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Using a current archaeological research framework (regional or thematic), contextualise and synthesise data and results from an agreed archaeological project

Informative and up-to-date research frameworks are how archaeological projects should be designed. Without understanding previous research in a specific region, period, or thematic context, it is not easy to progress research questions and gain additional insight from the archaeological record in a consistent and meaningful way. However, this is problematic in practice, as research frameworks are not consistently developed by central government authorities or archaeological representative bodies, local authorities, academia, private contractors, and other interested groups undertaking research (Belford, 2020). The result is a patchwork of information that cuts across regional boundaries, disciplines, and themes; without any clear lines of authoritative responsibility, these frameworks become quickly outdated as the body of published and unpublished material diversifies and changes over time. In practice, a researcher at the beginning of a project must instead make do with what is available from these variable sources.

Pudding Pan: A Roman Shipwreck and its Cargo in Context (Walsh, 2017) is a published book that resulted from the author's unpublished thesis at the University of Southampton, UK (Walsh, 2006). The research is challenging to place within any straightforward research framework, as it covers a multitude of regional and thematic frameworks discussed below, with the compounding factor that the author was a significant contributor to a framework after the research was conducted, which then noticeably details the relevant research questions around topics of Roman samian ware, shipping, and trade (Walsh et al. 2013 p.93-112). As this research produced a thesis and a book, it was also difficult to condense into forensic detail the results of Walsh's research. Nonetheless, the approach in this short assignment is to identify the salient results of the research, around primarily what can we learn about Samian ware and maritime trade from the collected data of the pudding pan assemblages and then contextualise and synthesise these outcomes within the array of relevant and available frameworks.

Firstly, it is necessary to note that any samian ware pottery is an important assemblage because it provides some of the best surviving data of the Roman period (Willis, 2004) in terms of chronology, cultural change, identity, trade, and geography. Secondly, Roman samian ware pottery called Pudding Pans exist in the archaeological record, but Roman shipwrecks in the coastal waters of East Kent are only speculative and based upon the physical evidence of retrieved Roman samian ware trawled up Whitstable fishermen over the last 300 years.

The pudding pans retrieved from Whitstable are a significant assemblage of 526 samian wares (Appendix 1), which due to the nature of their retrieval within uncertain contexts and over long periods, is now dispersed widely in museums and private collections (Appendix 2). Walsh emphasises that the assemblage has been neglected for over a hundred years from any detailed systematic review (Smith,

1907). However, reviewing and studying this assemblage of pudding pans could help us develop a further understanding with regards to their origin, purpose and perhaps give a better indication if the pudding pans were jettisoned cargo or amount to evidence of Roman shipwrecks on the Kentish flats carrying a single large cargo of samian pottery. In contrast to the suggestion that samian ware constituted 'piggyback' goods (Middleton, 1979) rather than a significant and important cargo, transported in bulk quantities for private markets.

Within Northern Europe, we do not have a comparative Roman shipwreck within coastal waters carrying a large cargo of samian ware to normalise the data reviewed by Walsh. However, some parallels were drawn with shipwrecks found within the Mediterranean, although the samian ware was produced of a different form, source, chronology and perhaps constituted a secondary cargo rather than the main bulk (Millet, 1993). The nearest comparative we have of samian ware is a riverine site excavated at New Wharf London 1974-5 (Rhodes, 1989) which shared some correlation with the retrieved pudding pans, as the assemblage was from a similar chronology, form and bearing the same potter stamps of the place of manufacture in northern France, Lezoux.

The cumulative data of all retrieved Roman pottery from the locality identifies two possible wreck sites dated between 40-65AD and 180-200AD (Appendix 3). The plain non-decorative samian ware ascribed by Walsh as most likely to constitute one wreck carrying a bulk mono cargo of pudding pans from central Gaul falls into the 180-200AD bracket, based upon comparative data sets of identified potter stamps and known dates (Appendix 4). The pudding pans come from a singular context that is neither disturbed nor dispersed over a wide area of the seabed; the physical examination of the assemblage does not have abrasion yet does have sharp edges glaze, and some paint marks. The recovered pudding pans showed signs that they were stacked in an inverted position, possibly resulting from bulk transportation within containers of both pottery type and stamp.

This contrasts sharply with what we might expect using Schiffer's model of transforms, N transforms being erosion from natural tide and currents over time, and C transforms from human disturbances such as oyster dredging (Schiffer, 1997). This is further borne out in the data when we look at the graphical evidence of the forms of recovered samian ware not showing variation over the last 300 years (Appendix 5), indicating that a vast assemblage of pudding pans could be buried deep in a paleochannel of the Kentish Flats. That the pudding pans are not an exhausted assemblage of samian ware is perhaps evidenced by longitudinal data sets that show the approximate frequency of recovery over the last 300 years (Appendix 6). Although Walsh does not and maybe cannot average this distribution in the data due to variables in recovery dates resulting in poor quality of collated data.

Terrestrial data on samian ware trade in the British Isles from the 2nd century AD provides compelling evidence to the purpose and destination of the pudding pan assemblage. The assemblage was unusual due to its large volume of plain pottery types, contrasting with terrestrial assemblages containing plain and decorative types (Appendix 7). It does indicate that the cargo recovered is a bulk transport travelling from the point of manufacture to a port for distribution and trade. The data on samian

ware found in the UK during the same period has much more variability in the characteristics of samian assemblages (Appendix 8); which perhaps indicates that the manufacture was not driven by demand but made and transported in regular long-distance networks, stored at quayside warehouses to be latter redistributed (Appendix 9). Such as New Wharf London, where a quantity of samian pottery was recovered bearing the same potter stamps as those found at pudding pan.

In terms of regional research frameworks, the pudding pan assemblages do cover a wide geographical area. The hypothetical archaeological site is 5km-8km from the southeast coast on the Kentish Flats, but it also covers the outer Thames Estuary. For this reason, it is not easy to pin down into single regional framework. This is especially the case when we think about the broader European impact of the assemblage on trade; the resulting data of pudding pans like the physical samian assemblage have a wide distribution.

The Southeast Regional Framework (SERF) is still a work in progress and contains a selection of papers (Kent County Council, 2021). The framework is agenda-based, and under the Maritime section (Milne et al, 2012) mention is made of pudding pans and links between terrestrial and Maritime trade, which was the focus of the above research data. Although perhaps outdated, this research agenda does provide a good overview of the region's maritime heritage, and for this reason, it is also perhaps inward in its focus. The latter section attempts to summarise a regional research agenda (Appendix 10), but it does not detail a specific understanding of Maritime heritage from contextualising recovered cargo such as Roman samian ware from imported European trade. Although interestingly, there does seem to be a nod towards the need to re-examine marine assemblages that are languishing with-in collections unstudied and uncatalogued, which was a significant driver for the undertaking of the pudding pan data collections

The Roman period section of SERF (Allen et al, 2013) focuses upon domestic pottery production and trade exchanges of samian ware between British regional production centres. The gathered pudding pan data could enable a better understating of continental influences on pottery production in the region as the framework document mentions continental potters migrating into developing markets. Although this is currently outside the scope of resulting datasets from pudding pan, it may have the potential to develop further into a research project. The research agenda (Appendix 11) located at the end of the document focuses on the big military questions around the transition from Iron Age to Roman Britain in the region and does not provide much incentive to evaluate some of the best data we have in the archaeological record for the period, i.e., samian ware.

Michael Walsh has been a significant contributor to the *People and the Sea: A Maritime Archaeological Research Agenda for England* (Walsh et al, 2013 p.93-112) As such, this framework provides an accurate focus based around five themes: Coastal Change, Maritime Settlement and Marine Exploitation, Seafaring, Maritime Networks and Maritime Identities and Perceptions of Maritime Space. It should be noted that these themes do recycle and develop a variety of both thematic and regional frameworks into combined resources for future research. The first four of these themes listed below apply the research framework to synthesise and contextualise the data results on the pudding pan assemblage.

Coastal Change 5.1 (Walsh et al, 2013 p.95): it is problematic to measure coastal morphology during the Romano-British period due to a lack of cartography data and a multitude of unknown variables; although the pudding pan data does indicate the approximate location of shipping channels used for trade in coastal waters (Appendix 12); traders would have made good use of the now silted up Wantsum channel at nearby Reculver.

Maritime Settlement and Marine Exploitation 5.2 (Walsh et al, 2013 p.97): identifying the correlation between the pudding pan potter stamps and those found at New Wharf London helps understand the potential port of destination for samian ware trade from the continent. However, the pudding pan data does not help to answer interesting research questions regarding the location of Romano-British harbours, ports, and landing places other than the ones we know about in London.

Seafaring 5.3 (Walsh et al, 2013 p.103): The pudding pan data discussed above has the potential to answer key research questions within this theme, such as using interdisciplinary methods of pottery analysis to identify the potential locations of Roman shipwreck sites. Given the lack of evidence in both the historical and the archaeological records on Romano-British seafaring, samian ware from a marine context represents some of the best data sources available to answer these research questions.

Maritime Networks 5.4 (Walsh et al, 2013 p.105): We know that cross channel maritime trade between Gaul and Southern Britain predates the Roman occupation and leading up to the 3rd Century AD, we also start to see a decline in imports from long-distance Mediterranean sources into Britain, which might indicate growing material independence. However, there are open and unresolved questions around the purpose of trade being a function of supply for military occupation via taxation or independent bilateral commercial exchange in a pre-industrial society. Again, there is a scarcity of cargos found in Romano-British shipwrecks to answer these questions definitively. The pudding pan data goes part of the way, revealing cross channel imported samian ware as an important bulk commodity in its own right, stored within ports and redistributed along supply chains to locations other than military forts.

The thematic research framework perhaps offers the best means to synthesise the data. Although regional frameworks such as SERF offer an excellent resource in terms of general overview, but it becomes somewhat cumbersome when providing a clear focus beyond the main areas of interest and expertise of the contributing authors. A thematic research framework does not hide this bias and has the impetus to examine detailed research questions as explored above. Thematic research frameworks can also be resourceful in utilising collectivised expert knowledge in the specific archaeological disciplines to tease out the direction of new research. However, there are fundamental problems with keeping the momentum updated in whatever research framework is chosen to focus a project. The solution could be to treat research frameworks as living data that must be continually updated to yield high-quality research outputs.

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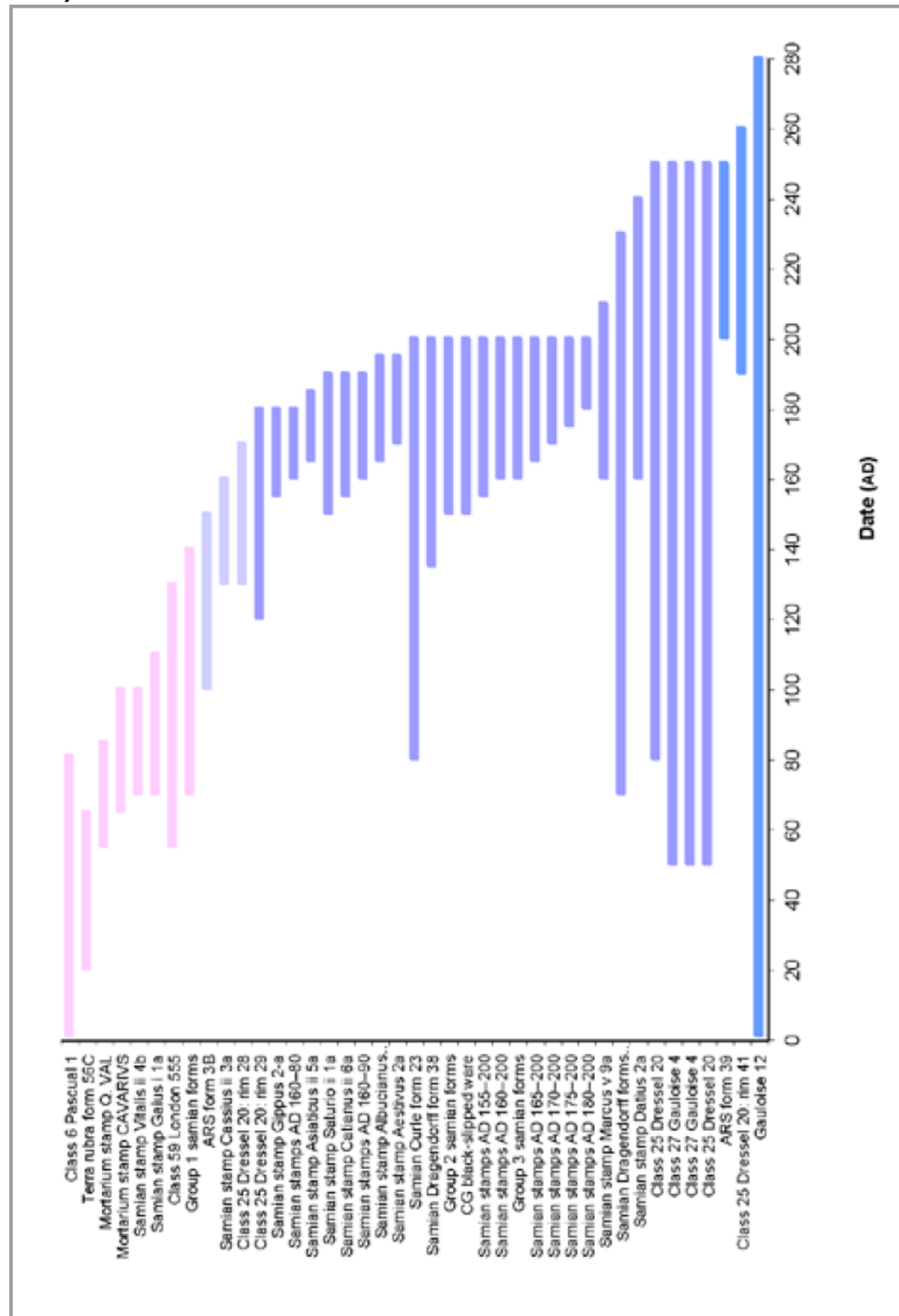
Appendix 1: Summary of minimum numbers of vessels from pudding pan (Walsh, M. 2017)

Source	Date	Total	Adjustments	Amended total
Smith	1909	282	- 2 from Cambridge University Museum of Archaeology and Anthropology of very dubious provenance	280
Watson	1987	182	+ 62 reported but unseen	244
Walsh	1998	327	None	327
Walsh	2006	497	- 29 fragments counted as if complete vessels	468
Current	2015	510	+ 16 reported but unseen including 10 missing vessels from Swansea Museum	526
Current	2015	526	+ 12 recorded uniquely by Smith (1909)	538
Current	2015	538	+ 40/43 recorded by Smith but currently untraced	578–81
Current	2015	526	+ 31 per cent in private collections in 1909	c. 689

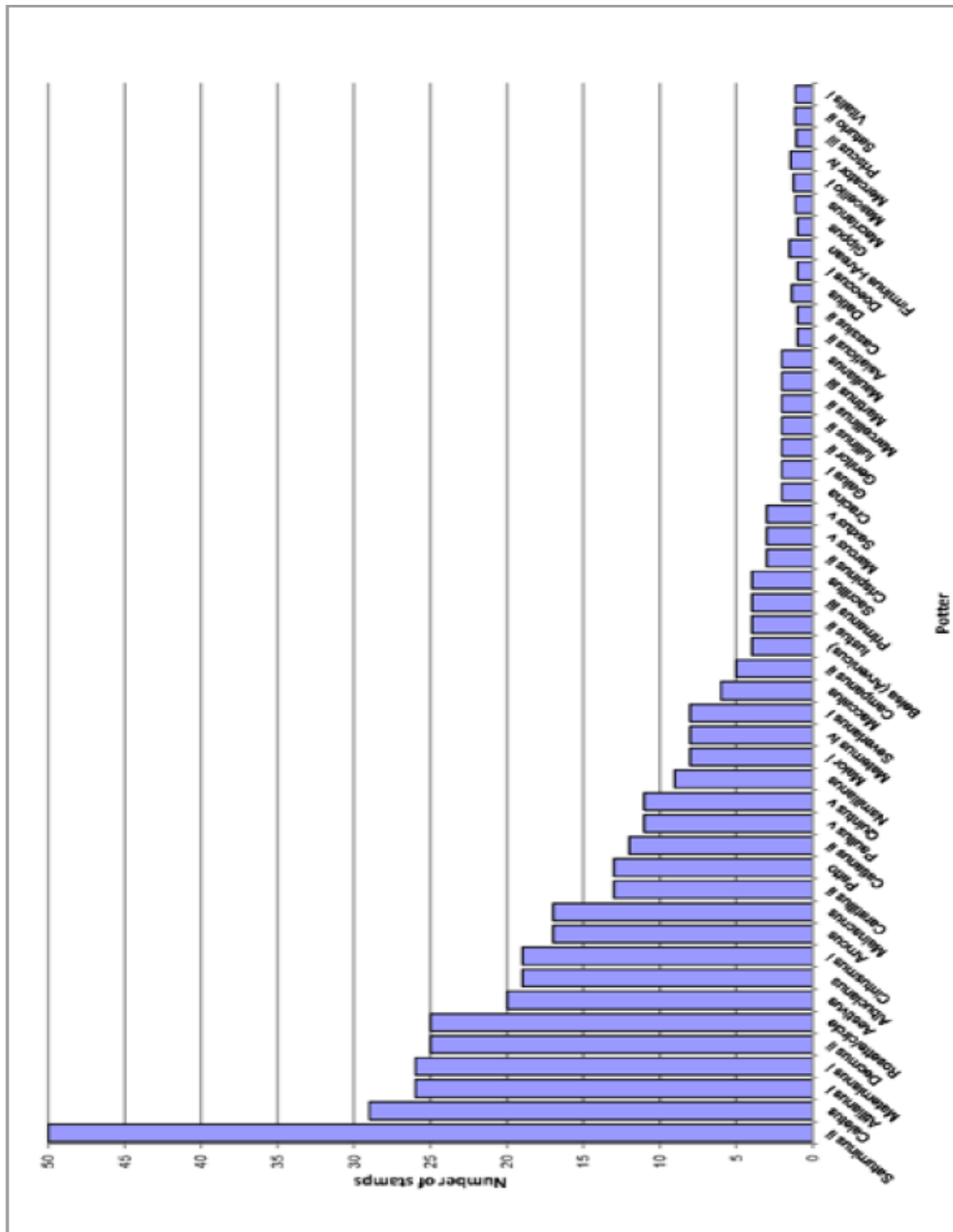
Appendix 2: Dispersal of pudding pan assemblages (Walsh, M. 2017).

Location	1907	1909	Total	Current	Identified	Missing
British Museum	36		36	105	yes	0
Bethnal Green Museum	5		5	10	now in Museum of London	0
Guildhall Museum, London	5	18	23	0	28 to British Museum; 3 to Kelvingrove Museum Glasgow	0
Free Public Museum, Liverpool	29		29	27	2 unaccounted for	2
Royal Museum, Canterbury	19		19	10	probably to Whitstable Museum	0
Municipal Museum, Maidstone	8		8	41	yes	0
Society of Antiquaries of London	7		7	5	1 to British Museum	1
G.M. Arnold, FSA	25		25	0	18 to Maidstone Museum; 9 to Guildhall, Rochester. Note: Arnold collected 2 more vessels after 1909	0
Sebastian Evans	14		14	?	6 to Folkestone Museum	8
Dr J.W. Hayward	4	4	8	?	no	8
W. Holden	8		8	0	bought by British Museum	0
F.G. Hilton Price, Director of the Society of Antiquaries of London	12		12	?	3 to Jewry Wall Museum, Leicester; 6 to National Museum of Scotland	3
Sibert Saunders	54		54	0	7 to Guildhall Museum; 10 to British Museum; 39 to Swansea Museum	0
V.B. Crowther-Benyon FSA	3		3	0	3 to Jewry Wall Museum, Leicester	0
Christ Church Library, Oxford	2		2	0	2 to Ashmolean	0
Pitt-Rivers Museum	3		3	2	1 unaccounted for (Ashmolean?)	1
Alnwick Castle Museum	2		2	?	?	?
Ashmolean Museum	1		1	16	yes	0
Dorset County Museum	1		1	?	?	?
Cambridge Museum of Archaeology and Anthropology		2	2	3	yes	0
Kingston Library and Museum		1	1	0	1 to British Museum via Museum of London	0
Lady Armytage		5	5	?	no	5
Major Brocklehurst		1	1	?	no	1
Professor F. Haverfield FSA		1	1	0	1 to Ashmolean Museum	0
F.J. Sparshott		9	9	?	1 to Birmingham Museum	8
John Sutherland		1	1	?	no	1
C. Warner		2	2	?	no	2
Totals	238	44	282			40-3

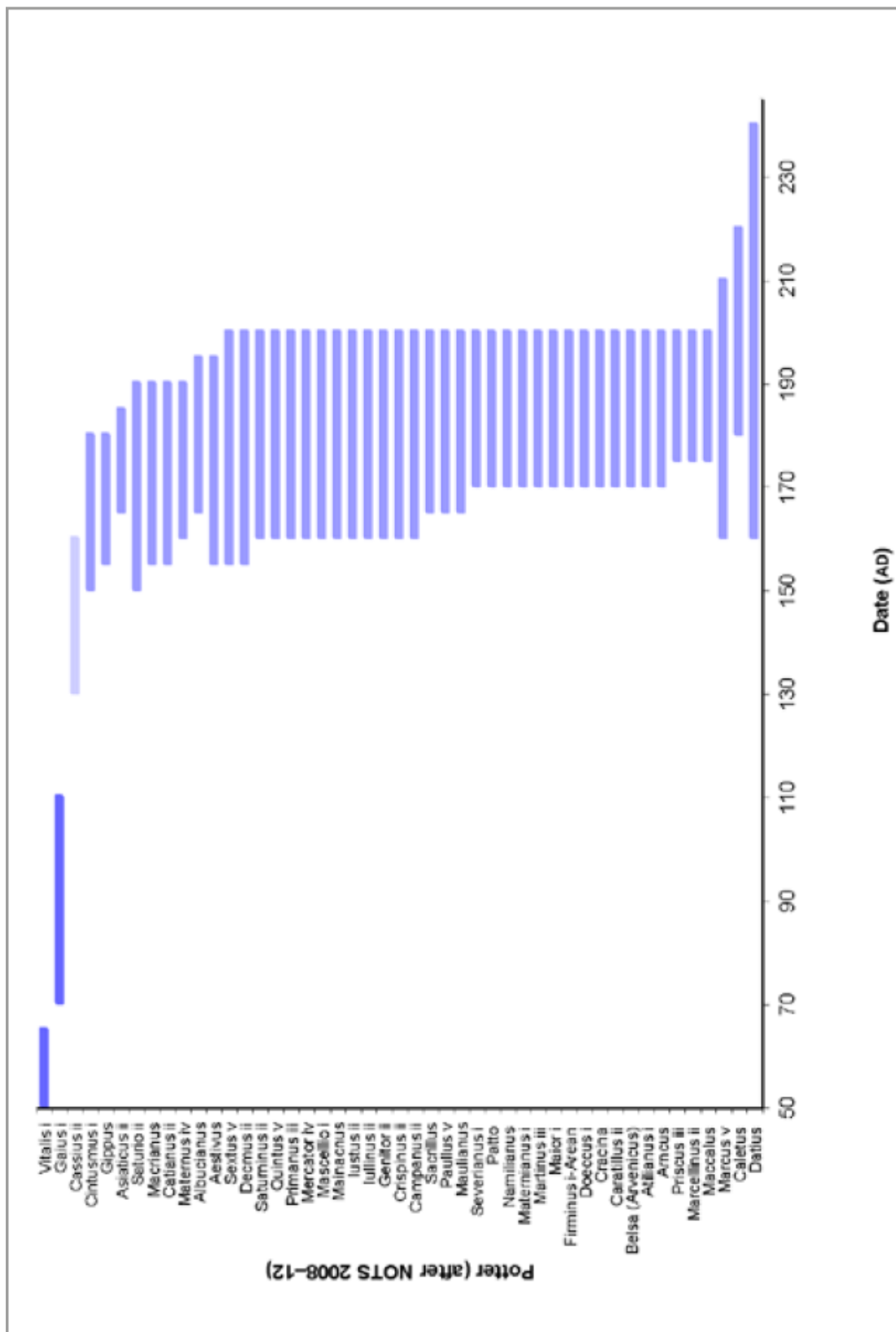
Appendix 3: Date of all artefacts recovered on the Kentish flats (Walsh, M. 2017).



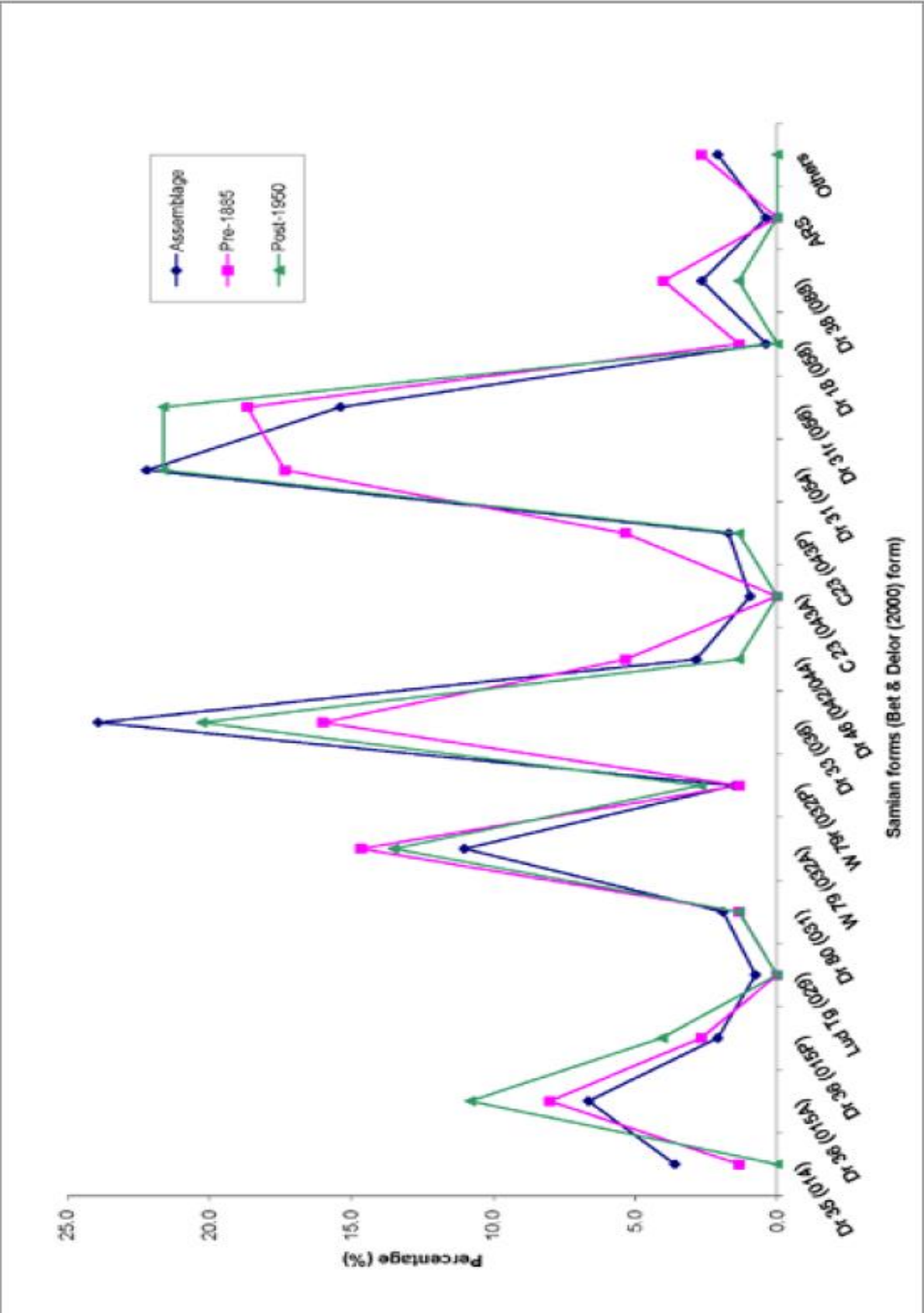
(A) Total number of stamps from Pudding Pan (Walsh, M. 2017).



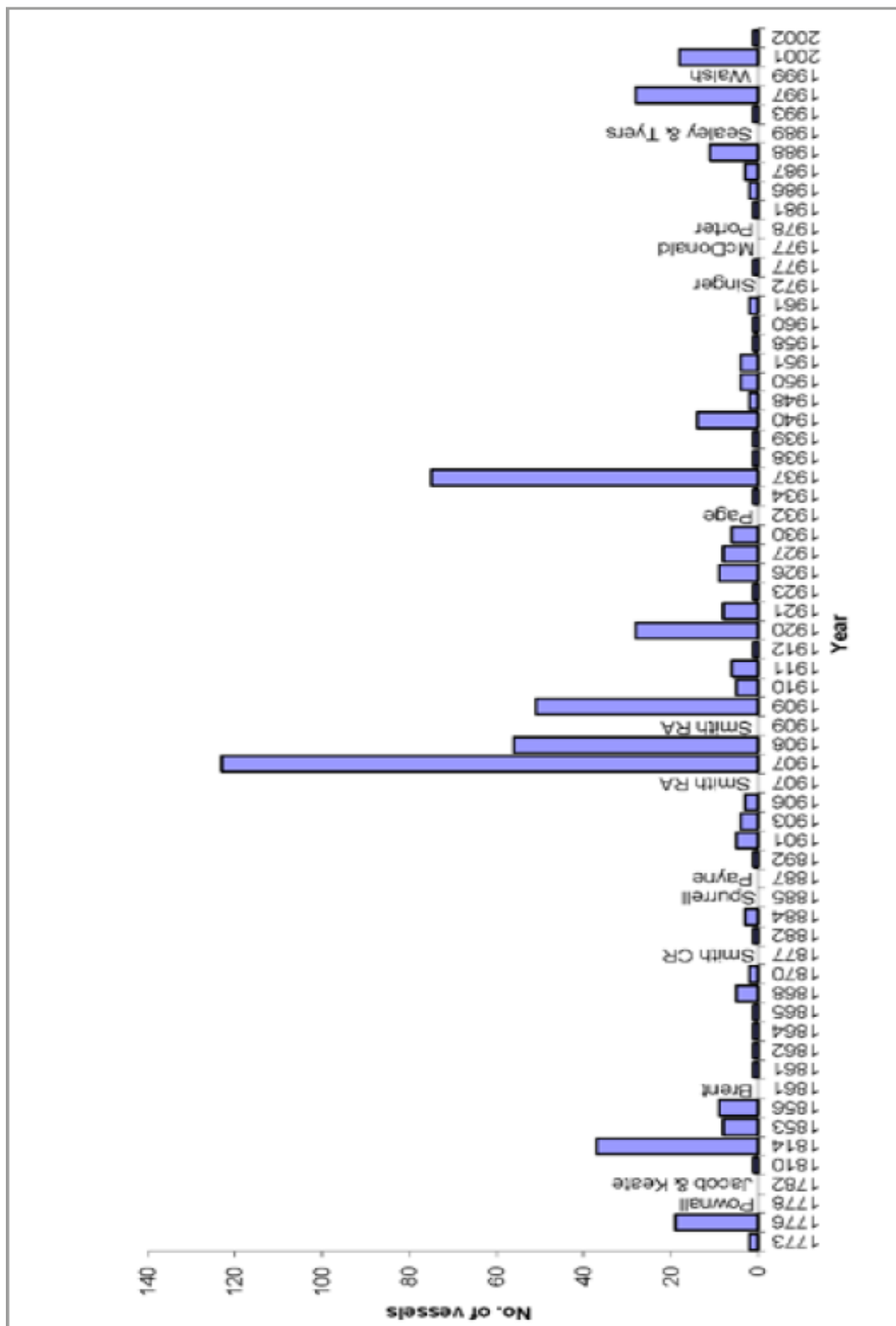
(B) Comparison of dates to potter stamps (Walsh, M. 2017).



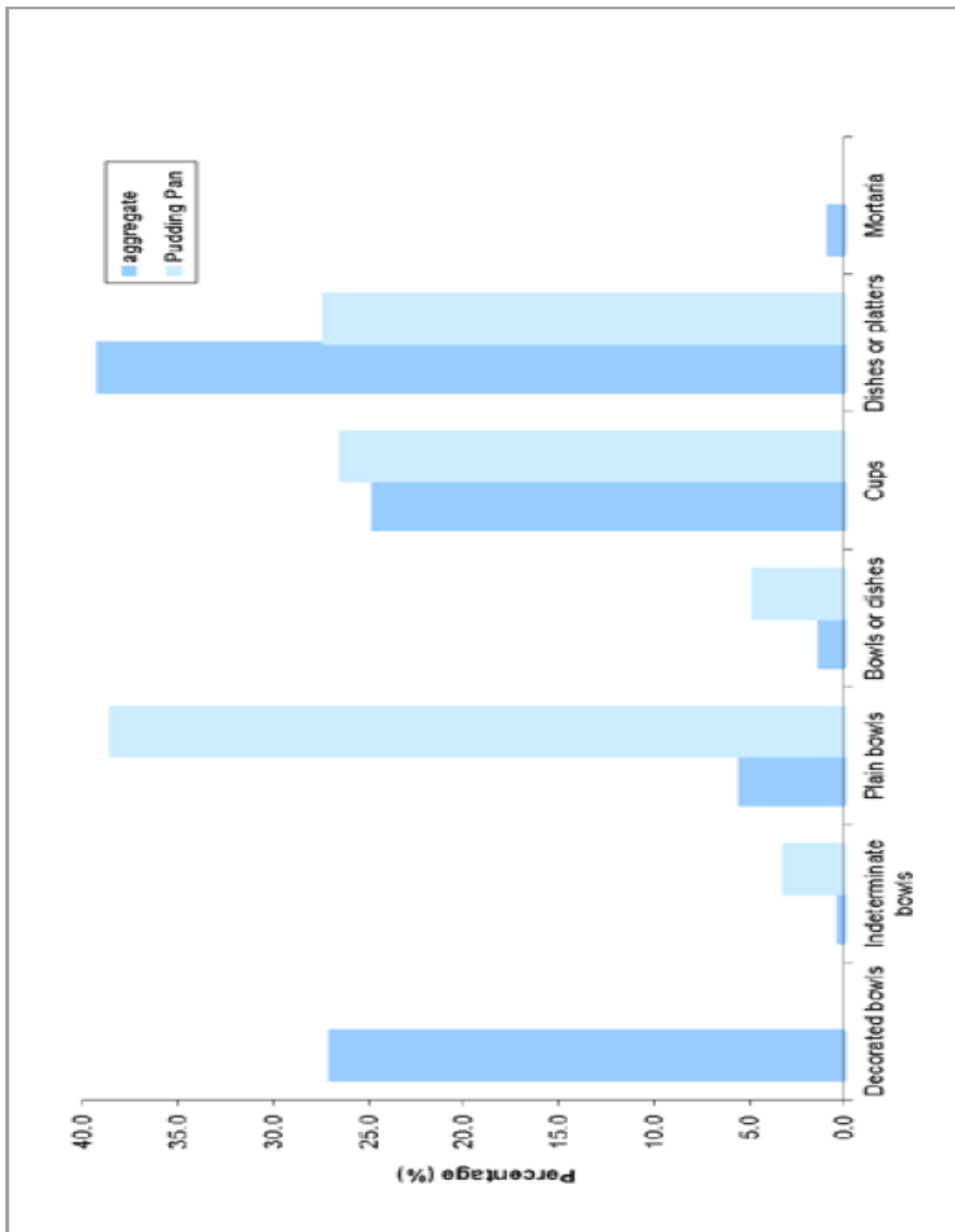
Appendix 5: Comparative relative frequency of samian forms recovered from padding pan in the last 300 years (Walsh, M. 2017).



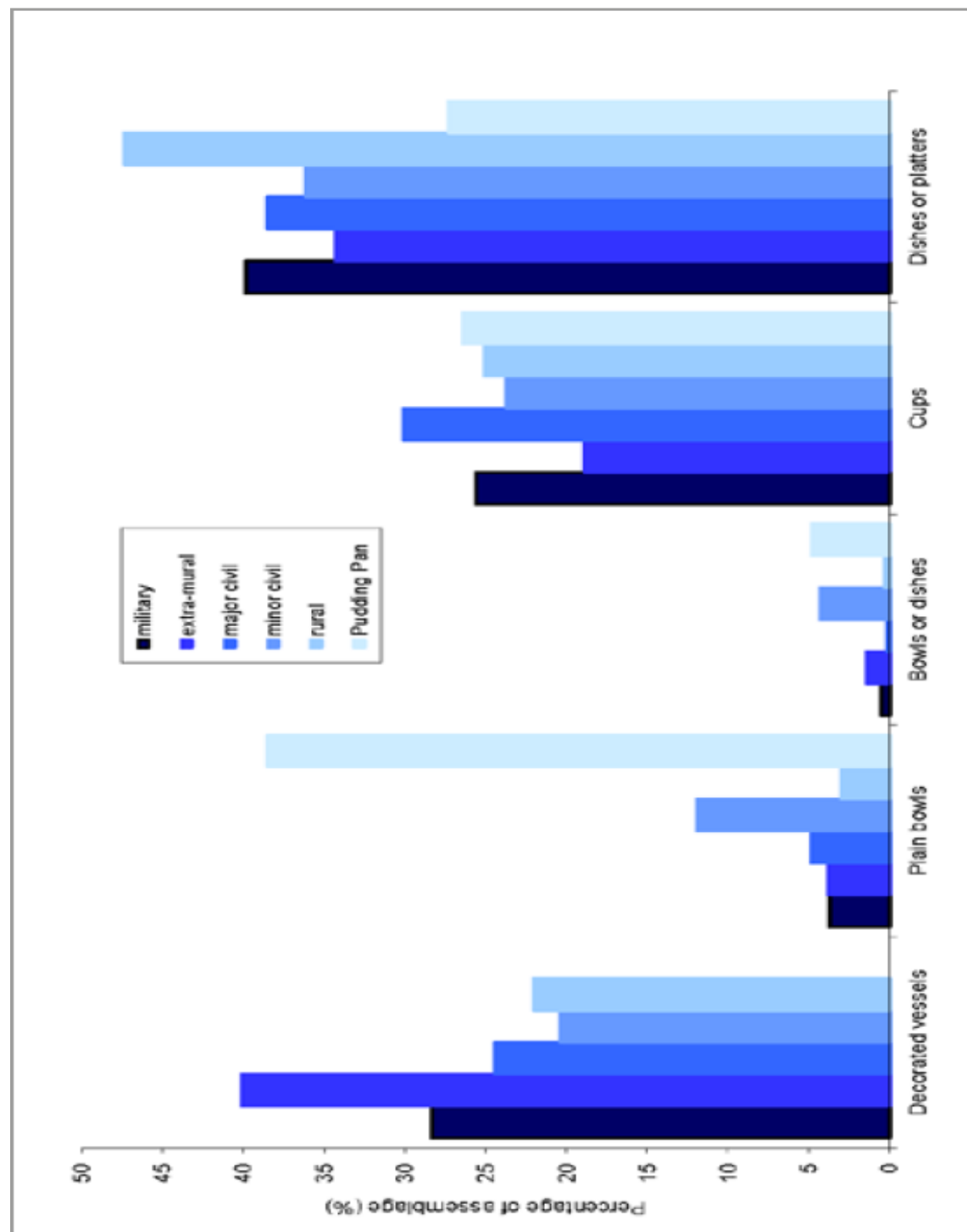
Appendix 6: Dates of assemblage recovery. Note, that recovery dates spike at times when academic interest is shown, and according to Walsh at times of increased fishing in the area. (Walsh, M. 2017).



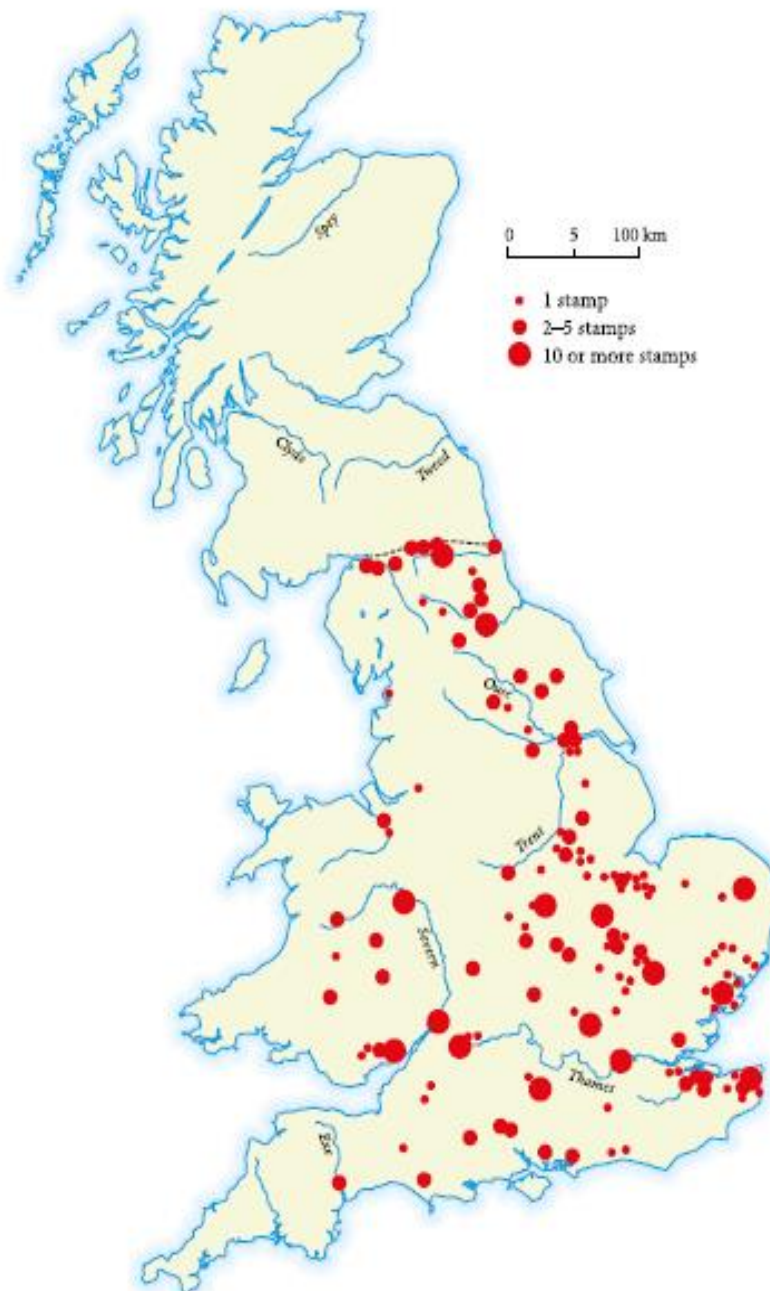
Appendix 7: Comparative of samian assemblages from other sites. Note Decorative Bowls and Plain Bowls (Walsh, M. 2017).



Appendix 8: Characteristics of samian assemblages across different sites (Walsh, M. 2017).



Appendix 9: Distribution of potter stamps found in the pudding pan assemblage (Walsh, M. 2017).



Appendix 10: Southeast Research Framework Resource Assessment and Research Agenda for Maritime (Milne et al, 2012).

Research agenda

It is suggested here that a full, integrated regional research agenda for maritime archaeology should be a priority for south-east England: some possible pointers for such work have been outlined above and may be summarised thus:

Regional themes

- Plotting sea Level change over time
- Plotting coastal change over time, based on sea level change

Development of maritime settlements in relation to each other and to sea level and coastal change

Site-specific themes

- Development of port topography and port buildings
- Development of harbours and landing places in relation sea level and coastal change and development of maritime settlements
- Maritime industries (fishing, shipbuilding, salt etc.) in relation to both regional and site-specific themes
- Maritime defences, in relation to both regional and site-specific themes
- Maritime transport: excavation, research and publication of wrecks, hulks and vessel fragments

Methodological themes

- Audit of maritime-related finds (from land and underwater sites) in the region's museums and private collections

South East Research Framework Resource Assessment and Research Agenda for Maritime (2012 with additions in 2013 and 2019)

- Development of monitoring frameworks for underwater and intertidal zone sites
- Development of surveying/ prospecting methodologies for maritime terrestrial sites and for coastal, intertidal and fully marine environments.
- Evaluations and excavations of terrestrial (urban and rural) and wreck sites must apply best-practice sampling techniques for the recovery of fish bones, including recovery of large whole-earth samples and the use of appropriate mesh sizes (1mm and 2mm).
- Such a regional maritime focus should also feed directly into any environmental, defence, urban or period-based programmes.

- There is a clear need to encourage the publication of more vessel sites, be they underwater, intertidal or 'dry land'.

- Reviews of vessel fragments, ship fastenings, fish hooks, net weights and other maritime-related artefacts (e.g. amphorae relating to transport of fish products) languishing in museums or private collections, unstudied and un-catalogued: these studies should preferably be undertaken on a regional-basis.

- There is a surprising dearth of harbour and shipyard excavations on the Cinque Ports coast: perhaps some preliminary researches could be conducted to identify possible sites before deep drainage works destroys them unremarked.

- As for underwater wreck sites, the often-prohibitive costs and logistical problems associated with such projects argues strongly for a comprehensive long-term monitoring programme, rather than 'total excavation': a similar approach may well be required for sites eroding in the inter-tidal zone

- Finally, it is worth stressing the wider relevance of underwater archaeology, and the development of new and more efficient methodologies in that unique environment. Work below the low water mark is not just about maritime matters, for it can also provide information on submerged palaeo-landscapes and their associated terrestrial finds, since land surfaces pre-dating recent sea-level rises can be found offshore (e.g. Wessex Archaeology 2007d; Cowrie 2008; Gribble and Leather 2011). Finds including animal bones from these sites will be key in extending our understanding of early human presence in the Palaeolithic and Mesolithic periods (Worley 2013). Thus, divers seeking sunken vessels may well be in a position to record much older prehistoric material. There is therefore the continuing need to integrate marine, intertidal and terrestrial surveys, to extend the 'seamless' approach developed in neighboring Hampshire, for example. Divers in the region have also been responsible for discovering that most un-maritime of artefacts, aircraft, the residue of the hard-fought Battle of Britain (Wessex Archaeology 2008a). Thus, the archaeology of the seabed can and will contribute directly to the maritime archaeology of Kent and Sussex, but also to other quite separate subjects as diverse as prehistory and World War II

Appendix 11: Southeast Research Framework Resource Assessment and Research Agenda for the Roman period (Allen et al, 2013).

Research Agenda

1. Introduction

Despite the number of Roman sites known from the region surprisingly little is collectively known or understood about key issues relating to the period. The existence of substantial unpublished backlogs is a fundamental issue that must be addressed. Additionally, key sites require revisiting to enhance data gained through previous investigations. Other limitations on available knowledge have been somewhat addressed through the more systematic approach to excavation brought about through developer-funded archaeology.

2. From the Iron Age to Roman Britain

The period between Caesar's raids and the Claudian conquest needs to be better understood. The influence of Gallic or Roman contacts on all aspects of society and material culture must be identified. The structure of society, nature of trade and examples of continuity or change, pre- and post-conquest, need mapping out. Specifically: were there instances of early contact or Roman presence in Britain pre-conquest? Did the native elite remain in place post-conquest; did they adopt, adapt or resist? Can the impact of conquest be detected in settlement changes in this period? Is the dearth of evidence of military presence genuine, and if so, what does it signify?

3. Military activity

There were three significant early instances of Roman military contact with the SouthEast; Caesar's two incursions and the Claudian conquest. Despite the historicity of these events, little evidence for them is known at present. Greater work is necessary on all instances of early Roman presence.

Are there any physical traces of Caesar's troops' in the region, either direct or indirect?

For example, are there definable changes in late Iron Age sites (abandonment, fortification or intensification) that might evidence stress of or response to conflict/contact? Are there objects (weapons, equipment, personal items) that could relate to troops? Are there any fortifications, or even siege works, built by the Roman troops?

Debate still continues concerning the landing place(s) for the Claudian troops. Is there

any potential for identifying direct evidence of the Claudian conquest?

Following the period of conquest, is there evidence for continued military presence, besides the Classis Britannica? Can our understanding of the Classis Britannica, and its relationship with inland sites, be enhanced? Is there evidence for military presence

or involvement in other sites?

What form did the late Roman military activity take in the region? Can our understanding of the Shore Forts be enhanced via evidence from external sites?

4. Roads and transport

The road network requires re-examination. Recent work in West Sussex, and a pilot project in Kent, suggests significant revisions are possible. This enhanced understanding of the network permits identification of new sites and new site types. Beyond basics such as route, the network needs to be examined for insights concerning construction techniques, maintenance and dating of these, plus final use. Bridges and fords are of importance, particularly in light of any re-examination of the road network. The possible use of ferries to cross the rivers Medway and Stour in Kent as integral parts of the road network needs further research.

All elements of ports need further investigation, from wharf and mole construction (dating and techniques) to waterside structures. Any trace of vessels (whether wrecks

or reused timbers found elsewhere) is of great interest.

5. Rural settlement

Examples of continuity and change in rural settlement patterns and types throughout the Roman period are important. All instances of rural settlement sites are valuable resources that require mapping, phasing, dating and comparison with other known examples in order to determine patterns of change or regionality.

What building types are used on rural settlements? How common are roundhouses and how late do they remain in use?

Villa sites remain over-represented in terms of known rural settlement sites but conversely are not well-understood in terms of function, layout, phasing, origins or end of use. Particular attention needs to be focused on ancillary buildings forming part

of the villa complex, especially 'detached bath houses' and aisled buildings. Sites which have been excavated but not properly published must be resolved. An emphasis should be placed on non-intrusive means of investigating such sites where there is no pressing threat of development or on-going damage from agriculture. The villas' position within the wider landscape also needs investigation, potentially identifying new examples from 'gaps' in known distributions, while a much greater emphasis on environmental evidence from these sites would be very beneficial.

6. Urban settlement

Urban centres within the region remain poorly understood, individually and collectively. Existing datasets need to be consolidated and re-examined in order to gain a better understanding and to assist in targeted investigation of specific areas, buildings, features or questions as sites become available within modern cities and towns. Even sites previously excavated and heavily developed since the Second World War can be highly informative when re-excavated under modern conditions (as

shown in examples from Exeter).

The development of town defences needs to be better understood, and opportunities to date and characterise this phenomenon across the region need to be pursued.

Suburban sites require greater investigation, being tied into the development of their associated urban centres.

The so-called 'small towns' and roadside settlements are not well understood, in terms

of development, function, plan and organisation. Lesser nucleated settlements, such

as Westhawk Farm, Kent, need to be placed in their wider surroundings, in terms of how they interrelate with other rural and urban settlements.

7. Beliefs, burials and the population

Religious activity is not well understood in general. There has been too great a focus on temple sites and elite modes of expression. Greater attention is necessary on smaller less-monumental sites; these were likely to have been the more common foci

of experience for the majority of the population on a daily basis. Instances of structured deposition, both on and off site, need to be catalogued and compared on a regional scale. Attempts to fit this small-scale belief activity into known cultic practices and to assign names to deities should be avoided in preference for a focus on the means of expression and the choice of site for this action type.

There exists a growing body of evidence relating to small scale rural cemeteries, down

to isolated clusters of cremations or inhumations, located within field systems. This data requires consolidation and cross-site analysis. Burial practices in general need detailed analysis, specifically in light of information gained from recently published cemeteries (Pepper Hill, Kent (Booth 2011)), but also looking in more detail at individual burials and cemeteries as a whole. Variations in deposition, inclusions (food

offerings in particular) and distribution all need analysis on a regional scale, though frequently they also need better recording in the first instance.

Existing and newly discovered burials would benefit from isotope and DNA analysis. The movement of peoples within and from without the Roman empire is an emerging area of potential. Given the South-East's position in relation to the provincial capital and role as a route of transit to and from the continent, it is possible that rural and urban populations were more diverse than has been realised. Such analysis also potentially enables identification of under-represented social groups. Isotope analysis

has the potential to shed important light on diet, differentiating between urban, rural, coastal, rich and poor. Further research is necessary on the demographics of the Roman population in general.

Dating remains a major shortcoming in relation to burial evidence. Radiocarbon samples need to be collected as a matter of routine. It is thought that there are more earlier inhumations, but these have largely gone unnoticed. Such dating is also especially valuable as it may shed light on phasing and ultimately the end of use of cemeteries.

8. Craft, industry and domestic consumption

Field systems, and their relationship to preceding and succeeding systems, need to be better understood. Areas of widespread development present an opportunity to collate evidence of the scale of systems, both via re-examination of excavated evidence and through future targeted intervention. A consideration of areas that were not utilised for arable production should also be approached, with attention given to areas of pasture and of woodland that could be identified through targeted environmental analyses.

There is a need to examine the evidence of crop assemblages collectively, both in terms of types of crop grown and practices of processing and storage. Regional

patterning may exist within this data. Likely circumstances for preservation need to be identified so as to permit targeted investigation to be included in specifications for developer funded excavations. Environmental evidence in general needs to feature more prominently in such work, and to be subjected to synthesis. The introduction of new crop types, technologies and agricultural practices needs to be better considered. It is possible that viticulture was common across the region. The apparent absence to date may stem from differences in planting practices, with the methods employed in Northamptonshire not used in the South-East. Faunal remains need to be consistently examined and published. A regional synthesis may be possible, indicating variations in production practices and also in butchery and processing (salting for instance). The presence and significance of unusual faunal remains needs greater analyses: deer, fish and fowl principally. In relation to fishing, and shellfish cultivation, any evidence is of great interest. In general, there needs to be a dedicated research effort starting with on-site sampling to recover the important faunal evidence. Sites spanning the Iron Age and Roman period are of particular interest in relation to rural production in terms of what evidence they may provide for continuity or improvements. The same is also true for related technology.

Any evidence relating to watermills is of importance. A key question is simply how common they were. Details of the technology used in the mills is also of interest. A review of coin evidence from the region should be conducted, in order to plot change over time and space, to test whether there is a late collapse in low denomination coinage and in an effort to potentially identify centres of activity on the regional scale. The data collated by the Portable Antiquities Scheme offers a rich resource enabling such questions to be tackled now. On site coin recovery also needs careful consideration. Anecdotal evidence suggests that coin size and the use/non-use of metal detectors can significantly impact on recovery rates from excavations, potentially creating false impressions of coin frequency and use. There is a need to re-evaluate methodology on Roman excavations.

All elements of the Wealden iron industry are deserving of further investigation. Identifying distinctions from later phases of extraction and processing would be of value. Is it possible to determine the level of official involvement in the industry? Salt production in the region needs further examination, particularly in relation to associated activities on saltern sites and dating in general.

Stone extraction sites need further research, in terms of likely quantities removed and where this material was sourced from.

The evidence for the pottery industry needs re-evaluating. Any opportunity to investigate production sites is an important one. The same holds true of tile manufacture. Relationships between production sites also need to be explored.

9. Landscape

The landscape is poorly understood in terms of vegetation (specifically woodland and

whether or not it was significantly managed—see above) and coastline. More work is necessary on pollen and soil samples to determine basic characteristics of areas during the period.

The existence, or non-existence, of centuriation needs to be conclusively determined via targeted investigation of elements claimed to form part of such systems.

10. Late Roman Britain and the Anglo-Saxon period

How do the urban sites change in the late Roman period? Is activity concentrated in certain sites or parts of sites? Do activity types change within and immediately around

urban sites in the later part of the period?

What impacts on the landscape came about during the later period and into the subRoman phase? Are there discernible changes in agricultural practices and reforestation?

The relationship between early Anglo-Saxon sites and Roman sites needs further exploration. Older excavations could be reviewed for evidence of continuity or reuse of sites. Instances of 5th and 6th century activity on such sites warrants careful scrutiny.

Appendix 12: Model reconstruction of the Romano-British coastline East Kent with reference to Pudding Pan and Pan Sands (Walsh, M. 2017).

