonstrate several points of similarity and difference. However, both were profoundly affected by Roman imperial expansion and the social and economic opportunities and obstructions it presented.

7.1.2.2 *Tuscania*

Urban development and the nature of town/hinterland relations were also central themes of the Tuscania Survey (section 4.3.1.6). Again, there are significant differences in methodologies used and their comparability with those of the BVS, especially regarding survey intensity. However, comparison to the preliminary results from Tuscania forms another useful exercise. Tuscania emerged as an urban centre during the early Etruscan period (seventh to fifth centuries BC), again significantly pre-dating Larinum. Further, whilst Tuscania was subject to the political and economic domination of Tarquinia or Vulci (Rasmussen 1991: 112), Larinum formed the primary regional focus from its earliest days.

Early Etruscan settlement clustered in an enclave around the Tuscania indicating close political and economic integration of town and hinterland. During the late Etruscan and Republican period, the density of dispersed sites increased and by the early Roman period settlement was evenly distributed across the survey area (*ibid.*: 112). This suggests a loosening of relations between town and hinterland in the context of the wider Roman economy. In comparison, the trends at Larinum are more marked. The correlation of these shifts with changes in the abundance of diagnostic material may diminish their significance, but nonetheless, the settlement history of Larinum was far more unstable. One explanation – in the wider context of Roman imperialism – may concern the lack of evidence for intensive élite activity at Tuscania. The small size of the urban centre and the

lack of rural hierarchy suggest that élite competition – an important factor in economic and settlement change at Larinum – was focused elsewhere.

7.1.2.3 *Monte Pallano & Roccagloriosa*

Perhaps the most appropriate comparisons for Larinum are to be found at Roccagloriosa and, especially, Monte Pallano (sections 4.2.2.4, 4.1.3.3). Both have traditionally been classified as hillforts, whilst Larinum has been labelled a town. This has resulted in their interpretative isolation. However, the increasingly blurred nature of these categories has recently led to the suggestion of their historical comparability (De Felice 1994: 140–3; Faustoferri & Lloyd 1998: 19).

Some of the methodological differences between the Biferno Valley and Sangro Valley Surveys have been outlined in section A.1.3.4. The most important difference is the comparatively low intensity of the former; the Sangro Valley and Roccagloriosa surveys are of significantly higher intensity (cf. Boxes 4.8, 4.9, 4.16). All three centres appear to have emerged as part of a general expansion of population and dispersed settlement during the mid first millennium BC, perhaps starting slightly earlier around Monte Pallano. The pre-eminence of these hillforts/(proto-)urban centres as the focus of increasingly stratified social power was consolidated through their expansion and enclosure. However, the subsequent histories of these sites demonstrate some diversity. At Roccagloriosa, the number of dispersed settlements began to decline during the third century BC, accelerating in the second and first centuries BC because of the foundation of the colony of Buxentum. In contrast, neither Monte Pallano nor Larinum were disturbed by colonisation. During the third and second centuries BC, there was a general stability of settlement numbers around Monte Pallano and an increase around Larinum. By the early imperial period, Roccagloriosa had been abandoned and a major shift in the focus of settlement towards the coastal plain had occurred. This was accompanied by an overall increase in settlement numbers. Although this does not resemble the intensive export-based agriculture of the Northern Campanian coast, it is clearly associated with the area's integration into the Roman economy. In contrast, the contemporary contraction of dispersed settlement and the monumentalisation of Larinum, and possibly Monte Pallano, indicate a strengthening of centralised functions during the early Roman period (De Felice 1994: 42–5; Faustoferri & Lloyd 1998: 10). This shift in the balance of town and hinterland may relate to a change in the way in which land and agricultural resources were exploited as part of the relocation of the local élite within the wider political economy of the Roman state (section 7.1.1).

7.1.3 Larinum & the Biferno Valley

The isolation of the area around Larinum as a case study had several motives (section 6.4.2). In particular, it was intended to assess the claim that Larinum was likely to have experienced the greatest impact within the valley as a result of Roman domination. This can be seen to be a rather vague statement – it is clearly impossible to compare directly between the situation at Larinum and Bovianum or Saepinum.

Both Bovianum and Saepinum demonstrate considerable movement towards urban status before the Social War, developing on lowland sites below major hillforts (Lloyd 1995b: 223), though, there was no such settlement at Monte Vairano. The hillfort of Bovianum may have been the Pentrian capital (Livy 9.31.4), but its lowland successor was no major rival to Larinum – indeed, Larinum was by far the most significant settlement in the valley during both the Samnite and Roman periods. Bovianum was promoted to *municipium* status c.48–6 BC, before receiving a veteran settlement under Caesar (D’Henry 1988: 8); it was probably recolonised under Vespasian. Saepinum received a colony in AD 2 and the territories of both towns were centuriated (Choquer *et al.* 1987: 144–9; Compatangelo 1991: 140). Consequently, to directly compare the development of these centres with Larinum is a dubious exercise.

However, more general comparison suggests there were both similarities and differences in the development of the upper and lower valley. The former include population growth, agricultural intensification (including villa construction) and urbanisation. The differences lie in the detail frequently not directly collected by survey, especially a project with a regional focus – for example, the density of hillforts and sanctuaries and different cultural influences on material culture. Much of the distinction between the upper and lower valley has therefore focused on the historical division between the Pentri and Frentani. It is suggested here that more detailed contextual analysis can reveal much greater diversity – especially in a colonial context – than analysis of survey data alone can achieve.

7.2 Biferno Valley & Samnium

The historical context of the incorporation into the Roman state of the Biferno valley, and Samnium more generally, has been outlined and discussed in sections 6.4.4 and A.1.3. Here attention is focused towards a social and economic interpretation of the impact of Roman imperialism on Samnite society, though political events are obviously drawn into the synthesis.

7.2.1 Demographic Growth

The evidence for Iron Age communities is dominated by large necropoleis. Following the limited hierarchy of the Bronze Age, these burials indicate a gradual process of social stratification (Barker & Suano 1995: 171–6; Tagliamonte 1996: 202–20) leading to the development of chiefdoms. Settlement patterns were based around large nucleated villages, with a thin spread of small associated domestic sites. Again, in comparison with the Bronze Age, this indicates an expansion of population which is alluded to in the later historical sources through the migration myths of the *ver sacrum*.

The degree to which the historical distinction between the Pentri and Frentani can be traced back into the Iron Age is questionable; their origins as Roman colonial constructs must be addressed through detailed contextual analysis. The ‘cultural’ distinction of the upper and lower valley arguably reflects their wider locations on the Adriatic coast and in the central Apennines than these historical ethnicities (e.g. Barker & Suano 1995: 180).

Although there is much continuity of individual sites from the Iron Age to the Samnite period, the late fourth/early third century BC was a critical period of change, in both settlement and funerary contexts (*ibid.*: 171–2; Lloyd 1995a: 181). The broad transition from a village-based to a dispersed settlement pattern is accompanied by a dramatic increase in site numbers (see Figures 6.6, 6.7), particularly notable in the previously sparsely-occupied upper valley. Extensive hilltop occupation in the Iron Age is likely (e.g. Barker & Suano 1995: 162; Oakley 1995: 135–8) and is attested at Monte Vairano (D32). The relationship between hillforts and necropoleis sites is unclear, but if associated, this lends weight to the possibility of hilltop occupation before their enclosure (Tagliamonte 1996: 178). Broadly contemporary with the increase in dispersed settlement, was the construction of megalithic walls at hillfort sites (Oakley 1995).

Overall, the new settlement hierarchy demonstrates an increase in size and a diversification of function (Barker & Suano 1995: 162; see Figure 6.3), and represents a shift in the social, political and economic organisation of the area. In particular, these developments suggest significant demographic expansion which may have peaked, along with the number of dispersed settlements, during the third and second centuries BC. Contemporary geomorphological evidence demonstrates increased colluviation and alluviation as a result of agricultural clearance (Hunt 1995: 75).

This growth of population must be placed in a wider context – many other parts of Italy were experiencing similar demographic growth during the mid-first millennium BC.

Developments in Samnium were therefore part of a much broader process. This demographic expansion provides an important context for subsequent patterns of development in the area. Various mechanisms to cope with growing (upland) populations can be adopted. Historically, the most obvious method is emigration – the *ver sacrum* – and raiding, which attempt to balance population and resources and maintain existing social structures. The alternative is a major restructuring of society. Often this takes the form of urbanisation and/or state formation. Neither of these developments is clearly identifiable archaeologically at this early date – continual social fissioning served to relieve population pressure. However, the emergence of hillforts indicates that other no less dramatic changes were underway, including enhanced territoriality and social stratification.

7.2.2 Hillforts

Over one hundred hillforts are known from the central Apennines (Lloyd 1995a: 188–90; Oakley 1995; Figure 6.12). However, controlled archaeological investigation is limited and discussion remains resolutely historical – dating, function, and even their creation as a distinct class of settlement, all derive from historical, not archaeological, criteria. In particular, the assumption of a defensive paradigm (*ibid.*: 139; Tagliamonte 1996: 173) finds an appropriate context in Livy's description of the Samnite Wars, and consequently derives a much-needed chronological framework. Alternatives, though still resolutely functional, include population centres, guardposts on transhumance routes, and retreats (Oakley 1995: 141–6). In contrast, ritual, display, symbolism, and population control are widely accepted for Celtic Europe (e.g. Rideout *et al.* 1992: 14). The very monumentality of these settlements has tended to be overlooked, as has the idea of place. Historians have long emphasised the profound ideology associated with Roman towns and the significance of place in the Roman imagination (e.g. Laurence 1996: 111–2). There is little reason to assume that such concepts were less developed in the pre-Roman period. A further problem is that this model relies upon external (i.e. Roman) intervention in order for these changes to occur. It denies the possibility that such developments may originate within the undocumented structures of Samnite society (see La Regina 1991: 130).

A final point concerns the way in which hillforts have been created as a distinct class of settlement and field of study. The term 'hillfort' is highly problematic in any context, carrying much cultural baggage, yet defying meaningful definition. Oakley (1995: 16) considers a hillfort to be simply 'any fortification on elevated topography'. As a result of the isolation of hillfort studies, there have been few attempts to contextualise these

settlements within their contemporary landscapes (Millett 1997: 346; though see Gualtieri 1987: 31; for brief discussion of ‘overlap’ of *vici*, sanctuaries & hillforts – Oakley 1995: 145–6). In particular, their abstraction as a separate field of study has created a rigid distinction between hillforts and towns, obscuring the issue of urbanisation. Roman literary *topoi*, creating hillforts as ‘anti-classical’, are still reflected in modern literature.

However, there are growing archaeological grounds for disputing this distinction (Tagliamonte 1996: 173). Increasing evidence for ‘urban’ features is being discovered at hillfort sites and vice versa. For example, in the Biferno valley, the ‘hillfort’ of Monte Vairano (50ha) has produced evidence for iron-working (Salter 1995: 139) and the production and regional marketing of *vernice nera* (De Benedittis 1990: 38). The importation of luxury goods (e.g. Rhodian amphorae, Mediterranean coinages) indicates wide trading contacts (*ibid.*: 18; 1991c). There may also have been a regular street plan (De Benedittis 1990: figure 1) and a permanent population seems likely (Oakley 1995: 115). Meanwhile, the ‘town’ of Larinum was partly enclosed with polygonal masonry walls (De Felice 1994: 41 *contra* Lloyd 1995a: 199) and its topographical location is distinctly ‘anti-classical’. The distinction between hillfort and town may therefore be unhelpful. Removing this arbitrary divide also allows the origins of urbanisation in Samnium to be projected back much further than the traditional starting point of the first century BC.

The archaeological dating of these hillforts is extremely poor. The best evidence relates to the megalithic walls, with suggested dates ranging from seventh/sixth centuries BC to the late fourth/early third centuries BC and even later (see Oakley 1995: 135–8 for summary; Tagliamonte 1996: 177). However, discrepancies between the dating of walls and surface material from interiors should be noted (Oakley 1995: 136). A heavy burden therefore rests upon the few excavated (and even fewer dated) sites. Rocca of Orantino was enclosed during the fourth century BC, and Monte Vairano during the late fourth century BC (*ibid.*: 135); Monte Pallano appears to pre-date c.300 BC (Faustoferri & Lloyd 1998: 19). However, a unitary date for the development of these centres across Samnium is highly unlikely (Oakley 1995: 137) and there is no *a priori* reason to believe that walls were planned and executed as part of a single operation (*ibid.*: 135). Indeed, there is some evidence for the rebuilding of walls, possibly as late as the early first century BC (*ibid.*: 137).

Oakley's (*ibid.*: 137) chronology, still firmly historical, recognises this diversity and places their origins in the seventh/sixth centuries BC, with enclosure because of Roman aggression during the fourth/third centuries BC. Ultimately, however, the difficulties in building a general chronology/typology, even with the limited current state of knowledge, suggest the need to avoid universal interpretations of these sites (Gualtieri 1987: 31).

7.2.3 Territoriality & Social Stratification

One alternative to simple defensive interpretations is to consider hillforts as representing a monumentalisation of hilltops in terms of the development of territoriality (Meinig 1982; 1992; Monks 1997: 6–10; Sack 1986). These hillforts demonstrate a new attitude towards place and landscape – they are monumental territorial markers in way that Iron Age settlements never were. Until the later rural sanctuaries, these hillforts had no parallel in terms of monumentality or investment, whether economic or social. Indeed, they can be seen as the logical predecessors of the monumental construction later found in sanctuaries and towns.

Demographic growth is one context for their development – territoriality provides an alternative to emigration as a means of balancing population and resources. As resources became relatively scarcer, territorial strategies developed to control access to them. Hillforts can be considered as an expression of this territoriality – making ownership both tangible and timeless. The degree of stability in the location of sites must be seen in an historical and experiential context; timeless places, growing out of the ground, appearing to have always existed (Moreland 1992: 118). For example, the megalithic walls at Monte Pallano consist of exposed rock surfaces, placed on their sides (Lloyd pers. comm.; Faustoferri & Lloyd 1998: 19). This act can be seen to effect a notion of permanence and longevity – the site appears to grow literally from the living rock. These powerful ideas could be called upon to obscure social conflict and control populations, territories and resources. In particular, the location of hillforts between pastoral and agricultural land has been suggested to indicate control over resources and transhumance.

Hillforts, and territoriality, are not necessarily asymmetrical or exploitative strategies, but they contain the potential for personal and group advancement. Instead of the temporary authority gained from personal (military) prestige, institutionalised hereditary power can be implicated within the landscape and projected back into the past to the ancestors, gods, and to the realms of Nature (see Campanelli & Faustoferri 1997). Power comes to be invested not simply in people, but also in more permanent socio-political institutions and

physical places. Traditionally, the construction of monuments (such as hillforts) has been seen as a reflection of existing social, political and economic resources. The interpretation proposed here envisages the two emerging side-by-side. Such interpretations require that monuments are not planned and executed as part of a single scheme, but continuously develop in a dialectical relationship with social power (see Barrett 1994: 29). Groups and individuals draw on this powerful notion of place as a method of obscuring or ‘naturalising’ social structures and gaining social power (Sack 1986: 32–4). Hillforts therefore represent a new territorial definition of landscape, social relations and identity.

In general, the Italian Iron Age and subsequent Samnite period are marked by the emergence of a new permanent élite (Barker & Suano 1995: 176; Peroni 1979: 24; Tagliamonte 1996: 116–20). Emergent Samnite hierarchies are most clearly seen in funerary contexts during the second half of the millennium (e.g. Sangro Valley – Faustoferri & Lloyd 1998: 19). In particular, rich infant burials suggest hereditary social status, though burials in the Biferno valley are less impressive than those in Abruzzo (Barker & Suano 1995: 179). Such burials do not just reflect the existence of an élite, they help to create and legitimise it.

The emergence of an élite through territorial strategies also has implications for identity. In particular, as demographic pressures increased, upland societies were forced into greater contact with other groups – both upland and lowland – but most importantly, with Rome. In the case of the latter, anthropological parallels suggest that such imperial contact situations may lead to strong pressures either to coalesce into larger groupings or to fragment. Historically, the basic ethnic groups do just this during the Samnite Wars, grouping together as the Samnite League. Hillforts clearly play an important role in the identity the Roman authors construct for the Samnites (e.g. Livy 10.17.2, 10.44.1), though their role in Samnite identity is less clear. However, by approaching hillforts as both the medium and outcome of social action (see Barrett 1994: 29; Shanks & Tilley 1987: 117), these settlements are not passive reflections of social developments which exist independently of the material world, but active participants in the constitution of social structures. In this context, the emergence of a new Samnite identity could be explored archaeologically rather than accepted, uncritically, as a historical reality.

7.2.4 Dispersed Settlement & Agricultural Intensification

As stressed above, it is important to contextualise hillforts with field survey evidence. The broadly contemporary shift from villages to dispersed settlement is accompanied by a huge

increase in site numbers, population and agricultural intensification. The scope of this expansion has been largely underestimated due to continual emphasis on historical references to military disruptions (e.g. Gabba 1989: 234). For example, the impact of the Sullan reprisals is likely to have been exaggerated as part of the ideology that surrounded his regime (e.g. Strabo 5.4.11; Dench 1995: 134). This tends to oppose stable and unstable conditions, and associate them with nucleated, defensive settlement (i.e. hillforts) and open, dispersed settlement (e.g. Oakley 1995: 139–40). Consequently, attention has focused on hillforts and historical events at the expense of the dramatic contemporary expansion of dispersed settlement and the major increase in agricultural production and productivity it represents.

Again, demographic growth provides an obvious context for changes in agricultural strategies, as do economic pressures from Rome, whether directly through taxation (e.g. manpower) or indirectly through the area's integration in a wider political economy. As elsewhere, there were few formal taxation structures (section 2.4.1.1). Those taxes to which the Samnites were subject – as non-citizens – were removed by their enfranchisement in the first century BC. Manpower was the most significant drain on resources. The principal period of exaction, for both taxes and manpower, coincides with the settlement peak during the third and second centuries BC. This may be a result of Roman imperialism enhancing existing regional demographic and economic cycles. Population appears to have been expanding at the time of conquest (section 5.2.1), and the military levy may have acted as a form of institutionalised emigration, helping to maintain this high population, Open mode (section 5.2.3). Combined with limited taxation, more traditional social and settlement structures persisted – the stimulus to urbanisation was not strong.

In terms of external economic demand, the area was unsuited to large-scale, specialised production due to its mountainous terrain and distance from the principal markets. The transportation of cheap bulk goods from Samnium was an economically unfeasible exercise: the lack of navigable rivers makes much of this area more distant in terms of cost than parts of the North African littoral (see Figure 5.2). Although large oil-producing villas are attested, for example, from Venafrò (Curti *et al.* 1996: 180), the archaeological evidence for substantial production is limited (e.g. few presses or local amphorae types). Further, oleoculture is not possible in large parts of Samnium due to altitude and climate. Finally, despite the evidence of viticulture from across Samnium, it is difficult to argue for large-scale production of wine for export (e.g. there are few local amphorae). The most

likely agricultural products for export are wool and leather (Lloyd 1995a: 207), though currently pastoralism is better understood through the historical, rather than archaeological, record.

The economy of the area was therefore somewhat isolated from external demand for agricultural goods. However, the settlement and economy of the area were neither static nor stable, as the dramatic agricultural intensification and, later, urban instability indicate. In particular, the development of villas suggests changes in production and consumption strategies. The most likely context for agricultural intensification, peaking during the third and second centuries BC, is local demand for greater surplus in the service of group and individual social status. Most obviously, this was directed towards the construction and/or monumentalisation of hillforts, sanctuaries and, subsequently, towns (see Campanelli & Faustoferri 1997; Oakley 1995; Patterson 1991a: 155–7).

7.2.5 Sanctuaries & Hellenization

Although activity continued at hillforts, sanctuaries subsequently emerged as the new focus of Samnite society (Letta 1992). From the third, but especially the second century BC, the architecture of these rural sanctuaries became increasingly Hellenistic in character (e.g. Pietrabbondante – Curti *et al.* 1996: 185; Dench 1995: 136–40; Lloyd 1995a: 209). However, in contrast to some hillforts, they never developed into centres of population. Their funding is unclear, but there is epigraphic evidence for the involvement of magistrates in their construction (Dench 1995: 121; see Tagliamonte 1996: 239). Even those keen to emphasise communal funding and the egalitarianism of Samnite society concede that groups and individuals are likely to have used these monuments to achieve status (cf. Dench 1995: 138, 145). Sanctuaries can therefore be viewed in a similar way to hillforts, both helping to reflect and enhance élite power. Good evidence exists for the long-term development of sanctuaries: for example, Pietrabbondante was in use for at least five centuries (Dench 1995: 137–9; Tagliamonte 1996: 179–202). Just as important as the structures themselves is the evidence for the conspicuous consumption of cattle in ritual. The cost of maintaining these animals and their specialised production for such ceremonies was an act of highly conspicuous consumption (Lloyd 1995a: 203, 209; generally, Barker 1988: 783).

The ‘Hellenization’ of Samnium is also visible through the exchange of imported goods, again a context which can be considered as a potential means of status enhancement (e.g. Faustoferri & Lloyd 1998: 19) – that is, a form of Prestige Goods Economy (Barker 1995:

179; Herring 1991; generally, Curti *et al.* 1996: 182 Guldager *et al.* 1993; Morel 1989: 477). In summary, the trends noted during the Iron Age/Archaic periods – agricultural intensification, demographic growth, more specialised craft production, wider exchange networks and increased social stratification (e.g. Barker & Suano 1995: 179) – continued and intensified during the Samnite/Hellenistic period.

7.2.6 Urbanisation & Dependency

The Social War has been promoted as a major break in the history of Samnium, with rural sanctuaries and hillforts scaled down or abandoned and a shift towards urbanism (Gabba 1994: 63–104; Tagliamonte 1996: 177). Although urbanisation was undoubtedly an important theme of the first centuries BC/AD, its origins can now be traced back into the second, even third centuries BC. Similarly, evidence for activity at some hillforts and sanctuaries can now be traced forward into the imperial period (e.g. Alfedena, Monte Pallano – Faustoferri & Lloyd 1998: 19).

The most obvious urban development was colonisation (e.g. Beneventum, 268 BC – Livy *Per.* 15). However, there was significant movement towards the urbanisation of Samnite hillfort and *vicus* communities. Developments at Larinum are somewhat exceptional in this sense, but, nonetheless, increasing evidence is available from hillfort sites (e.g. Monte Vairano) and from the lowland settlements, which developed below their hilltop predecessors (e.g. Bovianum, Terravecchia/Saepinum – Livy 9.31.4; Tagliamonte 1996: 168–77). It is perhaps more interesting to note that the largest and apparently most developed hillfort – Monte Vairano – had no Roman successor.

Knowledge of the pre-Social War development of these sites is comparatively limited, though Saepinum, Bovianum and Monte Vairano all demonstrate considerable urbanisation (De Benedittis *et al.* 1984; Lloyd 1995a: 208–9; 1995b: 218–22; *Saepinum* 1982; *Sepino* 1979). Following the Social War, veteran settlement, for example, at Bovianum (*CIL IX*, 2567–8), Terventum (*CIL IX*, 2592–4) and Venafrum (*CIL X*, 4871–4) complicates assessment of their imperial period development. For example, the veterans at Saepinum were under the specific, and generous, patronage of Tiberius and Drusus (Lloyd 1995b: 221). The relationship between the veterans and the Samnite *Neratii* family is unclear, but urban munificence here must have operated very differently to that at Larinum. At Aesernia, first century AD inscriptions set up by the *Nonii* and the *Vibii* demonstrate both the presence and civic status of Samnite families even in Latin colonies (D’Henry 1991b: 17).

It has been suggested that post-Social War urbanisation in Samnium was imposed by Rome as a means of control (e.g. Lomas 1998: 66–7). Such an argument would make sense if the War and subsequent Sullan reprisals had the devastating impact suggested by the historical sources (e.g. App. *B.Civ.* 1.95–103; Lomas 1996a: 13). However, as discussed above, this impact is likely to have been exaggerated (Dench 1995: 134). The close relationship between the élite and urbanism by the end of the first century BC – and the construction of ‘villas’ (see below) – suggests that the pre-existing élite was the primary agent for urbanisation. A dependency model forms the best explanation for this development.

Agricultural surplus, which had previously funded sanctuaries, was now transferred to the creation and monumentalisation of urban landscapes. If the funding of sanctuaries had been communal, in its new urban context, it was blatantly ‘privatised’ by élite families and individuals: the aim of this munificence was access to the Roman political arena. This status was first achieved after the Social War: for example, the Pentrian Statius in c.87 BC, C. Hosidius Geta from Histonium during the mid first century BC and other Samnites such as M. Papius Mutilus during the early first century AD (Wiseman 1972: 235, 249, 263; generally, Patterson 1991: 154). In this way, the Samnite élite came to be dependent upon Rome for its social reproduction. This is suggested by not only the aim itself, but also the means through which it was expressed (e.g. urbanism, munificence, villa-building). The economy, therefore, came to be dependent upon the actions and aspirations of the élite. Urbanisation and changes in the economy do not represent a state of development or under-development imposed by Roman colonial relations, but a local response to it, mediated through the élite.

This dependency was enhanced by the impact of Augustan administrative reforms. The promotion of a limited group of *vici* to the status of *municipia*, restricted the number of viable arenas for élite competition (Patterson 1991a: 153). Those *vici* excluded from this new system rapidly declined as the élite diverted their attention to more auspicious locations. Once access to the Senate was widely achieved, by the Flavian period, the principal arena for competition then shifted to Rome.

In the rural landscape, these post-Social War changes are visible through the construction of villas (see section 5.3.4.1; De Tata 1988; Di Niro 1987: 18; Tagliamonte 1996: 163). In many cases, these represent a comparatively sudden decision to develop a previously undistinguished site, often retaining the orientation or even structures of earlier phases (e.g.

Matrice – Lloyd forthcoming). The major period of development was the first century BC, with most reaching their greatest extent during the early Empire (Lloyd 1995b: 232). The abruptness with which some sites developed (in terms of unity of plan and execution) is suggestive of established wealth and power. Villas also represent the first clear distinction of public and private conspicuous consumption, though their monumentality reflects that found in contemporary urban centres. Their frequent comparison to the villas of the Tyrrhenian coast (e.g. *ibid.*: 232) has led to their characterisation as small and rather utilitarian in comparison. However, such observations must be placed in context – working on the assumption that these villas were part of a wider élite strategy involving urbanisation and munificence, they can be considered as successful enough to have propelled many Samnite families into the wider political arena of Rome (e.g. the *Neratii* from Saepinum – D’Henry 1991a: 207).

In general, therefore, the first century BC was a period of intensification of pre-existing trends, rather than their replacement. Roman imperialism instituted new avenues of social promotion which were locally-adopted and negotiated into existing structures – hence dependency was articulated (and principally motivated) locally.

7.2.7 Imperial Period

The dramatic reduction in site numbers recognised across Samnium during the early imperial period can be placed in the context of the trends outlined above. First, any decline in population must be considered in the light of the massive demographic expansion of the mid-first millennium BC. Following this period of overpopulation (Dyson 1992: 28), the early imperial period may be better conceived as a return to a more stable phase in a long-term cycle (Bintliff 1997). Nonetheless, census figures from the Augustan period suggest that the central Appennines remained one of the most densely occupied areas of the peninsula (Brunt 1971: 54). It has been suggested above that part of this apparent reduction in settlement numbers may relate to the lower archaeological visibility of early imperial settlement. However, part may also concern a genuine nucleation of population in the context of enhanced social control and exploitation.

The general trend continues into the mid-imperial period, when the reduction of settlement numbers is such that it becomes necessary to consider some form of demographic decline. Urban migration is a possibility, though there is little evidence of urban growth at this time. In relation to this decline, new social and economic strategies emerged. In particular, pastoralism gained renewed importance – this may have been stimulated by

demand from Rome (Barnish 1987) and/or by an élite, eager to develop alternative means of controlling sparsely settled areas.

These interpretations of Larinum, the Biferno valley and Samnium demonstrate the dialogues between Rome and its imperial subjects (Forcey 1997; Grahame 1998a) and the importance of viewing these at a range of spatial and temporal scales. This dialogue is always situated within a pre-existing context and, although social and economic factors have been emphasised as a counter to the Romanocentric perspectives of more traditional narratives, the historical evidence has been shown to be an integral part of understanding these communities' responses to Roman imperialism.

7.3 *Roman Italy*

It should be clear from the above, that attempting to synthesise the wealth of evidence from Roman Italy is, to use Potter's (1979: 8) expression, 'daunting'. The archaeological database is becoming larger and more sophisticated all the time; the historical texts have been opened up by a new generation of post-colonial scholars. The development of individual communities and areas is most profitably addressed through a range of indicators and at a series of different scales. In this way, the detail necessary to understand the nature of colonial relations can be identified, whilst allowing these dialogues to be located within the wider context of an expansive imperial framework. This 'rolling focus' (Ferguson & Whitehead 1992: 4) holds the key to the writing more critical histories of Roman Italy. Consequently, the survey summaries in Chapter Four effectively form the first part of these conclusions. Similarly, Chapter Five has highlighted a range of more general similarities and differences in relation to a series of models. Therefore, to conclude here, a few of the most general themes will be discussed, particularly those of relevance to regional survey data.

The historical and archaeological evidence of pre-Roman Italy demonstrates considerable social, economic and cultural diversity – from the highly stratified city states of Etruria and the *poleis* of Magna Graecia to the Oscan-speaking tribal communities of the central and southern Appennines. It is within this 'cosmopolitan' context that Roman expansion took place (e.g. Barker 1981; Peroni 1979: 24). During the Roman period, at a coarse scale of analysis, there is a marked convergence of cultural, social and economic indicators – 'Roman' urbanism, munificence, villas, agricultural intensification, black-glazed pottery and *terra sigillata* – that is, all the conventional indicators of 'Romanization'. Whilst not denying that these represent genuine change within these societies, the coarseness of this

observation must be recognised – it is possible to pan back and identify the same patterns across the Empire, from Britain to the East. It is the specific nature with which each of these processes or objects was negotiated into individual societies that informs on the working of imperialism/colonialism and on the concept of ‘Roman Italy’. Through such dialogues, it is clear that the post-conquest development of Italy was just as heterogeneous as that of the pre-Roman period.

This diversity should not really occasion surprise – it has been widely recognised in provincial contexts (e.g. Britain – Millett 1990; Greece – Bintliff 1997). However, through imperial hindsight, and a provincial perspective, Italy has frequently been considered as synonymous with Rome, thus masking its particularly diverse development. If anything, the variety of Italy’s pre-Roman communities, their extended colonial relations with Rome and the economic distortions caused by proximity to the largest city in the Mediterranean, all argue for Italy to be an area of marked diversity. That the differences recognised are not simply the result of divergent survey methodologies and theoretical frameworks is clear. Not least, there are as many opportunities for these considerations to smooth over and generalise these differences.

In terms of regional survey data, in some areas it is difficult to identify imperial dialogues as there is no clear pre-Roman evidence (e.g. Liri Valley, Northern Campania). In others, this dialogue is cut short through the process of colonisation. However, where it can be identified, it is the tensions between local and global, continuity and change, similarity and diversity, which are the dominant themes. In a recent review of central southern Italy, Curti *et al.* (1996: 185) argued for the large-scale disruption of settlement and culture associated with Roman conquest, during the first half of the third century BC. Subsequently, Terrenato (1998b: 113) has suggested that such massive disruption and replacement was the exception not the rule and that continuity was an important trend through the Republican period.

However, such a debate risks missing the point – different scales of analysis produce radically different impressions of the change and continuity involved in the initiation of core-periphery relations and the subsequent colonial dialogue. At the same time, however, there was also great spatial and chronological diversity; indeed, Terrenato (*ibid.*: 112) emphasises that even neighbouring areas demonstrate significant differences in the nature of their post-conquest development. Take, for example, Morel’s assessment of economic prosperity in second century BC towns – whilst Lucus Feroniae, Tarentum, Venusia and

Tarquinius demonstrate little urban vitality, Brundisium, Larinum, Luceria and Volaterrae were undergoing major expansion (Morel 1989: 495). These two groups have little in common – they range from north to south, from coast to interior, and from pre-Roman centres to Latin colonies. This illustrates perfectly the diversity of Roman Italy and the need for localised case studies.

Apart from blatant strategies such as colonisation, Rome was comparatively non-interventionist in many areas of Italy, especially during the third and second centuries BC. Even (Latin) colonies exercised considerable independence from Rome in many affairs. However, non-interventionist is not the same as non-intrusive (Greece – Alcock 1993: 171) and it is clear that Rome instigated a series of changes within the Italian communities as part of their relocation within the wider framework of Roman Italy. Through dialogue, in many cases, this led to an intensification of pre-existing trends. The most generic of these are discussed below.

7.3.1 General Trends of Roman Italy

From the broad perspective of the *conjunctures*, it is clear that peninsular Italy underwent significant demographic expansion during the first millennium BC. The general similarity of timing points to the type of long-term regional cycles identified by Bintliff (1997) in the Greek context. However, as the case studies in Chapter Four demonstrate, there was some variation in the timing and intensity of this development, and considerable diversity in terms of its effects, from raiding/war and emigration/colonisation to urbanisation and state formation. Concomitantly, there is a general nucleation and contraction of population in the imperial period, though this phenomenon demonstrates greater diversity in terms of timing and extent. Archaeologically, this may relate to gross changes in the basic visibility of specific periods. More generally, however, it may be a response to the widespread concentration of land into fewer hands, the de-intensification of agriculture and long-term demographic decline.

Intimately associated with the expansion of population is an increase in social stratification. In relation to the various strategies used to contain growing population, outlined above, the nature of this development was far more varied in date and effects. In most areas, this trend was underway before the Roman period and subsequent conquest served only to consolidate and intensify existing structures, though there was much disruption in terms of colonisation. Over the long-term, however, social power was focused upon an ever smaller group based at Rome.

Associated with both demographic expansion and increased social stratification was agricultural intensification. Obviously more people require greater agricultural production and/or higher productivity. However, it is also clear that a greater surplus was being extracted from the system, as demonstrated by urbanisation, the wider circulation of goods, such as pottery, and the conspicuous (public and private) consumption of wealth by the élite. Again, a range of different contexts for this intensification has been identified. These include market demand from Rome (South Etruria), the western Mediterranean (Tyrrhenian coast) and the East/Roman army (Brundisium), as well as élite requirements for greater resources for competition (Samnium). Perhaps the most notable trend, is the first century BC correlation between economic expansion in many areas and a period of immense historical disruption. These developments can be related by considering the destabilisation of the Republic against the background of expanding wealth and opportunities of imperialism. More specifically, the Social and Civil Wars did not significantly disturb the main markets of the coastal and Etrurian economies – Rome and the western provinces.

In each case, it is possible to identify an ‘externalisation’ of local economies: that is, despite the different contexts in which these changes occurred, all these areas underwent economic reorganisation in relation to considerations which lay beyond pre-existing systems. This is seen most obviously through the accelerated development of specialised agriculture in areas such as the Ager Cosanus. However, it is also apparent in areas such as Samnium, where agriculture and social organisation was transformed through the élite’s dependency on Rome as a means of defining and/or increasing its social status. As with demographic levels, the de-intensification of agriculture during the imperial period can also be located within this model. Once the forces which brought about the social and economic dependency of the Republican period were removed during the Principate (for example, through élite entry to the Senate or the development of provincial agriculture), these areas were left with economies which had no internal logic of their own.

Associated with population growth, social stratification and agricultural intensification, are urbanisation and state formation. These demonstrate far more diversity than any of the other trends discussed above. In many areas, they were ‘avoided’ through alternative means of balancing resources and population. However, the curtailment of mass migration during the early Roman period, meant that most areas had developed some forms of centralised or urbanised settlement before the frequently cited turning point of the Social War.

More generally, the urban structure of Italy was profoundly dislocated by Roman imperialism. Areas, which had formerly urbanised, were frequently destabilised with the abandonment of centres or replacement with Roman models (whether imposed colonies or local developments). The foundation of colonies in formerly urbanised areas appears to have done much to undermine the vitality of the general phenomenon. Frequently, such colonies were pale imitations of pre-existing urban centres, being isolated from local demographic and economic systems, and oriented towards external political considerations. Urbanisation in previously un-urbanised areas often tapped into pre-existing trends (e.g. the monumentality, even munificence, identifiable at Samnite sanctuaries) and explicitly associated this urbanisation with Roman control.

However, in nearly every area, the local motivation for urbanisation was enhanced elite competition – a phenomenon that was far from stable within a wider colonial context. More generally, as well as Rome's complex cultural attitude towards urbanism, the lack of any coherent financial management or administrative structures is apparent in the contradictory approaches towards urbanisation. Towns may have been vital centres of administrative control, but their main economic *raison d'être* was undermined through the lack of continual monetary taxation. Without this central economic function, the vitality of towns was heavily dependent upon local elite support – yet the lack of such economic potential must have curtailed elite interests (see Hopkins 1980). In this respect, it is notable that towns of limited urban success, such as Cosa, were located in areas where the elite and economy were external to the immediate area and where colonisation and the use of slave labour had fundamentally changed social relations. Finally, the very size of Rome, as both an economic market and imperial capital, must have exercised a profound influence on the urban development of central Italy.

From the long-term perspective, therefore, each of these basic themes demonstrates both general similarities across the peninsula, whilst indicating regional diversity. The more detailed summaries in Chapter Four illustrate the further variation that can be identified through closer assessment.

7.4 Thesis Summary

This thesis set out with the aim of using the expanding body of regional survey data to explore changes in the settlement and landscape of Italy in the context of Roman imperial expansion. This has involved an original mix of theories, models and IT techniques. This

final section is concerned with the effectiveness of the approach, rather than specific results.

First, it is clear that post-colonial approaches to the Roman Empire have opened a series of new avenues of research. The potential of these for historical studies of Italy is only just beginning to be realised. More generally, this new perspective has important implications for the conduct and interpretation of regional (surface) survey. By refocusing studies towards, not imperialism, but colonialism, the enormous potential of Roman Italy is opened up. Through the development of a mosaic of local case studies, it will be possible to build new narratives of Roman Italy by working from the individual colonial encounter to the wider framework of imperial expansion. Such local case studies will require the development of new theoretical frameworks and approaches. A series of different models have been outlined here, some specific to the period and individual regions, others borrowed from further afield. However, models that are even more specific will be necessary to permit the meaningful integration of the wealth of historical and archaeological evidence. At the same time, these models and case studies must be part of a flexible, ‘rolling focus’, helping to emphasise the importance of scale in the significance of these changes and the relocation of individual communities within much larger frameworks.

Secondly, it is fundamental that regional survey data are contextualised with as much detail as possible – as dots on maps and crude measures of population and agricultural strategies, they are of limited use. It is only through localised case studies that this can initially be achieved; but once integrated with epigraphy, historical and geomorphological evidence and excavation, both urban and rural, survey becomes an important tool for the writing of history. Here, attention has focused on rural settlement evidence for the series of methodological reasons outlined in Chapter Three, but the importance of such integration is clear from the interpretative syntheses in Chapter Four and the models outlined in Chapter Five. The development of the Biferno Valley Survey case study in Chapter Six and the first half of the present chapter has illustrated the need for, and potential of, integrated approaches. The need for explicitly interdisciplinary – and inter-specialisation – studies will assume greater importance in this regard. More generally, the concentration on a single survey, far more than originally intended, has served to illustrate how much more can (and must) be derived from survey data. Such work is fundamental to attempts to move forward with existing datasets, whilst helping to emphasise the minimum standards required of future work.

In such future research, whether new fieldwork or retroactive applications, statistical and IT techniques, especially DTM/GIS, will play a central role. GIS provides a powerful tool for the collation, integration, analysis and presentation of the many different strands of regional survey. For example, the enormous potential of the South Etruria Survey data has remained latent, in part because the sheer amounts of material (including geomorphological, historical, epigraphic evidence, etc.) have denied systematic collation, sustained analysis and synthesis. In the context of new fieldwork, DTM/GIS will play an even greater role, helping to focus research questions through the analysis of existing data, to identify new questions during the course of surveys, and to provide a far more flexible environment for the interpretation and presentation of results. In particular, the modelling of archaeological processes, especially post-depositional and recovery issues, has barely begun. Although there are issues of data quality and risks such as deceptively increasing comparability, the ability to explore actively and rapidly these data within a single coherent structure will be of vital importance in the development of surface survey research.

The availability of such techniques must also be matched by significantly improved datasets. If analysis of the variation in, for example, the distribution of African Red Slip is to move beyond anything but the anecdotal, the collection and documentation of survey data still requires significant improvement. This demands, not only the systematic quantification of results, but also their explicit location within their methodological contexts. There are still fundamental gaps in the publication of even the most basic of methodological details, which undermine the validity of results, simply because their significance is lost. This is not to argue for the use of standard methodologies by all surveys, or even within a single project, but that these details are published in a coherent fashion and tied explicitly to their relevant data.

This thesis has arguably demonstrated that Cherry's optimism – discussed in section 1.2 – about the ripeness of Italian surveys for an inter-regional synthesis, is still a little further away than he imagined. The writing of such a history of Roman Italy still requires some fundamental work to develop our understanding of these surveys – towards such an objective, this thesis has made a start. It has shown the potential of the data, of the theoretical frameworks offered by post-colonialism and of IT and DTM/GIS techniques in the achievement of this goal. If anything, the writing of a history of Roman Italy is even more daunting than envisaged by Potter (1987: 8) a decade ago; however, both the potential and means of achieving such this objective have increased as well.

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