A CONCEPTUAL FRAMEWORK TO APPROACHING LATE ANTIQUE VILLA TRANSFORMATIONAL TRAJECTORIES

Abstract: The mutation of the villa in the Western Roman Empire is a key element to our understanding of the transformation of the rural landscape between Late Antiquity and the Early Medieval Period. The archaeology of this transitional phase has long been identified and has been dated to between the 3rd century in some regions and as late as the 6th and 7th centuries and in other areas; however, it is only in the last 20 years that work has begun to examine the phenomenon in detail, with a number of regional studies emerging and a few larger but primarily non-empirical studies undertaken. Despite this, an overarching unified conceptual approach is lacking with little or no attention payed to the trajectories of individual sites. This paper intends to develop and demonstrate a new approach to the phenomenon of villa change, establishing a clear classification system, augmenting the work done by Chavarría (2004) and Ripoll and Acre (2000), categorising the different elements of transformation and applying this to the development of site trajectories It will also discuss the basis and feasibility of a standardised terminology to refer to these diverse features, replacing the biased catch-all phrase 'squatter occupation'.

Keywords: *Rural, Transformation, Late Antique, Villa, Early Medieval*

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The villa was the basic building block of the Roman rural economy, providing the foundation for a whole host of economic activities and social displays. The entire economic basis of surplus agricultural production, rural taxation, landownership and food supply were structured and dominated by the villa system (Roymans and Derks 2011, 1-4). Socially, the villa system allowed the landed elites a significant degree of social expression and a forum to articulate their *Romanitas* to some degree through the addition of non-functional and monumentalising features[1].

Between the 3rd and 6th centuries AD, the villa network suffered severe dislocation and significant socio-economic change[2]. The hybrid classicising rural society of the Roman world (Woolf 1998; Crowley 2011) adopted more utilitarian and functional styles of occupation, abandoning Romanising socio--cultural conventions of architecture and identity. This dislocation and change is characterised by the disposal of the socio-economic conventions of *Romanitas* in favour of more utilitarian and functional styles of occupation, and is framed within an increase of rural abandonment rates across various areas of the Western Empire[3] and occupation contraction at many sites and notably in some regions, the reoccupation of certain sites by groups of immigrants[4]. The breakdown of the villa landscape is perceptible across

[1] SLOFSTRA 1991, 179-182; SMITH *et alii* 2016, 33-37; HINGLEY 2005, 87-89.
[2] LEWIT 2003, 260-261; LEWIT 2004, 251-252; CHAVARRÍA 2004, 67-68.
[3] *cf.* HEEREN 2015, 280-283; LENZ 1998; CHAVARRÍA 2004, 71.
[4] HEEREN 2017, 158-159; CHAVARRÍA 2007, 69-78.

both halves of the Roman Empire. Archaeologically, this breakdown is visible in the west through the abandonment and re-use of high-status architectural elements for other purposes and the apparent 'decay' of the villa fabric. This transformation occurs at different times in different parts of the Roman West during Late Antiquity, but its first appearances are in Britain and along the Lower Rhine at the end of the 2nd and the very beginning of the 3rd century AD[5]. The redefinition of social space and the adoption of new lifestyles are key elements in the development of Roman rural buildings in landscapes of later centuries and represent a transitional phase between the world of the hierarchical state and a more subsistence based and less hierarchical system. This redefinition, together with migration, regionalisation and architectural transformation have all left their imprint on the later development trajectories of villa complexes. The shift in rural occupation is part of a much wider canvas of change; evidence indicates that transformation occurs in both urban contexts[6] and military installations[7] throughout Late Antiquity.

This paper will sketch out a conceptual framework for classifying villa transformation and so-called 'post-villa activity'. Firstly it will establish a categorisation system based on archaeological architectural features and material culture and secondly will put forward a more integrated model for plotting the trajectories of change and the transformation of space at individual villa sites in a similar manner to early Roman period pioneered by Habermehl[8]. Although classification systems are not new in relation to villa transformation, this system differs in its application. Operationally, it integrates both cross-regional comparisons and the application of a standardised system between regions as well as aligning the terminology to provide a better foundation for further analysis. This provides a basis for the development of larger, more integrated comparative models within a GIS dataset to map change on a more analytical level.

FROM 'SQUATTING' TO TRANSFORMATION: THE VILLA RESEARCH CONTEXT

Traditionally, the transformation of the villa and the presence of 'post-villa activity' has been severely neglected, serving only to support narratives of 'Decline and Fall' in the Gibbonist tradition[9]. Consequently, until the 1990s, little or no significant analysis had been addressed at the end of occupation. When transformation was addressed it was dismissed simply as squatters inhabiting the ruins, characterised by 'messy' occupation[10]. Older site reports tend to employ loaded language to describe the processes of rural transformation and abandonment in Late Antiquity, utilising a wide range of related phrases and words, dismissing occupation layers as 'type de habitat précaire', 'de campements', 'wretched' and 'rude'[11] or in English, the

overarching term 'squatter occupation'[12]. Individual site evidence has suffered from this disparaging bias. There are serious deficits in the later stratigraphy of sites across the Roman West[13] with later material often ignored wholesale or cleared off without extensive record in the search for high-status remains[14]. Where recording has taken place many features have suffered from extremely vague descriptions, especially in the description of poorly dated habitational features such as subdivision of walls or occupation debris[15] and non-identifiable burials[16].

This issue has been further compounded by a clear historicising agenda. Destruction levels and 'messy' occupation at villa sites have been traditionally associated with historical events and attempts to make destruction horizons match up with historically attested phases of barbarian raiding are commonplace. For example, apparent 4th century destructions in *Britannia Prima* was traditionally associated with the Barbarian Conspiracy of 367AD[17] despite the evidence suggesting that this is not the case. This association is not confined to Britain as Spain[18] and Northern Gaul[19] have suffered the same approach. It is, however, now clear that destruction horizons are very difficult to pin down to individual events and re-evaluation of many sites has demonstrated that layers initially identified as destructions may prove to be something entirely different. This approach was supported by the assertion that transformation must be the product of barbarian occupation at these sites. This bias framework fitted into the historicising narrative of decline and fall and was aligned with older theoretical frameworks surrounding Imperialism[20]. It is, however, now clear that destruction horizons are very difficult to pin down to individual events, and re-evaluation of many sites has demonstrated that layers initially identified as destructions are something else entirely[21].

The traditional narrative was supported somewhat by the assertion that transformation must be the product of barbarians 'squatting' in the ruins of these once-grand buildings. Barbarians are assumed to be responsible for post-Roman occupation at many sites[22] with habitational has been dismissed as the construction of 'habitations sommaire' and reuse by 'familias visigodas'[23] or 'Saxon marauders'[24].

The revisionist revolution of the 1970s and 1980s has favourably affected the development of villa studies. This shift has prompted more engagement with the transformation of the villa landscape beginning with Rivet (1969) and Percival (1976) who began to examine elements

[5] DODD 2014; VAN OSSEL 1992
[6] SPEED 2014; RODGERS 2011
[7] WILMOTT 1997, 203–24; COLLINS 2017, 212-215
[8] HABERMEHL 2014, 54-55
[9] *cf.* LEWIT 2001
[10] WEBSTER 1969, 222, *cf.* LEWIT 2001, 261-262; *cf.* LEWIT 2004, 251-252; *cf.* PETTS 1997, 103-105
[11] *cf.* LEWIT 2005, 254; *cf.* MATTINGLEY 2006, 534

[12] WHEELER/WHEELER 1936, 206; BALMELLE 2001, 158; RASCÓN *et al.* 1991, 197
[13] for two examples, LIVERSAGE *et alii* 1973; SÁNCHEZ 1997
[14] for example, PAYNE 1897; KOETHE 1940; HETTNER 1893
[15] GARCÍA GELABERT/GARCÍA DÍEZ 1997; ORETEGO 1977
[16] WRIGHT 1941; NASH-WILLIAMS 1953
[17] WEBSTER 1969, 223-230; *cf.* BRANIGAN 1971, 115-116; *cf.* BRANIGAN 1972, 120-121
[18] GORGES 1979, 43-45; TARACENA 1950; RAMOS FLOQUES 1960; BLÁZQUEZ/GARCÍA-GELABERT 1993
[19] GRENIER 1934, 890-950; AGACHE 1978; WIGHTMAN 1985, 219-222; *cf.* VAN OSSEL/OUZOULIAS 2000, 133-135
[20] LEWIT 2001, 34-35
[21] for examples in a military context, see HEEREN 2016
[22] RASCÓN *et alii* 1990, 188-193
[23] GARCÍA GELABERT/GARCÍA DÍEZ 1997, 53
[24] PAYNE 1897, 69

of continuity in serious detail. Large scale regional studies in Northern Gaul[25], Spain[26], South-East Gaul[27], Italy[28] and Britain[29] have greatly contributed to our understanding of the nature of rural change, and it is now possible to say that every part of the Western Empire, with the possible exception of North Africa, was affected by this change.

Academic work has unravelled much of the bias evident in previous literature and begun to rehabilitate the phrase 'squatting' in the archaeological record[30]. The theoretical framework for most of this is complete with various studies developing new contextual themes[31]. Petts (1997) and Lewit (2005) have concluded that the phenomenon represents the reorganisation of personal and social space within the villa in the Western provinces during the 4th and 5th century, in the light of increasingly irrelevant Roman social etiquette as the need and desire for displays of opulent and ostentatious cultural homogeneity amongst members of villa-owning elite declined. Ellis (1988) has broadly supported this theme, arguing for a dramatic shift in occupation patterns that show the transitional nature of Late Antiquity in which the classical peristyle house fell out of use and was abandoned in favour of more egalitarian habitations. This manifested itself through the subdivision of rooms and the use of former high-status rooms for utilitarian functions[32]. Many of Ellis' case studies come from the Eastern Empire where other factors, not present in the West, are at play in the changing *milieu* of Late Antiquity, primarily 'soukification'[33]. Ellis also draws attention to the existence of a growing inequality of habitation; a small number of buildings showing overwhelming surplus investment whilst others show evidence of mutation. This is a trend also visible in 4th century Spain[34]. This process has rejected loaded phrases such as 'wretched' and 'rude' and above all, abandoned the use of the word 'squatting' to describe features and deposits to view transformation as a phase within its own rights, as a long-term phenomenon tied to socio-economic change, and not the result of barbarian 'sojourners'[35] reusing the ruins. It is also worth noting that comparable trends in occupation in other classes of sites appear in the Late Roman period. The same features are visible in military sites, where industrial transformation and wooden constructions are common[36], urban sites[37] and religious sites[38]. These similar changes, with increasing reliance on wooden construction and non-Roman forms of construction, had they been uncovered in villas, would have been characterised as 'habitats sommaire' and dismissed.

[25] VAN OSSEL 1992; GANDINI 2008.
[26] CHAVARRÍA 2007; RIPOLL AND ACRE 2000; BROGIOLO/CHAVARRÍA 2008.
[27] RÉCHIN 2006; SCHNEIDER 2007; HEIJMANS/GUYON 2007; RAYNAUD 2018.
[28] CASTORAO BARBA 2014; 2016.
[29] DODD 2014.
[30] LEWIT 1991; PETTS 1997; CHRISTIE 2004.
[31] VAN OSSEL/OUZOULIAS 2000; CHAVARRÍA 2004; LEWIT/CHAVARRÍA 2004; RIPOLL/ACRE 2000.
[32] MUNRO 2010; FLEMING 2012; CHAVARRÍA 2004.
[33] LANDSTÄTTER/PÜLZ 2007.
[34] CHAVARRÍA 2004; 2007.
[35] O'NEILL 1933, 138.
[36] COLLINS 2012, 171-176; 2017, 213-215.
[37] SPEED 2014; RODGERS 2011; WHITE 1990.
[38] RAHTZ/HARRIS 1956; HENRICH 2010.

Despite the advanced theoretical state of the field, a unified conceptual framework is still somewhat lacking. The majority of scholarship now examines the end of the villa environment as a long term phenomenon, influenced by inherent flaws in the economic structure of the Late Roman economy and there is consensus that rural change is part of a wider transformation of socio-economic display. Despite this, a standardised framework rooted in a standardised terminology and framework is lacking, hampering cross-regional comparisons and high level analysis. A more integrated approach to transformation, rooted in the archaeological data will be put forward in this paper.

KEY CONCEPTS

Before developing this conceptual framework, several parameters of definition are required. Both the term ***villa*** and the phrase ***villa transformation*** require definition within the context of this study.

The term *villa* is deeply problematic. The word has been in use since the Classical period and has been seriously confused and misrepresented by 150 years of different perspectives, poor definitions and partial excavations of villa sites. It has been argued over, defined and counter-defined since the advent of early archaeology in the 18th and 19th centuries. Willems[39] has deftly summed up the terminological situation, stating '*exactly what constitutes a Roman villa is a subject that will probably be debated forever…*'

The Latin concept *villa rustica* refers to a type of rural residence favoured by the Roman elites, and the use of the term is most in vogue during the Republican and Early Imperial periods[40]. The term, however, appears in a wide variety of spatially and temporally diverse sources, often in a frustratingly vague and inconsistent way[41]. It was applied to anything from elite rural retreats to the estate centres of large *latifundia* by different writers at separate times, and is often difficult to pin down through allegory and metaphor[42]. This is further confused when considering the vast climatic variation and differing cultural traditions which make it impossible to apply a Mediterranean-centric Latin concept to the entire rural organisation of the Western Empire.

Archaeologically, the term has tended to refer to rural dwellings demonstrating some element of *Romanitas*. This definition, drawing on the Latin term, seeks to take elements of the ancient descriptions whilst ignoring the literary connotations. This morphological approach has inevitably led to the term being applied to any rectangular rural main house, especially in the Northwest provinces[43]. The dichotomy between the archaeological evidence and the literary terms has led to two diverging schools of thought; first an 'Italic model', rooting villas in a historical interpretative model[44] (and secondly, an archaeological model, viewing villas from within a landscape-archaeological perspective[45]. This perspective has led to the development of a socio-cultural definition of the villa. In some cases, the

[39] WILLEMS 1981, 112.
[40] CATO, *De Agricultura* 1.4.1; VARRO *Res Rusticae*, 3.2.10.
[41] PERCIVAL 1976, 14-15; RIVET 1969, 178-179.
[42] DARK 2005.
[43] *cf.* HABERMEHL 2014, 17-18; PERCIVAL 1976, 13.
[44] RIVET 1969, 178-182; PERCIVAL 1976, 119-144; *cf.* SLOFSTRA 1983, 87.
[45] ROYMANS/DERKS 2011, 1-4; *cf.* HINGLEY 1989, 3.

villa has been stripped of its classical veneer and essentially reduced to a form of glorified farmstead[46] whilst in others, it has been assumed to be the primary driver behind rural production and elite expression[47]. Abstract evolution models and settlement hierarchies have been developed around this form of definition[48], with these socio-economic associations and presumptions becoming the defining characteristics of a villa.

This study will approach the villa within this well-established tradition, rejecting the literary definitions in favour of an archaeologically grounded definition. It will define the term within a more practical framework, approaching it from a more rounded, morphological viewpoint, a definition used in a large number of works[49]. This definition assesses rural structures based upon their architectural morphology but also with the understanding that these buildings are probably owned by the elite of rural society or, at the very least, their agents. The defining characteristics for a villa site in this study are relatively simple. Architecturally, consideration as a villa site requires rectangular construction in stone, or partially in stone, as a primary element. This form of construction must however be combined with monumentalising architectural elements such as porticos, verandas, ornamental pools, courtyards and monumental approaches with a minimum number of small rooms. These buildings must additionally demonstrate some combination of non-functional or luxury internal features through the presence of hypocausts, interior décor, baths and sometimes mosaics, tessellated pavements and luxury decoration such as marble, statuary and fountains.

These buildings are usually part of an estate centre, consisting of a monumentalising main house and a series of ancillary production, storage and processing structures. The structures are sometimes physically connected to the main house through a separate wing but, alternatively, can be standalone structures within a nucleated settlement. In short, the villa is being defined as the main house of an estate centre, of which one building or more must demonstrate some form of additional non-functional features indicating a degree of investment of surplus disposable capital into landed assets[50]. This level of investment automatically indicates that these structures are the preserve of the wealthier classes of society and this project will adhere to this, assuming that the *villa* was the residence of elite members of society and their agents.

Related to this are two other terms, key to this project and defined within its framework. The **villa landscape** is an environment in which villas dominate both socio-economic life and the physical fabric. It refers not just to the numerical superiority of villa sites but also the perception of these structures by local rural populations[51]. This is opposed by a **non-villa landscape**; an environment in which more traditional forms of occupation constitute the majority of rural sites. This implies a more traditional form of landscape

organisation and settlement hierarchy, although this does not preclude the presence of an occasional villa or cluster of villas.

The phrase **villa transformation** refers to the archaeological visible changes to the physical fabric of the Roman villa during Late Antiquity. In this definition, it will refer to three broad categories of activity. **Reuse**, the 'reutilisation of buildings and their facilities', **reoccupation**, the repeated use of these structures by inhabitants living onsite after a period of abandonment or reduced occupation, and **altered function**, the reoccupation or reuse of buildings for purposes other than originally intended. These forms of occupation, all of which manifest themselves at villas between the 3rd and 6th centuries AD, and are archaeologically visible in a series of diverse but related phenomena. These features are often messy in comparison to earlier occupation, reusing and altering earlier and often high status elements of the physical fabric. They include a wide variety of different types of activity that will be dealt with later, but often the hints of occupation are very slight and activity must be inferred from very little evidence.

CONCEPTUAL FRAMEWORK

In line with previous studies, this system itemises the larger term *villa transformation* into smaller, more manageable categories set within the framework of a feature-based classification system. This division is not new; classification systems have been an important part of transformation studies since the beginning of modern research into the topic[52]. Despite their ubiquitous use, several problems are inherent in existing systems. In a majority of cases, classification is not fully developed[53] with little or no engagement with the stratigraphic features. Highly regionalised systems are also problematic[54] with little or no applicability to other areas. Generally studies have tended to deconstruct the evidence of transformation into several broad categories; *productive*, *habitational*, *cultic* and *funerary*. This system works within this convention whilst integrating a new category: *fortification*, a form of transformation which has not received significant quantification but has been superficially examined[55].

The primary problem however is the lack of standardisation between competing classification systems. One previous paper has even called for further codification and standardisation[56]. Classification used by previous studies has proved rather vague in terms of archaeological features and material culture, with the exception of Van Ossel (1992), although this work is not without significant issues. The classification system put forward here rectifies this, establishing more rigorous categories, expanded and augmented with a standardised terminology for individual classes (key terminology laid out in Figures 6) based upon the *Forum on Information Standards in Heritage* (FISH).

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46 REECE 1988, 49.
47 SLOFSTRA 1991, 175-177.
48 SLOFSTRA/BRANDT 1983; HODDER/MILLET 1980.
49 for example; LEWIT 2001, 260; CHAVARRÍA 2007, 32-36; VAN OSSEL 1992, 39-44; HEIMBERG 2002/2003, 68-69; *cf.* HINGLEY 1989, 2-4.
50 HINGLEY 1989, 45-46.
51 ROYMANS 1996, 61; ROYMANS/DERKS 2011, 3.
52 VAN OSSEL 1992.
53 RIPOLL/ARCE 2000, 70-95; CASTRORAO BARBA 2014, 261-262; CHRISTIE 2018.
54 CHAVARRÍA 2004, 76-85; 2007; VAN OSSEL 1992, 127-142; DODD 2014; CASTRORAO BARBA 2016.
55 VAN OSSEL 1992, 161-165; VAN OSSEL/OUZOULIAS 2000, 143-145; HEEREN 2018, 141.
56 RIPOLL/ARCE 2000, 71, 99.

Fig. 1. An example of habitational transformation. A rough flagstone floor laid over an earlier mosaic at Butleigh (Absolute Archaeology[60])

Habitational Transformation

Habitational transformation refers to the presence of continued domestic occupation or reoccupation of the physical fabric of the building. It is almost always defined within the framework of a change in building styles with less emphasis placed upon Romanising elements and a dispensation with classicising architecture[57].

Physically, it is characterised by several trends. It can be divided into two distinct forms; a reversion to timber post-built structures[58], often argued to have been related to the presence of immigrants[59] and the renovation of existing buildings in a different style. New walling, utilitarian flooring in addition to ephemeral features, such as hearths or rubbish dumps (for example in figure 1) are associated with domestic transformation and are found in habitational contexts across many Late Antique villas. In many cases, the evidence for this can be extremely vague. This is the product of a variety of factors including excavation biases and site formation process and the features themselves are often only very broadly datable. Elements of habitational transformation often possess multi-faceted purposes. For example, apparently domestic hearths may be found in demonstrably industrial contexts. In cases such as this, the evidence can be interpreted as belonging to a different class of transformational activity.[60]

Productive Transformation

Productive transformation relates to the alteration or reoccupation of villa buildings and the wider villa terrain for economically productive activities. This form of transformation has long been noted as a key element within the Late Roman rural economy[61] and forms part of a wider trend of increasingly diverse industrial production at villa settlements in Late Antiquity, especially in the North-Western provinces.

Morphologically, it is characterised by the alteration of a building, room or zone for the installation and use of industrial, artisanal or productive facilities, including storage zones. This class represents the clear modification of former structures into manufacturing zones and encompasses everything from small-scale ceramic production, for example at Bruyelle[62] to large-scale grain processing and storage, for example at Hambach 21 (for an example, see figure 2). This process both includes the alteration of formerly high-status residential zones, for example at Torre Llauder as well

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[57]   CHAVARRÍA 2004, 80-81.
[58]   VAN OSSEL 2006.
[59]   *cf.* HEEREN 2017, 160-163.
[60]   https://archaeologydataservice.ac.uk/library/browse/issue.xhtml?recordId=1118958&recordType=GreyLitSeries.
[61]   LEWIT 1991.
[62]   BRULET 2009, 305.

Fig. 2. An example of productive transformation. The conversion of a bath house into a T-shaped grain drier at Ingleby Barwick (Willis and Carne 2013, Plate A2).

the movement of productive activity from main buildings to post-built structures on the villa terrain, for example at Minster-in-Thanet. In some cases, regional industry developed from newly founded artisan production at groups of villas, with the Hambach glass industry acting as a regionally vibrant manufacturing hub throughout the 4th century. Archaeologically, they tend to be most visible when related to large-scale surplus production rather than small-scale processing; at which level there can be some interface with domestic level agricultural use.

Funerary Transformation

The use of villa sites for burial purposes is well attested in Late Antiquity and the Early Middle Ages[63] with a high frequency of appearance in all regions of the Western Empire. This phase of reuse is generally concentrated towards the end or after occupation ends is difficult and complex to contextualise. It includes both small-scale groups of burials or individual graves as well as large developed cemeteries and is not temporally or spatially limited within the villa complex. Burials are generally assumed to date to the end of the Roman period or immediate sub-Roman period, although much greater evidence has come to light in recent studies[64] highlighting the evidence for funerary use into the Early Medieval and High Middle Ages, especially on

Mediterranean sites.

Funerary use is often very difficult to quantify, with its scale poorly recorded due to the ephemeral nature of many burials, and an excavation bias against such features. Many of these graves are circumstantial, easily destroyed by careless excavation, or are in poor states of survival. Little post-excavation analysis has been done on the material and many larger cemeteries, especially in North-Western Europe remain unpublished.

Cultic Transformation

Similar in nature to the reuse of rural structures for funerary purposes, the transformation of rural buildings for religious purposes is well documented, especially in the Mediterranean region[65]. It is well understood with a developmental trajectory beginning with private chapels developing from the 4th century onwards[66] and in some cases represents the conversion of large portions of the house into religious zones.

Conversion into religious structures can take a number of diverse forms, from the conversion of a room to a house-chapel such as the case of the Villa Fortunatus[67]


Fig. 3. An example of funerary use. Part of a larger sub-Roman cemetery at Southwell (Daniels 1966).

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63 For a number of examples see, CHAVARRÍA 2004, 81-83; CHAVARRIA 2018; LEWIT 2003, 261-262; PELLECUER/POMARÉDES 2001, 524-525; LE MAHO 1994, 10-24.
64 *cf*. CHAVARRIA 2018.

65 CHAVARRÍA 2004, 83-85; RIPOLL/ARCE 2000, 74-88; BOWES 2001, 324-328; BELL 2007 amongst a great deal of other literature.
66 RIPOLL/ACRE 2000, 74-75.
67 PUERTAS 1972.
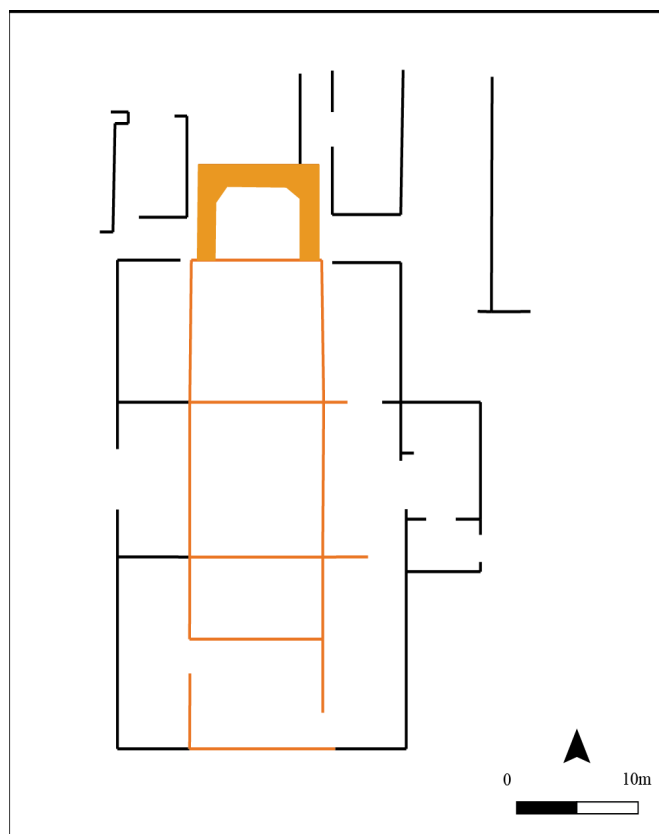
Fig. 4. An example of cultic reuse (highlighted in orange). The insertion of a Christian basilica into the Villa Fortunatus (Dodd, after Duval 1982, 37, fig. 3). Drawn in Adobe Illustrator.

and Lullingstone[68] to the reuse of abandoned buildings or squatter structures such as at Bradford-on-Avon[69] and Echternach[70] or the construction of entirely new buildings for example at Torre Del Palma[71]. There is also evidence of the conversion and development of villas sites into monastic communities[72], although this often develops through private house-chapels from the late 4th century onwards[73], for example at Plassac and later at Torre Del Palma. The installations themselves vary greatly in size and shape, with no clear architectural evidence. They are often difficult to discern without explicit evidence[74] although it notable that in Southern Europe, especially Iberia, religious reuse of villas is much more visible.

Fortification Transformation

The fortification of villa sites is a generally less common phenomenon and tends to be regionalised in specific areas, such as *Pannonia*[75], parts of the German provinces[76] and North Africa[77]. Fortified villas in Europe have generally been examined within the tradition of research on fortified towns and military installations[78]. Very little work has been done to

integrate a framework for fortified villas into a more general study of rural transformation. Most studies of fortified villas are small-scale and superficial, focusing upon either very specific elements[79] or very broad-brush studies[80].

Morphologically, fortification is defined from an architectural position, simply as the presence of defensive elements at a site. This naturally encompasses a large group of sites with diverse elements, including both putative and truly fortified construction. It includes features such as stone defences, palisaded enclosures and regionally significant features. These features, some bearing the hallmarks of military architecture include both the presence of poorly understood and ill-defined *Speichertürme*, traditionally viewed as a fortified grain storage silo and *burgi*, small forts or watch-towers in Northern Gaul and Germany.

One of key concepts not covered in the sequence of transformation covered above is the process of ***abandonment***. Abandonment is inevitably the endpoint for most Roman rural buildings, however, in what for, and how long this takes is matter of some discussion. Traditionally, studies dealing with the transformation of Roman rural settlements have brushed very lightly over the concept and theory of abandonment. The process of site abandonment has been addressed on the macro scale[81]; however the primary focus of many studies has been directed at isolating *transformation* from *abandonment* [82] with very little work directed towards a unified theoretical or methodological framework. Instead, the focus has rather been directed towards the transformation of sites[83], or establishing cases of continuity between Roman and Early Medieval occupation[84].

Practically, Roman archaeology has tended to implicitly follow the definition of abandonment laid out by Schiffer[85]; 'the process whereby a place - an activity area, structure or entire settlement is transferred to the archaeological record'. Despite its somewhat ubiquitous use, this definition is flawed when related to the afterlife of the Roman villa. Recent work, especially in New World Archaeology, has highlighted the impossibility of a clear and simple definition of abandonment[86]. In addition, research has cautioned against the default position of the so-called 'Pompeii Syndrome'[87] which assumes little or no use of a site after the end of formal occupation and can only be realistically applied to a small minority of sites destroyed beyond all use or recovery.

Abandonment is a key element in the development trajectory of villa sites. The abandonment of sites and areas of sites is intimately tied to the transformation of rural settlement. In the majority of cases the lines between abandoned zones and in-use areas are highly blurred and do not easily fit into clear cut definitions[88]. Some of these

68 MEATES 1979.
69 CORNEY 2002, 2003.
70 METZLER/ZIMMER/BAKKER 1981, 29-45.
71 MALONEY/HALE 1996.
72 PERCIVAL 1997.
73 RIPOLL/ACRE 2000, 86-88.
74 *cf.* MONTFRIN 1998.
75 CHRISTIE 1992, 320.
76 VON PETRIKOVITS 1971, 180-183.
77 MATTINGLEY 1995, 194; RIND 2009, 53-65.
78 JOHNSON 1984; BRULET 2017, 53; HENRICH 2016/2017, 177-187.

79 BECHERT 1978.
80 VAN OSSEL 1992, 161-165; VAN OSSEL/OUZOULIAS 2000, 143-145 HEEREN 2018, 140-141.
81 LENZ 1998.
82 VAN OSSEL 1992, 79-84; CHRISTIE 2004, 21-23.
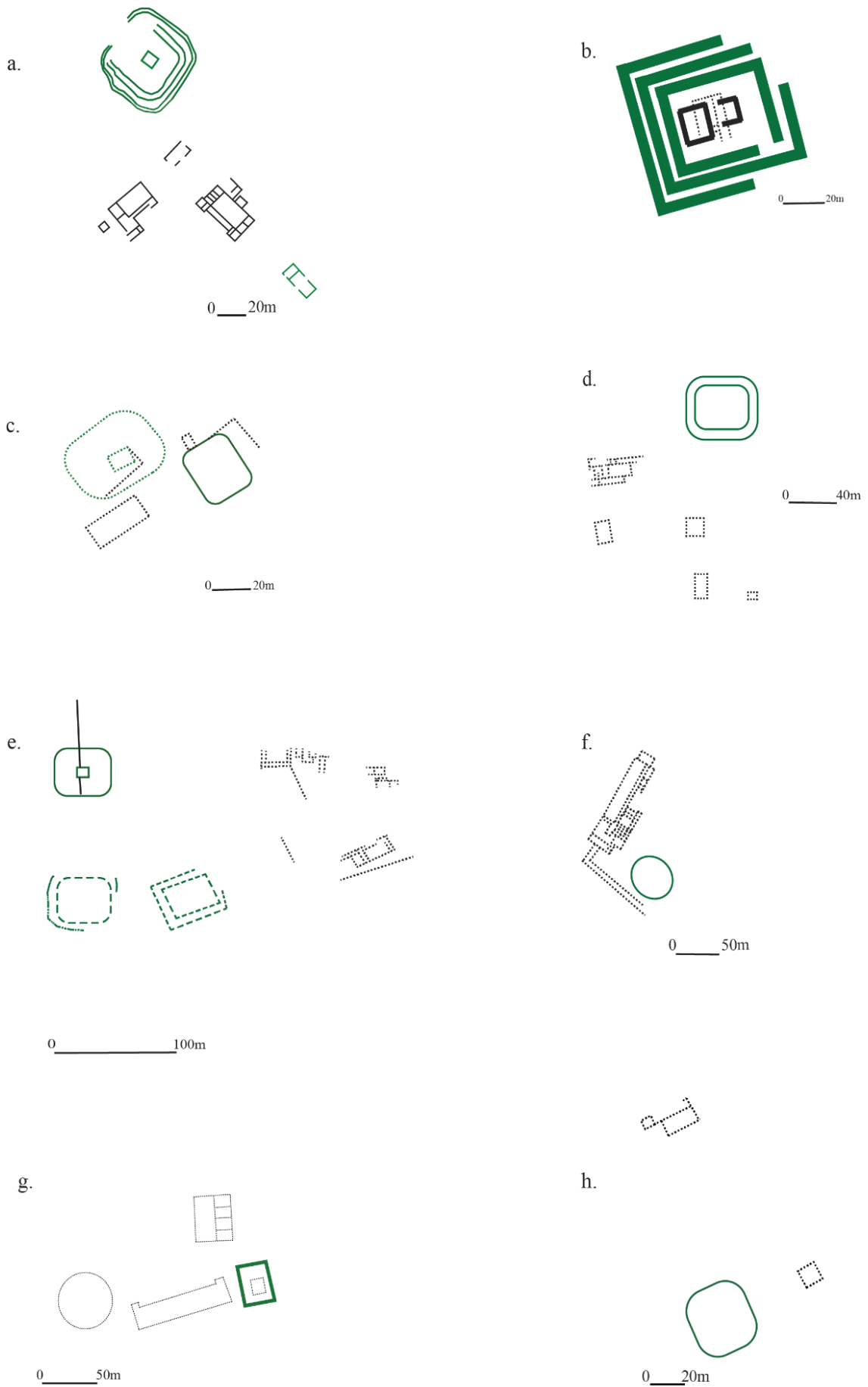83 VAN OSSEL 1992, LEWIT 1991; 2003; 2005.
84 HEEREN 2017, PERCIVAL 1976, 1992.
85 SCHIFFER 1987, 89.
86 CAMERON/TOMKA 1993; CAMERON 1991; STANTON/MAGNONI 2008, 6-9.
87 SCHIFFER/LAMOTTE 1999, 24-25.
88 SCHIFFER 1996, 40-44; SCARBOROUGH 1989, 415.

Figure 5: Comparative plans of *burgi* from the North-Western provinces showing the significant variation in design; a. Rheinbach-Flerzheim, b. Bodenbach, c. Köln-Widdersorf, d. HA303, e. Vettweiß-Froitzheim, f. Rommerkirchen-Nettesheim, g. Wijchen-Tienakker, h. HA224 (Dodd after various). Drawn in Adobe Illustrator

Table 1. A breakdown of features and material culture associated with classes of transformation (J. Dodd).

Class of Transformation	Archaeological Features	Material Culture
Habitational	postholes, pits, hearths, new floors, wood constructions, subdividing walls, middens, huts, *Grubenhäuser*.	domestic pottery, refuge and waste deposits, organic material deposits
Productive	grain driers, threshing floors, metalworking smelters, smithing hearths, oil/fish production facilities, saltworks, water tanks, batteries of dolium, kilns.	Industrial quantities of pottery or industrial waste, e.g. metalworking slag
Funerary	any form of burial, either individually or grouped	grave goods, human remains
Cultic	chapels, oratories and baptisteries. Often only discernable by overt Christian evidence.	wall plaster with Christian motifs, overt Christian architectural elements
Fortification	*burgi*, defended enclosures, *Speichertürme*, fortified compounds.	No associated material culture

indeterminate activities, such as stone-robbing, scavenging and partial reuse have been loosely grouped together as 'post abandonment activities'[89]. Many of these activities are identified as 'squatting' within Roman archaeology. This indicates that these buildings did not immediately enter the archaeological record, but rather continued to play a significant role in local interactions after the end of occupation. This interaction requires a new definition, rejecting Schiffer's simplistic model. This study will define abandonment as 'the end of formal, permanent occupation at a site, or sector of a site'.

This redefinition has been guided by the presence of more advanced theoretical models in other fields of study which have guided the integration of post-abandonment activity into this project. Ethno-archaeological studies, especially in the New World[90], have highlighted the extremely difficult process of identifying and understanding final floor level assemblages, whilst stressing that the material remains left behind only represents a partial picture of occupation. Such work has also begun to establish that a wide variety of activities occur after the end of formal occupation and can occur in both totally abandoned and sporadically used buildings. The most advanced models have been developed in relation to Mayan archaeology, where significant work has been directed towards understanding different forms of post-abandonment activity on a broad canvas[91] whilst also identifying different forms of abandonment and its role in the perception of buildings[92].

A similar approach must be taken in the Roman rural landscape. There is clear evidence that many of these buildings stood well into the Medieval Period[93]. The study of interactions with these buildings has been highly simplified, partly due to their archaeological invisibility. Only in a few simple cases can abandonment be viewed as the single stratigraphic transference of the archaeological horizon into the site record. In almost every case, it is more appropriate to discuss a trajectory, or several competing trajectories, of inter-related uses and perceptions, culminating in the entry of a site into the record.

This paper integrates a more nuanced view of abandonment, with four different grades along a sliding scale, and therefore enabling the categorisation of different forms of post-abandonment activity. Abandonment can be broken down into four broadly differentiating categories, based on different types of reuse and different timescales of abandonment:

- *Seasonal:* Seasonal re-use is defined as the abandonment of a building for large parts of the year and its reuse for a definable period. This form of abandonment is usually seasonally tied either due to climatic reasons, for example a roofless building would be of limited use in midwinter, or for socio-economic reasons such as cyclical markets or feasting. It is characterised by regular, intense occupational layers separated by periods of natural depositional processes.
- *Episodic:* Episodic re-use represents the use of a structure on a more or less sporadic basis. It includes a broad array of less formal activities that can occur in unused or decaying buildings. These activities tend to be unplanned and irregular in timescale, with a casual or opportunistic pattern of reuse. They can range from the use of a structure as a temporary shieling for livestock or the use of an unused structure as a dumping ground, to the reuse of a building as shelter or to more generic scavenging or stone robbing. Temporally, these forms of activity can go on for centuries, specifically stone robbing, which often appear not to have been planned or directed in any meaningful way at many sites. This category covers the majority of processes, often archaeologically invisible and constitutes the largest group of post-abandonment activity.
- *Near-Permanent:* Near-Permanent abandonment represents the reuse or reoccupation of sites after a long period of abandonment. This category of site includes settlements abandoned and reoccupied centuries later. The reuse of a Roman villa abandoned in the 5th century and reoccupied in the 8th century by a Christian centre, Tholey[94] is one such example. In many cases this can include the use of building materials from the previous occupation as well as looting or pillaging of such material.
- *Permanent:* Simply put, this is the type of abandonment proposed by Schiffer in 1987 and represents the complete

[89] SCHIFFER 1996, 207-212.
[90] CAMERON/TOMKA 1993; BROOKS/YELLEN 1987; LAMOTTA/SCHIFFER 1999.
[91] STANTON/BROWN/PAGLIARO 2008.
[92] STANTON/MAGNOLI 2008.
[93] RAHTZ/HARRIS 1956; HOWELL 2000.

[94] KOLLING 1961.

and definitive abandonment of a site, without reuse or reoccupation. It would be left as the day that final permanent occupation ended, with the site later shaped by site formation process and modern disturbance. The class of activity includes sites catastrophically destroyed, such as Pompeii and Herculaneum, and those which
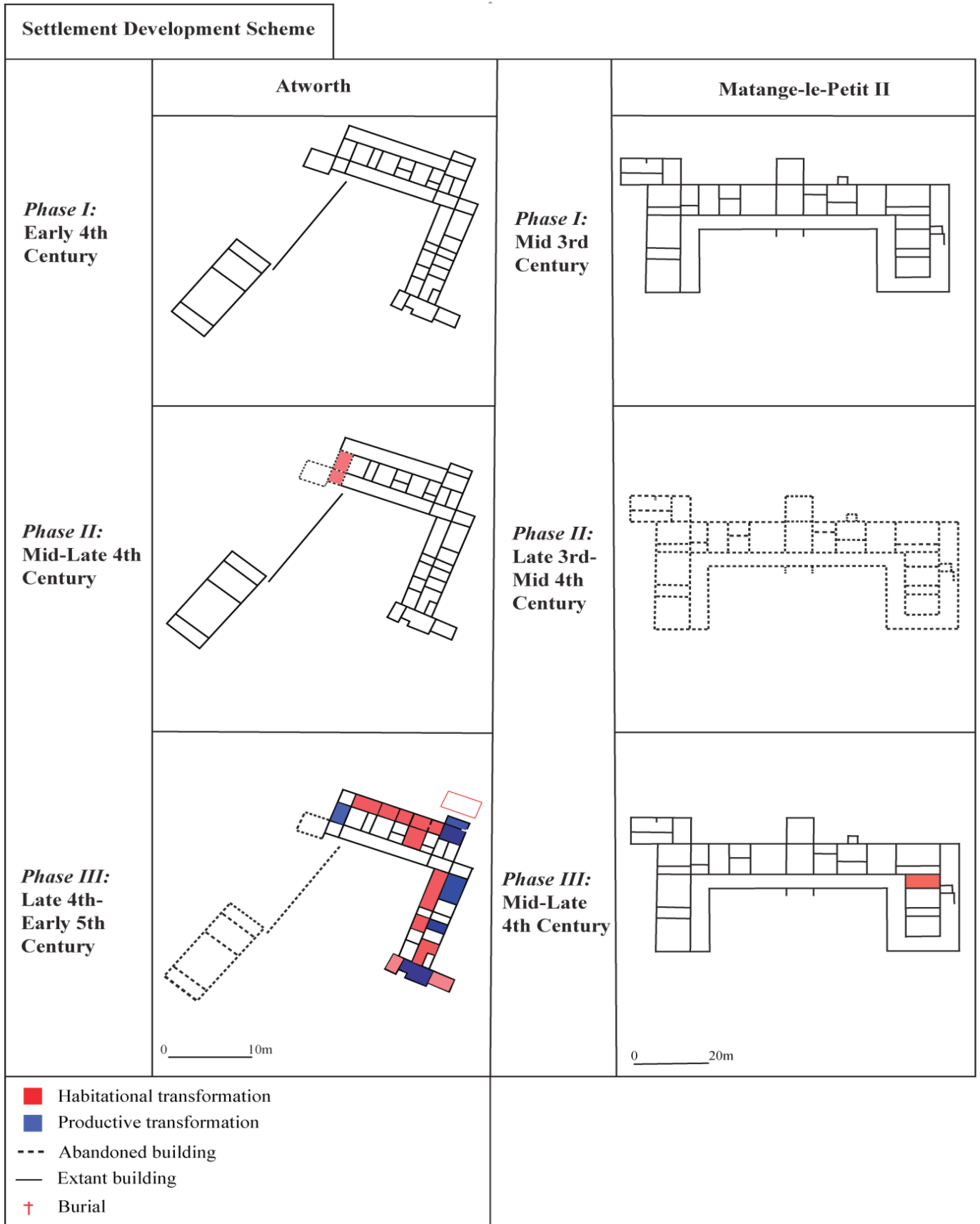
Fig. 6. Two examples of phase plans showing differing trajectories of villas and the increasing reorganisation of space and the eventual abandonment of areas of the complexes (J. Dodd). Drawn in Adobe Illustrator.

appear to be apparently deliberately destroyed such as the fortress at Inchtuthil[95]. It is only really limited to buildings destroyed beyond any recovery or possible use.

PRACTICAL APPLICATION

The second aim of this paper is to demonstrate the practical application of this classification system within a settlement development trajectory. A primary problem with all studies of transformation villas is the lack of chronological engagement with the phenomenon[96]. Settlement development trajectories have not been applied to Late Antique villas and subsequently this has left a gap in our understanding of the temporal mechanisms and practicalities of rural change. The theoretical basis for this system has developed from work done on the Late Iron Age and Early Roman Period. Diederick Habermehl developed a schematic system to chart the development of Early Roman rural settlements[97]. The development trajectory used in this study builds on the work done by Habermehl, applying some related methodology. However, unlike Habermehl's study, which could easily chart the development of sites by large-scale typological and spatial trajectories, this project cannot adequately achieve the same clarity with transforming villas.

This paper utilises chronological phases to build two individual site biographies (figure 7). These chronological phases are relative to each site, primarily due to the poor stratigraphy of many features and the nature of the chronological evidence. A uniform system of phases across all sites and regions is impossible given the wide variety of biases inherent in the data. The phases in use are generally broad, in most cases spanning half centuries except in specific cases where occupation dates are securely dated. These phases will be used in two ways: firstly they will be employed in combination with a series of colours, which will designate a transformed use of space as illustrated in figure 7. These colours will demonstrate the changing nature of the site over the Late Roman period and allow both for individual site biographies to be developed and for high-level comparative analysis between sites. Secondly the chronological phases will illustrate the changing size of individual villas throughout Late Antiquity, allowing for meaningful conclusions to be made of chronology and development at these sites.

CONCLUSIONS

This framework differs from previous studies in a number of ways. Firstly it is tied to a site-specific phasing system, using fixed colours and icons to illustrate the changes of individual site trajectories, similar to the processes pioneered for the Late Iron Age-Early Roman transition by Habermehl. Previous work has only addressed this in the most basic way; broadly shading areas were transformation occurred when setting out site plans[98]. This paper moves forward the theoretical application of settlement trajectories and allows for a more complete analysis of the reorganisation of the social and productive space at rural sites in Late Antiquity. Secondly this framework is designed

for application across Europe, with applicability to all villa settlements across the Western Empire without a regional restriction. It can be used to provide a theoretical platform to expose large scale differences between provinces as well as micro-regional trends in the Roman west and when coupled with modern GIS analysis, it can be used as a powerful tool for mapping rural transformation across the Western Empire, both temporally and spatially.

The large-scale perspective inherent in this also encourages the possibility of integrating the study of transformation between Northern and Southern Europe, traditionally a distinct divide in the study of rural landscapes in Late Antiquity, although this is now somewhat breaking down. However this can only be realistically achieved through the standardisation of terminology, recording and data analysis. Large scale studies in this format can be used to draw conclusions from individual classes of transformation, for example comparing funerary and cultic trends, which have generally been examined on a regional basis[99]. Intra-regional studies using this theoretical framework can utilise a data-based system to develop statistical analysis of the patterns and trends of large-scale rural change. A key element of this study has been the development of a standardised terminology, something lacking from most studies of villa transformation, and central to transmitting information as well as developing comparisons and conclusions based on the same standard. This paper has provided a framework to change this and to encourage a further holistic study of rural change across Western Europe, moving beyond regional analysis towards a more modern, integrated framework for villa transformation.

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[95] PITTS/ST. JOSEPH 1985, 279-280.
[96] *cf.* CHAVARRÍA 2004, 67-68.
[97] HABERMEHL 2014, 51-55.
[98] CHAVARRÍA 2007, 163-260.
[99] BELL 2007; CHAVARRÍA 2018; GLIEZE 2017.

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