Roman London's first voices

Writing tablets from the Bloomberg excavations, 2010–14

Roger S O Tomlin

MOLA

Roman London's first voices: writing tablets from the Bloomberg excavations, 2010–14

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Front cover: detail showing Londinio, *from* Londinio Mogontio: *stylus tablet*
<WT6> (outer face), addressed in London, to Mogontius (Fig 43)

CONTRIBUTORS

Principal author	Roger S O Tomlin
Archaeological background and context	Jessica Bryan, Julian Hill, Sadie Watson
Woodworking tools	Owen Humphreys
Manufacture	Damian Goodburn
Wood species identifications	Karen Stewart
Wax analyses	Lucy J E Cramp, Nicola George, Matthew J Ponting, Juliet Spedding
Conservation	Luisa Duarte
Graphics	Hannah Faux, Carlos Lemos, Roger S O Tomlin (catalogued stylus tablets <WT1>–<WT83>)
Site photography	Maggie Cox
Studio photography	Edwin Baker, Andy Chopping, Maggie Cox
Project managers	Julian Hill (post-excavation), Sophie Jackson (fieldwork)
Editor	Susan M Wright

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Bloomberg London was the most extensive and significant archaeological excavation of Roman levels in the City of London for 20 years. The volume and variety of the Roman artefacts recovered from waterlogged deposits constitute an assemblage of international significance, of which the writing tablets reported on here form a vital part.

The Bloomberg London excavations of 2010–14 were undertaken as part of redevelopment of an area of 1.2ha, south of Queen Victoria Street and Bucklersbury, as the new European headquarters for Bloomberg LP. The site, famous for the discovery of the 3rd-century AD temple of Mithras in the 1950s, afforded the opportunity to investigate archaeologically the valley of the Walbrook stream. Roman London was founded immediately to the east of the site within five years of the invasion of Britain in AD 43. During the second half of the 1st century AD, the site was characterised by alternate episodes of raising the ground level and building construction, as development followed on from the building of roads and bridges over the Walbrook.

A total of 405 stylus writing tablets (waxed wooden tablets inscribed with a stylus), together with two stylus tags or labels and two ink writing tablets (thin wood sheets inscribed with a pen), were excavated at Bloomberg London, more than doubling the total number of stylus writing tablets known from all previous archaeological excavation in London. About 80 of the new tablets carry legible texts, fully published here. Consideration of the form and epigraphy of the tablets includes a demonstration of how tablets may have been made by recycling imported barrels, as well as the types of tablet and letterforms.

Romans used stylus tablets for legal documents and financial accounts, as well as more general correspondence, notes and memoranda of all kinds, including examples reused for writing-practice. While eight documents are actually dated, the tightly-phased archaeological sequence means that the overwhelming majority of the texts run from the AD 50s to 80s, in contrast to the well-known texts from the Vindolanda forts of the AD 80s to *c* AD 110.

The tablets present a picture of the more formal, official, legal and business, aspects of life in Londinium immediately before and after its destruction by Boudica in AD 60/1. The city's first financial document (8 January AD 57) illustrates Tacitus' description of London on the eve of destruction as being 'very full of businessmen and commerce'. A contract of 21 October AD 62 for the transport of 20 loads of provisions from St Albans to London suggests that both recovered rapidly from their destruction only a year or two before. Other letters concerned with financial matters mention a note of hand, the loss of transport animals, appeal for working capital or offer advice to a financier whose ill-judged loan has made him a laughing-stock 'through the whole market'. Many are loan-notes, including one dated 15 March AD 82. Judicial in nature is the preliminary decision dated 22 October AD 76 in a case to be heard on 9 November.

In all 92 persons, many potentially Roman Londoners, are named and many of the documents were probably written in London. Letters are addressed to some 25 recipients, including Tertius 'the brewer' who is also known at Carlisle; three are explicitly to persons 'in London'. Slaves and freedmen appear, sometimes acting as the agents of their owners or patrons. One recipient is an imperial veteran (*emeritus Augusti*) and the military feature strongly in these writings (women, in contrast, are absent). The documents substantiate Tacitus' report that the garrison was reinforced after the defeat of Boudica by alluding to two other cohorts, the Vangiones and the Lingones, and by naming cavalrymen and their officers. A reference to Classicus, prefect of the Sixth Cohort of Nervians, can be identified with the well-known rebel in AD 70. The tablets not only reflect life in Roman Britain and beyond, but carry the voices of Roman Londoners in the provincial capital in its first half-century.

ACKNOWLEDGEMENTS

FOREWORD

Michael R Bloomberg

Our new European headquarters is right at the heart of the City of London. A symbol of Bloomberg's commitment to London and its future, it also preserves and celebrates the past. The building, by Norman Foster of Foster + Partners, occupies one of the UK's most important archaeological sites, famous since the 1950s as the site of a temple dedicated to the Roman god Mithras.

The archaeological excavations that took place in 2010–14 as part of the building's construction have made the site nationally and internationally important for a second time. The astonishing quantity, range and preservation of the objects recovered from the site make this the most significant archaeological project undertaken in London in recent decades, and the writing tablets published in this volume are one of the most notable discoveries.

Writing tablets are fragile objects which rarely survive: the more than 400 from Bloomberg London are the largest collection ever found in a non-military context in northern Europe. Nearly all the examples are stylus tablets, where the writer used a stylus to inscribe their words into a layer of wax set into a wooden mount. These tablets were designed to be reused. The existing message could be smoothed away with a spatula and replaced by another, making them an early example of recycling and a sustainable technology.

Britain became part of the Roman Empire in AD 43 so the tablets, dating to the AD 50s to 80s, reflect the new importance of written communication to life in its first decades. They include Britain's earliest known handwritten document – from AD 57 – which also happens to be London's earliest financial document. Another tablet carries the earliest known reference by name to London. They introduce us to some of the first inhabitants of this new city, a Roman provincial capital and therefore a 'European' city – a diverse mix of businessmen, slaves and freedmen, with Celtic and Roman names, and soldiers from Gaul and the Rhineland.

The writers speak to business partners, agents and friends with news and business information, about money owed and lent (not always wisely), transporting animals and goods, and prices paid. They offer a snapshot into the workings of Roman London as it grew as an administrative and financial centre.

As steward of this ancient site and artefacts, Bloomberg has embraced the City of London's rich heritage. And as a company that is centred on communication – of data, information, news, and analysis – we are thrilled that Bloomberg has been at the core of a project that has provided so much new information about London's first half-century.

1

Introduction

Jessica Bryan, Julian Hill, Roger S O Tomlin and Sadie Watson

1.1 The Bloomberg London monographs and the writing tablets

This volume is one of three in the MOLA Monograph Series detailing the results from the Bloomberg London excavations of 2005–14. The other two volumes cover the Roman site sequence, including the pottery (Bryan et al in prep), and provide a detailed catalogue of the Roman glass, small finds, coins and textiles (Marshall and Wardle in prep), respectively. A total of 405 stylus writing tablets (waxed wooden tablets inscribed with a stylus), together with two stylus tags or labels, and two ink writing tablets (thin wood sheets inscribed with a pen) were excavated at Bloomberg London (detailed in Chapter 6.3; Table 14; Table 15). This more than doubles the total number of stylus writing tablets known from all previous archaeological excavation in London (Chapter 6.2; Table 13) and as such constitutes a hugely significant assemblage; hence their extended treatment in a separate publication.

The main body of this volume then consists of a catalogue of 185 items: 181 (*c* 45%) of the stylus tablets, together with the two stylus labels and two ink tablets. Of the tablets, only 15 (stylus tablets) are more or less complete; the others are single fragments or two (or more) conjoining fragments. Some 80 stylus tablets carry legible traces of text, however slight; another 90 or so show signs of use, but the traces are illegible, most often because they belong to more than one text. Both categories are catalogued here, together with stylus tablets selected because of their unusual format. The remaining 224 items, which were undoubtedly used but when examined before conservation showed no trace of text, have been omitted from the published catalogue (Chapters 4 and 5).

1.2 The background to the excavations at Bloomberg London

The Bloomberg London site is bounded by Queen Street, Cannon Street, Queen Victoria Street and Bucklersbury, and Walbrook (Fig 1; Fig 2). It occupies *c* 1.2ha. The approximate centre of the site is at National Grid reference 532549 181002. Modern pavement level is at 12.30m OD to the north of the site and at 10.03m OD to the south.

The most recent archaeological work on the site was undertaken between 2005 and 2014 in successive phases of evaluation (in 2005 and 2008 for Legal & General) and then excavation as a preliminary to and during the early stages of its redevelopment as the new European headquarters for Bloomberg LP. The principal phases of excavation occurred during 2010–14 and involved a MOLA team of over 55 archaeologists.

These, however, were not the first archaeological investigations of the site. It is famous (under its previous name of Bucklersbury House) for the unexpected discovery of the Roman temple of Mithras during excavations in 1952 and

Fig 1 Map showing the location of Bloomberg London and other sites referred to in this volume (scale 1:10,000), with inset showing location in relation to the modern City of London and the Thames (scale 1:50,000)

1954–6 on the Second World War blitz site; these investigations were led by Professor W F Grimes, then Director of the London Museum and subsequently Director of the Institute of Archaeology of the University of London. The construction of the temple dated to *c* AD 240–50. It was modified several times before being converted for use by the followers of another pagan cult – perhaps that of Bacchus – during the first decades of the 4th century AD and finally falling into disuse towards the end of that century. The 1950s excavations, the discovery of the temple, and the form and history of the building itself are described extensively elsewhere (eg Grimes 1968; Wilmott 1991; Shepherd 1998). Salvage excavations were also undertaken on the site during 1958 by Ivor Noël-Hume of the Guildhall Museum.

Intense public interest in the site led to the remains of the temple of Mithras being dismantled and subsequently

reconstructed within a northern forecourt to the Bucklersbury House development in 1962 (Shepherd 1998). The reconstruction, although faithful to neither the original position nor orientation of the temple, was listed at Grade II by the Secretary of State for Culture in 2007. The Bloomberg LP redevelopment scheme, for which consent was granted in 2012, included provision for the 1962 temple reconstruction to be dismantled and rebuilt as close as possible to where it was found, within a dedicated display and exhibition space incorporated within the Bloomberg building.

The original reason for Professor Grimes's interest in the site in 1954 had been that it offered an opportunity to investigate archaeologically the valley of the Walbrook stream. Roman London – Londinium – developed on two low gravel hills on the north bank of the Thames which were separated by a valley formed by the Walbrook. London was founded on the eastern of these hills within five years of the invasion of Britain in AD 43 by the Emperor Claudius (AD 41–54). Its focal point was the crossing over the Thames, which connected London's eastern hill with the south bank, and it is possible that the Walbrook was originally envisaged as forming a western boundary to the settlement.

Given the strategic importance of the Thames crossing, it is likely to have taken the form of a bridge from an early date, probably by *c* AD 52 (Watson et al 2001, 33). The road running north from the crossing met an important east–west road at a T-junction at the cardinal point of the early town, in front of the site that later became the forum. Though the first forum building is Flavian in date, probably constructed *c* AD 75 or shortly after (Marsden 1987, 73), it was preceded by a pre-Boudican, open gravelled area which can be presumed to have served as an earlier marketplace (ibid, 16–19, 21–22): this is particularly relevant to catalogued writing tablet <WT30> (Chapters 3.2, 4.1). Running west from the town centre, this east–west road bridged the Walbrook immediately north of Bloomberg London (Fig 21) before continuing over the western hill. Leaving London, it formed the main Roman route along the Thames valley to Silchester (Calleva Atrebatum), Hampshire. The earliest tree-ring date yet recovered from London, a felling date of winter AD 47–8, came from a timber drain laid beneath the earliest metalling of this road recorded at 1 Poultry (Hill and Rowsome 2011, 564).

The settlement grew rapidly and, even before the Boudican revolt of AD 60/1, ribbon development along the main road north of Bloomberg London was extending the occupied footprint westwards, beyond the Walbrook. By the early 2nd century AD the Walbrook valley lay in what had become a central position within the Roman town. The archaeological significance of the valley lies in the nature of the deposits within it that are, with the exception of some waterfront sites, both deeper and more waterlogged than is generally the case in the City of London.

The position of the site, initially on the western periphery of the Roman town but later within its core (Fig 21), combined with the waterlogged nature of the archaeological deposits resulted in outstanding survival of structures and artefacts.

With regard to the latter, the increasingly central location of the site within the Roman town, and the fact that the deposits used to raise the ground level must principally have derived from elsewhere, mean that the finds assemblage has great significance for our understanding of the character of the settlement as a whole.

The construction of Bucklersbury House (completed in 1962) had removed a considerable quantity of later Roman and medieval stratigraphy (Fig 2). However, preliminary assessment work and evaluation trenches indicated that much 1st- and 2nd-century AD material was likely to have survived beneath the less deeply basemented parts of the building. Excavation proved this to be correct: although the archaeological sequence excavated at Bloomberg London extends from *c* AD 50 to the late 4th century, the vast majority of the material pre-dates *c* AD 200 and most falls within the tighter range of *c* AD 50–125/35 (Table 1). Some deeply cut, later Roman features were extant and relatively small quantities of late Saxon, medieval and post-medieval material were also recovered, principally from the south-west and north-east corners of the site.

Bloomberg London was the most extensive and significant excavation of Roman archaeology carried out in the City of London for 20 years. The quantity and variety of the artefacts recovered from its waterlogged deposits constitute an assemblage of international significance, of which the writing tablets published in this volume form an important part.

Circumstances of the excavations

The main programme of archaeological excavation at Bloomberg London was undertaken between January 2010 and February 2014. The fieldwork included evaluations, enabling works, excavations and areas covered by archaeological watching brief methodology (Fig 2); these interventions are catalogued and archived under the site code BZY10, which replaced the earlier site code used during evaluations carried out on the site in 2005–8 (BBU05). A more detailed description of the planning background to the site and the various phases of excavation can be found in Bryan et al in prep.

The main open-area excavations took place between July

Fig 2 Plan of the areas of archaeological excavation undertaken under site codes BBU05 and BZY10; the toning in the excavated areas represents the varying levels of archaeological survival due to previous truncation (scale 1:1000)

horizontal archaeological survival

- up to 7m depth
- up to 2m depth
- up to 1m depth
- recorded in section only
- no survival

Fig 3 View of excavation in progress at Bloomberg London in 2012, looking north, with 1 Poultry to the left and St Stephen Walbrook to the right of the site

2012 and May 2013 in the north-east corner of the site as a preliminary phase of the construction of a new entrance to Bank underground station, referred to here as the London Underground Limited box (LUL box) (Fig 2; Fig 3). This was the principal excavation area and produced the majority of all finds categories including the writing tablets. The provenance of the tablets is discussed in Chapter 3.1.

In the evaluation and excavation areas, all archaeological remains were fully recorded in plan, within a site-wide grid established by the MOLA geomatics team and tied to Ordnance Survey mapping. Archaeology surviving beyond the limits of excavation was preserved behind soft sand and a Terram membrane. During the watching briefs, archaeology was recorded in section and/or plan as appropriate. Extensive shoring was necessary for the pile caps and sumps, and for the evaluation and excavation trenches along the Walbrook stream course (all of which were deep and often narrow) (Fig 2).

Conserving the writing tablets post-excavation

Luisa Duarte

The wooden writing tablets were recovered in a waterlogged condition. All the tablets were initially assessed by visual examination and inspected under a binocular microscope at up to ×40 magnification for remains of wax and other surface treatments. The tablets were then gently cleaned under running water with a soft brush to remove surface soil. The great majority of the tablets were conserved with a polyethylene glycol (PEG) immersion treatment followed by freeze-drying. The very few writing tablets with evidence of ink were treated with a two-step de-watering process using industrial methylated spirits (IMS)/diethyl ether.

The PEG immersion treatment involved a gradual impregnation regime. Because of the type of wood and good condition of the tablets, a 15% PEG 200 and 10% PEG 4000 solution was used for their impregnation. Initially, the tablets were immersed in a 5% PEG 200 solution. The concentration of, first, PEG 200 and, later, PEG 4000 was increased over 12 months until the desired final concentration of the solution was achieved. After impregnation was complete the objects underwent a freeze-drying process under vacuum for two to three weeks. Once dried, in some cases fragmentary tablets were adhered using an acrylic resin (Paraloid B48).

The de-watering method involved immersing the tablets in successive baths of IMS until all the water had been driven out of the wood structure. This was followed by several baths of diethyl ether and then the object was allowed to air-dry.

1.3   Organisation of the report

Textual conventions

The basic unit of cross-reference throughout the excavation, recording and analysis is the context, a unique number given to each recognised archaeological event (such as a layer, wall, pit cut, pit fill, or road surface). Context numbers in the text are shown within square brackets, thus: [100]; [+] indicates unstratified. During the post-excavation process contexts are aggregated into subgroups, with subsequent analysis assigning subgroups to a higher level of interpretive clustering, the group. These groups are then further refined into land uses, which form the classification used within this volume and all MOLA publications. Details of subgroups and groups are not included within this text, as the physical archive held at LAARC is organised according to context number.

Land-use entities are described as Buildings (B), Open Areas (OA), Roads (R) and Structures (S), numbered from 1 onwards for the site sequence (thus B1–, OA1–, R1–, S1–). These land uses are organised into the highest level of chronological interpretation, the period structure.

The catalogued writing tablets are listed in period and phase order, by land use and then context, and each carries a publication catalogue reference number, <WT1>–. All accessioned (or registered) finds receive a unique identifying number during the post-excavation process which is presented within angled brackets, thus: <100>. This numbering precedes and is independent of the publication catalogue <WT> numbers. Note that ceramics and other 'small' or accessioned finds referred to in this volume and detailed in the companion Bloomberg London artefact volumes (Bryan et al in prep; Marshall and Wardle in prep) are identified here by accession number, not by publication catalogue number.

In all, the MOLA Oracle database comprises 411 wooden writing tablet accessions (WOOD WRIT, including the two ink-leaf tablets), some of which consist of more than one fragment, together with two wooden stylus label accessions (WOOD LABE). There are a number of instances where separate accessions have subsequently been found to be conjoining; in all instances such accessions are from the same context. These examples are catalogue items <WT77> (accession nos <7478> and <7479>) and <WT88> (<6365> and <6367>), plus two uncatalogued examples, both from context [4044], Structure 151 phase 3, period 3 phase 1 (late): <3305> and <3306>, and <4790> and <4791>. Because they are conjoining, these eight items are treated as representing four. Thus the 181 catalogued stylus tablets comprise 183 accessions and the 224 non-catalogued items consist of 226 accessions.

Period structure

The period and phasing structure used for the Bloomberg London site sequence is the same as that established for 1 Poultry (ONE94) and associated sites such as the Docklands Light Railway access shaft in Bucklersbury (BUC87) (Hill and Rowsome 2011, 12–15). These sites lay immediately north-west of the

Table 1 The Roman period structure for Bloomberg London: these periods are those applied to the adjacent site at 1 Poultry (Hill and Rowsome 2011) (not all these periods are represented within the Bloomberg London site sequence), with in addition the subdivision of period 2 phase 3 and period 3 phase 1 allowed by the Bloomberg London stratigraphic sequence excavated on the east bank of the Walbrook; the periods from which catalogued writing tablets were recovered are in bold

1 Poultry/Bloomberg period	Description/date AD (approx)
1	natural; prehistoric
2 phase 1	**AD 43–53**
2 phase 2	**AD 53–60/1**
2 phase 3 (early)	**AD 60/1–62**
2 phase 3 (late)	**AD 62–65/70**
2 phase 3	AD 60/1–65
3 phase 1 (early)	**AD 65/70–80**
3 phase 1 (late)	**AD 80–90/5**
3 phase 1	**AD 65/70–90/5**
3 phase 2	**AD 90–5**
4 phase 1	**AD 90/5–125**
4 phase 2	AD 125–35 (fire horizons)
5 phase 1	**AD 125/35–170**
5 phase 2	**AD 170–220**
5 phase 3	**AD 200–20+**
5	AD 125/35–220+
6 phase 1	**AD 220–250/70**
6 phase 2	AD 250/70–300
6 phase 3	AD 300+
6 phase 4	AD 340+
6	AD 220–340+
7	late 4th century+ (AD 340+–450)

Bloomberg LUL box excavation (Fig 1) and the archaeology encountered, particularly at Bucklersbury and the eastern apex of 1 Poultry, was very similar. The common period structure facilitates inter-site comparison and the development of wider thematic studies. However, some further subdivision of the 1 Poultry periods was necessary to accommodate the complex, later 1st-century AD stratigraphy at Bloomberg London (see period 2 phase 3 (early and late) and period 3 phase 1 (early and late)). The Bloomberg London Roman period structure is shown in Table 1.

Referencing Vindolanda tablets and *RIB*

The more detailed references to the Vindolanda writing tablets (*Tab Vindol* 1–3) work as follows (on the examples of *Tab Vindol* 3, no. 643.a.i, l 4; ii, l 3; back, ll 1, 5; no. 670.B.ii, l 4). Following the item number, lower-case 'a', 'b', 'c' (etc) denote fragments (with conjoining pieces counting as a single fragment); 'i' and 'ii' indicate the columns of the diptychs frequent among that collection; subsequent (arabic) numerals are line (l, ll) numbers. Upper-case 'A' and 'B' refer to what the Vindolanda editors call 'sides' or 'front' and 'back' (in the present publication, 'face' is used in preference to their 'side'); 'front' and 'back' apply to letters (correspondence) in the form of ink-leaf diptychs with the text on one face and the address and/or sender's name on the other face, and which would

have been folded up and tied so that only the 'back' was visible. In references to volume 2 of *The Roman inscriptions of Britain* (eg *RIB* 2(1), no. 2401.15) the number preceding the stop denotes a category of object (eg 'Military diplomata') and the number following the stop an individual item within that category.

The catalogue order and content

In exact figures, 411 tablets and two tags or labels were recorded as individual accessioned finds (above). Of these, 90 stylus writing tablets have been catalogued according to their content or form: 'Correspondence' (Chapter 4.1), 43 tablets; 'Financial or legal documents' (Chapter 4.2), 25 tablets; 'Accounts' (Chapter 4.3), 8 tablets; and 'Miscellaneous' (Chapter 4.4), comprising 14 tablets. These have all been drawn, except for seven miscellaneous tablets of unusual format which are not inscribed. The other 91 stylus tablets, inscribed but illegible, are described in Chapter 4.5 ('Descripta'). Within each category, tablets are ordered according to their occurrence in the archaeological sequence (ordered by period and phase, then land use and context), including internally dated documents. In addition, the two stylus tags or labels – one inscribed and the other with a recessed face – are catalogued in Chapter 4.6. The two ink-leaf tablets identified are catalogued in Chapter 5. An appendix (Chapter 6) notes for comparison the *c* 300 tablets previously found in London, 19 of which were legible enough to be read and published previously (Table 13).

The three initial lines of each catalogue entry comprise successive standard elements; the round brackets indicate the abbreviations used:

<W(riting) T(ablet) number> Type of wood; type of tablet (Fig(ure) number(s))

<accession number>, [context number]; period and phase, land use

Complete or incomplete, with note of surviving ends and sides. W(idth); H(eight); L(ength) for tags/labels; Th(ickness) of R(im) and F(ace), with incomplete dimensions enclosed by (brackets).

For each catalogue entry, the catalogue number with appropriate letter prefix (here, WT) is given in angled brackets. The wood species identification methodology is described below. For the tablet type see Chapter 2.4.

In describing tablets, the term 'face' means either the front or the back, whether or not it was inscribed. But to reduce repetitive description, if one face is not inscribed, this is usually not made explicit. One face or both may be recessed to take wax: type 1 is recessed on one face only, type 2 on both faces, but with one face consisting of two panels separated by a flat-bottomed groove down the centre (as described more fully in Chapter 2.4). The tablets are all inscribed along their longer axis, parallel to the wood grain in 'landscape' format. The 'end' of a tablet means the top or bottom edge if it is original and retains the raised border, being further described as 'top' or 'bottom' if this can be determined from the surviving text. The 'side' of a tablet means the left edge or the right edge, if it is

original and retains the raised border.

This volume employs the modern spelling of 'stylus' (plural 'styluses') for the writing instrument, although the Roman term was *stilus* (plural *stili*). For the 'three names' (*tria nomina*) of praenomen, nomen and cognomen, see Chapter 3.2.

Identifying the wooden tablets to species

Karen Stewart

The tablets were first observed by eye in order to examine the character and direction of the wood grain. Subsamples were then taken in section along three axes (radial, tangential and transverse) using a flexible razor blade and mounted on glass slides according to Hather (2000). Where possible, the samples were taken from damaged areas of the tablets in order to limit the effects of the analysis on the character of the artefacts. The sections were observed using a transmitting light microscope at magnifications up to ×400. Microscopic features were observed and recorded using standard identification texts for softwoods and hardwoods (Baas and Richter 2004; Hather 2000; Schoch et al 2004; Wheeler et al 1989) and modern reference material where required.

Of 199 accessioned fragments of stylus writing tablet examined (selected as having potentially legible text or otherwise being of interest), 187 were identified as silver fir (*Abies alba*), four as spruce (*Picea abies*), five as larch (*Larix decidu*a) and one as larch/spruce. Only two tablets were found to be made of hardwood taxa, both being of maple (*Acer* sp): <4807> (OA14, period 3 phase 1 (early)) and <WT87>. The coniferous species are native to the central European alpine region, and in the case of silver fir also occur in the Pyrenees and Massif Central (Mitchell 1982, 63). They did not occur naturally in Roman Britain, although very limited evidence from a few Roman sites suggests that very small-scale attempts were made to introduce them (larch or spruce branches from Borough High Street, Southwark (site code BHB00): Goodburn 2003; a branch of larch from Bridge Farm, Sutton Courtenay, Oxfordshire: Goodburn 2012). Maple occurs across Europe but the field maple (*Acer campestre*) is the only native British species.

Of the two ink writing tablets, <WT184> has been identified as willow (*Salix* sp) (there are several native willow species in Britain) and <WT185> as alder (*Alnus glutinosa*), also a native species (Chapter 5). This is to date the only artefact of alder from the site, whereas two basket bases (<9897>, <10366>) were also made of willow. Comparable ink-leaf writing tablets of alder, and possibly of willow, were identified at Vindolanda (Chesterholm, Northumberland) (*Tab Vindol* 1, 26–9).

Stylus writing tablets catalogued here (Chapter 4) are all silver fir (*Abies alba*), except <WT87> of maple (*Acer* sp), <WT18> and <WT77> of larch (*Larix decidua*), and <WT93>, <WT102>, <WT108> and <WT168> of spruce (*Picea abies*). (The catalogue entries for silver fir tablets omit the Latin name.)

Conventions used in transcribing the tablets

Texts are transcribed letter-by-letter as far as possible, but with editorial intervention. This is indicated by the conventions listed below, which should direct attention to the line drawing and commentary. Words have been separated in the transcript, even if this was not done in the original. Punctuation has not been added, except for hyphens when words were divided between lines. Proper nouns (personal names and place names) have been capitalised. The letter *u* has been transcribed as *u*, whether it was actually a vowel (*u*) or a consonant (*v*), since the Romans used the same letter for both; but proper nouns have been capitalised with *V*, and in the translation lower-case *v* is used. The one alphabet (<WT79>) has been transcribed in capitals, but otherwise lower case is used, even in addresses which include letters of capital letter form such as B, D and II for E. Lines are numbered from the first line of which traces remain, whether or not it was originally the first line.

(i), (ii)	separate columns of text (type 2 tablets; ink tablets)
. . .	the text is broken or incomplete at the top or bottom
uacat	space left by the scribe on the tablet
[[abc]]	letter(s) erased by the scribe
'abc'	letter(s) added by the scribe above or below the line
(abc)	letter(s) omitted by abbreviation, or a symbol explained
(…)	abbreviation of uncertain length
<abc>	letter(s) omitted erroneously
[abc]	lost or damaged letter(s) restored
[…]	lacuna in the text of uncertain length
{s}	superfluous letter
abc	doubtful or partially preserved letter(s)
.	trace of one letter
..	trace of two letters
…	trace of at least three letters
traces	illegible letters
?	precedes a word whose reading is not certain
★	(in the catalogue commentary) conjectured word or form not known to exist

Graphical conventions

Site plans

The site plans utilised in this volume are derived from a selection of those that will accompany the principal monograph on the site detailing the site sequence (Bryan et al in prep) and employ the same conventions, which are shown in Fig 4.

Catalogue illustrations

In the line drawings which accompany the catalogue of stylus tablets (Chapter 4), the original appearance is reversed (black on white instead of white against black). The limitations identified below (Chapter 2.2) should also be borne in mind when studying the line drawings in this volume. They represent what is visible now to an observer through a binocular microscope with a raking light. They were made in Adobe Photoshop on the basis of high-resolution digital photographs, but with constant reference to the original. To make them requires a series of small decisions – to distinguish deliberate incisions from casual damage and irregularities in the grain, and to decide where there is no trace of an expected incision – but they do try to be objective in representing what is actually there, and not to restore what 'must have been'. Drawing a tablet is an essential aid to reading it. The necessary photographs were often made in sets of four, not changing the registration but varying the angle of light. The reason for this plurality is that a single photograph with light from a single angle will not reveal the whole of an incision or sometimes even distinguish it from a casual mark. The fullest record would be that of 'reflectance transformation imaging' (RTI), in which software combines a long series of such photographs to create a 'three-dimensional' scan. The preferred approach was to make a drawing aided by photographs.

Marks which may only be casual have been drawn in outline, a convention also used for traces of earlier text(s). Whereas the line drawings reproduced at 1:1 in this volume were done, and the catalogue measurements taken, before conservation, the matching photographs are post-conservation images (with sometimes minor loss or additions). The photographed stylus tablets are thus fractionally smaller than in the line drawings because of some shrinkage during conservation (above, 1.2). The caption for each item simply states '(scale 1:1)'.

The two ink-leaf tablets (Chapter 5) are illustrated by post-conservation infra-red (<WT184>) or pre-conservation (<WT185>) photographs only, since the method of reading them is different.

limit of excavation	
section	
wall/foundation: found and conjectured	
retained wall: found and conjectured	
internal surface	
open area	
post- and stakeholes	
structural timber: found and conjectured	
pits: found and conjectured	
hearth: found and conjectured	
ditch/structural cut: found and conjectured	
drain: found and conjectured	
well/cesspit: found and conjectured	

B1 Building 1   S1 Structure 1   OA1 Open Area 1   A room A

OA2
4 (1 cat)   4 stylus tablets (1 catalogued) within Open Area 2

Fig 4 Graphical conventions used in the plan figures

2

The tablets: their form and epigraphy

2.1 The manufacture of waxed stylus writing tablets in Roman London

Damian Goodburn, with a note on woodworking tools by Owen Humphreys

The wood types used for the tablets and their suitability

It has long been recognised through visual identification that similar varieties of coniferous timber were used to make both stylus tablets and casks or barrels in Roman London. However, it is only relatively recently that systematic botanical species identification, as carried out for the large collection of tablets, cask material and related woodworking debris found at Bloomberg London, has been employed.

Of the accessioned fragments of stylus writing tablets examined for species, *c* 94% (187/199) were identified as silver fir (*Abies alba*) and *c* 5% (10/199) as larch or spruce (*Larix decidua/ Picea abies*) (Chapter 1.3). The results show that the Bloomberg London stylus tablets were overwhelmingly of imported coniferous timber and only extremely rarely, potentially, made of native timber species.

Silver fir and spruce timber is white to cream in colour and would have shown as a bright contrast with the blackened wax tablet infill (below, 2.2, 2.4). Larch varies in colour but is mainly a pale reddish brown with a coarser grain than the former two conifers, so its suitability for tablet making is less obvious, though its use in casks is also documented alongside silver fir (Goodburn 2011, 395) so it was probably treated in the same way. Where the trees grew close together in natural woodland the lower logs would generally be straight-grained with few knots. Examination of the timber used in tablets and in casks shows that they were mainly made from narrow-ringed timber derived from large-diameter parent trees of alpine wildwood type, with many being over 300 years old (ibid). In terms of controlled splitting, sawing across, smoothing and hollowing, silver fir and spruce are relatively easy species to work, though larch is a little tougher and less easily split. The silver fir and spruce also have the advantage of being lightweight whereas larch is slightly heavier.

Few native species would have had similar characteristics except perhaps the pale soft timber from large alder, willow or poplar trees, and indeed alder and willow were used for wafer-thin ink tablets (including the Bloomberg London ink tablets), but not apparently stylus tablets (alder is typical of the Vindolanda ink-leaf tablets, together with birch and oak: *Tab Vindol* 1, 27–8).

The two stylus tablets of maple (*Acer* sp) (<WT87>; <4807>: Chapter 1.3) would have been a little harder to carve out than the conifers, but would have been pale brown to reddish-white in colour. Maple wood is hard, strong, even-grained and ideal for turning to make utensils, furniture and so on (Gale and Cutler 2000, 27–8). The unique form of maple tablet <WT87> and its Continental parallels make it most likely that it was imported as a tablet (Chapter 4.4).

Recycling casks into writing tablets

Apart from stylus tablets and the two tags or labels, several bucket/tub staves (6) and glazing bars (5), the other accessioned wooden objects of silver fir from Bloomberg London are overwhelmingly from casks or barrels, in the form of circular bungs or stoppers (19) and rectangular fragments or offcuts from cask staves (13+) (below; Marshall and Wardle in prep). The survival of both bungs and waste offcuts may reinforce the argument set out below that casks are the likely source of the wood used for stylus tablets. All of the accessioned objects of silver fir could have been converted from casks.

Among the well-preserved organic material found at Bloomberg London was woodworking debris, one particularly diagnostic category of which was a range of sawn offcuts together with wood chips of pale yellow, coniferous wood. This material would have derived from the reworking of large, imported, stave-built barrels or casks.

On waterlogged sites complete barrels or casks often survive where they were reused as linings of well shafts or circular tanks (Wilmott 1982; Goodburn 2011, 394–6; Fig 5). The casks were sealed with pine resin on the inside, traces of which are often found still adhering to the surfaces of timber cut from them, and are generally accepted as having served as containers for imported wine, probably mainly coming west from the Rhineland.

The most complete such cask found on the site had been reused as a well lining (S148, Fig 27; see Chapter 3.1, period 2 phase 3 (late), c AD 62–65/70). It was constructed from at least 15 staves (there were often as many as 17), each just under 2m long. The circular ends, c 0.75m in diameter, were usually made up of five 'heading' boards joined together. The staves and head boards were all produced by radially cleaving logs down to c $1/32$nd sections (or smaller) and trimming with axes. The timber species used differed from species available in Britain and had characteristics desirable for several purposes.

Approximate standard dimensions for cask timbers have been recognised. For staves these are c 1.96m long by c 170mm wide by c 30mm minimum thickness (a maximum thickness of c 35–37mm occurs in places on most staves). With the ends of the staves removed, their length would have been c 1.82–1.83m. Typically the three central head boards were of similar width and thickness, and an approximate length of c 0.5m with the ends removed is likely.

Thus, we can suggest that, once split in half, each stave could yield as many as 12 tablets with a maximum dimension of 140mm from each half, up to a total of 24 per stave. From the head boards the maximum quantity would have been approximately three from each half or six from each piece, giving a total of 18 from each end. In both head boards and staves some features would have 'spoilt' the timber for making tablets, for example bung holes, excessive damage and occasional knots, or edge pegs in the head board. Making some allowance for such defects, it can be suggested that a total of c 420 tablets could have been made from a single whole cask in good condition. If the timber was particularly fine-grained and straight, it may have been

Fig 5 Stave-built cask, with the head boards removed and reused as a well lining c *AD 65–95, photographed* in situ *at 1 Poultry (0.50m scale)*

possible to cleave the half-thickness blanks again, producing even more tablet boards.

Evidence for the breaking up of casks and barrels has been found on several Roman waterfront sites in the City of London, with significant concentrations being found to the south-east, at Pudding Lane (PDN81: Milne 1985). Recent excavation at Centurion House (MNU11, formerly Monument House) included limited re-excavation of the Pudding Lane site and allowed the sampling of deposits containing similar debris to that found at Bloomberg London (Goodburn 2013). The location of this debris suggests that the recycling of casks took place within the Roman city, near the Thames waterfront or in the Walbrook valley. We cannot be certain whether or not this took place actually on the Bloomberg London site.

The manufacturing process

The Bloomberg site has provided more evidence than any other excavation to date of what must have been an important craft practice in Londinium (even given the reuse of tablets; below, 2.2), and possibly elsewhere. Here, for the sake of brevity, the production of only the most common type, type 1 (below, 2.4), is considered: rectangular, with finished dimensions of close to 140 × 110mm by *c* 6mm thick, and one plain and one recessed face (Fig 15).

The Bloomberg London writing tablets were all radially faced with no traces of saw marks on their faces. This suggests that controlled radial splitting or 'cleaving' was the method used to manufacture the tablet blanks; hand-sawing such thin blanks would have been much more difficult and also very wasteful (Goodburn et al 2011, 431–2).

Additionally, radially cleft timber is more dimensionally stable than tangentially faced material. The finely controlled cleaving parallels that required in the final stages of making the very thin, cleft oak fence pales found on the Bloomberg London site (Goodburn 2014, 17–18). A specialised cleaving tool, commonly called a froe, would have been used; this is essentially a wedge-shaped iron blade combined with a pole lever handle that is still in use in traditional woodland craft work in England and appears to have been a Roman introduction. It is used with a wooden holding device (a break or 'brake') which helps the woodworker to control the run of the split by applying pressure on the thicker side of the split, in this case in the stave (Goodburn et al 2011, 431, fig 363).

To work efficiently, the froe is driven into the flat square end of the timber to be split. To achieve this with Roman cask staves and heading boards, the ends had to be cross-cut square with a saw to prevent jointed stave ends or bevelled edges of the heading boards interfering with the controlled cleaving. This first stage of recycling (Fig 6a–b) would have resulted in short stave end offcuts, and these were indeed found in numbers on the Bloomberg site. They have a diagnostic form with a groove to hold the cask end board and a bevelled end (Fig 7a). A total of seven well-preserved stave end offcuts were found at this site (period 2 phase 2, S45: two from [6772] (including <9888>, Fig 7a) and one from [6888] (<10909>, Fig 7a); period 2 phase 3 (late), OA12 phase 2: [6779] (<9892>, Fig 7a); period 3 phase 1 (early), OA14: [5301]; period 3 phase 1 (late), OA82: [5061] (<10905>, Fig 7a)), together with smaller similar fragments as from period 2 phase 3 (early), OA3: [10258] (<11320>, Fig 7d). These varied in length from *c* 42mm to 70mm, centring on *c* 65mm; thus, a typical stave would have measured *c* 130mm less than when complete at *c* 1.82–1.83m long. Such a billet (a short section of cut wood) was clearly also suitable for cleaving down for items such as the bucket or tub staves and glazing bars also found in smaller numbers at the site.

Of the bevelled-edged heading boards the central three were useful for recycling into small items, particularly stylus tablets, as they were much shorter than the staves, especially when the curved, bevelled edges were sawn off (Fig 6a; Fig 7b). Both types of full-thickness cask timber would then have been cleft carefully in half using a froe and break with the help of a 'froe club' (an expendable, crude type of mallet) to start the split (Fig 6b; below and Fig 8).

Once the cask timbers were cleft into two thin but slightly irregular boards, they must have been trimmed with a fine-bladed small axe or hatchet to make them more regular (Fig 6c). It is possible that they were straightened using soaking and weights, but probably more likely that they were sawn into more manageable, flatter lengths prior to the next stage of manufacture (Fig 6d). The shorter billets would then have been planed down on a bench to flatten and smooth the boards to the final dimensions required for making several writing tablets at a time (Fig 6e). The planed boards (6mm thick) would then have been marked out by scribing with a knife tip or possibly the point of an awl, using a carpenter's square and a rule (Fig 6f; below and Fig 8). It is very unlikely that tablets were ever made individually as they would have been difficult to hold and shape without damage; practical considerations suggest that a minimum of three would be made at a time, and Fig 6f–g show four being made from one blank. While still supported firmly on a level surface, recesses for the wax could then be cut at depths of 2–3mm. Marks show that this was achieved with a small chisel and mallet, although with great care as the bases of the tablets were often no more than 3mm thick.

At the Bloomberg London site, many small, thin and distorted coniferous wood chips were found (eg from period 3 phase 1 (early), from [6372], B4 phase 2, with resin on one face, [5153] OA15 and [3233] OA134; from period 3 phase 1 (late), from [4828] OA28, and [336] and [340] OA67), as well as larger cask timber end offcuts (above); in some cases both chips and sawn wood were found together (eg [3781], S174, period 6 phase 1). It seems likely that these wood chips (eg Fig 7c, <9890>, from [6779], period 2 phase 3 (late), OA12 phase 2) derive from the chisel work for the wax recesses, and from the axe or adze trimming of the rough clefts. The manufacturing process would have produced both fuel for melting the filling wax and much re-saleable, easily ignited kindling.

To finish the tablets, two loop cord holes would have been bored using an awl or small bow drill, and then the tablets separated using a small fine-toothed cross-cut saw (Fig 6g; below and Fig 8). Finally, the blackened wax was added, the surface smoothed and the binding notch cut with a small saw or knife. The fact that the tablets were made from timber seasoned

Fig 6 (opposite) The different stages in making a stylus tablet from recycled wine cask timbers: a – a typical large stave, with the point at which the ends were sawn off marked, together with a five-board cask head similarly showing where the boards were cut at each end; b – a shortened cask stave, c 1.8m long, being carefully cleft in half using a froe and break; c – trimming the rough halves with a small axe; d – sawing the bowed stave into shortened sections for further working; e – planing down the tablet blank to the desired thickness; f – marking out the tablets with square, rule and knife, and hollowing with a chisel to create recessed faces; g – boring the loop holes with an awl and cross-cutting the finished recessed tablets ready to be waxed (not to scale)

a

stave and heading ends
cut off for cleaving

b

c

d

e

f

g

a

<9888>

<9892>

<10905>

<10909>

b

sawn end

<5143>

bevel to
fit staves

break

c

<9890>

origin in cask head piece

Fig 7 Examples of diagnostic Roman cask sawn offcuts of coniferous wood found at Bloomberg London: a – stave end offcuts <9888>, <9892>, <10905> and <10909>; b – heading board end offcut <5143>; c – wood chip <9890>; d – offcuts with both ends sawn <9891> and <11320>; e – photograph of offcuts <15323> (unstratified) (scale 1:2)

d   <9891>

<11320>

e

<15323>

Fig 7 (cont)

in casks would, together with the radial orientation of the timber, have helped them to remain stable and not much prone to warping or splitting, unless treated roughly.

All the types of tools suggested for this work are well attested as finds and in iconographic evidence of the Roman period, and many, such as cross-cut saws and planes, were Roman introductions (Liversidge 1976; Gaitzsch 1980); nearly all can be paralleled in London (below). The plausibility of the various techniques, stages and methods suggested for the manufacture of type 1 stylus tablets was tested experimentally and they produced finished blank tablets very similar to those found at the Bloomberg London site, although it should be borne in mind that some details of the manufacturing process may have differed a little from that proposed here.

Woodworking tools employed

Owen Humphreys

All the woodworking tools required for this recycling process can be paralleled in London (Fig 8), with the exception to date of the froe, examples of which can be found on the Continent

(Pietsch 1983, pl 26, nos 570–1; Pohanka 1986, fig 51, nos 233–5).

Among the Bloomberg London tools are a number which would have been suitable for this sort of precise work with softwood. Examples include a woodworking cross-cut saw blade (<4692>, Fig 8), chisels (eg <2008>; <5409>, Fig 8; <5392>), several awls and bradawls (eg <5385>, Fig 8; <4218>), and the blade of a large woodworking plane <7875>.

Previous excavations at the Bucklersbury House site (Wilmott 1991, 18–33; Shepherd 1998) produced a comparable assemblage of tools, including awls, fragments of saw blades, several chisels and drill bits. In addition, the British Museum houses a paring chisel (Manning 1985, no. B25) described as coming from the Walbrook.

Axes and adzes are notably absent from the Bucklersbury material, the only example being a fragment of an axe poll (MOL 19844). Well-preserved axes are known from elsewhere in London, including from the Thames at Brentford (eg MOL A19538, Fig 8) and a larger example from the nearby Bank of England site (MOL 13679). An iron adze was recovered from 1 Poultry (Hill and Rowsome 2011, 117, fig 117 <S226>; 509) and the Museum of London holds four Roman adzes. A mid

MOL 26706

MOL A19538

<4692>

<5409>

<5385>

MOL 18667

Fig 8 Examples of some of the woodworking tools required for the manufacture of stylus tablets, recovered from Bloomberg London, the Walbrook valley, the London waterfront and the Thames: wooden froe club (MOL 26706) from Puddle Dock (GM182); iron axe blade (MOL A19538) from the Thames at Brentford; iron cross-cut saw blade (<4692>), chisel (<5409>) and awl (<5385>) from Bloomberg London; copper-alloy folding foot rule (MOL 18667) from St Swithin's House, Walbrook (GM158) (scale 1:1 except MOL 26706 1:4, MOL A19538 and MOL 18667 1:2)

2nd-century AD example of a froe club comes from the Thames waterfront at Puddle Dock (GM182, 1962; MOL 26706, Fig 8; Schofield 1998, 95). Wooden mallets rarely survive from the Roman period. Other forms of mallet are depicted in frescoes (Ulrich 2007, fig 3.17), sculpture (ibid, fig 3.41) and funerary monuments (ibid, fig 3.15).

Measuring tools are represented at the Bucklersbury House site by a pair of dividers (MOL 19572) and two folding copper-alloy rules (MOL 19289, 20319). Another folding rule comes from nearby St Swithin's House (GM158, 1949–50; MOL 18667, Fig 8; Wilmott 1991, 114, no. 271). These may not have been carpenters' tools, however, and wooden rules, such as that found in the upper Walbrook valley at Drapers' Gardens (PCA 2009, 33), may have been more common (Goodman 1964, 188–90). The carpenter's square would also normally be made of wood and as such is mostly known through sculpture (Chapman 1979; Ulrich 2007, 57), although a handful of bronze and iron examples survive from Caerleon (Monmouthshire), Canterbury (Kent) and the Continent (Chapman 1979).

2.2   Reading the tablets

Except for two ink-leaf tablets (Chapter 5) like those from Vindolanda, the Bloomberg London tablets are all stylus writing tablets, that is, rectangular panels of wood, usually silver fir (*Abies alba*), recessed on one or both faces to take a thin, smooth coating of wax in which the scribe wrote with a needle-pointed stylus (*stilus*). Many were used more than once (below and Table 2), but the excavations produced good evidence that imported barrels or casks were also recycled, reworking the constituent parts – the staves and headboards – into tablets (above, 2.1). This method of manufacture was not necessarily general practice, especially in areas where the wood was readily available from the tree.

The Latin term for a stylus writing tablet, *tabula cerata*, usually abbreviated to *cera* ('wax'), derives of course from its wax coating; *cera* was explicitly beeswax, and its use was taken for granted. When his girl sent him tablets (*tabellae*) with a negative message, Ovid comments (*Am* 1.12, ll 8–10) that the wax must have been collected by Corsican bees from hemlock flowers. The wax of these tablets, as it happens, was coloured red with vermilion ('like blood', Ovid adds sourly), but the usual colour was black. Vitruvius (*Arch* 7.10) and Pliny the elder (*Nat Hist* 35.41) describe how the black colorant (*atramentum*), as used in paint and ink, was made by burning resin or resinous wood in a confined chamber, ordinary soot being a cheap substitute. This lampblack (ie carbon black) was stirred into the melted beeswax, which was then poured on to the tablet, *cera … rasis infusa tabellis* (Ovid, *Ars Am* 1, l 437). If need be, it could be smoothed off with a hot spatula (below). When it was inscribed, the stylus cut into it, exposing the pale wood underneath. The resulting effect can still be seen on the Trawsfynydd (Merionethshire) tablet (Tomlin 2001), which the wax stained

black before it disappeared; however, where the wax had already been divided by the stylus, it could not stain the wood, so the writing survives as a ghostly brown trace against a black background. The Romans appreciated the need to brighten the contrast: instead of gloomy waxed tablets (*tristes cerae*), Martial (*Epig* 14.5) recommends resting one's eyes with ivory tablets inscribed in ink. This is the effect intended by the line drawings in this volume: black on white, a reverse of the original. But by contrast, Fig 9 reconstructs photographically the original appearance of <WT29>, with the text inscribed on the wax-coated surface.

The Bloomberg London tablets, like the Trawsfynydd tablet and almost every tablet ever found in Britain, have lost this coating. Some of them retain grey/black patches which may be degraded wax (eg <WT165>), or a blackish residue like an oily film. However, unusually, sufficient wax survived on <WT108> (Fig 10) for samples to be taken and submitted for scientific analysis (Chapter 6.1). The lipid composition of the wax contains all of the characteristic components of beeswax; to this has been added carbon as soot to blacken the wax, and the carbon may also have retarded solidification of the wax.

Such residues now serve only to obscure the underlying scratches. These scratches are crucial since, in favourable circumstances, they preserve something of the text. On about half the Bloomberg London tablets the stylus, in exposing the wood, also cut into it. These traces often amount to incisions, including pressure-breaks somewhat wider than the original letter, but sometimes no more than a linear abrasion or a bruising discoloration. It must be emphasised that they hardly ever preserve the full text: letters are generally incomplete, because they survived best where the writer was pressing hardest, that is in the middle of the stroke, especially if they cut across the grain vertically or diagonally; horizontal strokes tend to disappear. But even when the stylus cut across the grain, it might 'skip' alternating bands or zigzag slightly. Letters which incorporate the same basic stroke can also be difficult to tell apart when incomplete (below, 2.3).

The surface of the wood is often degraded by subsequent wear, and especially by ribbing due to differential shrinkage of the alternating bands of grain. Letters are often fragmented in consequence, and it can be difficult to decide whether a mark is deliberate or 'casual'. (In the line drawings which accompany the catalogue (Chapter 4), marks which may only be casual, and traces of earlier text(s), have been drawn in outline.)

Unfortunately (from our point of view) tablets were intended for reuse: the inscribed waxen surface was simply smoothed off to remove the existing text. This was easily done with a spatula (Fig 11), the most diagnostic form having a wide triangular iron blade (Feugère 1995, 322, fig 1, types A1–A5). It is found with styluses and writing tablets as part of writing sets within burials and in iconographic representations (ibid, 321–4; Obrecht 2012, 27–30). Spatula <6178> (Fig 11) is an example of the type found at Bloomberg London along with a range of spatulas of other forms (as Feugère 1995, 322, fig 1, types B1–C1), some of which might also have been used with stylus tablets (Marshall and Wardle in prep). Fig 11 also illustrates

<WT29>

Reconstructed text:

taurus macrino domino
                    carissimo salute
scias me domine recte esse
quod tu sis inuicem cupio
cum uenerat catarrius et
iumenta aduxerat conpedia
quae messibus tribus reficere
non possum adfueram ehre
ad diadumenum set ille
superuenit unum diem

Translation of reconstructed text:

Taurus to Macrinus his dearest lord,
greetings.
Know that I am in good health,
which I desire that you are too.
When Catarrius had come and
had taken the beasts of burden away,
investments which I cannot
replace in three months,
I was at (the house of) Diadumenus yesterday,
but he (Catarrius) arrived unexpectedly for a single day …

Fig 9 Stylus tablet <WT29> as it may have originally appeared; traces of earlier (and/or corrected) text have been removed and lost text conjecturally reconstructed (scale c 1:1)

three examples of iron styluses of the 1st century AD from Bloomberg London; the 200 or so styluses from the site include an octagonal stylus (<8700>) which is unique for its very long inscription, four lines of tiny letters dot-punched on alternate facets (Tomlin in Marshall and Wardle in prep).

The new text was then inscribed. There would be no sign of reuse at the time, since it was concealed by the wax, but, in the wood under the wax, a second series of scratches had been created, a process repeated every time the tablet was reused. Often this resulted in rows of meaningless diagonal incisions or triangular dents. Occasionally a line survives in isolation from a previous text, as in <WT29> (Fig 68), but usually the lines

coincide, making it impossible to distinguish one set of scratches from another since individual letters are often incomplete and the potential combinations multiply rapidly. This problem is uniquely illustrated by a Vindolanda stylus tablet (Birley et al 1993, 29–30 and pl 19; *Tab Vindol* 2, 364, inventory no. 88.836), one of the very few found in Britain which retained its wax. Providently it was photographed before conservation, since the wax then dissolved and exposed the underlying surface as an illegible palimpsest. But the photograph preserves the latest text, a letter from Albinus. More than a hundred of the Bloomberg tablets are palimpsests of this sort.

<WT108>

*Fig 10 Stylus writing tablet <WT108>, a type 2 tablet made of spruce (*Picea abies*) with traces of wax surviving on the recessed face, photographed pre-conservation (scale 1:1)*

<6889>   <6732>   <9039>   <6178>

Fig 11 Examples of iron styluses (<6889>, <6732> with copper-alloy inlaid bands and plated reel mouldings, <9039>) and a spatula (<6178>), dating to the later 1st century AD, from Bloomberg London (scale 1:2)

On the plain outer face of the aforementioned Vindolanda tablet, an address was scratched 'to Albanus at Catterick' (*Cataractonio Albano*), but inside on the wax was a letter which began with Albinus' greetings to his friend Bellus (*Albinus Bello suo salutem*). To write to Bellus at Vindolanda, Albinus (or Albanus) was reusing a tablet sent to him previously at Catterick (Yorkshire). Regular correspondents would have taken this interchange for granted. When Augustine wrote a letter (*Ep* 15) to his friend and patron Romanianus, he apologised for using parchment, on the excuse that he had already used his 'ivory tablets' (*tabellas eburneas*) to write a more urgent letter to Romanianus' own uncle. He went on: would Romanianus please send back any of his (Augustine's) tablets he happened to have, so that he could meet such needs in the future?

It is no surprise, therefore, to find that many of the Bloomberg London letters are written on tablets which were reused (Table 2: 29/43, 67%), even if it is usually impossible to tell what sort of text this was; a few were loan-notes (cf also Table 12). Nor is it surprising that some of the financial or legal documents, as well as the accounts, also show signs of reuse, even if the proportion is rather less (Table 2: 10/24 and 3/8, respectively; in total 13/32, 40%). It should be added that some documents, such as <WT44>, <WT45>, <WT48>, <WT54> and <WT55>, positively seem not to have been reused. The reason for this disproportion is that documents such as loan-notes, contracts and other financial memoranda, such as accounts and receipts, were more likely than letters to be kept for future reference. <WT72>, for example, shows signs of being added to over some period of time. The example of 'writing-practice' (<WT79>), unsurprisingly, reuses a tablet.

The catalogue (Chapter 4) does not note every inscribed face which is totally illegible, and when traces are illegible, it can be difficult to tell whether they are multiple or not. The catalogue simply refers to 'multiple' texts, without trying to estimate how many there were. For two examples illustrated by line drawing, see <WT28> (Fig 67) and <WT43> (Fig 86).

Conversely, a tablet which has undoubtedly been reused may not retain traces of previous text, for example <WT27>, <WT35> and <WT80>. But it is unusual to find a tablet which has almost certainly been used only once, like those noted above. Table 2 is limited to the 90 tablets with legible text or of interesting format, since it is not possible to categorise the Descripta (<WT91>–<WT181>). For these reasons Table 2, by collecting tablets which show definite evidence of reuse, understates the number that were actually reused. It notes details which are significant or unusual, but reference should also be made to the commentary.

Waxed tablets were also intended for easy correction and alteration: a word could be erased with the wedge-shaped end of the stylus and replaced by another, whether it was the name of a place (<WT45>, Fig 88), a change of phrase (<WT44>, Fig 87) or even the writer's own name (<WT29>, Fig 68). Again, there would have been no sign of this on the surface of the wax, but two sets of scratches were left in the wood. One overlies another, but from their appearance alone it is difficult to tell them apart.

Table 2 Tablets showing signs of reuse, according to the type of text

Correspondence: addresses (<WT1>–<WT25>)
<WT2>	
<WT3>	
<WT4>	
<WT6>	
<WT7>	
<WT8>	'cancellation' lines indicating a reused loan-note
<WT9>	
<WT10>	
<WT11>	
<WT12>	broken in half to make a diptych
<WT13>	
<WT14>	
<WT20>	
<WT23>	
<WT24>	

Correspondence: letter-text (<WT26>–<WT43>)
<WT26>	type 2, possibly a reused loan-note
<WT27>	broken in half to make a diptych
<WT28>	type 1, but written over a dated document, so possibly a loan-note
<WT29>	
<WT30>	type 2, possibly a reused loan-note
<WT31>	
<WT32>	type 2 probably reused, possibly a reused loan-note
<WT34>	type 2, possibly a reused loan-note
<WT35>	type 2, but text is not multiple
<WT39>	type 2, possibly a reused loan-note
<WT40>	crossings-out, perhaps 'cancellation'
<WT41>	previous traces uncertain
<WT42>	
<WT43>	

Financial or legal documents: dated and date lost (<WT44>–<WT57>)
<WT46>	
<WT56>	

Financial or legal documents: lists of witnesses (<WT58>–<WT68>)
<WT58>	
<WT61>	'cancellation' lines
<WT62>	
<WT63>	
<WT64>	
<WT65>	'cancellation' lines
<WT68>	

Accounts (<WT69>–<WT76>)
<WT71>	
<WT74>	
<WT76>	

Miscellaneous (<WT77>–<WT90>)
<WT79>	reused for an alphabet
<WT80>	broken in half to make a diptych, but no sign of text
<WT83>	
<WT89>	probably reused

The challenge of reading these scratches is illustrated by the story of the Carthaginian who disguised a secret letter 'by taking new tablets not yet coated with wax, and incising his text on the wood; he then coated them with wax in the usual way, and sent them off as if uninscribed.' The recipient scraped off the wax and duly read the letter underneath (Aulus Gellius, *Noct Att* 17.9.16–17). Evidently the scratches were quite legible. A similar story, centuries earlier, is told by Herodotus (*Hist*

7.239). It may be objected that correspondence consisting of blank pages would have looked odd if intercepted, and that the wily Carthaginian would have been still more wily had he written a different text in the wax on top, but doubtless he was aware of the problem posed by multiple texts and was careful not to complicate the underlying text.

2.3 Letterforms

The Bloomberg tablets preserve a large sample of Roman stylus-handwriting from a western provincial city within a well-defined period, at longest the second half of the 1st century AD, but in essence only about 30 years from *c* AD 55 to *c* AD 85 (Chapter 3.1, 3.2). Those which can be certainly dated to these years (Table 10; Table 11), including <WT30> (*c* AD 43–53) and the five which reflect the order of battle after the Boudican revolt (AD 60/1), are distinguished by an asterisk in the graphic tabulations of letterforms (Fig 12; Fig 13). Since the assemblage can be located so closely in time and place, it is worth setting out its letterforms, and no surprise to find them more or less uniform.

The tabulation is divided between the capital letter or cursive letterforms of the outer texts on wood (Fig 12), the latter being the addresses of correspondence, and the cursive letterforms of the various inner texts on wax (Fig 13). The 'cursive' letters, despite the implication of the adjective 'running (hand)', were made with discrete strokes of the stylus. The scribe drew the stylus towards him and lifted it, before he made the next stroke. He did not run one letter into the next, this absence of ligatures contrasting with the ink-written texts of Vindolanda of the AD 80s to *c* AD 110 (*Tab Vindol* 2, 49–54) and the stylus-written Bath (Aquae Sulis), Somerset, curse tablets of a century and more later (*Tab Sulis*, 88–94). The only obvious exception is the letters *o* and *n* in *Ammonicus* (<WT76>, Fig 125). The strokes are variously curved or straight. The letters *b*, *c*, *d*, *o* and *q* incorporate an anti-clockwise loop or semicircle, but the other letters are made with strokes either straight or sinuous, almost all of them diagonal or vertical. Horizontal strokes are rare, being confined to the cross-stroke of *t*, and the mid-stroke of *h* and the *denarii symbol*. These observations may be amplified by considering the letters one by one.

a is made with two diagonal strokes, the first of which is sometimes vertical or sinuous, or extended downwards, features which may confuse it with *r*. But the second stroke of *r* should be sinuous. An earlier form of *a* survives in <WT35> (Fig 77), where the second diagonal was continued with a short vertical downstroke. In two addresses which contain cursive forms, <WT13> (Fig 51) and <WT18> (Fig 57), a downstroke is added between the diagonals, a form found in the capital letter in <WT7> (Fig 44).

b is made with a small loop, followed by a second sinuous

stroke; it is liable to be confused with *d*.

c is made with a single semicircular stroke, which makes it difficult to distinguish from *g* or even *s* (if incomplete). Although many Roman hands, both with pen and stylus, made *c* in two strokes (the first a curving downstroke, the second horizontal or diagonally upward), this does not seem to be so in the Bloomberg tablets.

The first stroke of *d* is often difficult to distinguish from that of *b*, but the second stroke should be straight and diagonal, although some scribes preferred to make a curving downstroke.

e is made with two short downstrokes which may be vertical or slightly diagonal. Their tendency to curve towards the right can make *e* difficult to distinguish from *u* (eg in <WT55> (Fig 98) and <WT72> (Fig 121)), and quite often it must be decided from the context. They are well differentiated in the personal name *Verecundus* (<WT62>, Fig 109), for example, but less so in *Vespasiano* (<WT51>, Fig 94).

f is made with a sinuous downstroke, followed by a single short downward diagonal, not by the two short strokes, whether horizontal or diagonal, typical of Vindolanda and Bath. This form is found in two contemporary graffiti, on pot <9197> from Bloomberg London (Bryan et al in prep) and *RIB* 2(7), no. 2501.193 (Puckeridge, Hertfordshire).

g is made with a large semicircle like *c*, which is followed by a short diagonal stroke at its foot, sometimes gently curved.

There are few examples of *h*, which consists of two downstrokes joined medially by a horizontal. The second downstroke tends to be shorter, and in <WT55> (Fig 98) there is the lower-case form typical of Vindolanda.

i is made in two forms, 'short' *i* which is a short downstroke sometimes gently curving to the right or slightly diagonal, and 'long' *i*, which has not been tabulated, but is simply an elongated downstroke. It serves to mark an initial letter, notably in <WT51> (Fig 94), and is not confined to vowels which are quantitatively long: see *promissit* in <WT55> (Fig 98), for example, where the first *i* is quantitatively long, but written 'short', and the second *i* is written 'long', but is quantitatively short. In other words, the form of the letter bears no apparent relationship to the length of the vowel.

k is very rare, since it was virtually displaced by *c*. There is one instance at Bath (*Tab Sulis*, no. 53, l 9), and in the Bloomberg tablets it only occurs twice in the fossil form of *K(alendas)* (<WT37>, Fig 80; <WT51>, Fig 94).

l is usually a long downstroke, curving at top and bottom like the second stroke of *b*. The capital letter form is used in <WT51> (Fig 94) to mark the initial letter of a personal name, but idiosyncratically in <WT30> (Fig 70) (*gloriantur*).

m is made with four diagonal strokes, the third not being

address letterforms: capitals and cursive

Fig 12 Capital letter or cursive letterforms of the outer texts on wood

linked to the second or even omitted, as occurs in some stylus tablet hands. <WT55> (Fig 98) (*promissit*) is exceptional in this respect. Sometimes the first and third strokes are vertical and even extended, as in <WT38> (Fig 81) and <WT56> (Fig 99).

n is capital letter, two downstrokes linked by a diagonal from top to bottom.

o is not made as a circle or in two curves, as at Vindolanda and Bath. As usual in stylus tablet texts, the first stroke is a loop, the second a diagonal. It can thus resemble *p*.

p is made with a short downstroke, often curving at the foot,

topped by a short diagonal second stroke.

q survives well, because of its long diagonal second stroke. The first stroke, a loop sometimes unfinished, survives less well. The letter is invariably followed by *u*, quite often made above the line.

r is made with a long downstroke, often sinuous and tending to the left, topped by a second sinuous stroke. As already noted, it is liable to confusion with *a*.

s is made with a single sinuous downstroke, and like *q* survives well. It is not made in two strokes, as at Vindolanda and Bath, the first a sinuous downstroke, the second an upward diagonal.

cursive letterforms

Fig 13 Cursive letterforms in the inner texts on wax; an asterisk distinguishes those tablets listed in Table 10 and Table 11 as pre- or immediately post-dating the Boudican revolt of AD 60/1

t is a simple letter, but liable to be confused with *p*. It is made with a short downstroke, usually tending to the right, which is topped by a horizontal cross-stroke.

u is occasionally made with two straight strokes like modern *v* (eg in <WT31>, Fig 72), but is usually two short downstrokes, the first tending to the right and often meeting the second. As

already noted under letter *e*, if incomplete it is liable to be confused with *e*.

x is made with two intersecting diagonals, the first of which is often elongated, the second shorter and almost horizontal.

Addresses (Fig 12) were written on the outer (plain) face of

tablets used for correspondence, in letters larger and bolder than the cursive on the waxed inner face (below, 2.4). The distinction between 'capital letter' and 'cursive' is somewhat artificial, since many of the letterforms are much the same, but the criterion adopted here has been the lower-case forms of *b* and *d*. It should be noted, though, that *p* in <WT11> (Fig 49) and <WT18> (Fig 57), with its full loop, is close to the 'capital' form; and that even in 'capital letter' addresses, *r* is lower-case in form. Capital E is always written as II. The alphabet in <WT79> (Fig 130; Fig 131) may have been an exercise in writing headings and addresses, so it has been tabulated with the capital letter addresses. There is no example of the elongated 'address script' used to write the addressee's name on Vindolanda ink-leaf tablets (*Tab Vindol* 2, 43).

2.4 The form and format of the tablets

Type and size

The various types of tablet are noted by Padley (1991, 210) and fully described by Speidel (1996, 23–8). At Bloomberg London, as at Vindonissa (Windisch, Switzerland) and Carlisle (Luguvalium) in Cumberland, type 1 is much the most common, followed by type 2; the others are quite uncommon (summarised in Table 3; detailed in Chapter 6.3, Table 14; Table 15).

Type 1 (Padley 1, Speidel A1)

One face is recessed, the other plain. This is the 'standard' type, used in pairs hinged together so as to protect the waxed surfaces which faced inwards (Fig 14). <WT77> (Fig 126; Fig 127) and <WT78> (Fig 128; Fig 129) can be identified as forming such a 'diptych', since they come from not just the same land use but were found in dump deposits in close proximity

Fig 14 Schematic reconstruction of a diptych – a pair of standard type (type 1) tablets hinged together – used for correspondence (after Speidel 1996, 23, fig 8, adapted for the Bloomberg tablets)

Table 3 Numbers of tablets and labels by period and tablet type

Period	Stylus tablets by type				Labels	Ink tablets	Stylus tablet type not determined	Total by period
	1	2	3	4				
2 phase 1	1	1					2	4
2 phase 2	6	2						8
2 phase 3 (early)	7	1						8
2 phase 3 (late)	46	8			1	1	6	62
3 phase 1 (early)	96	41			1		5	143
3 phase 1 (late)	83	29	2	1		1	8	124
3 phase 1	13	1					2	16
3 phase 2	5	2	1				3	11
4 phase 1	8	6					1	15
5 phase 1	2	1					1	4
6 phase 1	1							1
12		1						1
Unstratified	9	3						12
Total by type	277	96	3	1	2	2	28	409

(<WT78> came from a deposit overlying that containing the two conjoining fragments of <WT77>), are the same width and thickness, and unique in being inscribed with nothing but numerical symbols. Type 1, like all tablets, is liable to break along the grain, but there are 13 complete, or almost complete, examples which are inscribed. The capacity of a type 1 pair might be doubled by inserting a third, double-faced tablet between them to form a 'triptych'. The inserted tablet might be type 2 or 3, but much the most common is type 2.

Type 1 complete or almost complete examples are: <WT10> (Fig 15; Fig 48), <WT23> (Fig 62), <WT28> (Fig 67), <WT29> (Fig 68), <WT40> (Fig 83), <WT42> (Fig 85), <WT48> (Fig 91), <WT53> (Fig 96), <WT54> (Fig 97), <WT55> (Fig 98), <WT57> (Fig 15; Fig 101) and <WT76> (Fig 15; Fig 125); in addition there are <WT84> (no visible text) and 'Descripta' <WT123>, <WT135>, <WT136> (no text), <WT144>, <WT156> (no text) and <WT157>.

Type 2 (Padley 2b, Speidel S1)

Both faces are recessed, but one face is divided into two panels by a flat-bottomed groove down the centre. It was structurally weaker than type 1, and <WT65> (now in two pieces) is the only complete inscribed example (Fig 16; Fig 113).

The triptych thus formed, type 2 between two type 1 tablets (Fig 17), was intended for legal documents (Meyer 2004, 131, fig 4). The text was written on the first two inner faces (faces 2 and 3) which were then bound together, the cord running down the flat-bottomed groove on face 4 where the witnesses attached their seals to certify that it was unopened. They wrote their names in the wax on either side. The Bloomberg tablets are mostly too fragmentary to establish the relationship between the traces in these panels to left and right, but witnesses seem to have written their names in column (i) and completed them in column (ii) with a cognomen or filiation, or

Fig 15 Complete or almost complete examples of type 1 stylus tablets, with one plain (outer) face and one recessed (inner) face: <WT10> (outer and inner faces); <WT57> (inner face); <WT76> (inner face) (scale 1:2)

23

<WT65>

Fig 16 <WT65>, the only complete inscribed example of type 2, with one recessed face divided by a central groove (scale 1:2)

triptych used for a legal document

Fig 17 Schematic reconstruction of a triptych − two type 1 tablets enclosing a type 2, hinged together − used for a legal document: left − diagram showing the three tablets; the text was duplicated (inner and outer) and witnesses wrote their names to the left of their seals on the type 2 tablet (on face 4) which enclosed the inner text (faces 2 and 3), their names being identified to the right by patronymic, military subunit, etc (after Tab Vindol *1, 45, fig 9); right − schematic reconstruction (after Speidel 1996, 22, fig 7, adapted for the Bloomberg tablets)*

other form of identification; this is best seen in <WT62>, where the witnesses name their cavalry subunit (*turma*) in column (ii) (Fig 109). The text before being sealed was copied on to the other type 1 tablet (face 5), where it was available for reference without the need to open the sealed text. This ingenious device, which was established by a senatorial decision of Nero's reign (Suetonius, *Nero* 17), prevented the master text from being altered; but in case of dispute, or when the document was executed, for example a will (*testamentum*), the seals could be broken and the outer text checked against the inner.

Type 2 tablets could of course be reused for other purposes. Examples are <WT26> (Fig 65), <WT35> (Fig 77), <WT39> (Fig 82), and perhaps <WT34> (Fig 76) (correspondence) and <WT70> (Fig 119) (an account). For a Vindolanda example, see Bowman and Tomlin (2005, 9–10).

No Bloomberg examples were identified of a further type where both faces are recessed, but are not divided (Padley 2a, Speidel I 1). One might be inserted (like type 2 tablets) between a pair of type 1, to make a triptych, or several to make a 'polyptych' which resembled a solid block of wood (*caudex*, whence *codex* or 'book'). There is a single British instance of this type, the now-lost Roman will from Trawsfynydd (Tomlin 2001), which was described when found as a 'wooden book' of about ten tablets bound together with wire: 'All the leaves were written upon on both sides – the two covers on the *inside* only.' Only one of these 'covers' now survives, the first tablet (type 1).

Type 3 (Padley 2c, Speidel S2)

Both faces are recessed, but one face is divided into three panels by retaining two vertical bars to act as raised borders. The centre panel is much narrower, and would have served the same purpose as the groove in type 2; an example from Saintes (Charente-Maritime, France) retains traces of seals here (Vienne 1992, 217, fig 1). The only Bloomberg London examples are <WT88> (Fig 136), <WT90> (Fig 137) and <5171>, but there are

two others from London (Chapman and Straker 1986, nos 9.2–.3), and ones from Hadrian's Wall (Simpson et al 1935) and Vindolanda (*Tab Vindol* 1, pl 12 no. 1; Birley et al 1993, pl 24). At Vindonissa one such tablet was reused for correspondence (Speidel 1996, no. 4).

Type 4 (Speidel A3)

<WT87> (Fig 134; Fig 135), which is one of only two tablets made of maple (*Acer* sp), is unique at Bloomberg London. It has one recessed face, which is divided into two unequal panels 130mm and 13mm wide respectively. When the wider panel was recessed, a small rectangle of the original surface was retained, measuring 3 × 4mm, its purpose being to prevent the surrounding wax from touching that of the similar tablet to which it was hinged. Examples are known from Vindonissa and Herculaneum (Italy).

Type 5: tags or labels

<WT182> and <WT183> are neat wooden strips pierced at one end for attachment (Fig 138). They are quite uncommon, no doubt because they are so slight, but others have been found in the Walbrook in London (British Museum 1934, 1210.98, measuring 110 × 30mm), at Vindolanda (British Museum 1993, 1103.58) and at Saintes (Vienne 1992, 216–17, fig 4). <WT183> was intended to be reusable, since one face is recessed for wax.

Dimensions

The large number of stylus tablets recovered permits us to attempt some calculation of average dimensions. The numbers of stylus tablets with a complete dimension are shown in Table 4, by type, together with the labels. Based on the sample sizes shown in Table 4, Table 5 presents the data for minimum, maximum and average measurements. From this, the average

Table 4 Tablet dimensions: numbers of stylus tablets and labels with complete measurements, by type

Type	Total number of type	As % of all stylus tablets of defined type & labels	Sample size (count of occurrences of complete measurement & count as % of total of type)									
			Width	%	Height	%	Thickness (rim)	%	Thickness (face)	%	Width of seal-groove (type 2 only)	%
Type 1	277	73.1	216	78.0	26	9.4	246	88.8	248	89.5	-	-
Type 2	96	25.3	46	47.9	5	5.2	79	82.3	78	81.3	41	43.0
Type 3	3	0.8	0	-	0	-	3	100.0	3	100.0	-	-
Type 4	1	0.3	1	100.0	1	100.0	1	100.0	1	100.0	-	-
Type 5 (labels)	2	0.5	2	18.2	2	18.2	2	18.2	n/a	-	-	-
Total	379		265		34		331		330		41	

Table 5 Tablet dimensions: minimum, maximum and average measurements for all stylus tablets and labels with a complete measurement (Table 4), by type

Type	Width (mm)			Height (mm)		
	Min	Max	Average	Min	Max	Average
Type 1	64.0	181.0	139.8	66.0	146.0	113.5
Type 2	105.0	188.0	140.0	89.0	114.6	108.1
Type 3***	-	-	-	-	-	-
Type 4*	155.0	155.0	155.0	72.0	72.0	72.0
Type 5 (labels)**	18.2	18.2	23.1	99.0	99.0	114.8

Key:
* = only one example of type
** = only two examples of type
*** = only three examples of type

width of (216) type 1 tablets and (46) type 2 tablets is taken to be 140mm. In order to discount atypical items, the width data were recalculated having excluded tablets that deviated from the average by more than 20%. In practice, the cut-off points were determined as deviation by more than 30mm from the average; thus tablets >170mm (>121.5%) or <110mm (78.6%) of the average are deemed to be unusually wide or narrow. Table 6 lists these outliers by type. The exclusion of these items obviously alters the set to be averaged for each type. Table 7 shows revised average statistics for types 1 and 2.

Only a small percentage of all tablets preserved their original complete height. The sample size (26) for average height for type 1 tablets is small (<10%), but this could be taken as *c* 110mm. The range of values is shown in Table 5, and

averaged statistics for types 1 and 2 after removing outliers in Table 7.

The majority of stylus tablets thus measure *c* 140mm wide by (probably) *c* 110mm high. The exceptions (see Table 6) include two type 1 tablets, <WT84> and <WT85>, which together with type 2 tablet <WT86> (above; Fig 133) form a set of three matched tablets which at *c* 176mm are unusually wide, as are <WT89> (type 1, 181mm) and <WT106> (type 2, 188mm). Three catalogued tablets of type 1, which are unrelated to each other, are unusually narrow, <WT21> (Fig 60, 94mm wide), <WT136> (80mm) and <WT181> (63mm). All of these tablets are of silver fir. Another narrow tablet <WT87> (Fig 134, Fig 135; 155mm wide by 72mm high) is of maple and evidently imported.

Table 6 Tablet dimensions: stylus tablet outliers, viz exceptionally wide or narrow type 1 or type 2 tablets

	Cat no.	Acc no.	Context	Land use	Period	Width (mm)	Height (mm)	Thickness (rim) (mm)	Thickness (face) (mm)	Width of seal-groove (type 2 only) (mm)
Type 1 narrow	<WT181>	<6258>	[+]	-	-	64.0	(51.0)	5.4	5.2	-
	<WT136>	<2084>	[2841]	OA122	3.1 (early)	80.7	82.80	5.2	3.0	-
	<WT21>	<4291>	[5293]	OA15	3.1 (early)	92.0	(34.5)	4.8	3.2	-
Type 2 narrow	-	<6279>	[6485]	B9	3.1 (late)	105.0	111.0	8.7	6.8	31.0
Type 1 wide	-	<7967>	[6567]	OA15	3.1 (early)	172.0	(45.0)	7.6	6.1	-
	-	<5803>	[6465]	B9	3.1 (late)	176.0	138.5	7.8	4.6	-
	<WT84>	<6274>	[6465]	B9	3.1 (late)	176.0	146.0	7.3	5.4	-
	<WT85>	<6275>	[6465]	B9	3.1 (late)	176.0	(62.0)	5.6	3.1	-
	-	<4796>	[5301]	OA14	3.1 (early)	180.0	(69.0)	8.3	6.4	-
	<WT89>	<5783>	[6342]	OA34	3.1 (late)	181.0	(41.6)	8.1	5.4	-
	-	<3376>	[5229]	OA17	3.1 (late)	181.0	(36.0)	7.3	6.3	-
Type 2 wide	<WT86>	<6277>	[6465]	B9	3.1 (late)	177.0	(130.0)	6.7	3.2	27.7
	<WT106>	<6408>	[6615]	OA12P2	2.3 (late)	188.0	(67.7)	9.2	7.2	24.8

Key and notes:
Land uses: P2 = phase 2
Measurements in parentheses are incomplete
<WT136> is also unusually short and <WT84> is also unusually high

Thickness (rim) (mm)			Thickness (face) (mm)			Width of seal-groove (type 2 only) (mm)		
Min	Max	Average	Min	Max	Average	Min	Max	Average
3.8	13.5	7.3	2.5	12.4	5.8	-	-	-
4.0	13.1	8.6	2.0	11.0	5.7	8.2	31.0	23.5
6.1	6.1	7.3	2.8	2.8	3.3	-	-	-
7.3	7.3	7.3	7.0	7.0	7.0	-	-	-
6.3	6.3	6.3	-	-	-	-	-	-

Table 7 Tablet dimensions: revised average values for stylus tablets types 1 and 2 after removing outliers (Table 6) from the averaged set

Type	Revised average values					Revised total number of type	Sample size (count of occurrences of complete measurement excluding outliers (Table 6) & count as % of total of type)									
	Width (mm)	Height (mm)	Thickness (rim) (mm)	Thickness (face) (mm)	Width of seal-groove (type 2 only) (mm)		Width	%	Height	%	Thickness (rim)	%	Thickness (face)	%	Width of seal-groove (type 2 only)	%
Type 1	139.4	112.3	7.3	5.8	-	267	206	77.2	23	8.6	236	88.4	238	89.1	-	-
Type 2	140.8	107.4	7.0	5.7	23.3	93	43	46.2	4	4.3	76	81.7	75	80.6	39	41.9
Total						360	249		27		312		313		39	

Format and usage

The stylus tablets, as already observed, were thin rectangular panels of wood recessed on one or both faces to take a coating of black beeswax. The tablets were inscribed horizontally long-axis in 'landscape' format, unlike the pages of this volume which are 'portrait' format with the long axis vertical. A saw-cut or V-notch was made in the top and bottom edge to take the binding cord, and two small holes either side of it in one of the raised borders to take the loops which hinged two or three tablets together. The binding cord and the loops, threaded or poked through the holes, were probably twine made from hemp or linen, but wire may also have been used, as with the Trawsfynydd tablets (Tomlin 2001, 145). Seal boxes were found at Bloomberg London (Marshall and Wardle in prep), but not in direct association with the tablets, and how they were actually used remains uncertain. A small tablet from Vindonissa incorporates a central recess in which a seal box was lodged (Marichal 1992, figs 7–8), and it is quite possible that seal boxes were used with some of the Bloomberg London correspondence, but legal documents carried multiple seals which were differently protected (see type 2, above).

The Bloomberg tablets, as already noted, are almost all of type 1 or 2 (Table 3). They were used in pairs or threes for writing of all kinds, such as note-taking, memoranda and accounts, as well as legal documents and correspondence (letter-writing). No trace was found pre-conservation of the fore-edge annotation in ink found on four tablets from Vindonissa (Frei-Stolba and Krieger 2008) and some from Vindolanda (eg Birley et al 1993, pl 21 bottom), but this may only be an accident of preservation. There is no complete letter like the pair of tablets from 1 Poultry addressed to L(ucius) Iulius M[…] by Septimius Silvanus which retained traces of text on their waxed inner faces (Tomlin and Hassall 2003, 374, no. 23; Tomlin 2011a, 515; Table 13). Even <WT29> (Fig 68) is unusual in being the whole of one page. Although legal documents might be reused for the purpose (above), it is likely that most letters were written on two type 1 tablets hinged together. It was also possible to break a type 1 tablet into two pieces, and to cut a new notch in each of the broken edges before binding them together (<WT4>, Fig 18, Fig 41; <WT12>, Fig 18, Fig 50; <WT27>, Fig 66; <WT80>, Fig 18). This improvisation is also found at Carlisle (*RIB* 2(4), no. 2443.10), Vindonissa (Speidel 1996, no. 45) and Saintes (Vienne 1992, 212, 217, fig 3).

A peculiarity of the Bloomberg type 1 tablets not shared by Vindonissa is that a small rectangular panel was sometimes excised from one corner of the outer face (<WT2> (Fig 19; Fig 39), <WT23> (Fig 62), <WT69> (Fig 118), <WT78> (Fig 128), <WT81>, <WT96>, <WT100>, <WT102>, <WT173>,

Fig 18 Examples of type 1 stylus tablets broken in two and a new notch cut in the broken edge: <WT4> and <WT12> (outer and inner faces); <WT80> (inner face) (scale 1:2)

<WT38> (Fig 81)), and even from two corners (<WT18> (Fig 57) and <WT36> (Fig 19; Fig 79)). This feature has not been noted at Carlisle or Vindolanda, but there are two other London examples, from Lothbury (*RIB* 2(4)*,* no. 2443.7) and from Bucklersbury House (ibid, no. 2443.8) (Table 13). Of these 14 tablets, four carry addresses (<WT2>, <WT18>, <WT23> and Lothbury), while a fifth was part of a letter (<WT38>, Fig 81), seven are indeterminate, and only two were used for other purposes (<WT69>, <WT78>). If the latter are seen as reused, it is easy to associate the recessed panel with correspondence, but difficult to determine its exact function. Presumably it was once coated with wax, but it would have been too small to carry a whole address; moreover, it is unrelated to three of the actual addresses (<WT2>, <WT18>, Lothbury *RIB* 2(4)*,* no. 2443.7), and the fourth (<WT23>) expressly avoids it. Perhaps, therefore, it was used to identify the sender, whether by name or by signet-impression. Unfortunately there is only one inscribed example, the Bucklersbury House tablet with M TRA in one

corner, and no address. It is difficult to see this as an abbreviated name, since three initials would have been usual, for example MVM in a London samian graffito (*RIB* 2(7), no. 2501.398), for *M(arcus) V(alerius) M(aximus)* or similar. Since this tablet was found so close to the temple of Mithras, it is tempting to see a reference to *Mitras* (as his name was sometimes written), but the temple of *c* AD 240 would be much later in date than the tablet, which to judge by other stylus tablets would have been 1st- or 2nd-century AD at latest; and M TRA thus interpreted would have been inadequate as an address, and implausible as the sender's name.

This outer (plain) face was used to address a letter to its recipient; there are many examples at Carlisle (*RIB* 2(4)*,* nos 2443.3–.6, .10) and Vindonissa (Speidel 1996, 35–9). The lettering is larger and bolder than the cursive writing (with the letters joined or 'running') on the waxed inner face (above, 2.3), no doubt for greater legibility, but also because the writing-surface, being bare wood, was less smooth and regular. The

Fig 19 Examples of stylus tablets with a small rectangular panel excised from one corner <WT2> or two corners <WT36> (scale 1:2)

address started at the top of the page and ran horizontally along the axis of the wood grain, so the surviving traces consist mostly of vertical and diagonal lines which cut across the grain, often broken as they 'bump' over its ridges. The point used was apparently broader than the needle-like stylus used for the inner text, but this must be because it had been sharpened to a chisel-point, or was simply driven in more deeply. There is no trace of ink to imply the use of a metal-nib pen, although two Vindonissa addresses (Speidel 1996, nos 20, 23) were actually written with pen and ink. This is quite exceptional. The bold scratches in the bare wood must have been sufficiently legible at the time, like the scratches of the Carthaginian letter mentioned above (2.2). It is conceivable, to judge by surviving traces on <WT8>, for example, that the outer face was sometimes rubbed with black wax before incising the address, to increase the visual contrast. This would account for <WT3>, which carries the names of two different recipients on successive lines, without any sign of erasure; but this particular tablet shows no sign of any wax (Fig 40**)**.

The writing often respects the binding cord which tied the tablets together, but this may not mean that they had already been tied up. Some of the Vindonissa tablets have a line drawn vertically down them, to mark where the cord was going to be (Speidel 1996, 35–6), and <WT31> (Fig 71) may be a Bloomberg example. But <WT30> (Fig 69) is puzzling, since the name is divided, but not in line with the saw-cut.

The resulting address is surprisingly brief by modern standards, being little more than the name of the recipient in the dative case, sometimes accompanied by *dabis* ('you will give') as in <WT1> (with note of others). He may well be identified by his filiation, for example 'Luguseluus the son of Junius' (<WT4>), or by his occupation, for example 'Tertius the brewer' (<WT12>). But both these examples are complete, and they

point to the lack of place names, as already remarked by their editors for the Vindolanda tablets (*Tab Vindol* 2, 43). It is true that most Bloomberg addresses are incomplete, so generalisation is difficult, but only three include the place name 'London'. This is in the form *Londinio*, a locatival ablative ('in London') which immediately precedes the name of one recipient (<WT6>, *Londinio Mogontio*) and follows that of two others (<WT18>, *[…]ino … Londinio*; <WT24> *[…] dabis Londinio*). By its position and the absence of any preposition such as *ab* (contrast ibid, no. 225, ll 24–5, *ha[ec ti]bi a Vindolanda scribo*), 'London' must be the place of delivery, not the place of writing; the latter is uniquely specified in <WT23> (*scripsit ?Vir[oc]oni*), apparently 'at Wroxeter' in the locative. One address specifies a neighbouring property, 'opposite Catullus' (<WT14>), like the mention of 'at (the house of) Diadumenus' in <WT29>; and another address (<WT21>) may refer to a local landmark. The brevity of these addresses implies that the recipient was often known to the bearer of the letter, and even that most letters originated from London itself.

The inner text begins with the writer's name, followed by the recipient's name in the dative case, perhaps qualified as 'dearest' (*carissimo*) or 'brother' (*fratri*); the second line, which is indented to mark the heading, ends with 'greetings' (*salutem*). Thus 'Taurus to Macrinus his dearest lord, greetings' (<WT29>). The confusion over this writer's name, whether he was 'Taurus' or 'Taurinus', suggests that he was dictating to an amanuensis. <WT50>, a receipt, is explicitly written by a slave at his master's orders (*iussu domini mei*). The letter <WT27> is exceptional in not naming the writer, no doubt because it was obvious to the recipient, who was his dependent.

The beginning of a new sentence is marked by extending it to the left, and often the initial letter is enlarged; the last letter too may be extended to the right, for example *m* in *Nerviorum*

(<WT33>, Fig 75). Words are often separated by a space, if not as clearly as we might wish, but the interpunct, a medial point obsolescent during the 1st century AD (*Tab Vindol* 2, 56), is used for this purpose only in <WT57> (Fig 101). It also marks an abbreviation in <WT71> (Fig 120), and perhaps in <WT32> (Fig 73). There is apparently no instance of the apex, an acute accent which marked a vowel as long; this occurs on the contemporary tombstone of Classicianus in London (*RIB* 1, no. 12; Grasby and Tomlin 2002), and is frequent in the Vindolanda tablets (*Tab Vindol* 2, 57–61).

3

The archaeological provenance and social and historical context of the tablets

3.1 The archaeological context

Jessica Bryan, Julian Hill and Sadie Watson

Introduction

The excavations at Bloomberg London revealed a complex archaeological sequence – Roman land reclamation, buildings and external yards in the Walbrook valley – which this section summarises in order to place the writing tablets within a broader stratigraphic context. The discussion that follows focuses on those parts of the site and the chronological sequence from which writing tablets were recovered, and is therefore selective. Nor does it present the extensive artefactual and tree-ring dating evidence that underpins the site phasing structure. The full exposition of the Roman sequence and the finds assemblage will be presented in the companion volumes (Bryan and Watson in prep; Marshall and Wardle in prep).

Three other general points should be made. Firstly, for the Roman roads in the vicinity of Bloomberg London, this volume employs the numbering system as used in the 1 Poultry publication (Hill and Rowsome 2011). Specific references are supplied at the first mention of each road. Secondly, with the exception of some prominent public buildings, Roman London in the 1st century AD was almost entirely built of wood and this applies to all the buildings described in the sequence below. Finally, most buildings lay in the north of the site and can be presumed to have fronted on to Road 1 (below); therefore approximately the rear half to two-thirds of these buildings lay within the excavated area.

The course of the Walbrook stream lay on the western side of the LUL box (Fig 2) of Bloomberg London, and ran north–south towards the Thames (Fig 20). The presence of the stream had from the first a significant impact upon the character of the activity on the site; and the Roman development of the site had a correspondingly significant impact upon the Walbrook. Within the area of the site, the profile of the Walbrook valley was steeper on the east side than to the west and in plan it broadened out towards the Thames. Where the stream entered Bloomberg London from the north, in its pre-Roman form it was represented by several small, and probably mobile, braided channels which combined somewhere near the centre of the site, where they met a tributary (tributary 1; Fig 20) coming in from the west. As a result, the course of the Walbrook is shown in the plans that follow (Figs 24–8) as a 'conjecture zone'. Tributary 1 does not feature in later plans because it was effectively dammed by the construction of Road 1 (Hill and Rowsome 2011, 258). The highest Thames tides – which in the 1st century AD could reach *c* 2m OD (Milne 1985, 84) – would have flooded into the mouth of the Walbrook and affected the low-lying terrain in the southern part of the site. At low tide, *c* -0.5m OD or below (ibid), the base of the valley could have resembled more a muddy creek.

However, sediments from within the Walbrook channels themselves account for only a small proportion of the archaeological strata. During the second half of the 1st century

Fig 20 Map showing the Bloomberg London site in relation to the natural topography of the lower Walbrook valley: the contours on this map derive from geoarchaeological survey and define the late Holocene topography; these contours determined the configuration of the immediately pre-Roman landscape (scale 1:5000)

AD, the period on which this volume concentrates, Bloomberg London was characterised by alternate episodes of raising the ground level and building construction. It has been noted above (Chapter 1.2) that the main Roman road running west from the centre of Londinium bridged the Walbrook immediately north of Bloomberg London and that this road is a primary feature of the settlement dating to AD 47–8 (Fig 21a): the level of the bridge deck itself is likely to have been at *c* 5.0–5.5m OD (Road 1; Hill and Rowsome 2011, 256–60; 276, fig 264; 311, fig 284). The major episodes of raising the ground level from *c* AD 62 to *c* AD 90/5, that is periods 2 phase 3 (late), period 3 phase 1 (early), period 3 phase 1 (late) and period 3 phase 2, were structured so as to create building platforms flanking the south side of Road 1. The deposits, referred to here generally as 'landfill', meaning dumps of rubbish and other material, will have settled and compacted over time, though the extent to which this has occurred is not defined, and the OD levels cited

in this section will not precisely indicate the Roman ground level at any particular date. However, despite this caveat, it is likely that it was not until some point in the final 10–15 years of the 1st century AD (represented by period 3 phase 1 (late), 3 phase 2 and 4 phase 1) that the level of the rear rooms of the buildings matched the likely level of the road. Up until that time the buildings would have stepped down in level, albeit gently, towards their backyards.

Each landfill episode involved the replacement of all the buildings of the preceding period and each episode is too substantial to represent an accumulation of waste from the occupation of the site area itself. As the consistent intention was to raise the prevailing ground level of the site, it follows that the overwhelming majority of the landfill was imported. The quantity (and quality) of artefactual and ecofactual material present, particularly in periods 2 phase 3 (late), period 3 phase 1 (early) and period 3 phase 1 (late), covering the period *c* AD 62– 90/5, and including most of the writing tablets described in this volume, would tend to suggest that the landfill came from the more built-up areas of the Roman town further east (Fig 21). The ground level was progressively built up from the north/ north-east towards the south/south-west; the landfill was most probably brought into the site area from Road 1 and entered the site from the north-east. The Walbrook stream, and surface drainage into its valley from the gravel terraces through which it cut, subsequently served to keep these deposits wet and to create the waterlogged, anaerobic environment which provided the excellent conditions for the preservation of organic material such as the wooden writing tablets.

The landfill episodes do not necessarily feature in the plans that accompany this section since they sometimes lie below the phase of activity illustrated. However, some impression of the processes involved can be derived from a section recorded at the north end of the LUL box (Fig 22; located on Fig 2). The writing tablets and labels are cross-referenced to their land-use provenance in Table 14 and Table 15. As these tables demonstrate, some tablets derived from the use of buildings, and it is to these buildings that this section pays particular attention.

Another east–west Roman road (Road 12: Hill and Rowsome 2011, 275–6, fig 264; 310–11, fig 284), approximately parallel to Road 1, crossed the south part of Bloomberg London and was recorded at Bucklersbury House in 1954–5, although the date of its construction could not be determined with any more precision than as likely to be in the 1st century AD (Wilmott 1991, 25–6). Pile alignments flanking the road recorded at that time gave an indication of its alignment (ibid, 26, fig 13; Perring and Roskams 1991, 115). In the eastern part of Roman London the road's alignment indicates that it formed a component of what can be presumed to be the original, orthogonal street grid of *c* AD 48 (Fig 21a). West of the Walbrook, however, the development of buildings flanking this road does not seem to occur until after *c* AD 70–5 (ibid, 115; Hill and Rowsome 2011, 275) and, as a result, quite how far west this road extended by AD 60/1 has been regarded as uncertain. But at Bloomberg London, parallel arrays of similarly

Fig 21 Map showing the Bloomberg London site in relation to: a − pre-Boudican London (c AD 43−60/1); b − late 1st-century AD London (AD 60/1−c AD 100), with the modern River Thames and bridges superimposed (scale 1:20,000)

Fig 22 *South-facing section recorded at the north end of the LUL box excavation (located on Fig 2) and (lower) periodised schematic (scale 1:150)*

sized oak piles, none of reused timber, were found aligned orthogonally across the projected road alignment (S214, Fig 25). Dendrochronological analysis of two of these piles ([60051], [60052]; Fig 25) indicated they came from trees with felling date ranges of AD 37–61 and AD 48–81 respectively (Tyers 2014b, 5–6). Together, these dates could suggest that work on the westward extension of Road 12, including its Walbrook bridge, was under way during the period AD 48–61. The spread of the piles indicates a bridge at least 6.3m wide. In the plan figures that follow, Road 12 is shown as present from period 2 phase 2 (Fig 25) onwards, although its status in the years immediately following the Boudican revolt is unknown: the revetments consolidating the Walbrook bank near its crossing point (period 3 phase 1 (early); Fig 29) provide the first positive suggestion that this bridge was again present.

An extensive pre-Boudican brickearth raft to the north of the Road 12 alignment was observed at 6.3–6.6m OD at the Walbrook site WAO06 at a distance of *c* 45m to the east (Fig 1). That this acted as a foundation for Road 12 can be inferred but not positively demonstrated (Blair in prep). There is sparse evidence for the level at which Road 12 may have crossed the Walbrook. Building 37 (period 3 phase 1 (late); Fig 31) is the earliest to be recorded close to the road alignment; its floors lay at *c* 5m OD and may reflect the level of the road in *c* AD 80. The spatial distribution of all writing tablets and labels recovered from the site is inevitably influenced by the depth of archaeological survival on the site; consequently, the toned areas shown and keyed on Fig 2 are reproduced as background colour on Fig 23,

which is plotted on the basis of the count of all tablets and labels per context: the dots are scaled by number of tablets and each dot is at the centre of the context of provenance. The dots are not counter-scaled to context area.

The concentration of tablet recovery to the north-east of the site shown on Fig 23 is in large part due to the better archaeological survival in these areas. However, within the LUL box (located on Fig 2), there is a real concentration to the north within the zone most affected by intensive 1st-century AD landfill and most occupied by buildings. The concentration of tablets deriving from those periods between *c* AD 62 and *c* AD 90/5 is further demonstrated in Table 8, which summarises the writing tablets by period and the catalogued items by category. Forty-nine tablet accessions (49/413: 11.9%) and 17 of the catalogued items (17/185: 9.2%) came from deposits which represented internal or external surfaces and which may, therefore, be related to the use of the site (Table 9).

The pre- and immediately post-Boudican sequence, to *c* AD 65 (period 2)

Period 2 phases 1 and 2 (*c* AD 43–60/1)

The total of 12 tablets recovered from period 2 phase 1 and phase 2 (*c* AD 43–60/1) were discarded during the first 13–18 years of Roman London's existence and constitute an extremely important and well-stratified group of objects.

Initial site clearance was characterised by redeposited natural

N

Queen Victoria Street

Bucklersbury

Walbrook

all tablets and labels

· 1

· 2

● 3–4

● 5–7

● 8–12

○ 27

horizontal archaeological survival

up to 7m depth

up to 2m depth

up to 1m depth

recorded in section only

no survival

Cannon Street

0   10m

*Fig 23 The distribution of all writing tablets
(stylus (405) and ink (2)) and labels (2) from
Bloomberg London (scale 1:500)*

Table 8 Summary by period and phase of total numbers of writing tablets (stylus and ink) and labels from Bloomberg London, with the catalogued items also by category

Period	Count of all tablets (all accessions)	Count of catalogued tablet accessions	Count of catalogue entries	Correspondence (Chapter 4.1)			
				With name of recipient	Addresses acephalous, without name of recipient	Letter-text with first line	Letter-text with first line lost
2 phase 1	4	1	1				1
2 phase 2	8	6	6	2	1		
2 phase 3 (early)	8	6	6				
2 phase 3 (late)	62 (63)	26	25	2			1
3 phase 1 (early)	143	66	66	7	5	1	6
3 phase 1 (late)	124 (127)	68	67	5	1	3	6
3 phase 1 (undifferentiated)	16	3	3		1		
3 phase 2 (undifferentiated)	11	2	2				
4 phase 1	15	5	5				
5 phase 1	4						
6 phase 1	1						
12	1	1	1				
Unstratified	12	3	3			1	
Total	409 (413)	187	185	16	9	4	14

There are 187 catalogued accessions representing 185 catalogued items
There are 181 catalogued stylus tablets
There are 2 catalogued stylus tags or labels
There are 2 catalogued ink tablets

Table 9 Writing tablets that may relate to use of the site, that is, recorded as coming from occupation deposits, floors or external surfaces on the Oracle database, with the addition of those from Open Area 12 phase 2 [6615]

Period	Land use	All accessioned tablets				Catalogued tablets		
		Type 1	Type 2	Type uncertain	Total	Type 1	Type 2	Total
2 phase 3 (late)		10	7		17	3	5	8
	B1 phase 2	1	1		2	1		1
	OA12 phase 1	6	1		7	1	1	2
	OA12 phase 2	3	5		8	1	4	5
3 phase 1 (early)		2			2			
	B3	1			1			
	B7	1			1			
3 phase 1 (late)		15	7	4	26	8	1	9
	B11 phase 1	1			1			
	B11 phase 3	1			1	1		1
	B9	8	7	4	19	4	1	5
	OA22	3			3	1		1
	OA23	2			2	2		2
4 phase 1		2	1		3			
	B13 phase 2	2			2			
	B17		1		1			
5 phase 1				1	1			
	B42 room C			1	1			
Total		29	15	5	49	11	6	17

gravels (OA2; period 2 phase 1; Fig 22; Fig 24) which contained the four stratigraphically earliest stylus tablets from the site, one catalogued (<WT30>) and three non-catalogued (<6421>, <11193>, <11207>). Rectilinear earthen banks and ditches were then laid out on the cleared site to form an enclosure (S5; period 2 phase 2; Fig 25). One use of the enclosed space was for metalworking.

Financial or legal documents (Chapter 4.2)			Accounts (Chapter 4.3)	Miscellaneous (Chapter 4.4)			Descripta (Chapter 4.5)	Stylus tags or labels (Chapter 4.6)	Ink tablets (Chapter 5)
Dated	Date lost	Lists of witnesses		Numerals	Alphabet	Unusual but format not inscribed			
1 (AD 57)							2		
1 (AD 62)					1		4		
		2	1	2		2	12	1	1
2	3	2	3			2	35	1	
5 (AD 64, 67, 76, 85, 85–95)	1	5	4			6	29		1
							3		
						1	1		
1 (AD 82)		1					3		
								1	
		1						1	
10	4	11	8	2	1	11	91	2	2

The surfaces within the banks were at *c* 2m OD, with the banks themselves surviving to a maximum height of *c* 0.6m.

The banks (S5) contained stylus tablet <WT44>, which is dated to 8 January AD 57. This, the earliest internally dated written document from Roman Britain, is an object of enormous significance in its own right. It additionally provides a *terminus post quem* for the construction of the enclosure. One uncatalogued (<7523>) and three other catalogued (<WT1>, <WT2>, <WT91>) stylus tablets also came from Structure 5, together with one (<WT17>) from gully Structure 40 and two (<WT92>, <7514>) from wattle-lined drain Structure 45.

Period 2 phase 3 (early) (*c* AD 60/1–62)

There was no clear archaeological evidence of the Boudican revolt: as the site was not occupied by buildings before AD 60/1, diagnostic *in situ* debris – the remains of clay-and-timber buildings destroyed by fire – was absent. An isolated area of burnt material in Open Area 5 (Fig 26), lying *c* 45m to the south of Road 1 and almost certainly redeposited, represents the only deposit that may be derived from it. However, a number of the pre-Boudican features from period 2 phase 2 did partially silt up, and the dating evidence for the succeeding phases of activity strongly suggests that this represents a brief period of disuse as a result of the events of AD 60/1.

The banked and ditched enclosures were subsequently repaired and reconfigured (period 2 phase 3 (early); Fig 26). One element of the new layout was an east–west aligned, wattle-lined drain Structure 36. This contained a second stylus tablet of great significance: <WT45>, dated to 21 October AD 62, was found wedged within its wattle lining. Three further stylus tablets (<WT93>, <WT94>, <WT95>) came from material incorporated within the Structure 33 bank, while <WT96> and two uncatalogued stylus tablets (<7486>, <7506>) were recovered from the fills of the Structure 35 drain.

Further south, dumped deposits which showed evidence of having been subsequently influenced by water flow and flooding accumulated on the east bank of the Walbrook (OA120). This material, gravel, silts and organic material, containing another stylus tablet (<WT79>), sloped down to *c* 0.7m OD to the west. Disregarding this tablet from Open Area 120, the circumstances of deposition of which may be complicated, the seven tablets associated with the banked enclosures of period 2 phase 3 (early) form a second important group of tablets, significant in that they were discarded within a year or two after the Boudican revolt, although only one (<WT45>) bears legible text.

Period 2 phase 3 (late) (*c* AD 62–65/70)

The revised layout of banks and ditches was soon covered with a substantial and extensive layer of organic dumping (OA12 phase 1; period 2 phase 3 (late); Fig 22; Fig 27), which raised the ground level in the north-east of the site by *c* 0.8m to match that of the top of the banks (ie to *c* 3m OD). The ground-raising fanned out and diminished to the south and west, and it

N

Road 1

Walbrook conjecture zone

OA2
4 (1 cat)

flood zone

0   10m

Fig 24 The provenance of the writing tablets
associated with the primary clearance (OA2)
of the site in period 2 phase 1 (c AD 43–53);
the stratigraphically earliest catalogued tablet
<WT30> was one of four stylus tablets to
come from this phase (on this and subsequent
plans the trench outlines are shown, but see
Fig 2 and Fig 23 for those recorded in section
only and for the depth of archaeological
survival on the site) (scale 1:500)

Fig 25 *The provenance of the writing tablets from the first phase of banks and ditches, gullies and drains in period 2 phase 2 (c AD 53–60/1); <WT1>, <WT2>, <WT44> and <WT91> derived from enclosure Structure 5, <WT17> from gully S40 and <WT92> from drain S45 (scale 1:500)*

N

Road 1

Walbrook
conjecture zone

S33
3 (3 cat)

S36
1 (1 cat)

S35
3 (1 cat)

OA5
fire debris

OA3

OA120
1 (1 cat)

flood zone

Road 12
? in use

0   10m

Fig 26 The provenance of the writing tablets from the second phase of banks, ditches and hearths in period 2 phase 3 (early) (c AD 60/1–62) (scale 1:500)

N

Road 1

Walbrook
conjecture zone

B1
phase 2
4 (1 cat)

B2
5 (3 cat)

[53467]

[53469]

[6615]

OA12
phase 1
37 (13 cat) +
1 ink + 1 label

S59

OA12
phase 2
9 (5 cat)

S148
barrel well

OA4
5 (1 cat)

flood zone

Road 12
? in use

0   10m

Fig 27 The provenance of the writing tablets from Buildings 1 and 2 and associated activity in period 2 phase 3 (late) (c AD 62–65/70); Open Area 12 phase 1 was the landfill episode that created the platform on which these buildings and their associated external yards were built (scale 1:500)

may be assumed that the landfill proceeded in a north-east to south-west direction, moving away from Road 1. Cumulatively the period 2 phase 3 (late) landfill created broadly level building platforms in the north-east corner of the site at a level above that of the highest contemporary tide. The concentration of writing tablets in the various episodes of landfill has been noted previously. Open Area 12 phase 1 was typical of this pattern: it contained 37 stylus tablets, one of the two ink tablets and one of the two labels (Table 14; Table 15). Of these, 13 of the stylus tablets, the ink tablet (<WT184>) and the label (<WT182>) are catalogued.

The earliest clay-and-timber buildings on the site, Building 1 and Building 2 (period 2 phase 3 (late); Fig 27), were constructed on top of the landfill; of relatively simple construction, they incorporated large, earthfast timber posts and wattle walls. To the west of Building 1, an external area sloped down to the Walbrook. Further buldings probably existed east of Building 2 but lay beyond the limit of excavation. Building 1 consisted of two phases. In its later form it was extended southwards to create an additional room. Trample and detritus on the floor of this room ([6650], [6668]) contained stylus tablet <WT97> and non-catalogued example <6419>, with a third (non-catalogued) stylus tablet <6413> recovered from treads within a worn depression ([6656], Fig 27) outside a threshold into this room. A timber component ([53469], Fig 27) of what may have been an external boardwalk running south from this threshold provided a tree-ring felling date of AD 63 (spring) (Tyers 2013, 6–7). Six other writing tablets came from make-up deposits beneath Buildings 1 and 2 and are not associated with their use.

An external yard lay to the south of these buildings (Open Area 12 phase 2 and Open Area 4). Part at least of Open Area 12 phase 2 was covered by a rough surface of wooden planks (S59 and degraded timber [6615], Fig 27). Stylus tablet <WT108> which carried relatively well-preserved wax (Chapter 6.1) came from [6615] (included in Table 9). A barrel well (S148) to the south of Building 2 is shown on Fig 27 although its backfilling, which contained one uncatalogued tablet, <4294> (albeit from silt [5537] which may have accumulated during the life of Building 2), is treated as part of the following period.

Flavian development, c AD 65–90/5 (period 3)

Period 3 phase 1 (early) (c AD 65/70–80)

Excavations at the Walbrook site WAO06 (Fig 1; Blair in prep) have confirmed that Road 7, a north–south street to the east of the Bloomberg site (Hill and Rowsome 2011, 311, fig 284, R7) was first constructed during this period, probably c AD 70 (Fig 21b). This development would have started to open up the easternmost parts of the centre of the Bloomberg site, remote from both Roads 1 and 12 but at the rear of any properties being laid out on the west side of Road 7.

PRIMARY LANDFILL
Buildings 1 and 2 were soon sealed beneath renewed ground-raising, undertaken on an even more extensive scale than

previously (period 2 phase 3 (late)). In the north of the site, initial dumps (OA14) were followed by the construction of cribwork, timber boxes standing up to 0.60m high and retaining further, similar dumps (S43, S46, S50, S52, S58; Fig 28). Finds from Open Area 14 included the second label (<WT183>). A final episode of levelling dumps (OA15; not illustrated but labelled on Fig 29 since they underlie that phase of building) created a platform at c 3.6–3.8m OD over much of the northern part of the site. These deposits sloped away to the south and merged into the external open areas that developed during the use of the buildings constructed above them. Consequently, it is difficult to determine whether the southern parts of Open Area 15, and equivalent dumps or accumulations raising the ground level to c 3.0–3.4m OD along the east side of the site (OA72, OA74, OA76, OA134; Fig 28), pre-date or are contemporary with Buildings 3, 6, 7 and 4, described in the next section. Some at least of the features in the yards to the rear of Buildings 1 and 2 may have continued in use into this period.

To the south-west of Open Area 134, the contemporary ground level dipped down towards the Walbrook. A marginal zone exposed to periodic flooding and drying out (at c 1.85m OD) separated Open Area 134 from Open Area 122, which remained strongly influenced by the Walbrook, or at least by tidal ingress from the Thames into its valley, and was characterised by more sandy and gravelly strata deposited by faster-flowing water.

A large number of writing tablets came from the period 3 phase 1 (early) landfill dumps (OA14, OA15, S43, S46, S50, S52, S58); these contained a total of 106 (106/405, 26.17%) of the stylus writing tablets and one label (<WT183>), and together account for 50 (50/185, 27.03%) of all catalogue entries. The dumps in the east and south of the site (OA72, OA122, OA134) contributed a further eight tablets in total, of which five are catalogued.

BUILDINGS ALONG ROAD 1
The principal wall lines of the new range of rectilinear buildings (from east to west, B3, B6, B7 and B4; Fig 29) closely followed the structural lines of the boxes over which they were built and indicate a degree of pre-planning. The Walbrook lay to the west of Building 4. Another building would have lain east of Building 3, but did not extend into the excavated area. Stylus tablet <5791> was associated with an area of plank floor ([6407], Fig 29) in Building 3.

Building 3 and its western neighbour Building 6 were inter-related – for example, a bread oven (S60) within Building 6 room B was apparently accessible from Building 3 (Fig 29). Nearby was a storage area, a circular (2.70m diameter) wattle pen (S55, Fig 29), probably for storing wood for fuel, and a sequence of short-lived hearths and rake-out deposits. A probable foundation deposit, a hoard of six Claudian Minerva copies (and two illegible coins of similar size, weight and fabric) had been buried beneath a threshold on the west side of Building 6 room A (BZY10 coin hoard 2: Bowsher and Kenyon in prep).

Building 7 (Fig 29) represents the subsequent addition of a third room behind (south of) the two rooms of Building 6, and

N

Road 1

Walbrook

S58
4 (2 cat)

S69

S52
2 (2 cat)

S46
1 (1 cat)

S50
2 (0 cat)

S43
1 (1 cat)

S57

OA14
42 (16 cat)
+ 1 label

S63

S57

S57   S146

OA72
1 (0 cat)

OA74

flood zone

OA134
6 (4 cat)

OA122
1 (1 cat)

Road 12
? in use

0   10m

*Fig 28 The provenance of the
writing tablets from the cribwork
boxes and landfill dumps of period
3 phase 1 (early) (c AD
65/70–80) (scale 1:500)*

N

Road 1

Walbrook

A
B
C
S127
B6
A
B3
1 (0 cat)

D
E
S55
[6407]

G
H
S60
B

B4
phase 1
1 (1 cat)

OA20
C

B4
phase 2
1 (0 cat)
J

K

OA15
54 (27 cat)

B7
8 (5 cat)

OA19
13 (5 cat)

OA76
1 (0 cat)

S248
S250

S215
S216
OA125
1 (0 cat)

S345

S227
1 (0 cat)

Road 12

*Fig 29 The provenance of the writing
tablets from the buildings and external
areas of period 3 phase 1 (early)
(c AD 65/70–80) (scale 1:500)*

0   10m

S213

a concentration of stylus tablets (<WT54>, <WT82>, <WT109>, <WT110>, <WT111>, <7466>, <7467>) was recovered from a dump ([6586]) laid down to create the platform for its construction. Stylus tablet <6285> came from a separate but contemporary clayey dump [6504] in the north-west corner of Building 7.

The type of floors within Building 4 (Fig 29) varied from room to room, with beaten earth, planks and tiles all represented. A pot had been set in the floor of the north-east corner of room E. The building underwent minor modifications (Building 4 phase 2), including a floor resurfacing, from which one non-catalogued stylus tablet came (Table 15). A foundation pot was buried within the make-ups for the phase 2 floors.

An external area (OA20) separated Building 4 from Building 6/7, with a timber platform (S127) likely marking a threshold (Fig 29). A patchy repair ([6091]; Building 4 phase 1) to an internal surface inside this threshold included stylus tablet <WT5>. A second tablet, <6350>, came from a dump laid down at the rear of the building during the phase 2 modifications.

EXTERNAL AREAS TO THE SOUTH

External areas stretched south from the rear of these buildings towards Road 12. On the Road 12 alignment itself, a line of revetments and other driven timbers (S215, S216, S345; Fig 29) are likely to be associated with modifications to a bridge and the Walbrook bank immediately to its north. A series of ground-raising deposits consolidating the stream bank behind these revetments included Open Area 125 (Fig 29) from which one (uncatalogued) stylus tablet came (Table 15). A second (also uncatalogued) derived from S227 (Table 15), one of a series of drains (Fig 29) that mark a more concerted attempt to regulate the terrain north of Road 12. A timber baseplate and earthen bank immediately south of east–west drain S248/S250 (Fig 29) represents the first evidence for structural activity in this southern part of the site.

Period 3 phase 1 (late) (*c* AD 80–90/5)

RENEWED DUMPING

An extensive phase of reconstruction occurred *c* AD 80 when further dumping (possibly derived from the immediate vicinity) (OA16, OA22) formed new building platforms along the south side of Road 1 (Fig 30). A *terminus post quem* is provided by the four latest coins (from an assemblage of 42 from these land uses) that date to AD 77–8. A stylus tablet <WT50> with residual legible text dated to AD 64 was also present. The Open Area 16/ Open Area 22 dumps contained 40 stylus tablets of which 27 appear in the catalogue.

The subsequent development of buildings on these plots during this period was both intensive and complex. As a prelude, an early development was the installation (or more probably formalisation) of land divisions that were to prove long lasting (Fig 30). A fence line (S78, S150; Fig 30) ran south from the eastern side of what had been the Building 3 plot, extending the alignment apparent in period 3 phase 1 (early) as Structure 63 (Fig 28), until it met a fence aligned at right-angles (S149, Fig 30) approximately midway between Roads 1 and 12.

REPLACEMENT BUILDINGS ALONG ROAD 1

The range of new buildings consisted of three properties, all of which were altered during their lifetimes. In the eastern plot Building 5 (Fig 31) replaced Building 3. To its west, the new building – Building 11 – was of two main phases: initially two rooms (A and B) lay within its excavated portion (Fig 31). An oval, wattle-lined pit was cut through the gravel floor of room A with a timber overflow drain (S68) running south-west. As an indication of the depth of landfill that had by now taken place, the floor levels in Building 11 were at 4.7–4.8m OD, *c* 3m above the pre-Roman ground level (though still lower than Road 1).

A yard (OA23), containing two hearths, separated Building 11 from its western neighbour Building 10 (Fig 31). A partition across it, between the two hearths, subdivided the yard and may also provide evidence for a structure within it. The southern part of the yard surface consisted of amphora sherds laid on a gravel bedding layer, and produced two catalogued stylus tablets, <WT51> (of AD 76 and carrying part of the preamble to a legal judgement) and <WT159>. A further two uncatalogued stylus tablets came from disuse deposits.

An extension of Building 11 southwards by the construction of two further rooms, C and D (Fig 31), and the construction of Building 9 (Fig 31) are likely to have occurred at the same time. Together, these buildings closed off the southern end of Open Area 23. Maple stylus tablet <WT87> came from a floor make-up at the western end of Building 11 room C.

The eastern room (A) of Building 9 was particularly significant as 19 stylus tablets were recovered from its trampled earth floors (Fig 32; Fig 33). These include five catalogued items, <WT48>, <WT57>, <WT84>, <WT85> and <WT86>. Tablets <WT84>, <WT85> and <WT86> are parts of a triptych, providing corroborative evidence that these tablets were potentially in use in Building 9. Tablet <WT48> is dated (to AD 67) but the legible text is residual in this context; it and <WT57> both fall within the financial/legal category. Two coins (of Nero <6589> and Vespasian <6588>, an *as* of AD 72) came from the same sequence of floors. Tablet <WT144>, also from Building 9, had been incorporated within the fabric of one of its walls.

The arrangement of Buildings 9 and 11 around Open Area 23, the hearths and the wattle-lined pit suggest parts of one larger, industrial premises, which also included Building 10.

EXTERNAL AREAS TO THE SOUTH OF THE INITIAL ARRAY OF BUILDINGS

The external area (OA17, Fig 31) to the south of Buildings 5 and 10 and Building 11 phase 1 consisted of levelling deposits of clay and dumps of organic material. It was subsequently encroached upon by Building 9, Building 11 phase 2, Building 12 and finally Building 13. A total of 12 stylus tablets, six catalogued, came from Open Area 17. Of the six, two, <WT62> (containing a list of witnesses) and <WT73> (an account) come from that part of Open Area 17 which was later built over and could be contemporary with the use of the buildings shown in Fig 31. The other four (<WT49>, <WT146>–<WT148>) came

N

Road 1

Walbrook

OA16
1 (0 cat)

S78

OA22
39 (27 cat)

S78

S150

S149

Road 12

0   10m

Fig 30 The provenance of the writing tablets from the primary landfill dumps of period 3 phase 1 (late) (c AD 80– 90/5) (scale 1:500)

N

Road 1

Walbrook

OA23
4 (2 cat)

B11
phase 1
1 (0 cat)

A

B10
1 (0 cat)

B5

B

S78

B9
20 (6 cat)

C

B11
phase 2
1 (1 cat)

D

S47

S78

OA17
12 (6 cat)

S137

S153

S149

S33

OA163
3 (2 cat)

B39

S228
B41

S228

B40

B37

Fig 31 The provenance of the writing tablets from the initial arrangement of buildings and external areas in period 3 phase 1 (late) (c AD 80–90/5) (scale 1:500)

0   10m

Road 12

Fig 32 View of the room within Building 9 from which most writing tablets associated with that building came, looking south–east (0.50m scale)

Fig 33 Writing tablets being excavated within Building 9, looking south–east

The archaeological context

from further to the south-east and could have been discarded there at any point within period 3 phase 1 (late). Tablet <WT49> ([5229]) is dated to 2–6 October AD 85.

BUILDINGS IN THE SOUTHERN PART OF THE SITE

The buildings recorded in the southern part of the site are likely to have fronted on to Road 12. On this premise, two properties are involved: Building 39 (Fig 31) lay to the west and is dated to AD 83 or later by a timber ([50556]) felled in that year and used in its construction (Tyers 2014a, 5–6); it was separated from its neighbour Building 37/40/41 (Fig 31) by a southward-flowing box drain (S228). Both buildings lay at c 4.4m OD. To the rear (north) of Building 39 lay an external yard (OA163, Fig 31): this area was used for rubbish disposal and characterised by organic-rich silts, with frequent pottery, animal bone and general refuse. Three stylus tablets were discarded here during period 3 phase 1 (late), including <WT15> and <WT173>. Open Area 163 remained in use in period 4 phase 1.

REDEVELOPMENT ALONG ROAD 1 DURING THE LATER PART OF PERIOD 3 PHASE 1 (LATE)

The buildings fronting on to Road 1 were reconfigured once again during period 3 phase 1 (late). Further, localised ground-raising (OA28, Fig 34) covered an external yard (not illustrated) that temporarily replaced Building 5 and prepared the way for the construction of Building 12. Similarly, a little to the south, extensive dumped deposits (OA34, Fig 34) were laid down over Building 9 and the rear parts of Building 10 (but it is unclear whether Building 10 was completely demolished or whether those parts of it closer to Road 1 remained in use). The Open Area 28 deposits contained three catalogued tablets, while Open Area 34 contained a further five catalogued items, including <WT52> dated to AD 85 or later. Equivalent dumps to the east of the north–south fence (OA31, OA67; Fig 34) produced a further eight stylus tablets, of which six are catalogued. Open Area 31 also contained a coin (<4333>, [4734]) of AD 86. Essentially, the redevelopment concerned all the properties fronting on to Road 1 except Building 11 and the construction of Buildings 12 and 13 to its east and south respectively.

Deposits associated with a further modification to Building 11 (phase 3, Fig 34), to an internal wall and floors, produced two stylus tablets, including <WT145>. A small oval pit (S85, Fig 34) cut into the north-east corner of room D contained a highly organic fill which included two catalogued items, stylus tablet <WT16> and ink tablet <WT185>. The hearth area in the Open Area 24 courtyard was also altered (S66, Fig 34).

Building 12 ran south from Road 1 with an alley (OA29) along its western side leading to a yard (OA30) at its rear (Fig 34). Beyond the yard lay Building 13 phase 1 (Fig 34), which was aligned east–west and extended behind the rear of Building 11 phase 2 and into what had been the rear of Building 10. It contained at least three rooms whose floors lay at c 5m OD.

BUILDINGS IN THE EASTERN PART OF THE SITE

To the east of the fence line (S78/S150, Fig 30) there was now increasing, though fragmentary, archaeological evidence for buildings and structures extending down the the eastern margin of the site constructed over the landfill represented by Open Areas 31 and 67 (Fig 34). These building elements lay c 44–58m south of Road 1 and c 47m west of Road 7 and could be the rearmost parts of properties fronting on to either road. Buildings 14 and 16 (Fig 34) were recorded to the north of the east–west land division represented by S149 (Fig 31). Behind Buildings 14 and 16, a drain or gully (S151, Fig 34) ran between them and the fence (S150) to the west. To the north of Building 14/16, an external area (OA78, OA79; Fig 34) contained a c 0.6m deep timber tank (S204, Fig 34). This area produced three stylus tablets, including <WT168> from Open Area 79.

EXTERNAL YARDS SOUTH OF BUILDING 13

In the area south of Building 13 material continued to accumulate or be dumped against the north–south fence line. These external yards (OA81, OA82; Fig 34) contained a succession of trampled surfaces, up to a level of c 4.4m OD, and contained four of the catalogued stylus tablets (<WT169>–<WT172>). Within the yard, an east–west wall line marking the southern boundary to a series of internal surfaces represents a small bulding (B15, Fig 34).

Similar external deposits (OA77 phase 4), from which stylus tablet <WT14> was recovered, extended south of the cardinal east–west fence line (S149) and also started to fill the drain (S151 phase 3, which contained five uncatalogued tablets) at the rear of Building 14 (Fig 34).

Period 3 phase 1 (undifferentiated) (c AD 65/70–90/5)

TERRACING AND BUILDING CONSTRUCTION ON THE WEST BANK OF THE WALBROOK

The excavation area closest to the Walbrook on its western bank was not contiguous with those to the east of the stream. The natural topography in this zone was higher and as a consequence archaeological survival was shallower and less waterlogged than to the east (Fig 2). However, three catalogued examples, <WT24>, <WT174> and <WT175>, from a total of 16 stylus tablets, came from an area of small buildings (probably outbuildings) and yards that would have lain to the rear of properties fronting on to Road 12 (Fig 34). While this activity can be securely dated to period 3 phase 1 it cannot be specifically attributed to either its early or late subdivisions and is illustrated in plan with the final layout of buildings at the end of period 3 phase 1 (late) (Fig 34). However, in terms of the morphological development of the site during the 1st century AD, it is clearly most analogous to the period 3 phase 1 (late) buildings (B39 and B37/40/41) flanking Road 12 (Fig 31). Two shallow terrace cuts (S280, S284; Fig 34) prepared this area on the west bank of the Walbrook for building and created three levels. The westernmost would have lain at over 5.80m OD, the central terrace at c 5.5m OD and the easternmost at c 5.1m OD. The uppermost level was truncated and horizontal stratigraphy was confined to the central and eastern terraces where two buildings (B50, B51; Fig 34) were constructed. The

N

S66
1 (0 cat)

S85
3 (1 cat)
+1 ink

OA34
7 (5 cat)

B11

OA29

B12

B11
phase 3
2 (1 cat)

A

B

C

D

OA28
5 (3 cat)

OA30

B13
phase 1

OA31
6 (5 cat)

S204
1 (0 cat)

OA81
1 (1 cat)

OA78 + OA79
1 (0 cat)   **1 (1 cat)**

B15

S151
phase 3
5 (0 cat)

OA82
5 (3 cat)

B14

B16
OA67
2 (1 cat)

OA77
phase 4
1 (1 cat)

Walbrook

Road 1

S280
phase 2
11 (3 cat)

S294
1 (0 cat)

OA185
3 (0 cat)

B51

B50

S292
1 (0 cat)

S296

Road 12

*Fig 34 The provenance of the writing tablets
from the buildings of period 3 phase 1 (late)
(c AD 80–90/5) and associated external
areas in their final form; Open Area 28
underlies Building 12 while Open Area 34
underlies Building 13 and extends north over
the former Building 10; this plan also shows
the 1st-century AD buildings of period 3
phase 1 (undifferentiated) terraced into the
western Walbrook valley side (scale 1:500)*

0   10m

cataloged tablets derive from dumped deposits associated with a remodelling of the drop between the western and central terraces.

Period 3 phase 2 (*c* AD 90–5)

LANDFILL DUMPS (OA33, OA39 AND OA40)

Period 3 phase 2 defines a further, substantial (up to 0.80m deep) ground-raising event on the east bank of the Walbrook adjacent to Road 1 (Fig 35); this took place between the end of period 3 phase 1 (late) (*c* AD 80–90/5) and the beginning of period 4 phase 1 (*c* AD 90/5–125) and was possibly of very short duration.

The main ground-raising events were Open Area 33/39 and Open Area 40 (Fig 35). Open Area 39 was a stiff, clayey layer laid down over Buildings 11 and 12, with the more organic Open Area 40 acting as levelling above it. Open Area 33 was less deep and confined within the footprint of the former Building 12.

The new ground level along the north of the site now lay at a maximum of *c* 5.6m OD to the east, falling to *c* 4.5m close to the Walbrook. Here landfill represented by Open Areas 25, 26 (these in section only) and 27 represents further consolidation close to the stream (Fig 35). It is noticeable that although these dumps contained a substantial volume of material, the incidence of writing tablets is lower than previously. A total of 11 stylus tablets, including catalogued items <WT90> and <WT176>, were recovered.

Development after *c* AD 90/5 (period 4 onwards)

Period 4 phase 1 (*c* AD 90/5–125)

NEW BUILDINGS ALONG ROAD 1

In the last decade of the 1st century AD, all the buildings fronting on to Road 1 were replaced yet again (Fig 36). While this period represents an important component of the site sequence, from the perspective of this volume it confirms the diminution of writing tablet survival already noted for period 3 phase 2. A total of 15 stylus tablets come from period 4 phase 1, of which five appear in the catalogue. The brevity of the following discussion reflects this, rather than the overall significance of the buildings.

Building 13 was rebuilt, although on an identical footprint (B13 phase 2). The oak wall baseplates of both Building 13 phase 2 and Building 17 (Fig 36) were founded on substantial timber oak piles clustered in groups, and the similarities in construction suggest that these buildings were erected together and form components of a substantial industrial building complex. A timber drain (S86/S164, Fig 36) ran down the eastern side of Buildings 17 and 13. The lower floor levels of the western building, Building 19 (Fig 36), represented a slight stepping down towards the Walbrook.

The excavated portion of Building 17 consisted of three rooms (A, B and C in sequence towards the rear of the building). Room A contained a well-preserved plank floor, the bedding layer for which contained one (uncatalogued) stylus tablet <4244>. Rooms B and C had brickearth floors. The internal floor level lay at *c* 5.7–5.9m OD.

The floors of Building 13 phase 2 were slightly lower (*c* 5.3m OD) than those of Building 17. Room C contained a cesspit (S88, Fig 36), a long-lived feature that may have been originally cut during the first phase of use of Building 13 but not finally infilled until after *c* AD 140. It contained two tablets, both catalogued (<WT67>, <WT178>) but which cannot be precisely dated. Two uncatalogued tablets, <5167> and <5168>, came from a layer ([4567]) associated with the late occupation or disuse of room A.

Along the eastern periphery of the site, two uncatalogued tablets came from an external area (OA90, Fig 36) and one uncatalogued and one catalogued (<WT179>) from repairs to a drain (S186, Fig 36).

Open Area 150 and Open Area 163 (period 4 phase 1; Fig 36) represent the continued use of the external refuse disposal area first identified as Open Area 163 (period 3 phase 1 (late)) lying at the rear of the plot formerly occupied by Building 39. It is likely that this or a successor building continued to exist to the south. Six stylus tablets, including catalogued <WT53> (dated to AD 82–3 and therefore a residual text) and <WT177>, came from here.

Tablets post-dating period 4 phase 1 (after *c* AD 125)

Eighteen stylus tablets (of which four are catalogued: <WT25>, <WT68>, <WT180>, <WT181>) are not covered by the descriptive sections above. Of these, 12 (including (<WT25>, <WT68> and <WT181>) are unstratified.

Of the six other tablets, four come from period 5 phase 1 (*c* AD 125/35–170) and one each from period 6 phase 1 (AD 220–250/70) and period 12 (1500 and later). Consequently, <WT180> is the only catalogued tablet with a post-Roman provenance, and it is very clearly residual in the context from which it was recovered.

3.2   The social and historical context

The people

The Bloomberg London tablets name 129 or so persons, an exact count not being possible because some names must be restored with varying degrees of confidence, some names cannot be restored, and one or two may not even be names at all (see index 'II, Personal names'). Other persons also are known, but they have lost their names entirely, for example the soldier of the Vangiones who wrote <WT48>. Some 14 names are uncertain, either for being acephalous (8) or for being open to question in some other respect (6). Twelve persons are named only because they were emperors (4) or consuls (8), no more than dating-elements. Another 11 names are the

Fig 35 The provenance of the writing tablets from the landfill dumps of period 3 phase 2 (c AD 90–5) (scale 1:500)

N

Road 1

Walbrook

B19

B17
1 (0 cat)

S131

S111

A

S90

B

S86

S94

E

D

C

B13
phase 2
2 (0 cat)

C

OA32

S88
2 (2 cat)

C

B

A

OA38

S86

S186
2 (1 cat)

S202

B14

OA89

OA90
2 (0 cat)

S164

S239

OA150
2 (1 cat)

S235

S244

OA163
4 (1 cat)

S254

Road 12

0   10m

*Fig 36 The provenance of the
writing tablets from period 4 phase 1
(c AD 90/5–125) (scale 1:500)*

patronymics of persons like Martialis son of Ambiccus (<WT5>), whose fathers are unlikely to have lived in London and indeed may have been dead by then. But if these categories are eliminated, a total of 92 persons results, a random but precious sample relating to the earliest inhabitants of London. 'Relating' to them, it must be emphasised, since they did not all necessarily live and work there. Thus Catullus is evidently a London householder – the first ever named as such – since the cooper Junius was to be found 'opposite' him (<WT14>), but the same may not be true of Diadumenus (<WT29>). His house is identified only as the place at which Taurus did *not* lose his transport animals. This happened somewhere else, and one or both locations may – or may not – have been in London. Only Macrinus and the letter he receives from Taurus reporting the mishap can be located there with certainty. But as already noted, only three addresses include the name of 'London' (*Londinio*, <WT6>, <WT18>, <WT24>), with the implication that they were not written there. Only Intervinaris (<WT23>) actually says where he was writing from, perhaps Viroconium (Wroxeter, Shropshire).

Two of these 92 persons are previously attested, (Domitius) Tertius the brewer (*bracearius*, <WT12>) and the prefect (Julius) Classicus (<WT33>), but precious though the sample is, it is comparatively small. Consider the military men, for example: Classicus himself, officer commanding the Sixth Cohort of Nervians, the troop-commanders (*decuriones*) Mar[...] and Silvanus (<WT62>), the nameless soldier of the Vangiones (<WT48>), Rogatus of the Lingones (<WT55>), the likely bodyguard (*singularis*) Rusticus (<WT56>), and the troopers (*equites*) Agrippa, Longinus and Verecundus (<WT62>); these nine officers and men represent three auxiliary cohorts and the governor's bodyguard, more than 1500 men.

Classicus is the only member of the Roman aristocracy to feature in the tablets, by virtue of being an officer of equestrian rank, but he is hardly 'typical': although he was descended from a tribal grandee enfranchised by Julius Caesar or perhaps Augustus, in the last resort he rebelled against Rome (below). Twelve other Roman citizens can be identified by their nomenclature, with two at least of the diagnostic 'three names' (*tria nomina*), nomen (inherited family name) and cognomen (distinguishing name within the family), if not also praenomen (forename), for example the transport contractor Gaius Valerius Proculus (<WT45>). They include Gratus (<WT44>), freedman of <S>purius, since this is a praenomen, by which the freedman of a Roman citizen was conventionally identified; but probably not his associate Tibullus, freedman of Venustus, which is a cognomen, even though Classicus is a warning that Roman citizens in other tablets may have been identified only by their cognomen. But a 'Roman' cognomen does not guarantee that someone was *civis Romanus*: the auxiliary soldiers just named were undoubtedly Gauls and Germans, not Roman citizens, but they all bear commonplace Latin cognomina, like Martialis (<WT5>) who was in fact the son of the 'Celt' Ambiccus. Nonetheless, ten non-Romans (*peregrini*) can be securely identified by their patronymics, and about another ten by their Celtic names such as Atigniomarus (<WT37>) and Namatobogius

(<WT13>). But this is evidence only of provincial origin, not of British birth; they are more likely to have been expatriates from other Celtic-speaking provinces such as Gaul and Noricum. Unfortunately, Tacitus (*Ann* 14.33), when he enumerates the victims of Boudica, says only that 70,000 'Roman citizens and allies' (*civium et sociorum*) died in Verulamium and London.

This slaughter and burning, the climax of the Boudican revolt (AD 60/1), is stratigraphically later than 12 accessioned tablets in all, seven of which are texts catalogued here: <WT1>, <WT2>, <WT17>, <WT30>, <WT44>, <WT91> and <WT92> (Table 10; Table 11; Table 14). Two are letters, addressed to Metellus (<WT1>) and Gratus (<WT2>), preserving only their names; one is a letter with no named recipient (<WT17>); and two are inscribed but illegible (<WT91>, <WT92>). Noteworthy in this group of early tablets, however, are <WT30>, included by virtue of its archaeological context (AD 43–53), and <WT44>, included both by context (AD 53–60/1) and because it is explicitly dated to AD 57. These two texts are vignettes of the well-known picture of London on the eve of destruction as being 'very full of businessmen and commerce', *Londinium … copia negotiatorum et commeatuum maxime celebre* (Tacitus, *Ann* 14.33).

<WT30> is a tantalising fragment: one businessman writes to another that his enemies 'are boasting through the whole market that you have lent them money', and offers some moralising advice. The key phrase is *per forum totum* ('through the whole market'), but it cannot be placed with certainty. Since the letter was found in London, the allusion is most easily applied to the marketplace on Cornhill, but *forum* may only be an abstraction or even the forum of another town to which both businessmen belonged, in Gaul perhaps. But as evidence of the City of London's first ill-judged loan, it is hard to resist.

<WT44>, by contrast, is straightforward: it is dated 8 January AD 57 and is a formal written acknowledgement by one businessman to another that he owes him 105 denarii – at this date, a legionary soldier was paid 225 denarii a year – in respect of 'merchandise which has been sold and delivered' (*mercis quae uendita et tradita <est>*). The parties are the freedmen Gratus and Tibullus, who were either acting on their own account or more likely as agents for their sometime owners and present patrons. This is the city's earliest dated financial document and is incidental evidence of social mobility.

Other slaves and freedmen appear, sometimes explicitly acting as the agents of their owners or patrons. Florentinus, the slave of Cassius [...]tus, writes 'by order of his master' (*iussu domini mei*) to acknowledge receipt of two payments (<WT50>). The letter of Taurus likewise was dictated to an amanuensis, judging by its confusion over the writer's name (<WT29>). Secundio instructs his freedman Vialicus to accept the note of hand (*c(h)irographum*) of the unnamed slave of Marcus Salvius M[...] (<WT27>). Narcissus, the slave of Rogatus, lends money to Atticus (<WT55>). Catullus, the slave of Rom[anius] Faustinus, is debited the substantial sum of 65 denarii, and two other slaves smaller sums (<WT70>).

The historical context

Stratigraphically most tablets post-date the Boudican revolt, and some may be residual. While 12 tablets pre-date the Boudican revolt (above, 'The people'), on internal evidence a number are demonstrably immediately post-Boudican. The prime evidence is tabulated (Table 10) and includes three tablets internally dated to the AD 60s; five others are not explicitly dated, but they reflect the order of battle which followed the Boudican revolt (Table 11). The internal date of <WT45>, AD 62, is within the date range of its archaeological phasing, and in broader terms this is true of <WT52>. Also, the date deduced from internal evidence is almost contemporary with the archaeological phase dating for <WT33> and <WT55>. But for the other tablets in these groups, except <WT30>, the discrepancy between their actual date (whether internal or deduced from the historical context) and the archaeological phasing marks their legible text

as clearly residual. This is bound to be true of other tablets too, but cannot be proved individually.

Historically the most important is <WT45>, which is dated 21 October AD 62 and records a contract between the Gaius Valerius Proculus mentioned above ('The people') and Marcus Rennius Venustus, for the transport of '20 loads of provisions' (*penoris onera uiginti*) from Verulamium (St Albans, Hertfordshire) to London by 13 November, 'at a transport charge of one-quarter denarius for each' (*in singula (denarii) quadrans uecturae*). This is 'on condition that …' (*ea condicione*); but here the text breaks off. It probably specified part-payment per load, the balance to be paid on completion. Since Verulamium, like London, was destroyed by Boudica, this is documentary evidence of rapid recovery, which incidentally bears upon the question of whether Tacitus is right in dating the destruction to AD 61. Although Carroll (1979) reasserts the traditional date, most scholars have preferred AD 60 (Birley 2005, 43–52), which

Table 10 Texts internally dated as pre- and post-dating the Boudican revolt of AD 60/1, in date order

Cat no.	Internal date	Archaeological context, by period and phase	Category	Detail
Pre-dating Boudican revolt				
<WT44>	AD 57	2.2 (AD 53–60/1)	financial or legal	re money owed by Tibullus the freedman of Venustus to Gratus the freedman of Spurius …
Post-dating Boudican revolt				
<WT45>	AD 62	2.3 (early) (AD 60/1–62)	financial or legal	contract by Marcus Rennius Venustus with Gaius Valerius Proculus re goods from Verulamium to London
<WT50>	AD 64	3.1 (late) (AD 80–90/5)	financial or legal	Florentinus, the slave of Sextus Cassius […]tus, re money received from the farm
<WT48>	AD 67	3.1 (late) (AD 80–90/5)	financial or legal	legal, re […] of the First Cohort of Vangiones
<WT51>	AD 76	3.1 (late) (AD 80–90/5)	financial or legal	re preliminary judgement in legal case between Litugenus and Magunus
<WT53>	AD 82	4.1 (AD 90/5–125)	financial or legal	Communis writes that he owes …
<WT49>	AD 85	3.1 (late) (AD 80–90/5)	financial or legal	-
<WT52>	AD 85/95	3.1 (late) (AD 80–90/5)	financial or legal	-

Table 11 Texts, not internally dated, but either pre-dating the Boudican revolt of AD 60/1 by virtue of their archaeological context or immediately post-dating the revolt on grounds of internal evidence of their historical context

Cat no.	Archaeological context, by period and phase	Category	Internal evidence/reading (names etc)
Pre-dating Boudican revolt			
<WT30>	2.1 (AD 43–53)	correspondence	… give (this) to Titus …; [inner face, over earlier traces] … through the whole forum …
<WT1>	2.2 (AD 53–60/1)	correspondence	… give (this) to Metellus …
<WT2>	2.2 (AD 53–60/1)	correspondence	… give (this) to Gratus the son of Junius; [inner face reused but not legible]
<WT17>	2.2 (AD 53–60/1)	correspondence	[address, with no name]; [inner face text]
<WT91>	2.2 (AD 53–60/1)	descripta	[inner face text but not legible]
<WT92>	2.2 (AD 53–60/1)	descripta	[inner face text but not legible]
Post-dating Boudican revolt			
<WT61>	3.1 (early) (AD 65/70–80)	financial or legal	[witnesses] … Primus … Billiccus … (son) of Vannius … decurions …
<WT33>	3.1 (early) (AD 65/70–80)	correspondence	[inner face] … Classicus, prefect of the Sixth Cohort of Nervii, …
<WT55>	3.1 (early) (AD 65/70–80)	financial or legal	[inner face] … To Narcissus (the slave) of Rogatus the Lingonian, … to Ingenuus … Atticus has said
<WT62>	3.1 (late) (AD 80–90/5)	financial or legal	[witnesses] … […], troop of […]; Longinus, troop of Mar[…];	Agrippa, troop of Silvanus;	Verecundus, troop of Silvanus
<WT39>	3.1 (late) (AD 80–90/5)	correspondence	[financial or legal reused for a letter] … was in (the canton of) the Iceni at the fort of ?Epocuria, … and Julius Suavis has accepted it for himself …

makes for an easier chronology and is now supported by <WT45>. There is indirect reference to transport in <WT29>, the letter in which Taurus reports the unauthorised removal of 'beasts of burden' (*iumenta*), 'investments which I cannot replace in three months' (*conpe<n>dia quae messibus tribus reficere non possum*), but it cannot be closely dated (the context is AD 80–90/5).

Renewed economic activity and settled conditions after the calamities of AD 60/1 are also implied by <WT50>, which is dated to a day (now lost) in the final months of AD 64. The slave Florentinus writes by order of his master that he has received two payments (*pensiones duas*) in respect of a farm which he names (but the name is now lost), probably two instalments of rent. This receipt is contemporary with <WT31>, a letter dated by its archaeological context to AD 62–65/70, in which At(t)icus begs the recipient 'by bread and salt' (*per panem et salem*) to send two specific sums as soon as possible, amounting altogether to 36 denarii.

Three unusual tablets from this immediately post-Boudican period (archaeologically dated AD 60/1–65) are difficult to place. <WT79> is inscribed with two alphabets, and <WT77> and <WT78> are a pair of tablets inscribed with numerical symbols in sequence probably from '1000' to '1,000,000'. They suggest writing-practice in keeping books and other records, and may only be schoolwork, but the world of finance and administration seems more likely.

The military also obtrude. Tacitus (*Ann* 14.38) reports that the British garrison was reinforced from Germany by 2000 legionaries, eight auxiliary cohorts and 1000 cavalry, adding more vaguely that the auxiliary units of infantry and cavalry were placed in new winter quarters (*cohortes alaeque novis hibernaculis locatae*). These would have included Epocuria, if the reading is correct, the 'fort in (the canton of) the Iceni' (*in Icenis castello*) mentioned by <WT39>. These reinforcements would have passed through London, and some may have been based there, to judge by archaeological evidence for a temporary fort built *c* AD 63 (Fig 21; Dunwoodie et al 2015) and by allusions in other tablets. The most striking is <WT33>, which names 'Classicus' as prefect of the Sixth Cohort of Nervians; he can be readily identified with the well-known Julius Classicus, who was a likely kinsman and thus protégé of the newly-appointed procurator Julius Classicianus, and who a decade later (in AD 70) was commanding a cavalry *ala* when he joined the Batavian revolt. This tablet shares its context ([6588]) with <WT55> which, by naming Rogatus 'the Lingonian', probably refers to one of the cohorts of Lingones. A third tablet (<WT48>), which is dated to a day and month (now lost) in AD 67, probably refers to the First Cohort of Vangiones. These three cohorts derived from tribes in the Rhineland, and are attested later in the British garrison by inscriptions and military diplomas; the Lingones and Vangiones were part-mounted (*equitatae*), and are a likely source of the cavalrymen and their officers mentioned by <WT62> (*tur(ma) Siluani*) and <WT61> (*de(c)uriones*).

When London was destroyed by Boudica, it did not rank as a *colonia* like Camulodunum (Colchester, Essex) (*cognomento quidem coloniae non insigne*), and Tacitus implicitly contrasts it also with Verulamium, which he calls a *municipium* (*Ann* 14.33). The

question of its formal status has been much discussed, and two tablets may contribute to the debate. <WT51> (dated 22 October AD 76) is the preamble to a preliminary judgement (*praeiudicium*) by the judge appointed to hear a case on 9 November, his authority having been delegated by the emperor (*opera … data ab Ca[e]sare*). His language is formal, but the implication is that he was appointed by the provincial governor, the emperor's deputy, not by the annually elected magistrates of a community with local self-government who would have exercised judicial authority (*duumviri iuri dicundo*). <WT37> (by archaeological context AD 65/70–80) is part of a letter which refers to the arrival at (or in) 'the city' of Atigniomarus on 25 December (*[ad]* or *[in] ciuitatem iix K(alendas) Ianuarias uenit Atigniomarus*). The writer's language is informal, and it is not even certain that he is referring to London, but by using the general term *ciuitas*, he would imply that it did not qualify as a *colonia* or *municipium*.

The governor's presence is implied by <WT51>, the *praeiudicium* just mentioned, and by <WT56>, which may name one of his bodyguards, a *singu[laris]*. Two other tablets may have been addressed to imperial officials. <WT20> is addressed to an *emeritus Aug(usti)*, who is perhaps a veteran of the Praetorian Guard retained for further service like an *evocatus*, whether in the civil administration or to train soldiers. <WT18> may be addressed to a *scr(iba)*, the secretary of a Roman magistrate, but again the interpretation is uncertain. Fig 37 shows the figure from a late 1st-century AD funerary monument found in London of a Roman legionary soldier, who had apparently served as an imperial official. In his (missing) right hand he may have held the staff which would have identified him as a standard-bearer or *optio* (deputy to a centurion) or the lance which would have identified him as a junior officer seconded to the governor's staff (*beneficiarius consularis*). In his left hand he holds a papyrus roll and a block of six writing tablets, perhaps representing his will and privileges granted on retirement, but more likely to be his working tools as an imperial official. The tombstone was found reused as building material in bastion 10 of London's Roman city wall in 1876 (Camomile Street) (Coombe et al 2015, 47–8 and pls 44–5 (no. 80)).

Judicial authority is also implied by <WT57>, with its reference to permission being granted to 'contend in judgement' (*iudicio certare*). By alluding to a formal 'undertaking' (*sponsionem*) and to 'management' (*procurationem*), it is further evidence of economic and financial activity, which is also provided by other documents, but without much detail. In <WT53>, dated 15 March AD 82, Communis acknowledges a debt. <WT49> (AD 85) and <WT52> (AD 85/95) are also documents dated by consulships of Domitian, but too fragmentary to be categorised. <WT54>, <WT56> and <WT61> are fragmentary loan-notes, and <WT27> has been mentioned already (above, 'The people'), with its reference to a note of hand (*c(h)irographum*). <WT35> refers to the payment of a deposit (*arram*) of 200 denarii. <WT38> refers to the purchase of *fussum*, which may be a cereal. Letters are addressed to the merchant Optatus (<WT7>, *neg(otiator)*), the brewer Tertius (<WT12>, *bracearius*) who is also attested at Carlisle, and the cooper Junius (<WT14>, *cuparius*);

Fig 37 The tombstone of a legionary soldier and officialis, *who holds in his left hand a papyrus roll and a block of writing tablets (late 1st-century AD) (MOL acc no. 3366) (height 1.305m)*

unfortunately they are illegible, but the work of Tertius and Junius is reflected by <WT72>, which details the sale or purchase of beer in large quantities. In all, some 20 loan-notes or possible loan-notes can be identified, together with the note of indebtedness mentioned above (<WT53>), and five other tablets allude to debt (Table 12).

There is no reference to religion, which is hardly surprising in documents like these, but one omission is so obvious that it might be overlooked. The writers of these tablets are all men, likewise their associates and the recipients of the letters. Leaving aside the implied legacy of Boudica, in this world of commercial and military activity, administration and judicial authority, the presence of women goes unnoticed. As objects of commerce (ie, slave-girls), they figure in two other texts from the Walbrook (*RIB* 2(4), no. 2443.7; Tomlin 2003; Table 13), but the correspondence of the prefect's wife Sulpicia Lepidina at Vindolanda (*Tab Vindol* 2, nos 291–4) remains unique. However, it should be added that one of Roman Britain's finest epigraphic monuments, the contemporary tombstone (*RIB* 1, no. 12; Grasby and Tomlin 2002) of the procurator Julius Classicianus who died in office in the AD 60s, was erected in London to his memory by Julia Pacata his wife.

Table 12 Loan-notes

Identified by formula

<WT53>	*scribsi deb[ere]*
<WT54>	*[eiue] a[d] quem ea res | [pertinebit …]*
<WT55>	*dari fide promis{s}it* (etc)
<WT56>	*dari fide promis{s}it* (etc)
<WT61>	*[pecuniam] mutuam*
<WT62>	*accepit*

Identified by evidence of crossing-out (cancellation), but with text illegible

<WT8>
<WT60>
<WT64>
<WT65>
<WT68>
<WT134>

Probable evidence of crossing-out

<WT121>
<WT130>
<WT149>

Possible loan-notes: type 2 tablets reused

<WT26>	reused for a letter
<WT32>	*actum*
<WT34>	probably reused for a letter
<WT39>	reused for a letter

Possible loan-note: type 1 tablet reused

<WT28>	a dated document reused probably for a letter

Notes:
* In addition to these 20, two tablets imply the existence of a loan-note, <WT27> (an order to receive a *chirographum,* ie a note of hand/indebtedness) and <WT30> (*fæneras<s>e*, ie lending money at interest). Three further tablets refer to money owed: <WT35> requests money which is owing, probably by reason of a commercial transaction: cf <WT44>, which acknowledges money owed (*debeo*) for goods supplied, and <WT76>, with notes of money owed (*debet*).

3.3 The significance of the tablets from Bloomberg London

In view of what has been said above, the significance of the Bloomberg London tablets needs little emphasis. Totalling 405 stylus tablets, they are much the largest assemblage yet found in London, outnumbering the 300 or so stylus tablets recorded there piecemeal since 1919, of which only 19 are legible enough to be published (Chapter 6; Table 13). By contrast Vindolanda has produced 340 stylus tablets (British Museum inventory) and Carlisle 32 (Hassall and Tomlin 1988, 496; Tomlin 1991, 299–300), which have not yet been fully evaluated. These figures may be compared with Vindonissa (Windisch, Switzerland), claimed as the largest deposit of all. So far the rubbish dumped there by the legion has produced 612 stylus tablets of somewhat similar date from *c* AD 30 to AD 101 (in essence, the Bloomberg London texts run from the AD 50s to 80s, the Vindolanda texts from the AD 80s to *c* AD 110); of these, 90 are legible and 65 bear texts worth publishing (Speidel 1996, esp 12–16). All the tablets mentioned derive from waterlogged, anaerobic deposits, and are surpassed in richness of detail by the better-preserved assemblages from Herculaneum and Pompeii in Italy, but by provincial standards Britain now rivals Egypt and Dacia (Transylvania), where exceptionally dry conditions favour the preservation of wax as well as wood.

The deep and well-defined stratification of the site has permitted the tight phasing of the early Roman sequence. This means that a number of specific items, which may not necessarily carry an intrinsic date, have significance due to their extrinsic date. The most conspicuously significant groups of tablets have been discussed in the context of their provenance above (3.1), but some merit reiteration. The assemblage of 13 stylus tablets from period 2 phases 1 and 2 (<WT1>, <WT2>, <WT17>, <WT30>, <WT44>, <WT91>, <WT92>, <6421>, <7514>, <7523>, <11193>, <11207>) are all pre-Boudican and include <WT44>, the earliest internally dated (8 January AD 57) written document from Roman Britain. The seven securely stratified stylus tablets of period 2 phase 3 (early) (<WT45>, <WT93>, <WT94>, <WT95>, <WT96>, <7486>, <7506>), on the other hand, constitute a group discarded within the couple of years after the Boudican revolt. <WT45>, as noted above, dates to 21 October AD 62 and relates to the transport of provisions to London from St Albans (Verulamium). The concentration of 19 stylus tablets from the trampled earth floors of Building 9 room A (<WT48>, <WT57>, <WT84>, <WT85>, <WT86>) comes from what could be an 'office' at the rear of a range of industrial buildings.

Ninety-four percent (187/199) of the stylus tablets examined were made from silver fir (*Abies alba*), and the size of the sample examined means that this choice of imported coniferous timber (with only rare examples made of native timber species) has a statistical significance. By far the most likely source of silver fir were the staves of imported wine casks which had been broken up and recycled. As has been discussed above (Chapter 2.1),

Bloomberg London has provided evidence for this process under way on site. In contrast, ink tablets were typically made from native, locally available wood. This distinction also applies to their contents: ink tablets were used for ephemeral correspondence while stylus tablets carried more formal, legal and official documents – often financial or legal documents or accounts – though examples used for more general correspondence or reused for writing-practice were also present.

It may also be noticed that, although most addresses on the Bloomberg London tablets are incomplete, only three include the place name 'London'. The brevity of these addresses implies that the recipient was often known to the bearer of the letter and could in turn suggest that most letters originated from London itself.

Some 200 iron styluses were also found at Bloomberg London (Chapter 2.2), half the number of tablets, and over 200 styluses, mostly iron, were found in the pre-Hadrianic forts at Vindolanda (http://vindolanda.csad.ox.ac.uk/exhibition/docs-2.shtml). The ratio between stylus and tablet is in happy contrast with that at Silchester, where more than 160 styluses have been found, but only two writing tablets (Eckardt 2014, 184, 187). Silchester is unfortunately typical of Britain: in a survey of rural settlement sites which have no military associations, it has been reckoned that 250 styluses have been found at more than 70 villa sites, and another 94 from some 50 non-villa sites, but from all these 120 sites hardly a single tablet (Hanson and Conolly 2001, 156–9). The main reason for this disproportion is not literacy, of course, but differential preservation. In Britain writing tablets, being made of wood, survive only in anaerobic waterlogged conditions, in wells at Silchester, but at Vindolanda in the deeply buried deposits associated with the early timber forts, and in urban London in the Walbrook valley (eg Table 13).

The Vindolanda ink tablets are the richest haul of documents from Roman Britain and of international importance for the study of the Roman army and non-literary Latin, but like the military papyri of Dura Europos (Syria) they come from the frontier. The Bloomberg London tablets originate from the provincial capital in its first half-century, and are a significant accession to the record. Before they were discovered, it was reckoned that '235 Roman Londoners are recorded on 206 inscriptions' (Holder 2007, 29), but 92 persons can now be added, even if they are not all 'Londoners'. The tablets also provide the 'flashes of intimacy' missing from the previous record (ibid, 32–3), such as the pathetic appeal 'by bread and salt' for working capital, the financier whose ill-judged loan has made him a laughing-stock, the transport contractor who ruefully reports the loss of his animals, the discovery that Verulamium supplied London with provisions, not vice versa, the sober text which documents a flood of beer. They include the city's first financial document, as already emphasised, written three or four years before it was destroyed by Boudica; and they reflect the Roman government's military response, and the city's surprisingly prompt recovery. Fragmentary though they are, the tablets repay the demanding task of decipherment.

4

Stylus tablets: the texts

For the conventions used in the following catalogues, see Chapter 1.3.

4.1   Correspondence

This section begins with addresses written on the outer (plain) face, those which still name the recipient and those which are now acephalous (without name of recipient), and continues with letter-text written on the inner (recessed) face. Quite often there is a trace of text on the inner face of a tablet with an address, but it is almost always multiple and cannot be read. The only exceptions are <WT30> and <WT31>, which have therefore been treated as letter-text rather than addresses. For addresses in general, see Chapter 3.2.

Addresses with name of recipient

<WT1> Silver fir; type 1 (Fig 38)
<7500>, [6749]; period 2 phase 2, S5
Incomplete, but preserving one end with knife-cut V-notch midway, and part of both sides. W 132.6mm; H (29.5)mm; Th R 5.9mm; Th F 4.3mm.

On the outer (plain) face in capitals, the first line of an address:

(1)   Metello dabis

.   .   .

You will give (this) to Metellus …

(1)   The address is not necessarily complete. *Metellus* is quite a common cognomen, but this is the first instance from Britain. *dabis* is an epistolary formula (cf Cicero, *Ad Att* 12.15) found in two Vindolanda ink letters (as *dabes* in *Tab Vindol* 3, no. 643.a.i, l 4; ii, l 3; back, ll 1, 5; *dabis* in ibid, no. 670.B.ii, l 4), and perhaps also in a stylus tablet address (*Tab Vindol* 1, no. 107). It is certainly used in stylus tablet addresses once at Carlisle (*RIB* 2(4), no. 2443.3) and often at Vindonissa (Speidel 1996, 36). The other Bloomberg instances are <WT2>, <WT4>, <WT14> (*dabes*), <WT16>, <WT24> and <WT30>. The future tense is less peremptory than the imperative.

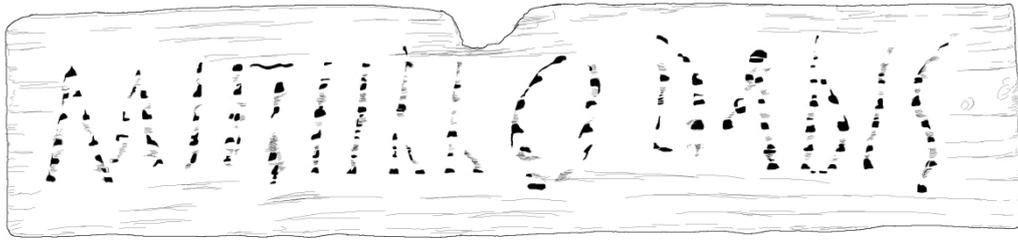On the inner (recessed) face, a few indistinct marks (not illustrated).

<WT1>

Fig 38 Stylus tablet <WT1> (outer face), addressed to Metellus (scale 1:1)

<WT2> Silver fir; type 1 (Fig 39)
<7501>, [6749]; period 2 phase 2, S5
Incomplete, but preserving one end with knife-cut V-notch midway, and part of both sides. W 138.0mm; H (57.5)mm; Th R 7.3mm; Th F 5.6mm.

In the top right corner of the outer (plain) face a rectangular panel measuring 27 × 13mm has been neatly excised. In capitals, a complete address:

(1)   ḍabis Grato
      Iun(i)ị filio

You will give (this) to Gratus the son of Junius.

(1)   The loop of *d* is lost, but the diagonal is well defined. Unlike *b*, it seems to have been of 'cursive' form; so is *r*. For the use of *dabis*, see <WT1> (with note).
Gratus is a common cognomen, and in any case the recipient should not be identified with Gratus in <WT44>, who is a freedman.
(2)   The second vertical stroke of *n* is extended upwards, as if to indicate *i* ligatured; alternatively the final letter was omitted.
n should not be read as *li*, for *Iuli*. For *Iunius* as a cognomen, see <WT4> (with note).
The second stroke of *f* is only a short downward diagonal, but this form is usual in the tablets (Chapter 2.3). The reading is confirmed by the sequence *-ilio*.

The inner (recessed) face is rather worn and has been used more than once, with many incomplete incisions; a few letters can be recognised, but no sequences or words (not illustrated).

<WT2>
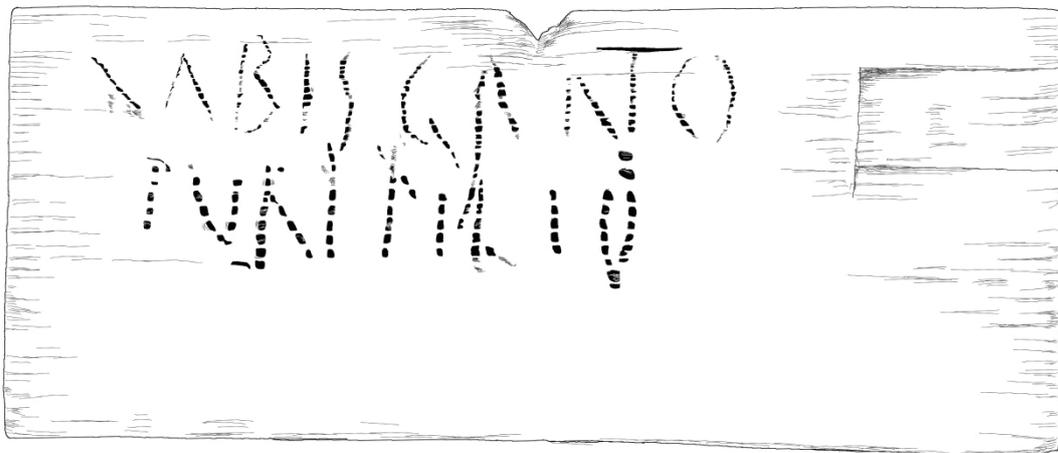

Fig 39 Stylus tablet <WT2> (outer face), addressed to Gratus son of Junius (scale 1:1)

<WT3> Silver fir; type 1 (Fig 40)
<7518>, [6779]; period 2 phase 3 (late), OA12 phase 1
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 137.4mm; H (46.2)mm; Th R 8.7mm; Th F 6.6mm.

    On the outer (plain) face are two lines of an address:

(1)   Ti(berio) Claudio Danuco
       Cornelio S[.]ttae
      . . .

To Tiberius Claudius Danucus. To Cornelius S[.]tta …

(1)–(2)   There is no sign that either line was ever erased, but they probably represent successive recipients. It would be unlikely for a letter to be addressed to two persons at once, and there are significant differences in style between the lines. Although both recipients are Roman citizens by name, only Claudius is given his praenomen, even though most *Claudii* would be *Tiberius* in any case. In (1), the letters *t* and *l* are bold capitals, but in (2) they are of cursive form. In (1), the letter *c* is twice written as a bold semicircle, but in (2) it is hardly curved at all.
Both cognomina are difficult. The first, *Danucus*, is not otherwise attested, unless *Danuacus* (Hartley and Dickinson 2008c, 253) was meant. *S[a]ttae* or *S[u]ttae* would be an easy restoration of the second, but these cognomina are feminine like most cognomina in *-tta*. *Cotta* is the chief exception, but the long downstroke cannot be part of *c*; the slight curve at the top makes *s* probable.

    The inner (recessed) face is rather worn and has been used more than once; the traces are illegible (not illustrated).
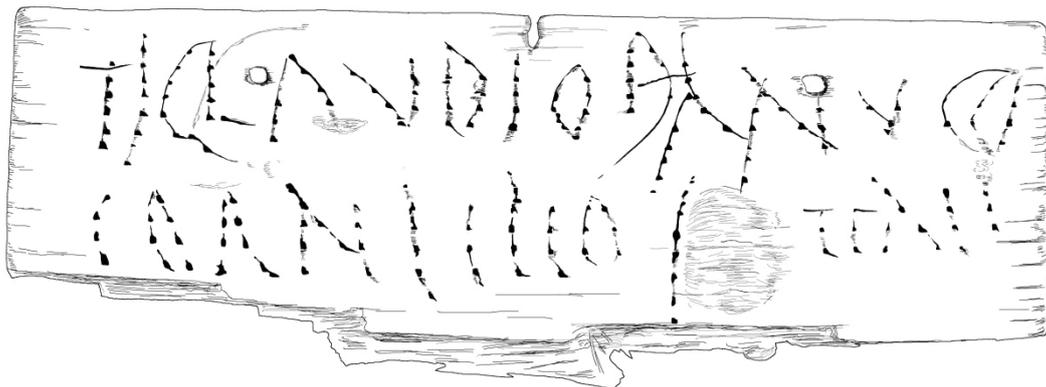
<WT3>

Fig 40 Stylus tablet <WT3> (outer face), addressed to Claudius and Cornelius (scale 1:1)

<WT4> Silver fir; type 1 (Fig 41)
<7520>, [6779]; period 2 phase 3 (late), OA12 phase 1
Incomplete, but two conjoining fragments preserving one end (with saw-cut midway enlarged with a knife into a V-notch) and part of both sides. A second, narrow notch has been improvised in the middle of the broken end, which shows that a tablet was broken in half and reused for correspondence, like <WT12> (with note). W 141.0mm; H (58.0)mm; Th R 9.7mm; Th F 7.1mm.

On the outer (plain) face in capitals, a complete address:

(1)   Luguṣeluo Iuni'i'
       filio dabis

You will give (this) to Luguseluus the son of Junius.

(1)   There is a gap in *Luguseluus* to accommodate the binding cord. This Celtic name is previously unattested, but is the masculine counterpart of *Luguselua* (*CIL* 13, no. 996, Perigueux), both names being compounded from the divine name *Lugus* (Ellis Evans 1967, 219).
The final *i* of *Iunii* has been interlineated below since there was no space for it. *Iunius* is a Latin nomen, strictly speaking, but is popular in Gaul and Noricum as a cognomen, perhaps because it 'concealed' a Celtic name element. For other instances see <WT2> and <WT14>.
(2)   For the use of *dabis*, see <WT1> (with note).

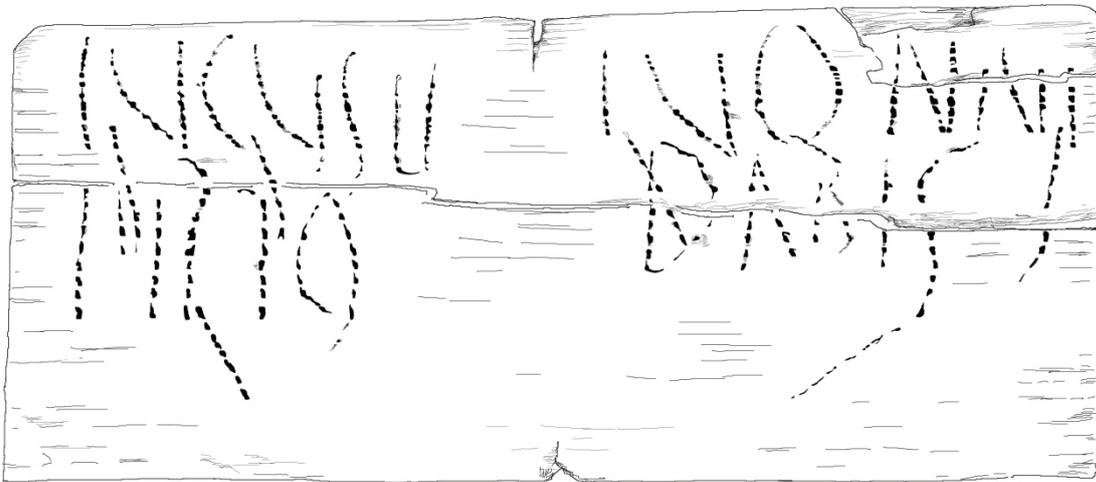The inner (recessed) face has been used many times, and the traces are illegible (not illustrated).

<WT4>

Fig 41 Stylus tablet <WT4> (outer face), addressed to Luguseluus son of Junius (scale 1:1)

<WT5> Silver fir; type 1 (Fig 42)
<5181>, [6091]; period 3 phase 1 (early), B4 phase 1
Incomplete, but preserving one end with a triangular notch cut into the fore edge, and part of both sides. W 138.5mm; H (43.5)mm; Th R 8.0mm; Th F 5.5mm.

On the outer (plain) face in cursive letters, the beginning of an address:

(1)   Martiali Ambicci f(ilio)
         qui *traces*
         .   .   .

To Martialis, (son) of Ambiccus, who …

(1)   *Martiali* is quite clear, and respects the binding cord with its cramped *l* (which has no good trace of a second stroke) and the long descending *i* which marks the word ending. This Latin cognomen is very common. The end of the father's name (in the genitive) is also marked by a long descending *i*, so the hooked stroke which follows should be taken as an incomplete *f* for *f(ilio)*. The Celtic name *Ambiccus*, in the form *Ambicus*, is already attested in Cisalpine Gaul (*AE* 1957, nos 129, 129 bis). It presumably derives from the name element *ambi-* (Ellis Evans 1967, 134).
(2)   This is stained and damaged, but apparently begins with *qui* ('who'); this would have identified Martialis by occupation or location, as in Speidel (1996, no. 4), *qui est in [cust]odia rivi* ('who is in charge of the watercourse').

The inner (recessed) face is very worn, with only a trace of the last letter in about three lines of text, one of which is *m* (not illustrated).
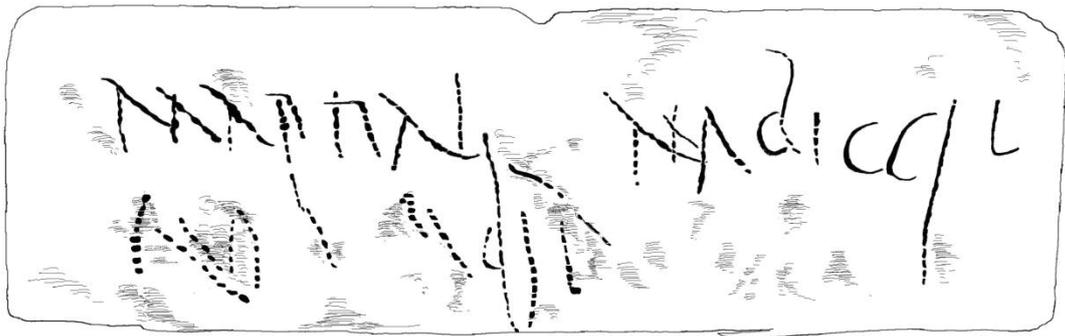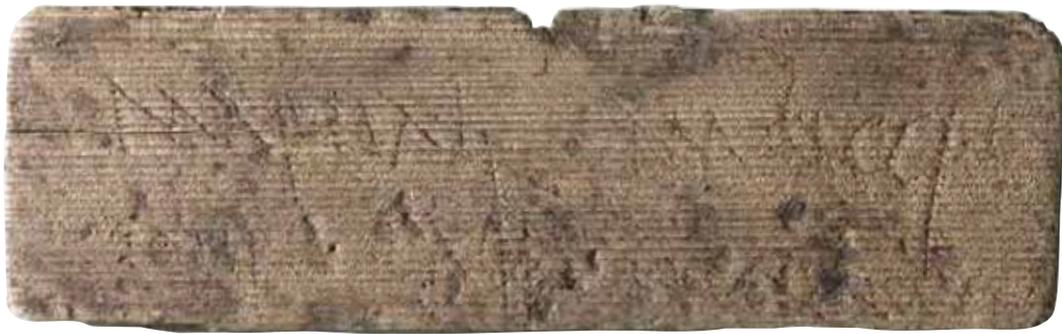
<WT5>

Fig 42 Stylus tablet <WT5> (outer face), addressed to Martialis son of Ambiccus (scale 1:1)

<WT6> Silver fir; type 1 (Fig 43)
<6401>, [6588]; period 3 phase 1 (early), OA14
Incomplete, but preserving one end (with a V-notch cut midway in the fore edge) and part of both sides. W 138.7mm; H (26.5)mm; Th R 7.0mm; Th F 5.9mm.

A rectangle measuring 19 × 9mm has been excised from one corner of the outer (plain) face to a depth of 3mm; it contains vertical marks possibly intended for letters or a numeral. On this face in capitals, the first line of an address:

(1)   Londinio Mogontio

In London, to Mogontius …

(1)   The address is not necessarily complete. *L* is made with two downstrokes, almost as if it were written twice, thus resembling the *L* of *Londinio* in <WT18>, although the hands are different. More crudely, this is also true of <WT24>. There is a fourth example of *Londinio* in a stylus tablet address from Lothbury (*RIB* 2(4), no. 2443.7), like the others a locatival ablative. In the locative *Londini* it heads an ink-leaf address found at Vindolanda (*Tab Vindol* 2, no. 310.back, l 22). It is also named (with Verulamium) in <WT45>.
The second O of *Mogontio* is apparently not closed at the bottom and thus resembles a small A, but the second O of *Londinio* is somewhat similar; and a second place name, *Mogontia|[co]* ('in Mainz'), is most unlikely. The Celtic personal name *Mogontius* (from the divine name *Mogons*) is implied by its derivations *Mogontinius* (*CIL* 13, no. 8850) and the place name *Mogontiacum*. In the form *Moguntius* it occurs on a clay die from Malton, Yorkshire (*RIB* 2(1), no. 2409.24).

On the inner (recessed) face is room for two lines of text, but many short diagonal strokes indicate multiple reuse (not illustrated).

<WT6>

Fig 43 Stylus tablet <WT6> (outer face), addressed in London, to Mogontius (scale 1:1)

<WT7> Silver fir; type 1 (Fig 44)
<6383>, [6567]; period 3 phase 1 (early), OA15
Incomplete, but preserving one end (damaged) and part of both sides. W 133.0mm; H (52.0)mm; Th R 8.1mm; Th F 6.4mm.

    On the outer (plain) face in capitals, the first two lines of an address:

(1)   Optato neg(otiatori)
       nut(…) *traces*
      .   .   .

To Optatus, merchant in …

As usual the writing respects the binding cord. (1) and the first three letters of (2) are inscribed much more firmly than the traces which follow in (2), so the latter are likely to be the remains of a previous address inscribed in more elongated letters.

(1)   *Optato*   This Latin cognomen is quite common, so the recipient should not be identified with Optatus the *bracearius* who received a letter at Vindolanda (*Tab Vindol* 3, no. 646; see note to <WT12>), nor with the two instances of *Optatus* in samian graffiti from London (*RIB* 2(7), nos 2501.415, 2501.433).

(1)–(2)   *negotiatores* often described themselves by the commodity in which they dealt (*allecarius*, *salarius*, *vinarius*, etc), which is apparently the case here, but the expansion of *nut(…)* is unknown. Perhaps *nut(rimentorum)* ('… of foodstuffs') or *nut(rimentario) ('… in foodstuffs'); compare <WT45>, with its reference to 'provisions' (*penoris*). But such a description would be unparalleled, and oddly unspecific compared with those actually known.

    The inner (recessed) face has been used several times. In the top right corner, despite the multiple traces, *salutem* can be read; but there is no sign of the expected *Optato* before it (not illustrated).
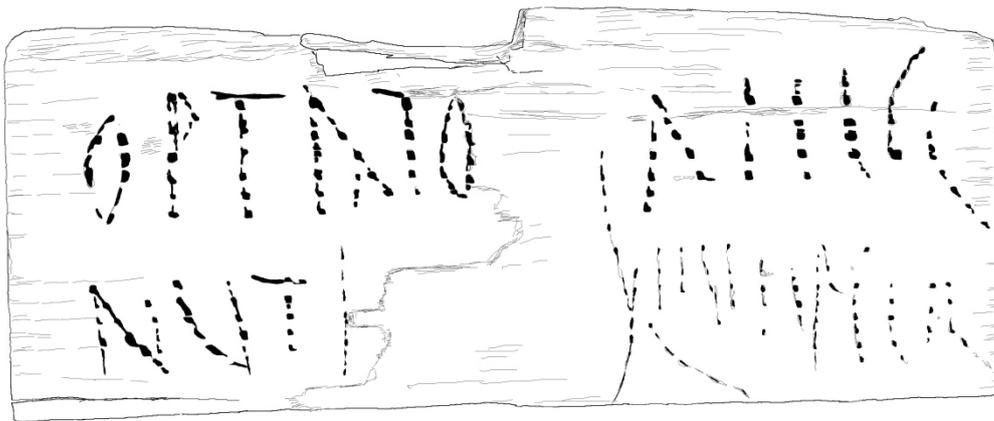
<WT7>

Fig 44 Stylus tablet <WT7> (outer face), addressed to Optatus, merchant (scale 1:1)

<WT8> Silver fir; type 1 (Fig 45; Fig 46)
<6388>, [6567]; period 3 phase 1 (early), OA15
Incomplete, but preserving part of both sides. W 140.0mm; H (49.6)mm; Th R 7.7mm; Th F 5.8mm.

On the outer (plain) face (Fig 45) in cursive letters, part of an address:

(1)   Iucundo Flaui (filio)
       traces

       .   .   .

To Jucundus, (son) of Flavus *or* Flavius …

(1)   The first letter of (1) does not extend down to the bottom edge: the stroke here belongs to (2), which is represented by the tops of some letters. This first letter could be read as *I* or *L*, but the gentle trend to left and right, at top and bottom respectively, excludes *S* (and thus the reading *Secundo*). The next letter could be read as *e* or *u*, but despite the difference from the fourth letter (which is undoubtedly *u*), *u* is preferable: it is similar to *u* in *Flaui*, and *Iucundus* is a common cognomen. There is already one instance from London (*RIB* 2(8), no. 2503.287).
The space between *n* and *d* marks the line of the midway binding cord. After *Iucundo* the reading is *Flaui*, given that the second stroke of *F*, probably a short downward diagonal (Chapter 2.3), left almost no mark in the wood; this happened to the first, curving, stroke of *d* and *o*, where the reading is not in doubt. Like *Iucundus*, *Flavus* is quite a common cognomen, but the nomen *Flavius* is also used as a cognomen, at least from the Flavian period (which the archaeological context allows). Either is possible here, in the genitive case.
(2)   Not much survives of the second line, but the derived cognomina *Flavi|ani* and *Flavi|ni* can be excluded.

There are traces of text on the inner (recessed) face (Fig 46), but they have been 'crossed out' by scoring a series of long diagonals across them. This would be done to cancel a legal document such as a loan-note, probably more than once, before the tablet was reused for the letter to Jucundus. For other evidence of legal documents being reused for correspondence, see <WT39> (with note) (and in general, Chapter 2.2, Table 2; Chapter 3.2, Table 12).
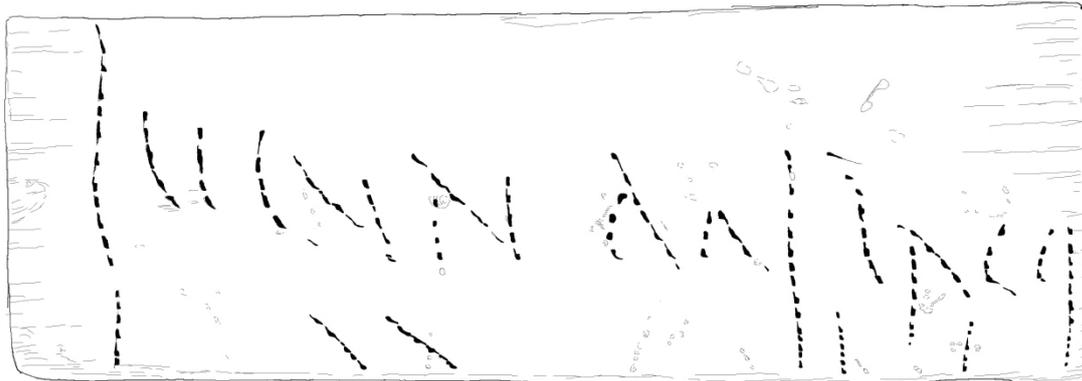
<WT8>

Fig 45 Stylus tablet <WT8> (outer face), addressed to Jucundus son of Flavus/Flavius (scale 1:1)
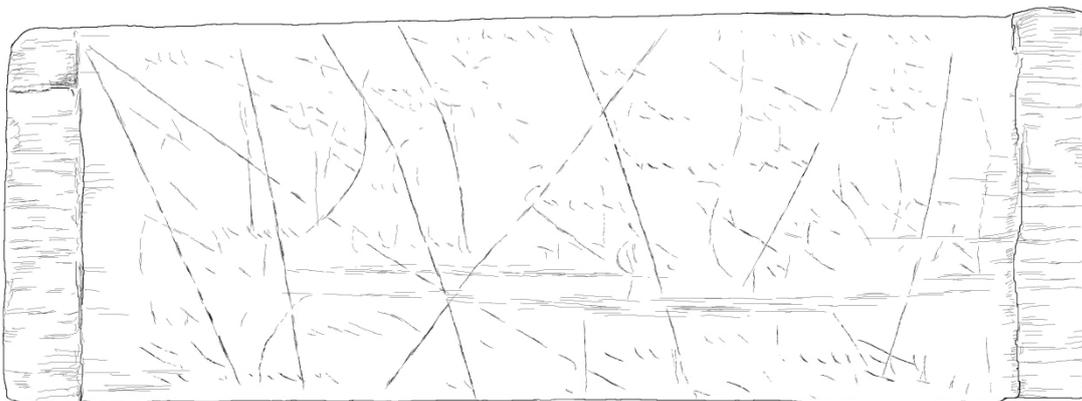
<WT8>

Fig 46 Stylus tablet <WT8> (inner face), showing crossings-out (scale 1:1)

<WT9> Silver fir; type 1 (Fig 47)
<7964>, [6567]; period 3 phase 1 (early), OA15
Incomplete, but preserving part of both sides. The ends are broken, but one retains half of one hinge-hole, showing that only the raised border has been lost. W 121.3mm; H (34.0)mm; Th R 6.4mm; Th F 5.6mm.

    Scored diagonally on the outer (plain) face:

(1)   Iul(io)

      . . .

To Julius …

(1)   Although the tablet is broken here, it looks as if *Iulio* has been abbreviated to its first three letters, since there is no sign of the second *i*. *Iulius* is quite often used by itself as a cognomen, but if abbreviated it would have been followed by a cognomen in the next line, now lost. The remains of the hinge-hole in the upper edge show that this is the beginning of the address, but the diagonal alignment is most unusual. Normally it would mark the sender's name, added to the address in the ablative case preceded by *a(b)*, as on ink-tablet letters at Vindolanda, but this cannot be so here.

    On the inner (recessed) face, extensive traces of multiple text (not illustrated).
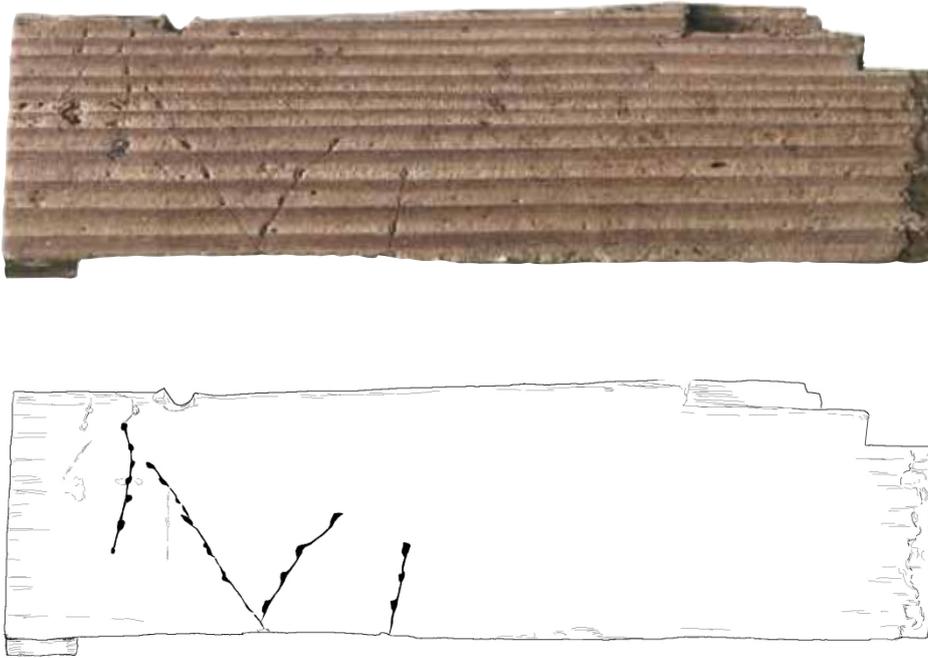
<WT9>

Fig 47 Stylus tablet <WT9> (outer face), addressed to Julius (scale 1:1)

<WT10> Silver fir; type 1 (Fig 48)
<7966>, [6567]; period 3 phase 1 (early), OA15
Complete in four conjoining fragments, except that half of each end has broken off at the saw-cut midway; one hinge-hole remains.
W 141.3mm; H 115.0mm; Th R 7.2mm; Th F 5.8mm.

In cursive letters at the bottom of the outer (plain) face:

(1)   Flori *uacat*

(Property) of Florus

(1)   There is no sign of any text immediately above or to the right, where the surface is quite well preserved, so the inscription is apparently complete. Placed where it is, and being in the genitive case, it does not seem to be an address. It is probably an assertion of ownership.
Florus is quite a common cognomen, so it may only be coincidence that the Bloomberg lead sealing <4716> carries the same legend, FLOR[I]. For this reason also, Florus is not necessarily the Florus who witnessed a stylus tablet document from Huggin Hill, London (*RIB* 2(4), no. 2443.18; Table 13).

The inner (recessed) face is badly worn and damaged, with multiple traces of text; two or three letters can be recognised (not illustrated).
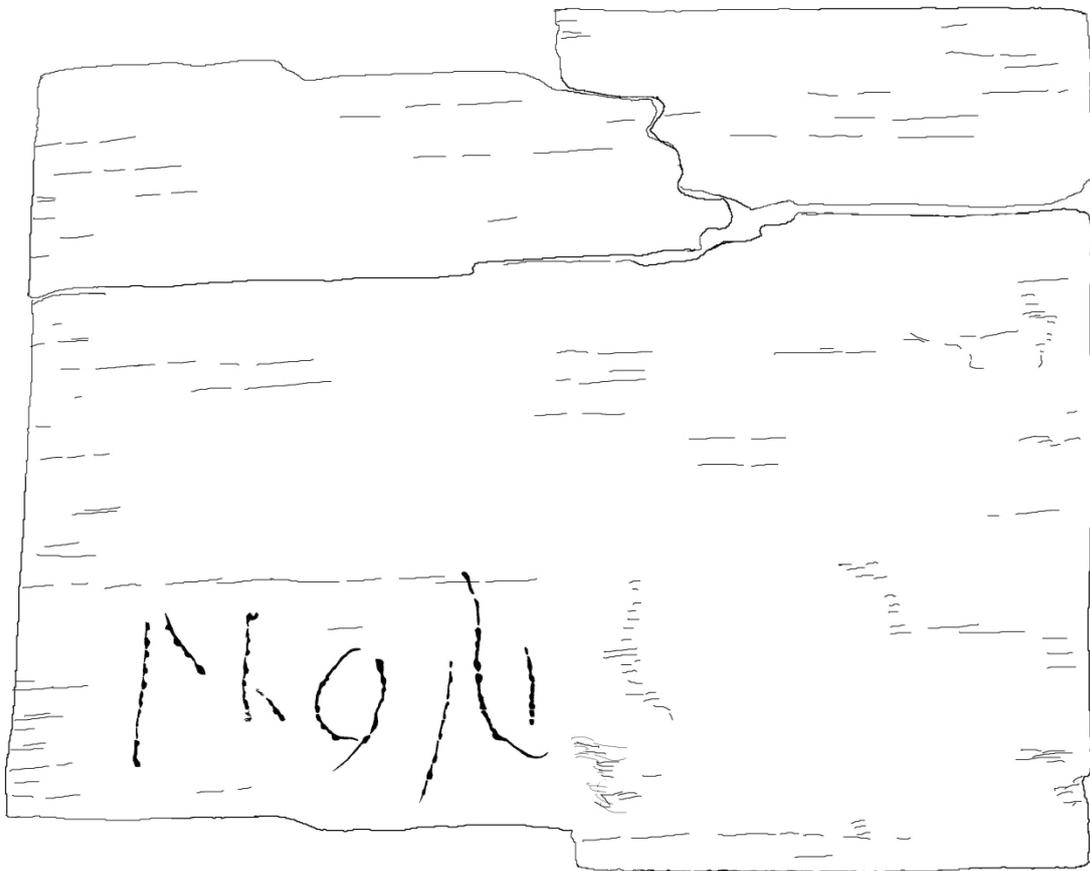
Fig 48 Stylus tablet <WT10> (outer face), the property of Florus (scale 1:1)

\<WT11\> Silver fir; type 1 (Fig 49)
\<6345\>, [6213]; period 3 phase 1 (early), OA19
Incomplete, but preserving part of both sides. W 138.7mm; H (36.0)mm.

On the outer (plain) face in cursive letters, one line of an address:

.   .   .

(1)   Sabino Pirini filio

.   .   .

… to Sabinus, son of Pirinus …

(1)   This may have been the only line of the address, hence the rather cramped *filio*, but since neither end of the tablet survives, this cannot be certain. There is barely a trace of the return of the loop of *b*, and *filio* is difficult, with its *o* reduced to two downstrokes, but there is no need to doubt the reading. As usual, a gap (in *Pirini*) marks the line of the binding cord.
The name *Pirinus* is very rare, the only instance apparently being *CIL* 2, no. 5025 (Lusitania), an epitaph probably of the 1st century AD since it lacks *Dis Manibus* and concludes with *h(ic) s(itus) e(st)*. Perhaps the name was Iberian. *Sabinus* is quite common, but it is found in a 1 Poultry address (Tomlin and Hassall 2003, 374, no. 24, fig 20; Tomlin 2011, 517; Table 13) which has only been partially deciphered; the line drawing now suggests that it may have read *Sabino fili[o] | Pirini*. If so, it would be the same man.

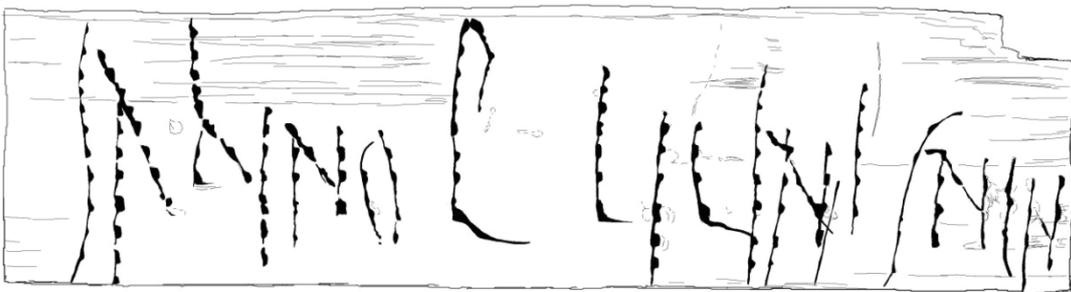The inner (recessed) face has been used many times, and is now illegible (not illustrated).

<WT11>

Fig 49 Stylus tablet <WT11> (outer face), addressed to Sabinus son of Pirinus (scale 1:1)

<WT12> Silver fir; type 1 (Fig 50)
<5788>, [6386]; period 3 phase 1 (late), OA22
Incomplete in three conjoining fragments, preserving part of both sides and one end with a saw-cut midway between hinge-holes enlarged into a shallow V-notch in the fore edge. The other end is broken and not original, but a small V-notch has been neatly cut midway. This indicates that a tablet was broken into two and reused for correspondence like <WT4>, <WT27> and <WT80>. W 135.0mm; H (58.4)mm; Th R 8.0mm; Th F 6.1mm.

On the outer (plain) face the address is inscribed just below the first notch and, to judge by the very short second line, is complete. In cursive letters:

(1)   Tertio bracea-
         uacat   rio

To Tertius, the ?brewer.

(1)   The cross-strokes of *t* have been almost lost in the grain. As usual the writing respects the binding cord, but coincidentally and conveniently *Tertio* ended well before it, so a space could be left quite easily.
For the recipient's trade, cf *Tab Vindol* 3, no. 646, an ink tablet from Vindolanda addressed *Optato braciario*, where the editors discuss the meaning of *braciarius*. It derives from *bracae*, a type of grain, but it is not clear whether it means 'corn-factor', 'maltster' or 'brewer'. The editors prefer 'maltster', since the term *ceruesarius* is also found in the tablets, but according to Adams (2003, 562–3) '*ceruesarius* may perhaps be translated as "beer-maker", *braciarius* as "brewer" (a sense it is given in dictionaries of medieval Latin) or, more precisely, "maltster"'. The broader sense of 'brewer' is attractive, since the name *Tertius* is scored on a wooden barrel-head found in London (20–30 Gresham Street and Blossom's Inn (GHT00): Tomlin and Hassall 2006, 478, no. 33g), and <WT72>, although from another context, is an account relating to the sale or purchase of beer. Note also <WT14>, addressed to a cooper (*cuparius*).
Tertius ('third') is a common cognomen, also found in London as a graffito on a jar (25 Gresham Street (NHG98): Lyon 2004, 165, fig 14; Tomlin and Hassall 2007, 358, no. 19, fig 14), and quite possibly as TER[…] in the Bloomberg samian graffito <2056>, but this Tertius is surely to be identified with Domitius Tertius the *bracearius*, to whom a stylus tablet at Carlisle (*RIB* 2(4), no. 2443.4, reading BRACIIARIO) is addressed. The coincidence of name and profession is striking, despite the also striking coincidence that letters addressed to the same man should be found so far apart. But a Flavian date is possible for both. London was the provincial 'capital', and Carlisle from its conquest in the early AD 70s was the western terminus of the northern 'frontier'; another stylus tablet attests a legionary presence there in AD 83 (Tomlin 1992). The two places must have been in constant communication: there is probably a reference to 'London' in one of the Carlisle ink tablets (*Tab Luguval*, no. 28, l 3), and a Vindolanda tablet refers to goods 'ordered from London' (*Tab Vindol* 3, no. 588.a.i, ll 1–2). Macrinus (<WT29>) may also have been active in both London and Carlisle.

On the inner (recessed) face are many short diagonal incisions, but no recognisable letters (not illustrated). It has clearly been used more than once, as indeed would be expected of a tablet which was broken in half to be reused for correspondence.
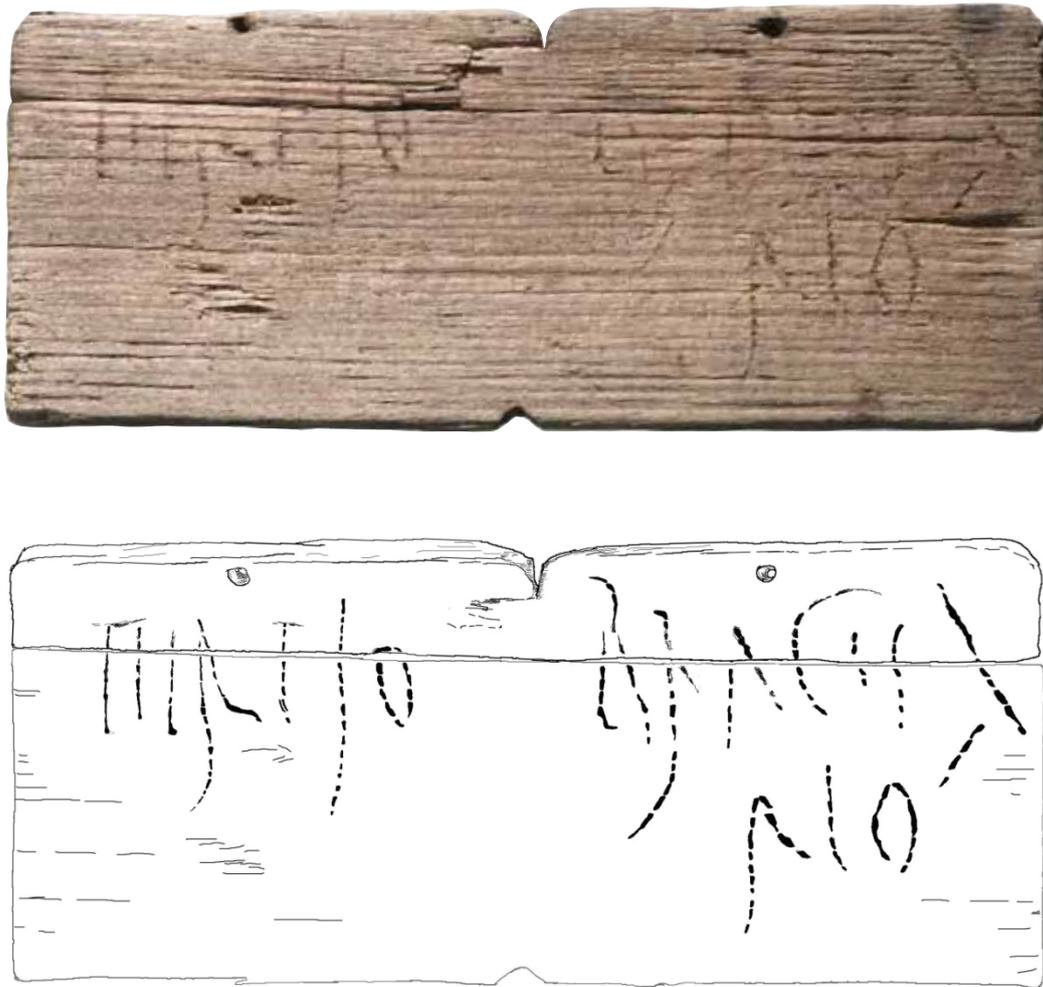
<WT12>

Fig 50 Stylus tablet <WT12> (outer face), addressed to Tertius, ?brewer (scale 1:1)

<WT13> Silver fir; type 1 (Fig 51)
<4284>, [4762]; period 3 phase 1 (late), OA31
Incomplete, but preserving both sides and one end with a saw-cut midway between hinge-holes. W 140.5mm; H (71.7)mm; Th R 7.6mm; Th F 6.6mm.

    On the outer (plain) face in cursive letters, the first two lines of an address:

(1)   Namatobogio
    …linagi filio
    . . .

To Namatobogius, the son of […]linagus *or* […]linagius, …

The address is not necessarily complete. The writing as usual respects the binding cord, (1) with a space between *a* and *t*, (2) by compressing the *n*, as can be seen by comparing it with the initial letter in (1). A line has been scored down from the left hinge-hole with a different and sharper instrument: this is probably casual, but may have been some sort of cancellation.
(1)   The recipient's name is attested once as *Namantobogius* in northern Gaul (*AE* 1947, no. 75), but Wuilleumier (1963, no. 335) notes that both elements ('breaker of enemies') are found in other Celtic personal names. See also Ellis Evans (1967, 103–4). The second at least has already been found in London, on a copper-alloy tablet discovered on the Thames foreshore at Wandsworth Reach (Tomlin 2013, 381, no. 1, fig 1): *[…]bogius. Nama[…]* is one of the witnesses of <WT63>, and he might be the same man.
(2)   The reading *filio* is certain, but *f* is of unusual form (a long descender cut midway by a cross-stroke), and there is no trace of the curving extension of *l* that would be usual. The father's name is also Celtic since it ends like many others in the suffix *-agus/-agius*, and shares elements with *Coin(n)agius*, but this cannot be read here.

    The inner (recessed) face carries extensive traces of text, which seems to be multiple, and is broken by the loss of alternating bands of softer grain (not illustrated).
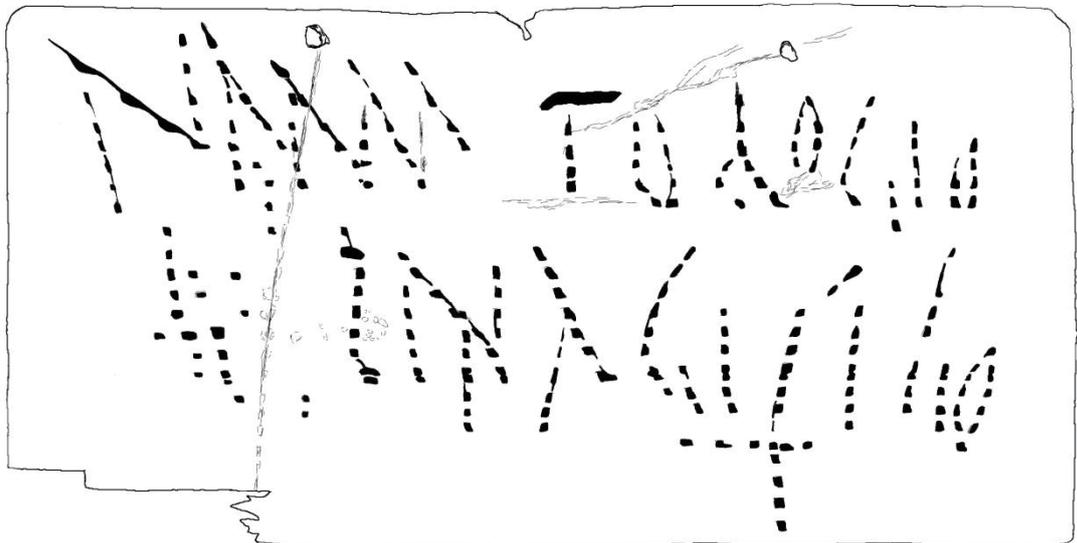
<WT13>

Fig 51 Stylus tablet <WT13> (outer face), addressed to Namatobogius son of [...]linagus or [...]linagius (scale 1:1)

<WT14> Silver fir; type 1 (Fig 52)

<3304>, [3823]; period 3 phase 1 (late), OA77 phase 4

Incomplete, but preserving one end (except for the very corner) with saw-cut midway, and part of both sides. W 143.3mm; H (43.7)mm; Th R 7.3mm; Th F 5.5mm.

On the outer (plain) face in capitals:

(1)   dabes Iunio cupario
       contra Catullu<m>
       .   .   .

You will give (this) to Junius the cooper, opposite (the house of) Catullus.

The gap in the middle of *Iunio* respects the binding cord. Although the tablet is broken just below *Catullu<m>*, the address is probably complete, in view of the uninscribed space below *contra*. The horizontal strokes in general survive better than usual in addresses. The letter *a* in *dabes*, *contra* and *Catullu<m>*, but not *cupario*, is firmly marked by a third downstroke.

(1)   *dabes* is a misspelling of *dabis* (with *e* for short *i*) also found at Vindolanda (*Tab Vindol* 3, no. 643) and Vindonissa (Speidel 1996, nos 15, 31, 53); see also Adams (2003, 533–5). For the use of *dabis*, see <WT1> (with note).

Iunius is a cognomen, as in <WT4> (with note).

cupario   In this hand, *r* resembles the first two strokes of *n*, but they can easily be distinguished in *contra*, and the reading *cupario* is visually quite acceptable, especially since ⋆*Cupanus* is not recorded as a cognomen. The term *cuparius* from *cupa* ('cask') is only found in inscriptions, but Dessau (*ILS* 2(2), nos 7631, 7659a) notes three examples: *CIL* 10, no. 7040; 12, no. 2669; 13, no. 3700. The need for barrel making is implied by <WT12> (probably addressed to a brewer) and <WT72> (the beer account).

(2)   In place names *contra* is applied to a place 'opposite' somewhere more important, and here it is apparently used of a more prominent resident, or at least one better known to the carrier. Cf 'opposite the bathhouse', *con{c}t{o}ra balneu(m)*, in a Vindonissa address (Speidel 1996, no. 44).

The final -*m* of *Catullum* was not sounded, so it has been omitted, as in *salute<m>* (cf <WT185> with note). The cognomen is quite common, so this is unlikely to be the same 'Catullus' as in <WT70>, especially since the latter is a slave.

The inner (recessed) face carries extensive traces of text, but they are worn and probably multiple (not illustrated).
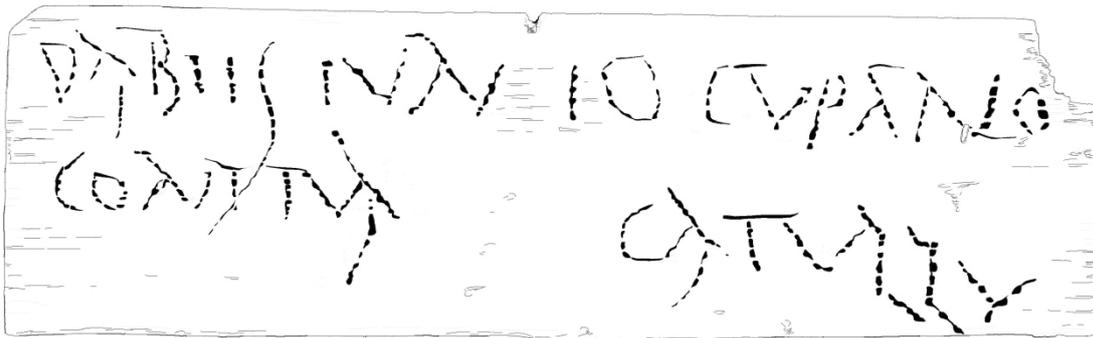
<WT14>

Fig 52 Stylus tablet <WT14> (outer face), addressed to Junius the cooper (scale 1:1)

<WT15> Silver fir; type 1 (Fig 53)

 <9870>, [10068]; period 3 phase 1 (late), OA163

Incomplete, but preserving one corner, the broken edge badly charred. W (72.0)mm; H (42.0)mm; Th R 7.0mm; Th F 5.0mm.

On the outer (plain) face in capitals, the beginning of an address:

(1)   Attico […]
       fil[io …]
       .   .   .

To Atticus, the son of […]

(1)   The cross-bar of the second *t* (perhaps continued from the first) has been lost in the charred wood grain. Otherwise *Atuco[ni]* might be read, but the name *Atuco* is rare and found only in Noricum (Alföldy 1969, 18, no. 26 with note). *Atticus* by contrast is widely attested; cf <WT55>, which probably names the same Atticus.

<WT15>

Fig 53 Stylus tablet <WT15> (outer face), addressed to Atticus (scale 1:1)

<WT16> Silver fir; type 1 (Fig 54)

<6263>, [6078]; period 3 phase 1 (late), S85

Incomplete, but preserving one end with a V-notch midway, and part of both sides. W 141.0mm; H (30.0)mm; Th R 7.3mm; Th F 5.2mm.

On the outer (plain) face in cursive letters:

(1)   dabis Basso

.   .   .

You will give (this) to Bassus …

(1)   The address is not necessarily complete. *Bassus* is a common cognomen. For the use of *dabis*, see <WT1> (with note).
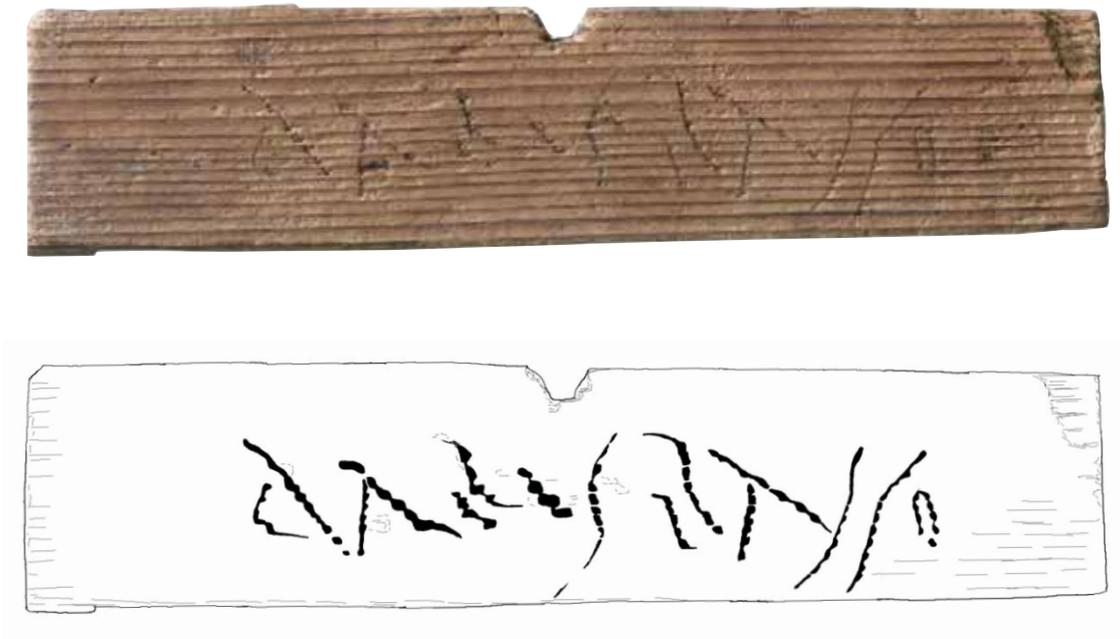
<WT16>

Fig 54 Stylus tablet <WT16> (outer face), addressed to Bassus (scale 1:1)

Addresses acephalous, without name of recipient

<WT17> Silver fir; type 1 (Fig 55; Fig 56)
<9116>, [6757]; period 2 phase 2, S40
Incomplete, but preserving part of one side. W (54.2)mm; H (15.0)mm; Th R 7.4mm; Th F 5.6mm.

On the outer (plain) face (Fig 55) is scored a vertical line parallel with the edge, at the same distance (10mm) as the width of the border of the inner (recessed) face; it is presumably the guideline of a recess which was never cut. The lower part of three or four letters:

. . .
(1)   ?*uacat* an[u]s

(1)   The gap between *n* and *s* suggests that *u* was once ligatured to the top of *s*. If *an[u]s* is preceded by a space, which is not certain, it would be the end of a cognomen in the nominative case, continued from the previous line. This would be the name of the sender.

On the inner (recessed) face (Fig 56), the upper part of four or five letters:

. . .
(1)   *traces*
         […]...am
. . .

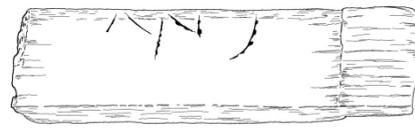(2)   The first letter after the break might be *d* or *o*.

<WT17>

Fig 55 Stylus tablet <WT17> (outer face), with address (scale 1:1)
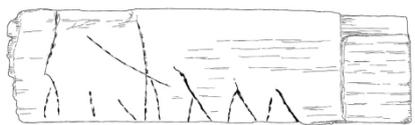
<WT17>

Fig 56 Stylus tablet <WT17> (inner face), with text (scale 1:1)

<WT18> Larch (*Larix decidua*); type 1 (Fig 57)
<6377>, [6539]; period 3 phase 1 (early), B2
Incomplete, but preserving part of both sides and most of one end with saw-cut midway and hinge-holes. W 133.7mm; H (49.0)mm;
Th R 8.5mm; Th F 7.5mm.

The surviving end is damaged, but unusually (cf <WT36>) a rectangular panel has been excised from both corners of the outer
(plain) face, measuring 26 × 13mm at the left corner and part of one 21mm wide at the right corner. On this face in cursive letters,
the last two lines of an address:

. . .

(1)   ino + scrIXIplario
       Londinio

To […]inus, ?secretary of tribunician rank, in London.

(1)   It begins with the dative termination of the recipient's cognomen, followed by a small 'cross', which must be equivalent to an
interpunct. The next three letters are clearly *scr*, but instead of continuing as *scribo* or similar (cf <WT23>), they are followed by
X between two short downstrokes, the first of which is curved. This looks like a military symbol; for this particular form, cf *RIB* 1,
no. 2200. The line is completed by *plario*, the dative of the termination *-plarius*, which might suggest *duplarius*, a soldier receiving
double pay; but the preceding letter(s) cannot be *du*.
The termination *-arius* would suggest a functionary of some sort, for example Albanus 'the *seplasiarius*' in a stylus tablet address
found at Carlisle (Tomlin 1991a, 299–300, no. 24, fig 5), but <WT18> is a puzzle. A blundered *sesquiplicario* (a soldier receiving one-
and-a-half the basic rate of pay) is a possible solution, but surely too extreme. A more attractive possibility is that *scr*, as quite often,
is the abbreviation of *scriba* ('secretary'). *Scribae* were senior members of a Roman magistrate's permanent staff, and one is said to
have 'died in the province of Britain' (*ILS* 1, no. 1883, Rome). They were graded by the magistrate or official to whom they were
attached, these grades including *tribunicius* ('tribunician') and specifically a *scriba tr(ibuni) mil(itum)* (*CIL* 14, no. 2108). Since a
milliary ('thousand-strong') cohort was commanded by a tribune, not a prefect, there would have been a perceived association
between 'tribune' and '1000', just as the regular Greek translation of 'tribune' was   c ('commander of a thousand'). This
prompts the conjecture that <WT18> was addressed to a 'tribunician' *scriba*.
(2)   *Londinio*   *L* is made with two downstrokes, almost as if it were written twice, thus resembling the *L* of *Londinio* in <WT6>,
although the hands are different. For other instances of 'London' in an address, see the note to <WT6>.

The inner (recessed) face carries extensive traces of letters, which are little more than short diagonal strokes (not illustrated).
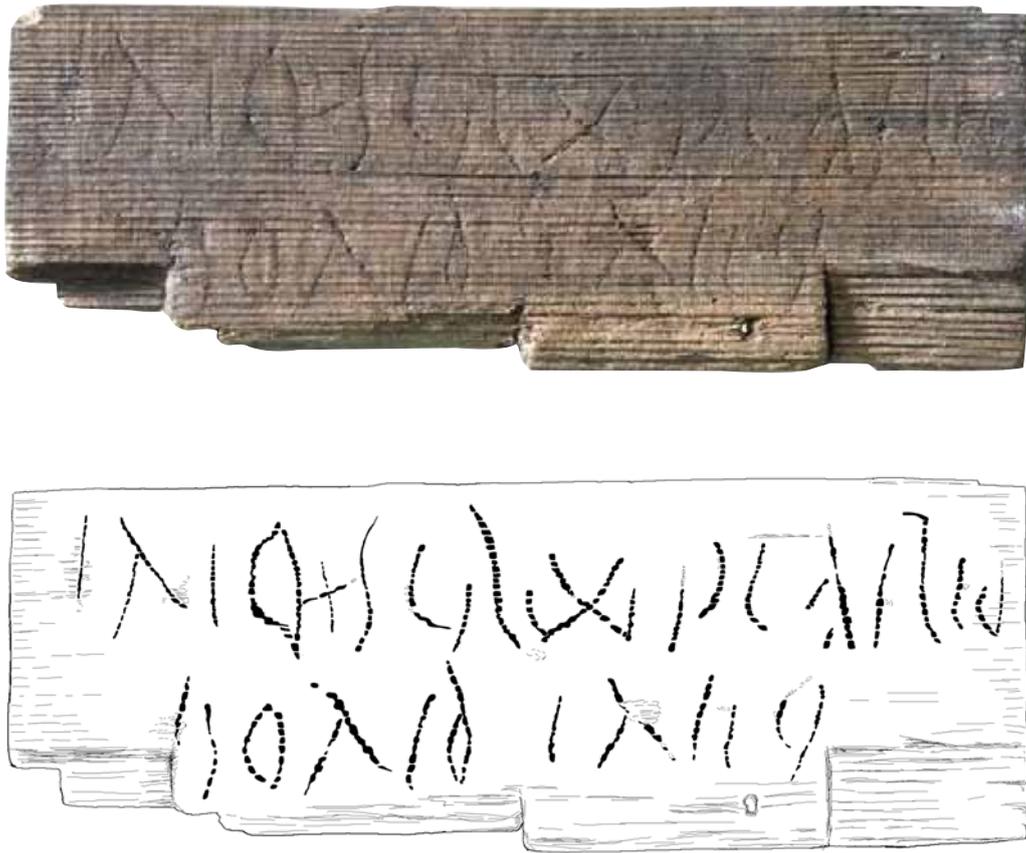
<WT18>

Fig 57 Stylus tablet <WT18> (outer face), addressed to […]inus, ?secretary of tribunician rank, in London (scale 1:1)

<WT19> Silver fir; type 1 (Fig 58)
<6358>, [6510]; period 3 phase 1 (early), OA14
Incomplete, in two conjoining fragments preserving one end with saw-cut midway between hinge-holes, and part of both sides.
W 130.6mm; H (62.1)mm; Th R 8.0mm; Th F 6.2mm.

On the outer (plain) face in elongated capitals:

.   .   .
(1)   *traces*
iaca *uacat*

(2)   The lettering, although elongated, is not really 'address script'. It should be taken this way up because the second *a* is cramped, as if to avoid the binding cord. It would also be natural for the writing to begin from the left margin. There is no sign of lettering in (1) to the left of the surviving letter-bottoms, but this is probably because its axis was downward-sloping. The termination *-iaca* suggests a feminine personal name or a place name.

On the inner (recessed) face are a few faint incisions, more or less diagonal, but no sure letters (not illustrated).
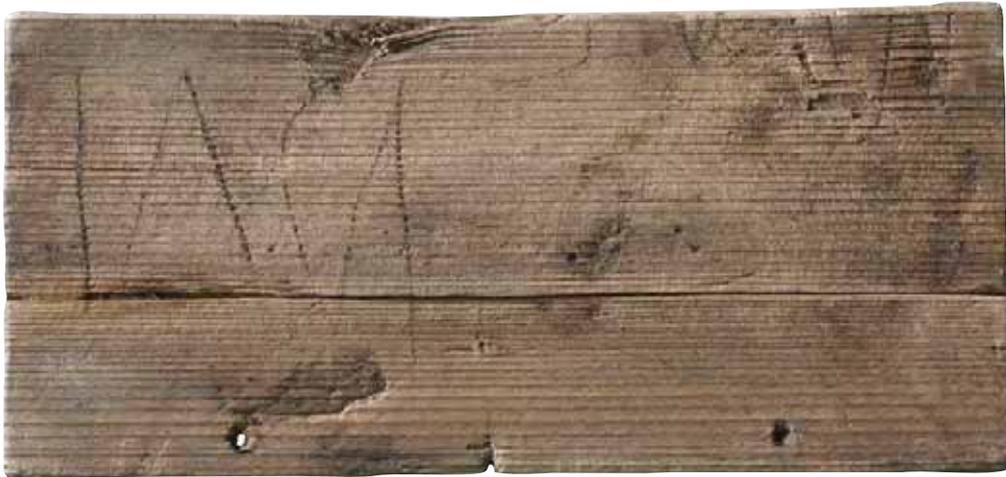
<WT19>

Fig 58 Stylus tablet <WT19> (outer face), with address (scale 1:1)

<WT20> Silver fir; type 1 (Fig 59)
<7455>, [6510]; period 3 phase 1 (early), OA14
Incomplete, but preserving part of both sides. W 138.9mm; H (38.5)mm; Th R 7.1mm; Th F 6.1mm.

   On the outer (plain) face in capitals, two lines of an address:

   .   .   .
(1)   emerito Aug(usti)
       emerito
   .   .   .

To […], time-expired veteran of the emperor, time-expired veteran …

(1)–(2)   The gap in *emerito* both times respects the (lost) binding cord. The last letter of (1) is damaged, but in view of the two preceding letters and the reference to an *emeritus* (see below) it must be understood as an angular *g*, consisting of two downstrokes which were possibly connected by a diagonal now lost. Since the top edge is not original, this is not the first line of the address. It follows that *emeritus*, although it can be a cognomen, is not one here. Instead it is a substantive, a military veteran who has served his time and been honourably discharged; but for him to be qualified as *Aug(usti)* ('of the emperor') is most unusual. The few instances are confined to Rome, and (by analogy with the term *veteranus Augusti*) would seem to distinguish veterans of the Praetorian Guard and Urban Cohorts.
The recipient is perhaps a veteran of the Guard who, like an *evocatus*, has been retained for further service, whether in the provincial administration or in a military training capacity.

   Extensive traces show that the inner (recessed) face was used many times, and no text is legible (not illustrated).

<WT20>

Fig 59 Stylus tablet <WT20> (outer face), addressed to […] time-expired veteran of the emperor… (scale 1:1)

<WT21> Silver fir; type 1 (Fig 60)
<4291>, [5293]; period 3 phase 1 (early), OA15
Incomplete, but preserving part of both sides and half of one end with hinge-hole. Like <WT136> and <WT181>, this tablet is unusually narrow. W 92.0mm; H (34.5)mm; Th 4.8mm; Th F 3.2mm.

    On the outer (plain) face:

    . . .
(1)   *uacat* am

(1)   Since the edge below is original, this is the last line of an address. When only a couple of letters were required for completion, they might be added below but to the right (cf <WT12>). This is perhaps a location in London, *[ad …]am*, like the *Romae … ad Minervam* ('Rome … at the temple of Minerva') familiar from military diplomas.
Two lines have been scored to the right, but they are probably casual.

<WT21>

Fig 60 Stylus tablet <WT21> (outer face), with address (scale 1:1)

<WT22> Silver fir; type 1 (Fig 61)
<6348>, [6213]; period 3 phase 1 (early), OA19
Incomplete, but preserving one corner. W (101.8)mm; H (61.3)mm; Th R 8.9mm; Th F 7.3mm.

On the outer (plain) face, some lightly scored lines; not letters, and probably casual. At the very foot, against the bottom edge which is original:

(1)   cccc

(1)   Perhaps a numeral, '400'; but its purpose is unknown.

On the inner (recessed) face, almost no trace of text (not illustrated).
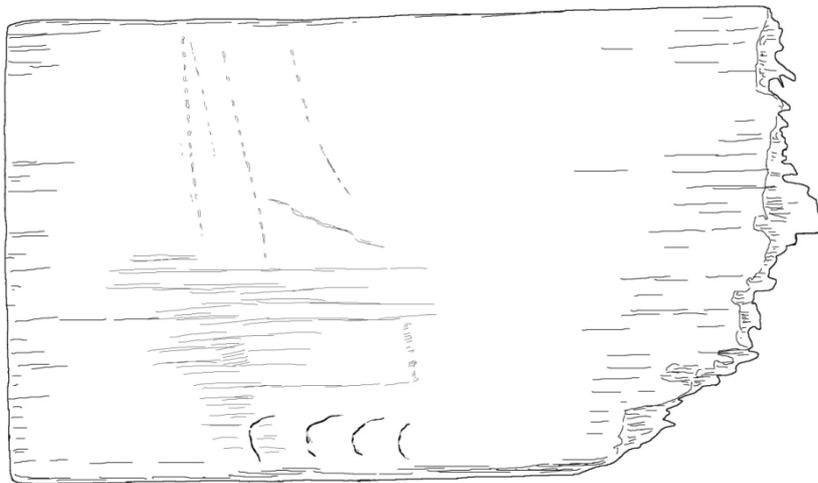
<WT22>

Fig 61 Stylus tablet <WT22> (outer face), with ?numeral (scale 1:1)

<WT23> Silver fir; type 1 (Fig 62)
<6378>, [6548]; period 3 phase 1 (late), OA22
Almost complete; preserving most of the sides, but none of the raised border at either end. W 142.4mm; H (103.0)mm; Th R 9.1mm; Th F 6.8mm.

In one corner of the outer (plain) face is the lower part of a rectangular recessed panel which the writing avoids. On this face, in capitals:

.   .   .

(1)   nori Gessi-
        ni filio Interui-
        [n]aris
        scripsit
(5)   ?Vir[oc]oni

… to […]nor, son of Gessinus; Intervinaris wrote (this) at ?Viroconium.

(1)–(5)   The gaps in *scripsit* and the place name below it respect the (lost) binding cord. The addition of the sender's name and his place of writing make this address unusually long, but it can be deduced that the original first line has been lost.
(1)   The name of the recipient apparently ended in *-nor* (nominative), which would suggest a Greek-derived name such as *Antenor*: cf the graffito *Ante(…)* from London (Bow Bells House, Bread Street, EC4 (BBB05): Tomlin 2009, 334, no. 30, fig 26; Howell 2013, 47–8, fig 34 <P62>). Another possibility is *Nicanor*, as conjectured in *RIB* 1, no. 970. The space this would imply to the left might have been filled by *dabis* (cf <WT1>, with note). The patronymic *Gessinus* is unattested, but derives from *Gessus*, the name of at least two samian potters (Hartley and Dickinson 2009, 201–2).
(2)–(3)   The writer's name is in smaller letters, and *u* is of 'cursive' form unlike that in (5), but the *o* of *filio* is much the same size, and the name does not look like an insertion; the continuity of sense with *scripsit* suggests it is not. (3) begins with two downstrokes without good evidence of a diagonal (for *n*), but the surface is pitted here; and they are too close together for *li*. The name *Interuinaris* is not attested, but cf the nomen *Ventinaris* (*CIL* 5, no. 428).
(4)   *scripsit*   The reading is quite clear, although there is no instance of this verb in a Vindolanda address, but towards the end of one letter (*Tab Vindol* 2, no. 225, ll 24–5) Cerialis says he is 'writing from Vindolanda' (*ha[ec ti]bi a Vindolanda scribo*). It implies that the next word will be the place of 'writing', not of delivery.
(5)   The place name is broken by quite a wide gap for the binding cord. It clearly begins (in capitals) with VIR and ends with ONI, and is evidently a locative, but the other traces do not permit the expected reading of *Viroconi* ('at Wroxeter'). The letter after R consists of two downstrokes most like a cramped II (for E), but they might be a badly-formed O like that in NORI. After the gap there are two more downstrokes, incomplete at the bottom but firmer and more widely spaced; they cannot be C. They are most easily read as II
(for E), since the surface here is well enough preserved to exclude the diagonal of N, but combinations of I, L and T are also possible. But, in view of Wroxeter's importance in the mid 1st century AD as a legionary base, it is tempting to read *Viroconi* nonetheless, by supposing that the writer misspelled it in some way.

The inner (recessed) face has been used many times, and no reading is possible (not illustrated).
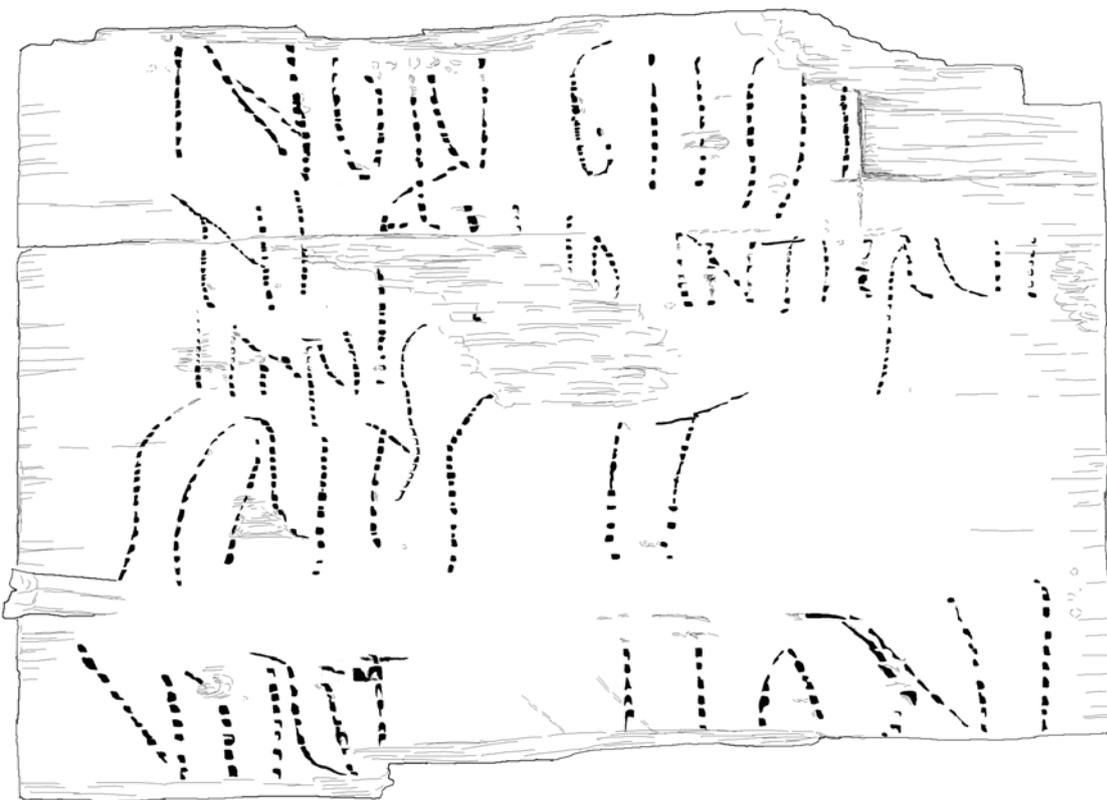
<WT23>

Fig 62 Stylus tablet <WT23> (outer face), addressed to [...]nor, son of Gessinus, written by Intervinaris at ?Viroconium (scale 1:1)

<WT24> Silver fir; type 1 (Fig 63)
<7448>, [5590]; period 3 phase 1, S280 phase 2
Incomplete, but preserving one end with saw-cut and part of both sides. W 137.5mm; H (75.0)mm; Th R 6.5mm; Th F 6.3mm.

    The outer (plain) face is worn and damaged, but carries the last two lines of an address above the saw-cut. In capitals clumsily written and quite lightly scored:

      . . .
(1)   dabis
      Lo<n>din<i>o

You will give (this) [to *name*] in London.

(1)–(2)   The top edge is broken, the bottom edge original, so this is the end of the address, not the beginning; the recipient's name must have been written on the missing half. For the use of *dabis* (1), see <WT1> (with note). The place name (2) has been garbled; it is correctly spelled in <WT18> and <WT6>, where other instances are noted.
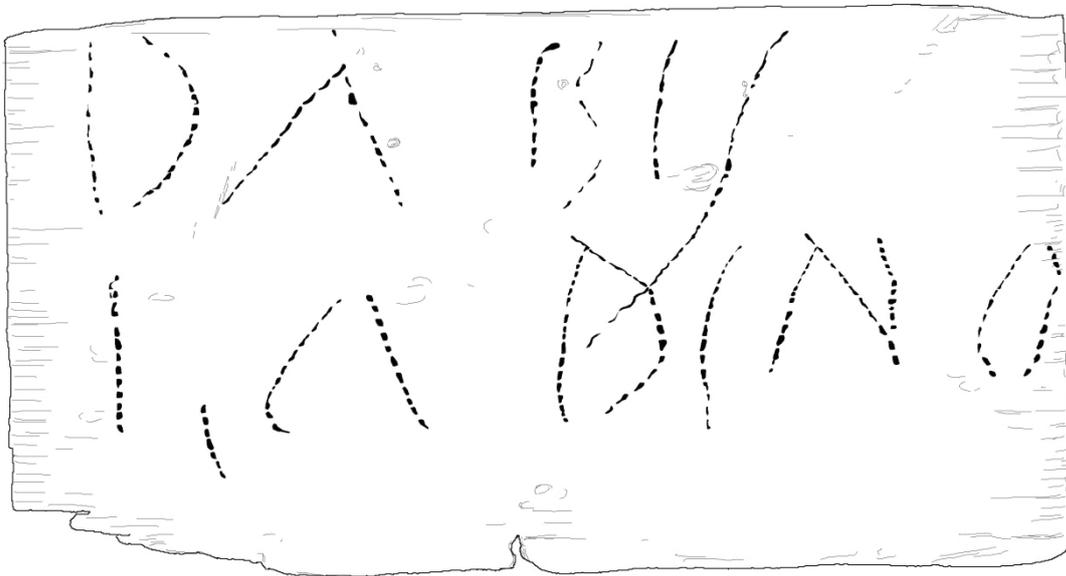
<WT24>

Fig 63 Stylus tablet <WT24> (outer face), addressed to […] in London (scale 1:1)

<WT25> Silver fir; type 1 (Fig 64)
<459>, [+]; -, -
Incomplete, but preserving one corner. W (83.8)mm; H (59.7)mm; Th R 7.2mm; Th F 6.0mm.

On the outer (plain) face in capitals, what appears to be half of one line of an address:

(1)   […]riciriani
       traces

(1)   The bottom edge is original, so this must be the end of the address. To the left of *r*, two lines have been scored which seem to be casual damage. To the right of *c*, the dotted letters are quite uncertain: there is no sign of the loop of the second *r*, but the surface is damaged here; another possibility is IIV (for *eu*). The final letters suggest a personal name in *–ianus* in the genitive case (a patronymic presumably), but there is no likely name.
(2)   The 'traces' in the space below are lines of different quality, finer and more extensive, which do not seem to be letters.

The inner (recessed) face carries extensive traces, but they are multiple and rather faint; the 'letters' are little more than diagonal strokes (not illustrated).

<WT25>

Fig 64 Stylus tablet <WT25> (outer face), with address (scale 1:1)

Letter-text with first line

<WT26> Silver fir; type 2 (Fig 65)
<6295>, [6544]; period 3 phase 1 (early), OA15
Incomplete, but preserving one corner, broken at the saw-cut. W (99.0)mm; H (52.3)mm; Th R 10.6mm; Th F 5.0mm.

    The fragment is type 2, but if this were a financial text, it would surely begin with a date. It has evidently been reused for correspondence: cf <WT39> (with note). There are traces of three lines of text on the inner (recessed) face, but only the first is legible:

(1)   Caluentius Ing[enuus …]
      traces
      traces
      . . .

Calventius Ingenuus [to *name*, greetings.] …

(1)   The descender of *s* at the end of *Calventius* extends right across the fragment, this exaggeration suggesting a 'signature'. The other letters of (1) are larger and bolder than those of (2) and (3), and there is something of a space below them, which suggests that they belong to the heading of a letter; but to the right of them, the name of the recipient and below it, *salutem* ('greetings') indented as usual, have been lost.
The cognomen *Ingenuus* is common, but the nomen *Caluentius* much less so; the only previous example in Britain is C(aius) Calventius Celer of Aprus in Thrace, soldier of Legion II Adiutrix at Chester (*RIB* 1, no. 475). An exact homonym is recorded from Noricum, Sex(tus) Calventius Ingenuus of Celeia (Celje, Slovenia) (*AE* 1995, no. 1203), who might be related: four legionaries at Chester are known to have come from Celeia (*RIB* 1, nos 479, 498, 504, 511).
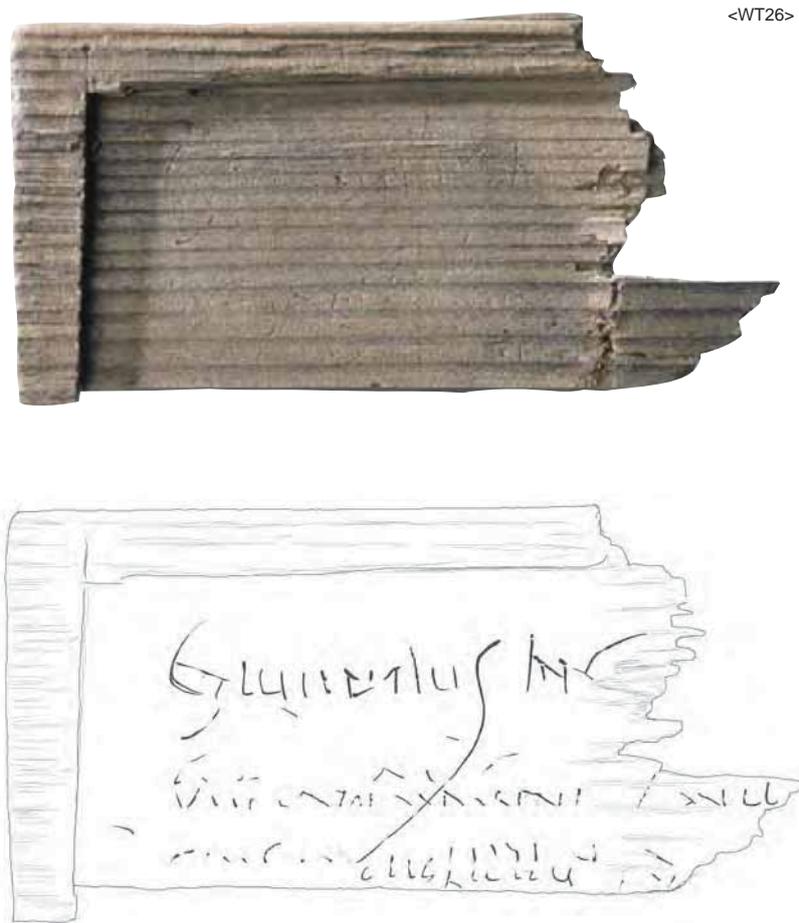
<WT26>

Fig 65 Stylus tablet <WT26> (inner face), with letter from Calventius Ingenuus (scale 1:1)

<WT27> Silver fir; type 1 (Fig 66)
<6352>, [6405]; period 3 phase 1 (late), OA22
Incomplete, but preserving part of both sides. W 142.9mm; H (35.7)mm; Th R 5.0mm; Th F 4.9mm.

Both ends are broken, but a V-shaped notch has been cut in the middle of one, indicating that the original tablet was broken in two to make a diptych for reuse in correspondence like <WT12> (with note). But despite this evidence of reuse, the rather faint traces on the inner (recessed) face belong to a single text:

(1)   Secundionis liberto Vialico
                    uacat   sal(utem)
        accipias c<h>irographum seru[i]
        ?M(arci) S[a]luii M[… …]tandi
(5)   *traces*
                ·   ·   ·

To Vialicus, the freedman of Secundio, greetings. Would you receive the note of hand of the slave of ?Marcus Salvius M[…] …

(1)–(4)   In this hand, *a* is sometimes written with an exaggerated descender (like the first letter of (2)) and is difficult to distinguish from *r*.
(1)   The notch above for the binding cord shows that this is the first line, as confirmed by the indented *sal(utem)* in the line below. The recipient's name (in the dative) would normally be preceded by the writer's name, but this has been omitted. No doubt the writer was Secundio himself, whose identity would be self-evident to his freedman.
The cognomen *Vialicus* seems to be unattested except as an alternative reading to *Viaticus* in *CIL* 2, no. 727, but it is a better reading than (say) *Italicus*, *Viaticus*, *Urbicus* or *Vi(t)alicus*. The adjective *uialis* ('associated with roads') is an epithet of the Lares, and is occasionally found as a name, for example in *CIL* 13, no. 3687; *Vialicus* might derive from it.
(2)   *sal(utem)*   Indented, as usual in the second line of a letter. Only part of the downstroke of *s* survives, followed by *al*. The usual *salutem* ('greetings') has been abbreviated to its first three letters, a rare convention not found in any of the Vindolanda letters, but Cugusi notes nine instances (*CEL* 3, 425, index IX, under *sal*, *sal pl* and *plur sal*).
(3)   This is placed vertically without regard for the distant *sal(utem)* (2), which it almost overlaps.
accipias   This is second-person subjunctive, and politely imperative: Vialicus is evidently acting on behalf of his patron (and former master), probably like the freedmen in <WT44>; for this relationship in financial matters, see Andreau (1999, 64–70).
c<h>irographum   Literally 'written by hand', this Greek term is defined by Gaius (*Inst* 3.134) as a document acknowledging a debt or promising payment (*si quis debere se aut daturum se scribat*): <WT44>, <WT55> and <WT56> are examples. Many of the tablets in the Sulpicii archive are identified as a *chirographum* by a note in ink on the fore edge (*Tab Pomp Sulp*, nos 45, 48, 50–2, 56, 82), like one from Vindonissa (Frei-Stolba and Krieger 2008, 8–9, fig 4).
The next word begins with *se*, and can be read as *seru[i]* by supposing that it was interrupted to accommodate the descenders of *sal(utem)* (2), and that the final *i* has been lost. For the term *seruus*, and for slaves acting as their master's financial agent, see <WT50> (with note).
(4)   The slave is apparently identified only by his master's name, suggesting that Secundio may not have known which slave it would be. The line begins with an enlarged *m*, followed by *s*, a sequence which suggests that *m* is the master's abbreviated praenomen. The *s* is followed by the downstroke of a letter (a vowel, presumably) and then *lu*. This sequence suggests the well-attested nomen *Salvius* in the genitive *S[a]lvii*, except for the horizontal incision above the first *i* which suggests it is *t*; however, the nomen *Salutius* in the genitive *S[a]lut(i)i* would be difficult, since *Salutius* (from *salus*) is only found as a cognomen, and then perhaps not until the 4th century AD. The apparent cross-stroke must be casual, or residual from a previous text.
The master's cognomen begins with *m*, but the rest of his name is lost; *[…]tandi* at the end of the line, a gerund(ive) ending, is too far away to be part of it.

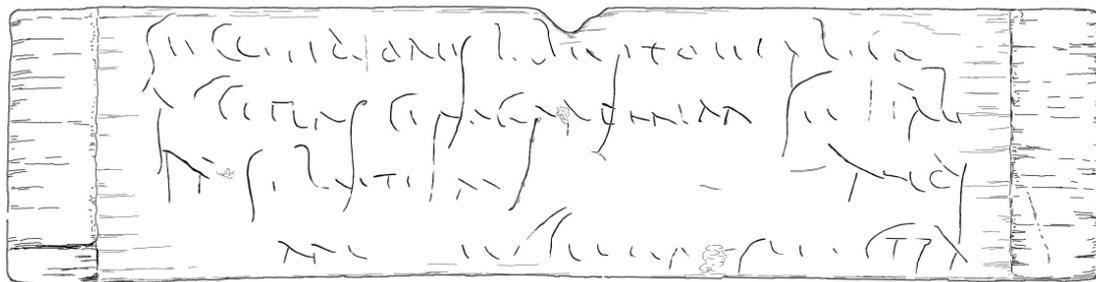<WT27>

Fig 66 Stylus tablet <WT27> addressed to Vialicus, the freedman of Secundio (scale 1:1)

<WT28> Silver fir; type 1 (Fig 67)
<6371>, [6538]; period 3 phase 1 (late), OA22
Complete, except for the raised border at one end. W 134.5mm; H 102.2mm; Th R 7.9mm; Th F 5.3mm.

    The whole of the inner (recessed) face is inscribed, and the incisions are comparatively well preserved around the edges, but unfortunately one text has been written over another in the same alignment. Despite many ambiguities due to the multiplicity of strokes, some letters are recognisable, but not their relationship to each other.

First text:

(1)   imp(eratore) …
      traces

Second text:

(1)   Bell…us …

                ?salutem

    rogo irate …
    traces

(Second text) Bell[…]us [to …] greetings. I ask angrily …

The two texts can be distinguished only at the top left corner, where the first begins (1) with *imp(eratore)* and is evidently a document dated by an imperial consulship. But it is impossible even to guess at the emperor's name. On top of these letters, but very slightly below them, the second text begins (1) with *bell…us*, as if the name *Bellinus*, although the traces do not quite match. To the right of this, but on the next line (2), *salutem* ('greetings') can perhaps be read, which would confirm it is a letter. If so, it begins quite abruptly in the line below (3).

It looks as if a dated document was reused to write a letter, but the two (or more) texts cannot be disentangled. For other instances of such reuse, see <WT39> (with note).
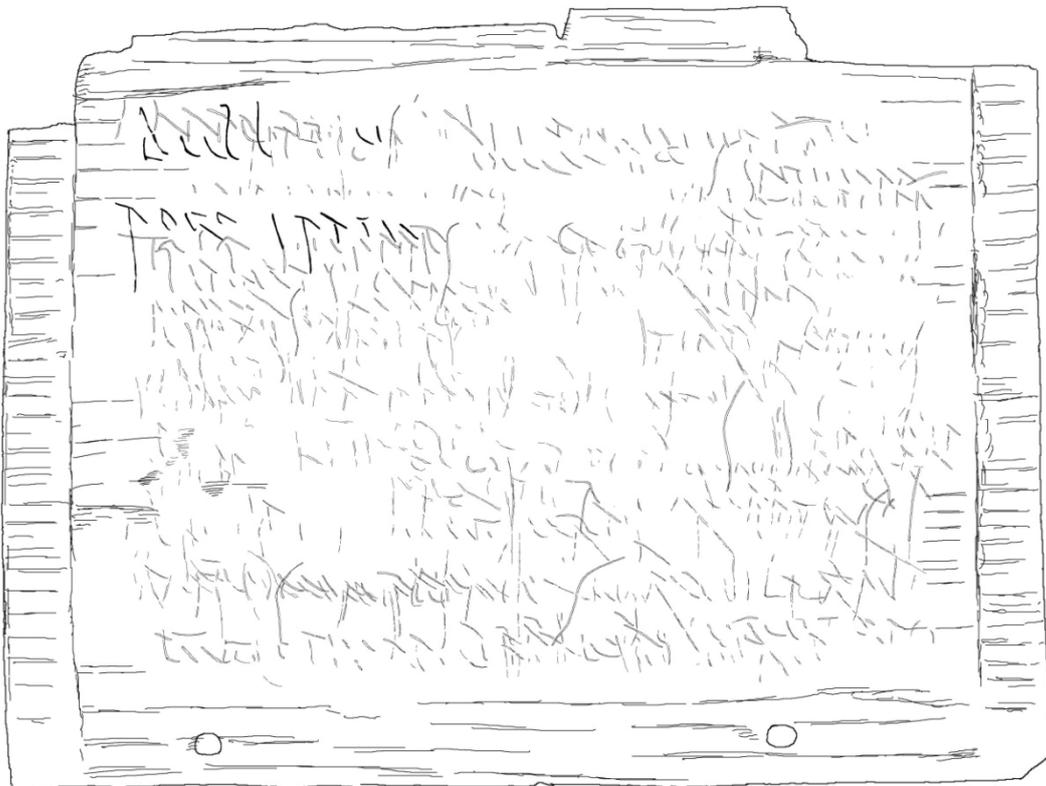
<WT28>

Fig 67 Stylus tablet <WT28> (inner face), with one (dated) text overwritten by a letter (scale 1:1)

<WT29> Silver fir; type 1 (Fig 68)
<6372>, [6538]; period 3 phase 1 (late), OA22
Complete, in two conjoining pieces. W 139.4mm; H 113.7mm; Th R 5.9mm; Th F 4.5mm.

On the inner (recessed) face, the first page of a letter:

(1)   Taurus [[Taurinus]] Macrino domino
     uacat   [ca]riss[imo] salute<m>
     traces   recte esse
     traces
(5)   cum uenerat Catarrius et
     [[-ni [o]ccas{s}ionem non adii[s]ses]]
     iumenta a<b>duxerat, conpe<n>dia
     quae messibus tribus reficere
     non possum [?adf]ueram [?he]re
(10)   a[d D]iadumenum set ille
     superuenit unum diem

Taurus (*written over* Taurinus) to Macrinus his dearest lord, greetings. … in good health … when Catarrius had come and had taken the beasts of burden away, investments which I cannot replace in three months. ?Yesterday I was at (the house of) Diadumenus, but he (Catarrius) arrived unexpectedly for a single day …
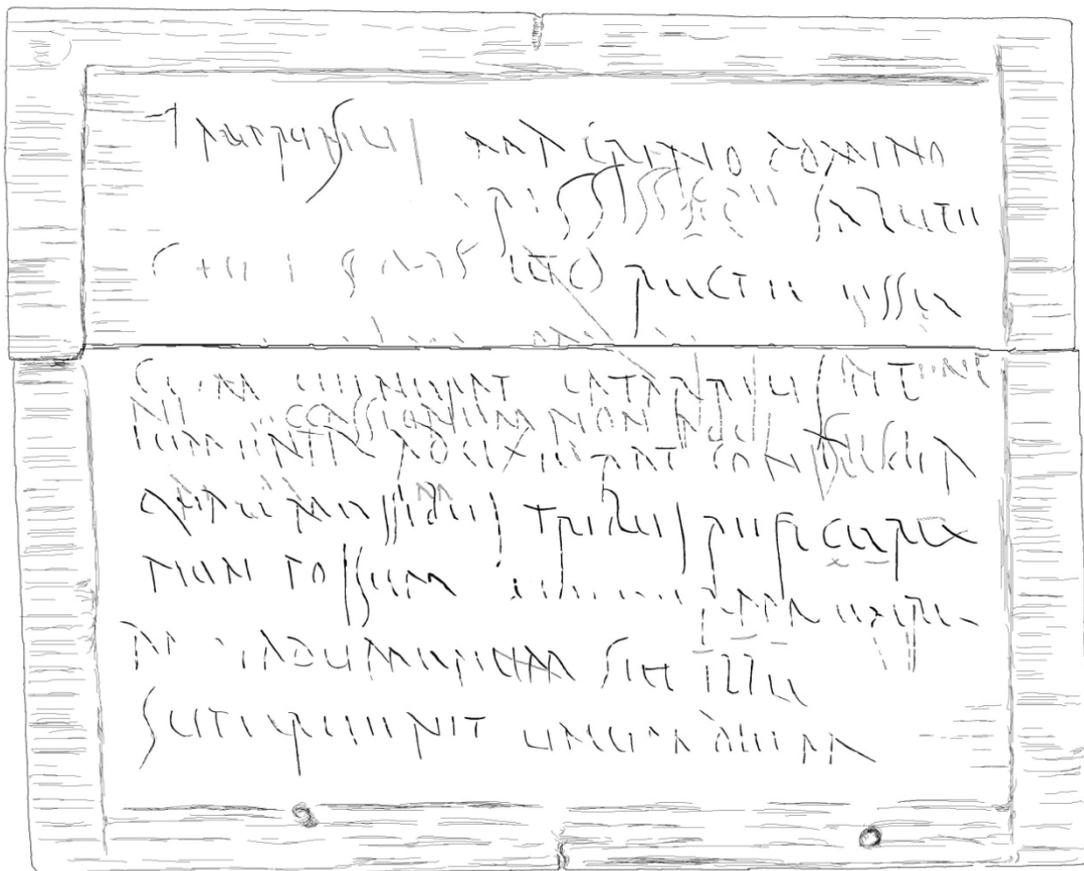
(continued)

Fig 68 Stylus tablet <WT29> (inner face), with letter from Taurus to Macrinus (scale 1:1)

(1)–(11)   The reading is complicated by traces of earlier (or at least corrected) text coinciding with legible letters and words, notably in (1), (2), (5) and (7). Moreover (6) ('you would not have encountered an opportunity of') is intrusive: it usurps the regular space between (5) and (7), but is located midway between the earlier traces at the end of (5) and in the first part of (7) which are themselves out of alignment with those lines; its end in fact is overwritten by (7). Syntactically it is also intrusive, since its only verb (*adii[s]ses*) is second-person, whereas the verbs in (5) and (7) (*uenerat* and *a<b>duxerat*) are third-person. Also it begins with the genitive termination *-ni*, evidently of the noun of which there was an 'opportunity', but the beginning of this word cannot be found at the end of (5). However, there is an easy solution. Continuity between (5) and (7)–(8) can be achieved by ignoring (6), which must be a survival from an earlier, unrelated text which was subsequently deleted.

(1)   *Taurus* coincides with *Taurinus*, but the traces do not reveal which was written first. The spacing shows that after writing *Taurinus*, the scribe continued with *Macrino domino*, but either he first wrote *Taurus* and corrected it immediately, or he subsequently corrected *Taurinus* to *Taurus*. Either is possible, but it seems more likely that *Taurinus* (not *Taurus*) was a false anticipation of *Macrino*. The exaggerated *s* of *Taurus* would then mark the end of a successful correction. Whichever was the correct form, the author of this letter is unlikely to have confused his own name, so he was probably dictating to an amanuensis.

Macrinus is quite a common cognomen and occurs in <WT66>, but note *RIB* 2(4), no. 2443.3, a stylus tablet letter addressed to Julius Macrinus found at Carlisle. Like Tertius the *bracearius* (<WT12>), this Macrinus may have been active in both London and Carlisle.

(2)   *salute<m>*   There is no sign of the final *m*, nor indeed room for it; but since it was not sounded, it was liable to be omitted, a trivial 'vulgarism'. <WT185> is another example, but it does not happen in any of the Vindolanda letters. Adams (2003, 537) notes how rare the omission of final *-m* is at Vindolanda.

Line (2) is indented, as usual in letters, but after the space are traces preceding *salute(m)* which include the sequence *riss* immediately followed by another *ss*. It looks as if *carissimo* was written twice, whether it was residual from an earlier text, or corrected like *Taurinus*. There is no sign of *fratri*, which is often coupled with *domino*, but three Vindolanda letters likewise end with the invocation *domine karissime* (*Tab Vindol* 2, no. 288, ll 4–5; no. 355; *Tab Vindol* 3, no. 613, l 5), which conveyed respect (*domine*) as well as affection (*karissime*), to judge by its use in a wife's letter of thanks to her husband quoted by the *Digest* (24.1.57).

(3)   *recte esse*   In the first words of a letter, this phrase would be part of the conventional wish that one's correspondent should enjoy the same good health as oneself: cf *Tab Vindol* 3, no. 670.A.i, l 3 (with note), *scias me recte esse quod te inuicem facere cupio*. Adams (2003, 574), commenting on *Tab Vindol* 2, no. 311 and a letter from Lothbury (*RIB* 2(4), no. 2443.7, where he corrects *indicem* to *inuicem*; Table 13), sees it as a 'British' formula. Unfortunately the rest of the line is ill preserved, and the next line is almost entirely lost along the break.

(5)   *Catarrius*   Except for *c*, which has lost its upper curve, the reading is complete. By its position it is the subject of *uenerat*, and is apparently a personal name, although previously unattested. A derivation from the rare noun *catarrhus* ('catarrh') is inherently unlikely, so it is presumably derived from the Celtic name element *catu-* ('battle') which in many names became *Cata-* (Ellis Evans 1967, 67).

(6)   *[o]ccas{s}ionem*   This alternative spelling with geminated *ss* also occurs in *Tab Vindol* 2, no. 225, ll 5, 16, where Adams (1995, 89) notes that it was by now rather old-fashioned. <WT29> is contemporary, according to its archaeological context, unless the

legible text happens to be residual.

As already noted, *[o]ccas{s}ionem* is preceded by two letters (*ni* rather than *ae*), which are the genitive termination of a word at the end of the previous line, indicating what the opportunity was 'of'. After *non*, the reading is complicated by four descenders: two belong to *rr* in the line above, but the other two extend still further. The likeliest reading is *adii* (the second *i* being 'long'), followed by a space in which *s* did not register; the termination *ses* is clear and (if verbal) must be second-person. (6), as already suggested, is residual from an earlier text.

(7)   *iumenta*   Animals 'used for pulling or carrying' (*OLD*), whether horses, mules or bullocks. Cf *Tab Vindol* 2, no. 343, l 20 (their use by road for hauling wagons) and <WT45>, which refers to the transport of 20 'loads' (*onera*). One of the Uley (Gloucestershire) tablets is prompted by the theft of a *iumentum* (Tomlin 1993, 118, no. 1).

The second letter of *a<b>duxerat* looks somewhat like *b*, but the leftward return of the second downstroke is appropriate to *d*. The verb might be seen as *a<d>duxerat*, with a failure to geminate the *d*, but the context of 'loss' (cf *reficere non possum*) requires that the animals have been 'taken away', not 'brought' there. The writer either thought of the verb as *a-duco*, or simply confused *b* and *d*, and failed to write them both.

conpe<n>dia (with the nasal confused before a dental, rather like VERECVD for *Verecunda* in *RIB* 1, no. 821) is an economic term for 'profits' or 'savings'. Here it is apparently used in apposition to *iumenta*, in the sense of the means by which profits are made, 'investments' so to speak.

(8)   *messibus* is not to be taken literally as 'harvests', but is another 'vulgarism', *mensibus* ('months') with -*ns*- assimilated to *s*; cf *RIB* 1, no. 1248, *mesibus*. The geminated *ss* would then be a hyper-correction, like *messe(s)* in *RIB* 1, no. 377.

(9)   After *non possum*, the line is ill preserved except for the verbal ending -*eram*, and -*re* at the very end. *adfueram* can be fitted to the surviving traces; immediately following *possum*, it would begin a new sentence, in which Taurus explains why he was unable to prevent Catarrius from taking the animals.

[he]re   The second letter is unclear, but it might be read as *h*, prompting the conjecture that the first two letters were reversed, *ehre* being written by mistake for *here* ('yesterday'). This would give force to *superuenit unum diem* in (11): Catarrius arrived unexpectedly on the very day that Taurus was elsewhere, and stayed only for the day. Taurus was moved to write his letter of complaint to Macrinus the very next day.

(10)   *a[d D]iadumenum*   In this hand, *a* is difficult to distinguish from *r*, but the first letter is just like *a* in *quae* (6). The next letter is almost lost, but could be the junction of the two strokes of *d*. The sequence *iadumenum* is good, although complicated by an irrelevant (?residual) diagonal under *um*. The personal name *Diadumenus* is inescapable, therefore, even if its context is obscure. *ad* for *apud* is a frequent 'vulgarism', so this would seem to be a location, 'at (the house of) Diadumenus'. Cf *contra Catullu(m)* (<WT14>), 'opposite (the house of) Catullus'.

set   Monosyllables ending in *d* such as *ad*, *quid* and *sed*, waver in spelling between *d* and *t*.

Fig 9 offers a restored view of the inner face of <WT29> as the letter may have appeared when it was sent by Taurus to Macrinus, with traces of earlier (or corrected) text removed and missing text conjecturally reconstructed.

Letter-text, first line lost

<WT30> Silver fir; type 1 (Fig 69; Fig 70)
<7515>, [6777]; period 2 phase 1, OA2
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 127.4mm; H (58.7)mm; Th R 7.4mm; Th F 6.0mm.

On the outer (plain) face (Fig 69) in cursive letters, a short but complete address:

(1)   dabis Tito auia-
    rius
    .

You will give (this) to Titus …

(1)–(2)   There are fainter traces of unrelated letters (drawn in outline) which must belong to a previous address; thus it is difficult to tell whether the first letter of (2) is *r*, or *l* over traces of *a*.
For the use of *dabis*, see <WT1> (with note). The praenomen *Titus* is quite frequent as a cognomen, but *auiarius* is a puzzle. A patronymic or descriptive term might have been expected, but *auiarius* is in the nominative, not the genitive or dative. This is a rare word meaning 'poultry-keeper', but it is not found as a personal name; nor, for that matter, is ⋆*auialius* (which could just be read by regarding the downstroke of *r* as residual). Final *s* is very close to *u*, which might mean it is a correction; but supposing ⋆*auiaris* were a patronymic, it would be a name previously unattested. Perhaps the writer simply made a grammatical mistake, and should have written *Tito auiario* ('to Titus the poultry-keeper'), but the content of the letter suggests he was a financier.
Tito has been divided as if to respect the binding cord, but the second *t* actually coincides with the saw-cut. So it looks as if the tablets had not been bound up when the address was written, or possibly the saw-cut was made afterwards when two half-tablets were reused as a diptych (see note to <WT12>).
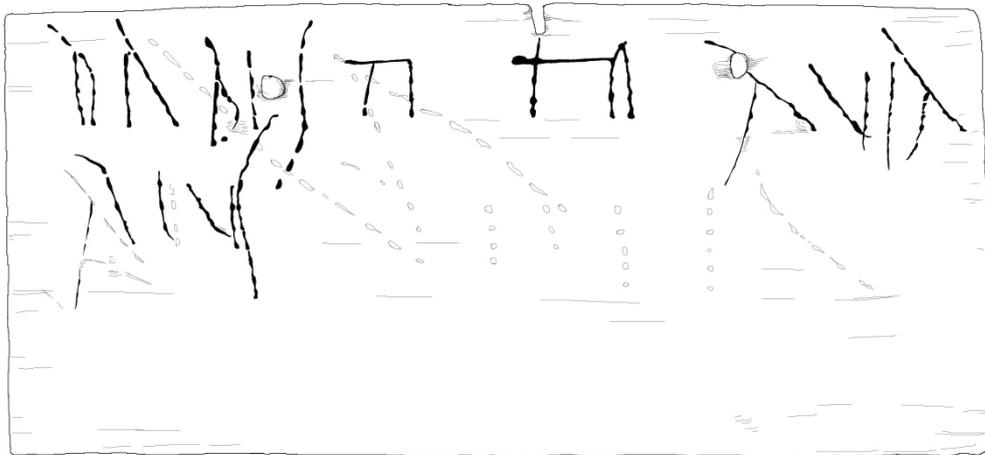
(continued)

<WT30>

Fig 69 Stylus tablet <WT30> (outer face), addressed to Titus (scale 1:1)

On the inner (recessed) face (Fig 70) are the last seven lines of a page, inscribed over traces of earlier text; the letters are best preserved in (1)–(2) and at the beginning of (3) and (4):

```
          .   .   .
(1)   quia per forum totum
      gloriantur se te faene-
      ras<s>e itaque te rogo tua
      causa ne tu turpis appar<e>-
(5)   as in ...cus non sic
      res tuas ?ama[bis]
      et put[a]s traces
```

… because they are boasting through the whole market that you have lent them money. Therefore I ask you in your own interest not to appear shabby … you will not thus favour your own affairs …

(1)   *per forum totum*   <WT30> is the only legible tablet from this early context (*c* AD 43–53), and the natural implication is that London had a marketplace (that on Cornhill). However, it is possible that the phrase is abstract ('the market', rather than a physical 'marketplace'), or that the writer is referring to the forum of another town, perhaps in Gaul, to which they both belonged.
(2)   *faenerare* is to lend money at interest, but with the two accusatives *se* and *te*, it is unclear who has lent money to whom, since the borrower should be in the dative. There is no parallel for the metaphor of lending a person ('you', in this case) as if he were a sum of money. Since to borrow money is more likely to be cause for 'boasting' than to lend it, *se* is probably a mistake for *sibi*, as if the writer first meant to write something like 'boasting … that they had deceived you'.
(3)–(4)   *tua causa*   For this idiom, cf Cicero (*Ad Fam* 16.3), *te valere tua causa primum volo, tum mea* ('I want you to be well, for your own sake, and then for mine').
(4)–(5)   *appar<e>as*   The writer was cramped for space, and perhaps his flamboyant *r* has eclipsed the *e*; alternatively he omitted it by mistake, or (most likely) he confused the verbs *apparere* and *apparare*.
(5)–(7)   These lines are badly preserved, with intrusive traces of previous text. At the beginning of (5), *as* is certain; but it would then be possible to read either *et* or *in*. At the end of the line, *non sic* may introduce a new sentence, perhaps continued by *res tuas ama[bis]* in (6): 'you will not thus favour your own affairs …'. But the rest is illegible, with the end of (6) being noticeably cramped. In (7), the sentence may end with *et put[a]s*, the faint traces thereafter belonging to a previous text. There is even a trace of three or four letters on the raised border, to the left of the hinge-hole.
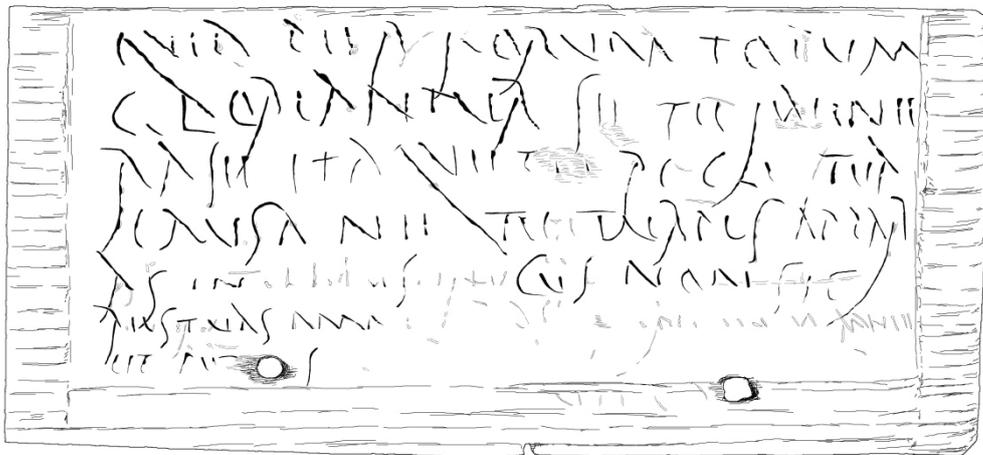
<WT30>

Fig 70 Stylus tablet <WT30> (inner face), with letter written over an earlier text (scale 1:1)

<WT31> Silver fir; type 1 (Fig 71; Fig 72)
<7522>, [6779]; period 2 phase 3 (late), OA12 phase 1
Incomplete, but preserving part of both sides, one of which has lost its raised border. W 127.0mm; H (44.0)mm; Th R 7.1mm; Th F 6.1mm.

On the outer (plain) face (Fig 71) in capitals, the last line of an address:

. . .
(1)   At<t>icus *uacat*

… (from) Atticus.

(1)   The sequence *aticus* is probably a misspelling of the name *Atticus* (cf <WT15> and <WT55>); for a Gallic example of *Aticus*, see *AE* 2000, no. 1848. It has also been reported for the samian potter Atticus i, but this is probably a mis-reading of AT ligatured (Hartley and Dickinson 2008a, 307). Less likely is the end of a longer cognomen such as *Asiaticus*. It is not the recipient's name, which would be in the dative, but that of his correspondent; cf <WT23> and <WT30>. A vertical line has been lightly scored down the middle of the face, perhaps as a guide to where the binding cord would go, but it is intersected by another at a diagonal.

<WT31>

Fig 71 Stylus tablet <WT31> (outer face), addressed to or from Atticus (scale 1:1)

On the inner (recessed) face (Fig 72) are good traces of four lines of text:

.   .   .

(1)   *traces*

rogo [te] per panem et sal-

em ut quam primum mit-

tas (denarios) uiginti sex in uictoriat(is)

(5)   et (denarios) decem Paterionis

.   .   .

… I ask you by bread and salt that you send as soon as possible the 26 denarii in victoriati and the 10 denarii of Paterio …

(1)   This is less firmly incised than the other four lines, and is complicated by descenders from above and extensive traces of previous text or draft. There are a few such traces elsewhere, but they are insignificant. It is evidently the end of a sentence, since another begins in (2).

(2)–(3)   *per panem et salem*   Except for the medical text cited below, this letter seems to be the first instance of an appeal 'by bread and salt', but the phrase was surely a cliché. According to the elder Pliny (*Nat Hist* 31.89), there was a proverb to the effect that 'the ancients' lived on bread and salt, but unfortunately he does not quote it. Proverbially it was the minimum needed to sustain life, to judge by Jerome's praise of Christian ascetics who ate nothing else (*Ep* 22.36; 24.3). 'Bread' and 'salt' also symbolise hospitality in many cultures, and the same may be presumed for the Romans, but the only allusion to this seems to be a spell against fever in the *Medicina* attributed to the younger Pliny (*Med* 3.15; Önnerfors 1964, 77–8), which tells the practitioner to wrap up bread and salt and tie it to a tree, then to recite three times 'by bread and salt' (*per panem et salem*) the words *crastino hospites mihi uenturi sunt, suscipite illos* ('Guests are coming to me tomorrow; welcome them').

It may therefore be conjectured that the writer has done the recipient a favour – the Roman equivalent of a free lunch at least – and is now requesting a return. Since he alludes to specific sums of money to which the other had access, it is likely that they were also partners. Cf *Tab Vindol* 2, no. 343, in which Octavius informs his 'brother' Candidus of various purchases he has made, and asks him to send money as soon as possible: *ita rogo quam primum aliquit (denariorum) mi mitte*.

(4)–(5)   The specific sums are 26 denarii held in the form of 52 quinarii (each one worth half a denarius) and the 10 denarii held by (*or* received from) Paterio. This is quite a common cognomen, but has not previously occurred in Britain.

The victoriatus was a Roman silver coin minted in the 2nd century BC for trade with the Greek world since it was equivalent to a drachma, and it remained a unit of reckoning in Cisalpine Gaul and the Rhône valley a century later, as the equivalent of the silver quinarius or half-denarius (Crawford 1974, 628–30). Although it was no longer minted, its name continued to be used as a term for the quinarius into the Empire, to judge by the treatise on measurement attributed to the Antonine writer Volusius Maecianus, which says that the victoriatus was worth one quinarius (*Dist* 45; Hultsch 1866, 66, 29–30, *victoriatus enim nunc tantundem valet quantum quinarius*), adding that the denarius was worth 16 *asses*, the victoriatus and quinarius eight *asses*, the sestertius four *asses* (*Dist* 47; Hultsch 1866, 67, 9–11, *nunc denarius XVI, victoriatus et quinarius VIII, sestertius quattuor asses valet*).

The coin is mentioned in *Tab Vindol* 2, no. 323, in the phrase 'three victoriati each' (*ternis uictoriatis*), but this may only be proverbial. A better parallel would be the mention of 'sending' victoriati in *Tab Vindol* 3, no. 694, *mittere uic[…]*; but this depends on restoring *uic[toriatos]*, not 'Victor' or a cognate name.

This letter was written in *c* AD 62–65/70, when no quinarii had been minted since the reign of Augustus (AD 14); minting was only resumed after the death of Nero (AD 68). Unless the letter belongs to the very end of this period and the coins were newly minted, it looks as if the writer or his partner had been deliberately withdrawing the rare examples they encountered in circulation, whether to serve as convenient 'small change' in silver, or as a store of value when Nero reduced the silver content of the denarius in AD 64 (MacDowall 1979; Butcher and Ponting 2011).
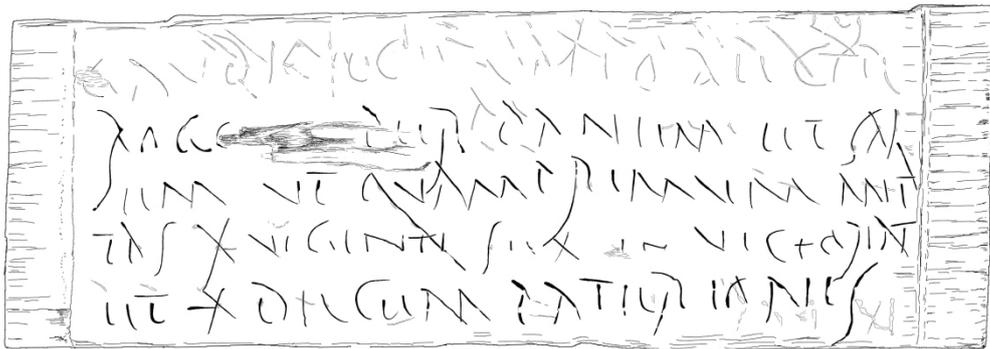
<WT31>

Fig 72 Stylus tablet <WT31> (inner face), with request that money be sent (scale 1:1)

<WT32> Silver fir; type 2 (Fig 73; Fig 74)
<4805>, [5301]; period 3 phase 1 (early), OA14
Incomplete, corner fragment broken at the seal-groove. W (80.0)mm; H (60.0)mm; Th R 10.0mm; Th F 5.7mm.

On the ungrooved face (Fig 73), traces of four lines of text, but the first two overlie traces of an earlier text (drawn in outline, but not altogether distinguishable):

.   .   .
(1)   ium *traces*
       traces r[…]
       don..[…]
       actum[…]

(1)   *ium*   Perhaps the beginning of the word *iumentum* ('beast of burden'); cf <WT29> (with note). But quite likely the end of a word in the previous line (cf <WT58>, ungrooved face, last line).
(2)   The letter *r* is aligned lower than the fainter traces to the left, so it may be the first letter of an indented line.
(3)   The first three letters are followed by what is possibly a medial point, which would imply an abbreviation (cf <WT71>), *don(…)*.
(4)   Initial *ac* is clear, and the other traces support a carelessly written *tum*. If so, this would have been the first word of the *actum* ('executed') formula, the rest of it now lost.

On the grooved face (Fig 74), a few traces: presumably the names of witnesses, the third of which apparently begins with *R*.
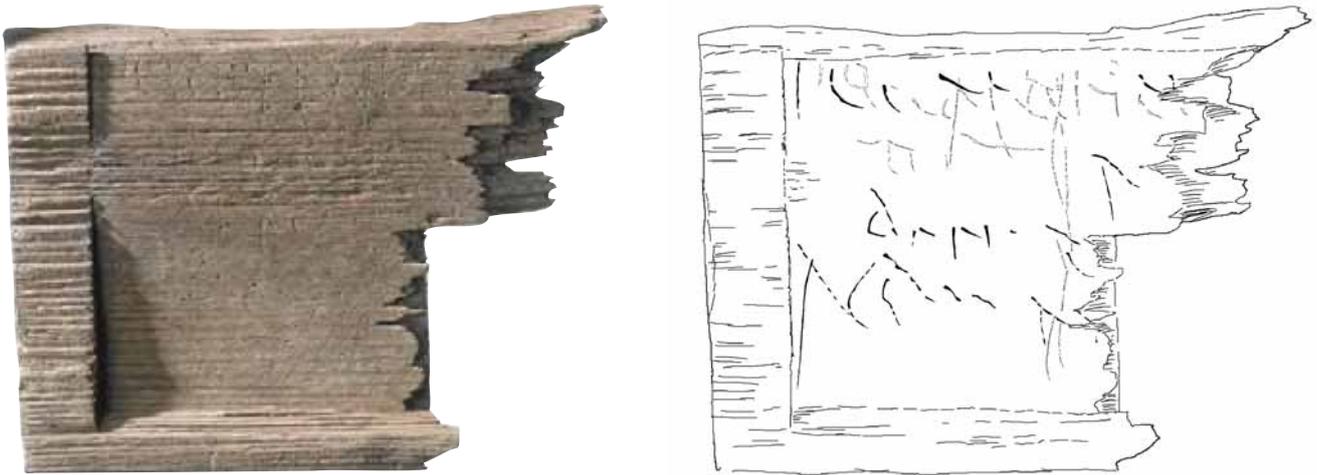
<WT32>

Fig 73 Stylus tablet <WT32> (ungrooved face), with text written over earlier text (scale 1:1)
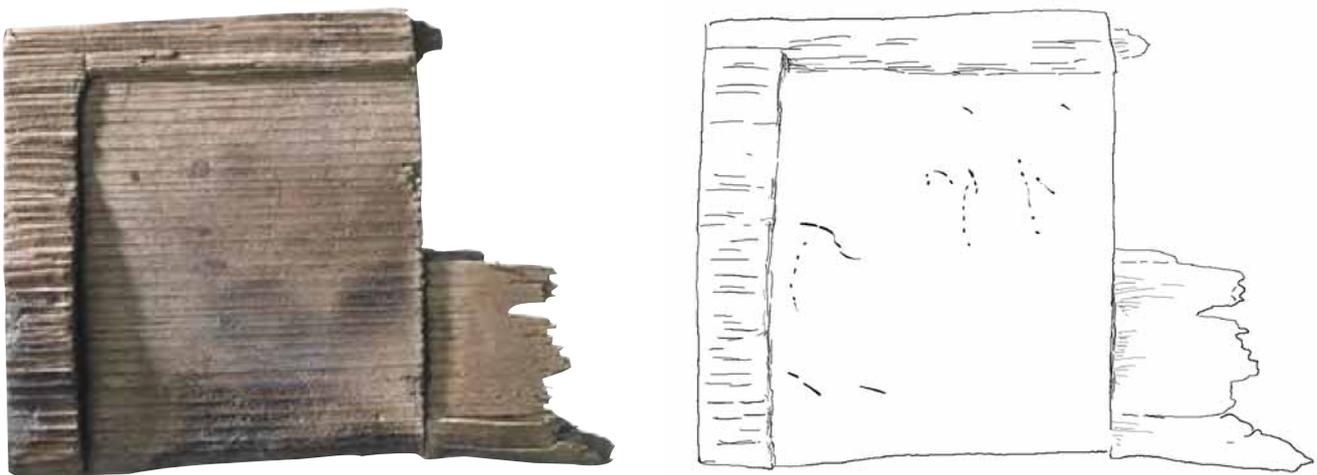
<WT32>

Fig 74 Stylus tablet <WT32> (grooved face), with traces of presumably witnesses' names (scale 1:1)

<WT33> Silver fir; type 1 (Fig 75)
<6398>, [6588]; period 3 phase 1 (early), OA14
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 136.4mm; H (44.0)mm; Th R 9.9mm; Th F 7.6mm.

On the inner (recessed) face are the last two lines of a page:

.   .   .

(1)   *traces*
        Classico praefecto c<o>hor-
        tis ui Neruiorum

… Classicus, prefect of the Sixth Cohort of Nervii.

(1)   *Classico* is dative or ablative, but the loss of the preceding text makes it impossible to determine which. The cognomen is not common, and the only equestrian officer noted by Devijver (*PME* 1, 'I' no. 46) is the Treveran noble Julius Classicus, who in AD 70 was commanding a cavalry *ala* when he joined the Batavian revolt. This would imply that he had previously commanded an auxiliary cohort, in the early AD 60s presumably, since a legionary tribunate would have intervened. He is thus probably the Classicus of <WT33>, especially since another Treveran noble, Julius Classicianus, had then just become procurator of Britain. Classicus, it has already been suggested (Wightman 1985, 68; Birley 2005, 304 n11), was his kinsman. It may now be further suggested that Classicianus recommended him for a commission in his new province. The archaeological context is dated *c* AD 65/70–80, which would make this tablet's legible text only just residual.

(1)–(2)   *c<o>hor|tis*   Intervocalic *h* was hardly sounded, so the first *o* tended to be lost; thus *cohortis* is quite often abbreviated to CHO, an early example being *RIB* 1, no. 121. For another instance of the form *c(o)hortis*, see *RIB* 1, no. 1898.

(2)   The Sixth Cohort of Nervii, as Holder (1982, 120) notes, is first attested by the diploma of AD 122 when it was already in Britain, where it remained until the end of the Roman period. There were *Nerviorum cohortes* in the army of Lower Germany by AD 69 (Tacitus, *Hist* 4.33), but they had only just been formed to replace cohorts withdrawn by Vitellius (ibid, 4.15). However, these may have included other Nervian cohorts, and there were probably some in the army of Upper Germany. <WT33> comes from the same archaeological context [6588] as <WT55>, which probably refers to a cohort of Lingones, and it may be suggested that both cohorts, like the Vangiones of <WT48>, were among the eight auxiliary cohorts from Germany which reinforced the garrison of Britain in AD 61 (Tacitus, *Ann* 14.38). Classicus (see note above) may even have accompanied the cohort from Germany. Unlike the Lingones and Vangiones, the Nervii are never recorded as part-mounted (*equitata*), so they cannot be the source of the cavalry implied by <WT61> and <WT62>.
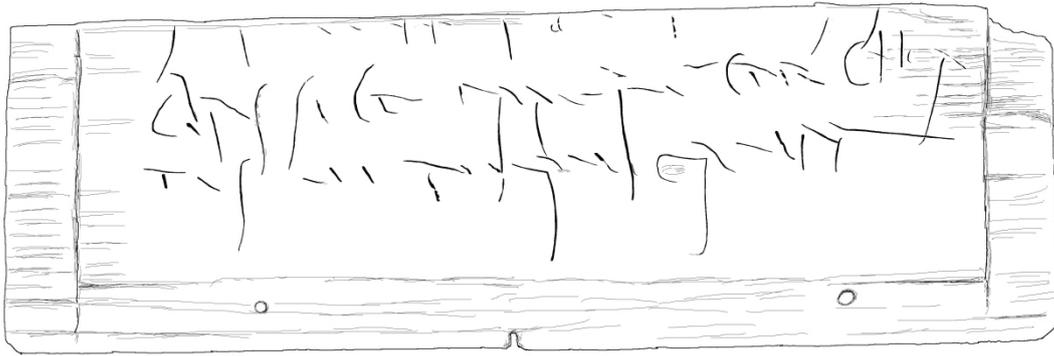
<WT33>

Fig 75 Stylus tablet <WT33> (inner face), … Classicus, prefect of the Sixth Cohort of Nervii (scale 1:1)

\<WT34\> Silver fir; type 2 (Fig 76)
\<4249\>, [5323]; period 3 phase 1 (early), OA15
Incomplete, but preserving part of both sides. W 142.0mm; H (39.0)mm; Th R 9.5mm; Th F 7.0mm; W seal-groove 24.3mm.

    On the ungrooved face:

     . . .

(1)   *traces*

    non est quidem

    ces..t potuit Frontin-

    us *traces*

     . . .

 … is not indeed … Frontinus was able …

(2)–(4)   This fragment is too slight really to be classified. Although the tablet is type 2, there is no hint of legal or financial language, so it has probably been reused for correspondence; cf \<WT39\> (with note).

(2)   There is no sign of the loop of *q* in *quidem*.

(3)   The first word begins with *ces* and apparently ends in *t*, which would suggest a finite verb, although *potuit* would require an infinitive. A second *s* cannot be read, but the traces would allow *cesuit* for *ce(n)suit* ('he supposed' or 'proposed'), with *ns* assimilated to *s*. However, the syntax of three verbs in two very short lines is difficult.

There is hardly a sign of the second, short diagonal stroke for *p*, but the sequence *-otuit* naturally suggests *potuit* ('he was able'). It is preceded by two converging diagonals which cannot be explained, unless they are casual or a crossing-out.
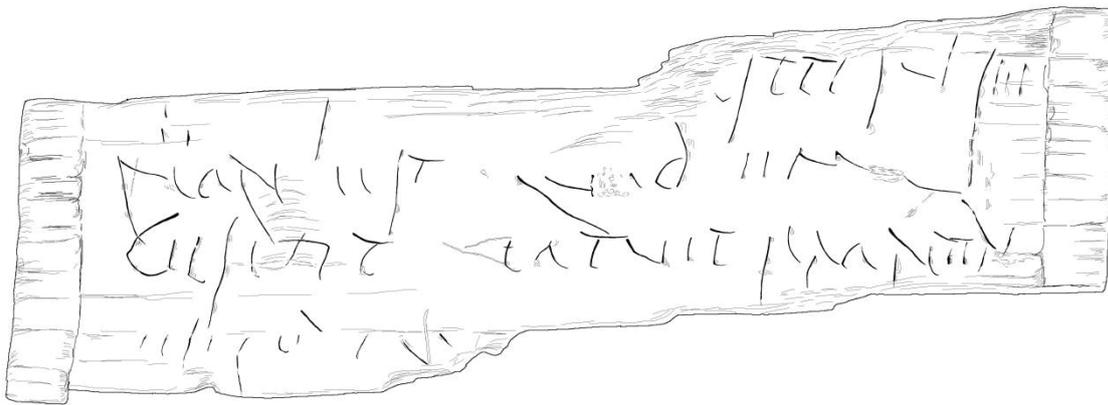
<WT34>

Fig 76 Stylus tablet <WT34> (ungrooved face), probably reused for correspondence and mentioning Frontinus (scale 1:1)

<WT35> Silver fir; type 2 (Fig 77)
<6290>, [6544]; period 3 phase 1 (early), OA15
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 140.7mm; H (90.3)mm; Th R 9.3mm; Th F 5.2mm; W seal-groove 25.0mm.

On the ungrooved face are extensive traces of text, not multiple but with many letters faint and incomplete. There are the ends of two lines of text, and a further five lines to the foot of a page:

```
           .   .   .
(1)    […] traces
       […] soluere
       traces [e]st non ?m<i>ratus tueri
       in eam (denarios) cc quos dedi arram
(5)    traces mittas mihi quod
       debes […]eris ...tere
       traces
```

… to pay … ?he was not surprised to watch over … for it 200 denarii which I have given (as) deposit … would you send me what you owe … you will …

(3)–(6)   The tablet is type 2, the use of which would imply a legal document, but the first-person *mihi* and the three second-person singular verbs are appropriate to a letter. For the reuse of type 2 in this way, cf <WT39> (with note).
The letter *a* is written with three strokes, the usual two diagonals followed by a short vertical; see *arram* (4) and *mittas* (5), where it is guaranteed by the reading. This form occurs in the Vindolanda tablets of *c* AD 100, where the editors consider it 'a survival of an older form' (*Tab Vindol* 2, 49 and 53, fig 1).
(3)   *[e]st non m<i>ratus tueri*   Only *st* is boldly inscribed, but there is a reasonable trace of what follows. The impossible sequence *mr* suggests that the scribe omitted *i* by mistake. But the difficulty of relating the phrase to its context leaves the reading in doubt.
(4)   There is no sign of the horizontal mid-stroke of the *denarii symbol* (cf <WT70>), but the context confirms it. The trace of the first *c* of the numeral is incomplete, and there is just possibly a third *c* before it, but the spacing supports *cc*.
For the payment of a deposit (*arram*) when making a large purchase, cf the letter from Octavius at Vindolanda (*Tab Vindol* 2, no. 343), especially lines 12–13, *quod arr(a)e dedi … (denarios) circa trecentos* ('what I gave as a deposit, some 300 denarii').
(5)   *mittas*   Perhaps *r[e]mittas* should be read, the first two letters widely spaced. There is no sign of *si* before it for a conditional clause, so the subjunctive would seem to be politely imperative ('would you send').
(6)   After *debes*, the sequence *eris* can be recognised, but not whether it is *eris* by itself ('you will be'), or *-eris* as a verb ending. The line apparently ends in an infinitive, for example *[pe]tere*.

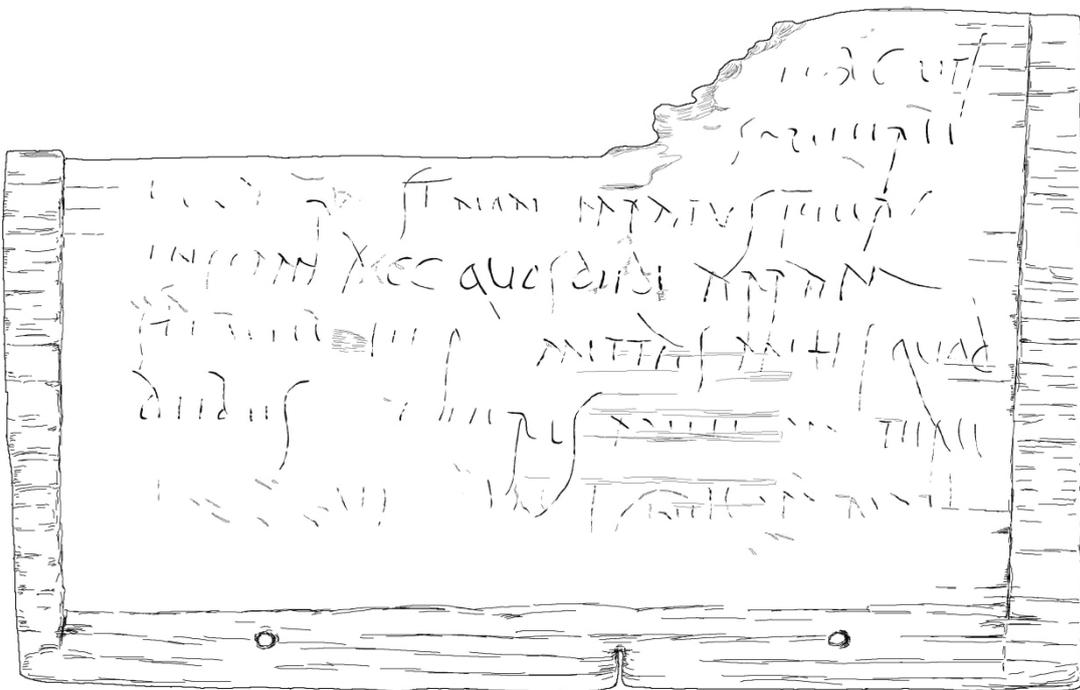The grooved face has been used, but almost no trace remains (not illustrated).

<WT35>

Fig 77 Stylus tablet <WT35> (ungrooved face), requesting money owed (scale 1:1)

<WT36> Silver fir; type 1 (Fig 78; Fig 79)
<6385>, [6567]; period 3 phase 1 (early), OA15
Incomplete, but preserving one end with saw-cut midway and part of both sides. W 134.0mm; H (23.4)mm; Th R 7.2mm;
Th F 3.7mm.

Unusually (cf <WT18>), a rectangular recessed panel has been excised from both corners of the outer (plain) face (Fig 78),
measuring 38 × 19mm at the left corner and 53 × 16mm (incomplete) at the right corner.

On the inner (recessed) face (Fig 79) are traces of the first line, probably ending in *caro* cut by *s* from the line below. This *s* is
isolated, raising the possibility that it was *salutem* abbreviated to its initial letter. The recipient would have been called *Carus* (a
common Latin cognomen) or a name which incorporated the frequent Celtic name element *caro-* (Ellis Evans 1967, 162–6) as a suffix.

<WT36>

Fig 78 Stylus tablet <WT36> (outer face), with a rectangular recessed panel excised at each corner (scale 1:1)

<WT36>

Fig 79 Stylus tablet <WT36> (inner face), addressing Carus or […]carus (scale 1:1)

<WT37> Silver fir; type 1 (Fig 80)
<7464>, [6567]; period 3 phase 1 (early), OA15
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 145.0mm; H (45.7)mm; Th R 6.7mm; Th F 5.7mm.

The end of one line, and five more lines, from the bottom of a page on the inner (recessed) face:

.   .   .
(1)   [… ad *or* in] ciuita-
    tem iix K(alendas) Ianuarias uenit
    Atigniomarus decau *traces*
    accipere et dicebat se <h>abere
(5)   abs te (denarios) ccc rite cum me
    rogabat *uacat*

… Atigniomarus came to the city on the 8th day before the Kalends of January (25 December) … he was saying that he is in receipt and has from you the 300 denarii properly. When he was asking me …

(1)–(2)   *ciuita|tem*   The 'city' would be London itself, if the letter were written there, which is quite likely but cannot be proved. It can only be dated by its archaeological context (*c* AD 65/70–80), but the lack of formal reference to London as a *municipium* or *colonia* (titles it lacked in AD 61, according to Tacitus, *Ann* 14.33) would be noteworthy.

(3)   *Atigniomarus*   Between initial *a* and *g* there are only two downstrokes, as the spacing confirms, so it is not possible to read the third letter as *e*. *Ategniomarus* (with *e*) is the form noted by Holder (1896), which has since been confirmed by another example (*AE* 1965, no. 28 bis). *Atigniomarus* would be an alternative spelling, which likewise incorporates the Celtic name element *maro-* ('great') (Ellis Evans 1967, 223).
The name is followed by the letters *decau*, but the rest of the line is lost. There is a slight space after *c*, which raises the possibility that *dec* is *dec(urio)* abbreviated: for other (military) decurions see <WT62> (with note). Alternatively, this is the place from which Atigniomarus has come, *de Cau[…]* or *de Ca[.]u[…]*, but the preposition *a/ab* would have been more correct.

(4)   The syntax of *accipere* is difficult, since it is followed by the conjunction *et* and a finite verb (*dicebat*). It would seem that *et* actually links *accipere* to *(h)abere*, and that both these infinitives depend on *dicebat*; they are often linked in formal receipts and the like, but as in <WT55>, the perfect infinitive *accepisse* might have been expected. *habere* is not aspirated; for another instance see <WT55>.

(5)   There is no sign of the horizontal mid-stroke of the *denarii symbol*, but this may not have registered in the grain (cf <WT45>).

(5)–(6)   *rite cum me | rogabat*   The reading looks good, but again the syntax is difficult. Which verb is qualified by the adverb *rite*? The word-order is no guide, but it makes better sense to suppose that the money has been properly 'received', than that he was 'asking' properly. At first sight the space after *rogabat* suggests the end of a sentence, but the clause *cum me rogabat* cannot easily be related to what has gone before. It makes better sense as the beginning of a new sentence, a sentence which the scribe could not continue since the line was sloping downwards and his next word would have hit the edge; so he continued it on the next tablet.
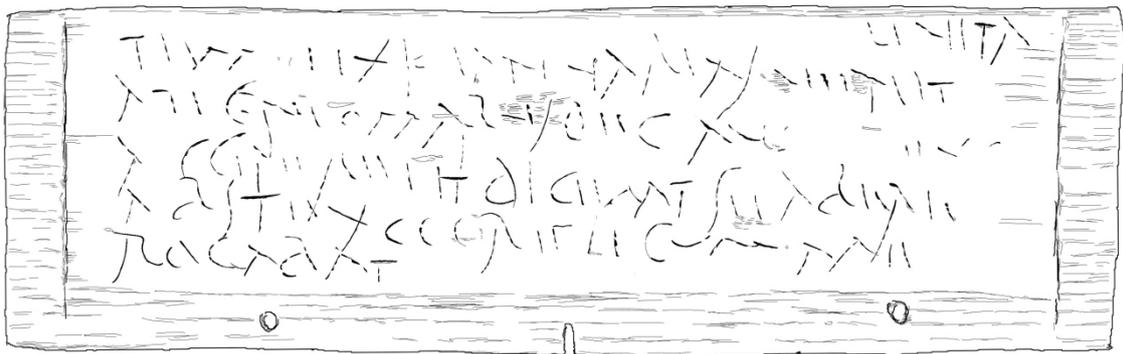
<WT37>

Fig 80 Stylus tablet <WT37> (inner face), reporting the visit of Atigniomarus to the city on 25 December (scale 1:1)

<WT38> Silver fir; type 1 (Fig 81)
<10141>, [6104]; period 3 phase 1 (late), OA22
Incomplete, but preserving one end with saw-cut midway enlarged into a V-notch, and part of both sides. W 147.0mm; H (46.0)mm.

A rectangular recessed panel measuring 38 × 15mm has been excised from one corner of the outer (plain) face (not illustrated).

On the inner (recessed) face are shallow but extensive traces, somewhat damaged by the ribbing of the surface. There are six lines of text, but two, (4) and (6), are only half-lines, and they are all crowded together, with the descenders of one line cutting the next:

    .   .   .

(1)   mal[..]m res id est ads[..]cer[.]i succurri
       traces
       fussum emerent ues *traces* [do-]
       mine f(rater), cum *uacat*
(5)   quibus quam primum uenient
       uacat   a Tincori[.]

… property, that is … to be helped … that they buy the *fussum* … lord brother, with which [*or* whom, *plural*] they will come as soon as possible from *Tincori[…]*

(1)–(2)   Although individual letters can be identified, the words they suggest remain in doubt.
(3)   *fussum*   The first letter is not *r* (the descender of which in this hand is straight or right-curving), but *f* like that in *f(rater)* (4) (see below), with the single second, diagonal stroke exaggerated by starting well to the left. This form is usual in the tablets (Chapter 2.3). *fussum* may be cognate with the problematic word *fussa* (ablative singular) in *Tab Vindol* 3, no. 645.i, l 7, where its meaning is discussed by the editors; they note that *fusus* can mean a 'spindle' and other winding mechanisms, but alternatively may qualify 'grain', for example *hordeum fusum* (Varro, *Re Rust* 2.4.20), 'barley poured out'. This interpretation is preferred by Adams (2003, 556–7).
emerent is imperfect subjunctive, suggesting there was *ut* somewhere in (2), the reference being to the purpose of 'their' journey.
(4)   *[do]|mine f(rater)*   There is no sign of *do-* at the end of (3), but there is damage here and a medley of letters. The adlocution *domine frater* ('lord brother', equivalent to 'My dear Sir') is frequent in letters between equals, especially as part of the closing salutation, but there is no other instance of the vocative *frater* being abbreviated to its initial letter. Cugusi notes three late 4th-century AD letters in which the two-letter abbreviation *fr(atri)* (dative) has been tentatively read (*CEL* 1, nos 231–3), but the still more extreme abbreviation of *frater* here in <WT38> suggests unusual intimacy or, more likely, a copy or draft kept for reference. Line (4) ends halfway with *cum*, apparently to avoid the downward slope of (3).
(5)   *a Tincori[.]*   The context requires a place name, but ⋆*Tincori[a]* or ⋆*Tincori[um]* is otherwise unattested. It would be formed from the *Tinco-* element found in the personal names *Tincorix* (*ILS* 3(2), no. 9311) and *Tincomarus* (Commius' successor as king of the Atrebates), an element discussed by Cheesman (1998, 313). *Tincori* is apparently complete, but there is some surface loss after the second *i*, and ample space for *a* or *o*. Either would make a more feasible ablative ending, and would also suggest the *coria/corium* name element, for which see Rivet and Smith (1979, 317–19, under *coria*).
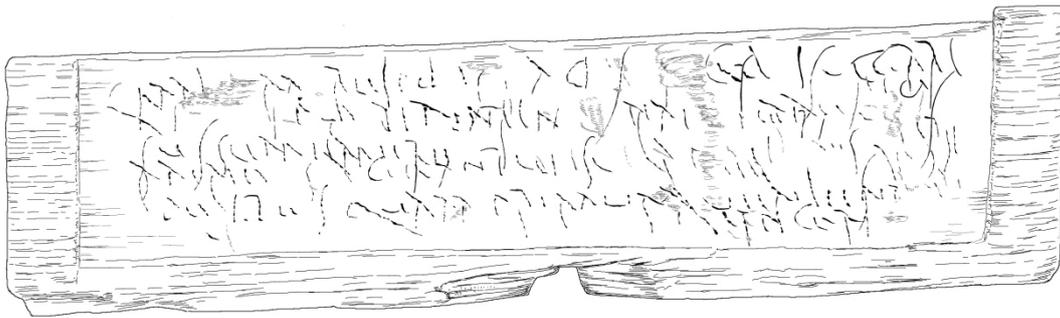
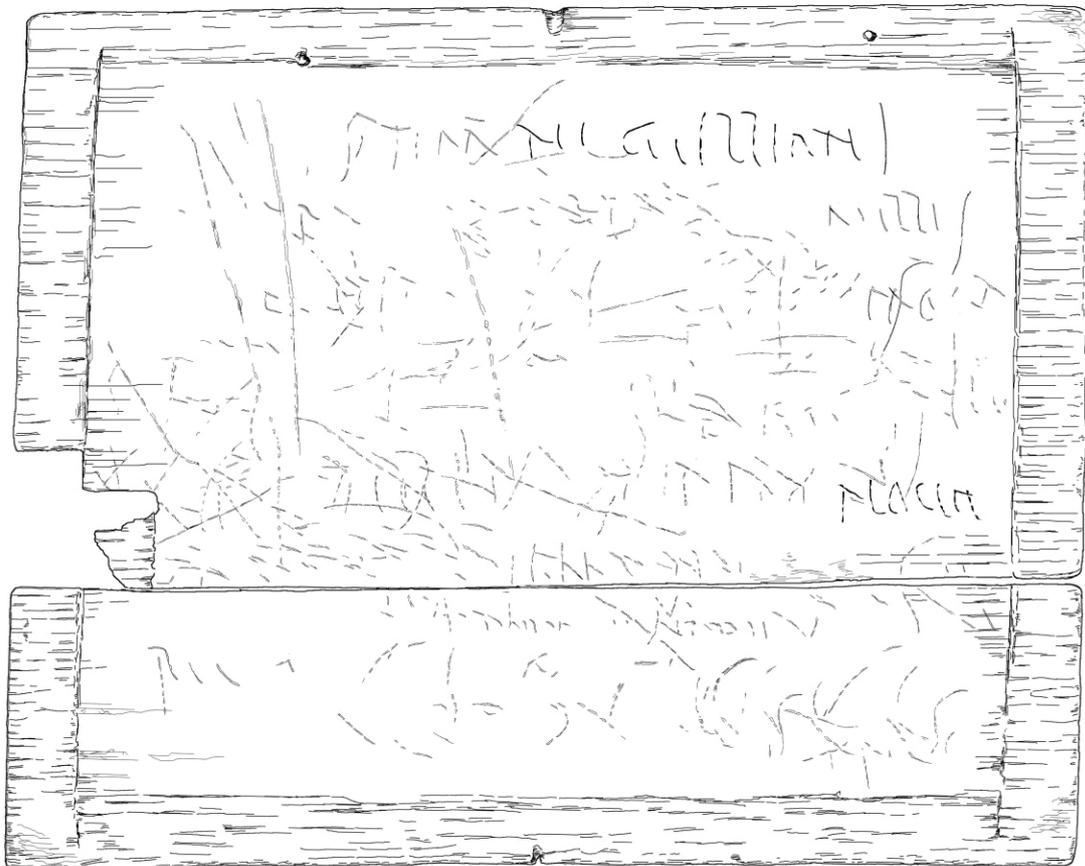<WT38>

Fig 81 Stylus tablet <WT38> (inner face), with letter regarding property (scale 1:1)

<WT39> Silver fir; type 2 (Fig 82)
<6368>, [6538]; period 3 phase 1 (late), OA22
Incomplete, but preserving half of one end (broken at the saw-cut with one hinge-hole remaining) and part of both sides.
W 136.7mm; H (58.0)mm; Th R 11.5mm; Th F 7.9mm.

On the ungrooved face are five lines of text:

(1) *traces*
     erat in Icenis castello
     ?Epocuria eamque *traces*
     in se recepit Iulius Suavis
(5) ... neque se ...
     . . .

… was in (the canton of) the Iceni at the fort of ?Epocuria, and Julius Suavis has accepted it for himself … nor he …

(1)–(5)   The tablet is type 2, but this seems to be part of a letter, not a legal document. It was evidently reused for the purpose, like one at Vindolanda (Bowman and Tomlin 2005, 9–10) and two at Vindonissa (Speidel 1996, nos 4, 26). Cf <WT8> (type 1, but evidently a reused loan-note), <WT26>, <WT35>, and perhaps <WT34> (correspondence) and <WT70> (an account). Not surprisingly, there are traces of previous text, notably at the beginning of (4). The long descenders of one line complicate the next, but a greater difficulty is that of distinguishing between *a*, *o*, *p* and *t* if incomplete, since they were all made with two converging strokes.

(1)   The traces are extensive, but cannot be resolved into words or anything that connects with the next line. After descenders which could be read as *ruris*, the word *dicunt* seems clear, except that the downstroke of *t* is ill preserved and its horizontal is ligatured to a long descender (*i*, presumably), which would suggest that it belonged to the same word. The line ends in *s*, and probably -*rius*.

(2)   *erat*   The subject is lost, but the demonstrative *eam* (3) probably refers to it, unless a masculine subject lies concealed in (1). Next the sequence *inicenis* is quite bold, and a reference to the Iceni is inevitable. The 'fort' would be a post garrisoned in the aftermath of the Boudican revolt (AD 60/1), but the archaeological context (*c* AD 80–90/5) is little help here. The final letter of *castello* is little more than a short downstroke, but there is a trace of a second stroke appropriate to *o*. Its name follows in the next line.

(3)   *Epocuria*   The sequence *curia* is preceded by three letters difficult to distinguish from each other, but *epo* is a reasonable reading. Both ⋆*epo–s* ('horse') and *curia* (defined by Rivet and Smith (1979, 318), as 'court, ward, assembly' or 'centre of a *pagus*') are well-attested place name elements, but there is no instance of their being combined. Still, the combination is plausible, and hardly any place names are known from the canton of the Iceni. The word after *eamque* is illegible.

(4)   There are traces of two texts at the beginning of this line, perhaps because a first draft was erased. They are difficult to disentangle, but the letter spacing and alignment support the reading *in se recepit*, of which the individual strokes are quite good. Julius Suavis is otherwise unknown, but the reading looks good and provides a subject for *in se recepit*.

<WT39>

Fig 82 Stylus tablet <WT39> (ungrooved face), letter referring to the fort of ?Epocuria in (the canton of) the Iceni, and one Julius Suavis (scale 1:1)

<WT40> Silver fir; type 1 (Fig 83)
<6370>, [6538]; period 3 phase 1 (late), OA22
Almost complete, in two conjoining pieces. There is a saw-cut midway in both ends, one of them between hinge-holes. W 138.3mm; H 112.5mm; Th R 5.0mm; Th F 4.6mm.

In the middle of the outer (plain) face is a zigzag, too faint to be part of an address, which might be read as the letter N, 40mm high (not illustrated).

On the inner (recessed) face are extensive but faint traces of nine or ten lines of text which are multiple and complicated by many irregular scored lines, perhaps crossings-out. In consequence it is illegible except for the end of the first line, and a few other letters:

(1)   *traces* Nigellioni
       traces of eight or nine lines

… to Nigellio …

(1)   *Nigellio* is well attested as a cognomen. Its position at the end of the first line in the dative would suggest that this is a letter 'to Nigellio', but since the previous word apparently ends in *m*, it cannot be the writer's name in the nominative. Nor does (2) end in *salutem*.
(?6)   In the bottom right corner of the larger fragment, *nocet* ('does harm') can be read.
(?9)   In the smaller fragment, one line begins with *re-*, which suggests a compounded verb such as *recipere*.

<WT40>

Fig 83 Stylus tablet <WT40> (inner face), letter referring to Nigellio (scale 1:1)

<WT41> Silver fir; type 1 (Fig 84)
<6373>, [6538]; period 3 phase 1 (late), OA22
Incomplete, but preserving one corner. W (106.0)mm; H (42.0)mm; Th R 5.9mm; Th F 4.9mm.

On the inner (recessed) face, part of five lines of text, from the bottom right corner of the page:

      .   .   .
(1)   […]maẹ .[…].s
      traces
      […]promisi siṭ tiḅi curae
      […]equus homineṃ inuenire
(5)   *traces*

… I have promised should be your responsibility … man … to find …

(2)–(3)   There is a trace of lettering between (2) and (3), but its different quality and the spacing of the lines indicate that it belongs to a previous text. There seem to be previous traces elsewhere, but they are difficult to distinguish.
(2)   A possible sequence is *esse*, the infinitive ('to be') of *sum* or of one of its compounds.
(3)   The second-person *tibi* suggests that this is a letter rather than a legal document.
(4)   The reading is good, assuming the final *m* of *hominem* was made carelessly, but the sense has been lost with the verb which governed *inuenire*. The sequence *equus*, unless it is the end of *[a]equus* ('balanced'), contrasts neatly with *hominem*, but the idea of 'horse' finding 'man' is puzzling.

<WT41>

Fig 84 Stylus tablet <WT41> (inner face), letter text, 'I have promised …', written over an earlier text (scale 1:1)

<WT42> Silver fir; type 1 (Fig 85)
<5170>, [4792]; period 3 phase 1 (late), OA34
Complete, with saw-cut midway in both ends and two hinge-holes in the bottom end. W 138.5mm; H 110.0mm; Th R 8.5mm; Th F 5.7mm.

The inner (recessed) face is damaged and worn, and the alternating bands of softer grain have been lost; the original surface survives only at the very bottom. The surviving traces belong to two different texts, to judge by the different widths of cut. A few letters are recognisable, for example *per* at the end of the first line, the sequence *inari* at the end of the penultimate line, and *de* at the very end, but no continuous text. Like the following item, it cannot really be classified.

<WT42>

Fig 85 Stylus tablet <WT42> (inner face), a complete tablet but with no legible continuous text (scale 1:1)

<WT43> Silver fir; type 1 (Fig 86)
<6339>, [6092]; period 3 phase 1 (late), OA34
Incomplete, in two conjoining fragments preserving one end with saw-cut midway and hinge-holes, and part of both sides.
W 132.5mm; H (56.6)mm; Th R 8.2mm; Th F 8.2mm.

    The inner (recessed) face is ribbed and worn, and has been used more than once. Despite confusing previous traces, some letters can be identified, but others (drawn in outline) are incomplete and ambiguous:

     . . .
(1)   *traces*
       ... uris ver...
       traces
       traces uris
(5)   ... item murus
       puer et illu<m> in re

(2)–(6)   The sequence *uris* occurs twice, and words can be recognised in (5)–(6), but they make no sense, so the reading is uncertain. *puer* (6) is probably an informal term for 'slave'. This fragment cannot really be classified, like the preceding item, but since it does not seem to be financial or legal, it has been included with 'Correspondence'.

<WT43>

Fig 86 Stylus tablet <WT43> (inner face), with little legible other than puer *(slave) (scale 1:1)*

4.2   Financial or legal documents

Dated documents

<WT44> Silver fir; type 1 (Fig 87)

<7499>, [6749]; period 2 phase 2, S5

Incomplete, but preserving one end with a wide V-notch midway between two hinge-holes, and part of both sides. W 137.3mm; H (56.2)mm; Th R 7.6mm; Th F 4.6mm.

The text is not multiple except for a few corrections or traces of earlier draft (noted below), and is unusually well preserved:

(1)   Nerone Claudio Caesare Augusto
                Germanico ii L(ucio) Calpurnio Pisone
        uacat   co(n)s(ulibus) ui Idus Ianuarias   *uacat*
        Tibullus Venusti l(ibertus) scripsi et dico me
(5)   debere Grato <S>puri l(iberto) (denarios) cu ex{s} pretio
                mercis quae uendita et tradita <est>
                quam pecuniam ei reddere debeo
                eiue ad quem ea res pertinebit

        .   .   .

In the consulship of Nero Claudius Caesar Augustus Germanicus for the second time and of Lucius Calpurnius Piso, on the 6th day before the Ides of January (8 January AD 57). I, Tibullus the freedman of Venustus, have written and say that I owe Gratus the freedman of Spurius 105 denarii from the price of the merchandise which has been sold and delivered. This money I am due to repay him or the person whom the matter will concern …

(continued)

<WT44>

Fig 87 Stylus tablet <WT44> (inner face), wherein on 8 January AD 57 Tibullus, the freedman of Venustus, writes that he owes Gratus, the freedman of Spurius, 105 denarii … (scale 1:1)

(1)–(8)   Down the left margin runs a zigzag line (alternating horizontals and diagonals, like '7' repeated), which begins below *Nerone* (1) and avoids *Tibullus* (4). This suggests that it was added afterwards, but its function is unknown; it may even be scrawled lettering. (1) and (4) extend leftward, to mark the beginning of new sentences. (3), which completes the date, is centred.

(1)–(3)   The date is neatly matched by the archaeological context, which is pre-Boudican (*c* AD 53–60/1). This is the earliest dated document from London, ante-dating the Boudican destruction by at least three years, and written less than 14 years after the Roman invasion. It supports Tacitus' (*Ann* 14.33) characterisation of London then being 'very full of businessmen and commerce' (*copia negotiatorum et commeatuum maxime celebre*).

(2)   As in <WT51>, the iteration-number of the consulship is marked by a suprascript bar, but not the date-numeral in (3).

(3)   *ui*   The date-numeral consists of three downstrokes, the first two of which trend to the right; this would suggest VI ('6') rather than III ('3') or IV ('4'). It is immediately preceded by what appears to be *f* or *s*, presumably deleted, unless the scribe wrote *coss* for *consulibus*; but the space after the first *s* makes this unlikely.

(4)   *Tibullus*   The reading is quite clear, but there seems to be no other instance of this cognomen except for the poet himself. However, slaves often received a fanciful name which they retained as freedmen, and perhaps the master (and now patron) of Tibullus had literary tastes. Since he is identified by his cognomen, *Venustus*, not his praenomen like the master and patron of Gratus (5), he was probably not a Roman citizen. If not, he cannot be identified with M(arcus) Rennius Venustus of <WT45>. The *n* of *Venustus* is written over *s*, which must have been deleted as a mistake.

(4)–(5)   *scripsi et dico me | debere*   The phrase is formulaic: cf <WT53> and the Carlisle loan-note of AD 83 (Tomlin 1992), *scribsi me debere*, where other instances are cited.

(5)   The third *e* of *debere* coincides with another *s* (deleted). Conversely there is no sign of the expected *s* of *Spuri*, but *puri* (the genitive of *Purus*) can hardly be read, since *Purus* is almost unknown as a cognomen. Since there is hardly room for *s*, and this is a letter which survives well, it seems to have been omitted by mistake, rather than failing to register. Freedmen are regularly identified by their former master's praenomen, if he was a Roman citizen, and a number of *Spuri liberti* are known.

The two freedmen may have been independent businessmen, but it is quite likely that they were acting as agents or partners of their patrons (and former masters); cf <WT27>. For this relationship, see Andreau (1999, 64–70).

The numeral *cu*, like the date-numeral in (3), is not barred. It is touched by a diagonal score which runs from (4) to (7), which is probably casual; if it were a cancellation, it would be one of several.

exs   The intrusion of *s* after *x* to reinforce the [ks] sound is frequent in British Latin (Smith 1983, 919–20); for other instances see <WT45> and <WT67>.

(6)   After *mercis* are extensive traces of a previous draft, which was probably … *quam uendidit et tradidit* ('which he has sold and delivered'), the subject being Gratus. The writer then chose the passive construction instead, but omitted *est* by mistake.

(7)   Above *reddere* are traces of a previous draft, apparently the letters *ce…*

(8)   The broken edge has removed the lower half of most of the letters, but the phrasing is formulaic (in *FIRA* 3, no. 122, it is even reduced to its initial letters), so the reading is not in doubt. For other examples see <WT54> and <WT55>; and, also from London, ones from Lothbury (*RIB* 2(4), no. 2443.15; Table 13) and 1 Poultry (Tomlin and Hassall 2003, 373‑4, no. 22; Table 13), with Camodeca (2006).

<WT45> Silver fir; type 1 (Fig 88)

<6356>, [6491]; period 2 phase 3 (early), S36

Incomplete, in three conjoining fragments preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 142.0mm; H (81.0)mm; Th R 7.4mm; Th F 4.2mm.

    On the inner (recessed) face:

(1)   P(ublio) Mario Ce<lso> L(ucio) Afinio Gallo co(n)s(ulibus) xii Kal(endas) Noue'mbr(es)'

    M(arcus) Renn[iu]s Venustus me condux{s}isse

        a C(aio) Valerio Proculo ut intra

        Idus Nouembres perferret a [[Londi]]

(5)   Verulamio penoris onera uiginti

        in singula (denarii) quadrans uecturae

        ea condicione ut per me mora

        (asses) i Londinium quod si ulnam

        om[n]e[m] *traces*

      .   .   .

In the consulship of Publius Marius Celsus and Lucius Afinius Gallus, on the 12th day before the Kalends of November (21 October AD 62). I, Marcus Rennius Venustus, (have written and say that) I have contracted with Gaius Valerius Proculus that he bring from Verulamium by the Ides of November (13 November) 20 loads of provisions at a transport charge of one-quarter denarius for each, on condition that … one *as* … to London; but if … the whole …

(1)   The consular date is certain, but instead of writing *Celso*, the scribe wrote *Cexiii*. He was apparently anticipating the day (but as xiii, not xii), but although he then wrote the other consul's name correctly, there is no sign that he corrected his mistake. Reaching the end of the line with *noue*, he interlineated *mbr(es)* below the line, for the abbreviated *Nouembr(es)*.

(2)   *condux{s}isse*   For the intrusion of *s* to reinforce the [ks] sound of *x*, see <WT44> (with note). The perfect infinitive is puzzling, since *M(arcus) Renn[iu]s Venustus* (nominative) requires a finite verb. The scribe seems to have omitted it by oversight, intending to write something like *M(arcus) Rennius Venustus scripsi et dico me conduxisse* (cf <WT44>), but slid over the conventional phrase. It would not be his only slip: see notes to (1), (4) and (6).

The date is neatly matched by the archaeological context, which is immediately post-Boudican (*c* AD 60/1–62).

(4)   *intra*   For the use of this preposition in a commercial context, as introducing the date 'within' which payment is due, cf *Tab Vindol* 2, no. 343, ll 33–4, *intra K(alendas) Martias*. <WT46> is probably another instance.

a [[Londi]]   There is a space before and after *a*, which confirms that it is a preposition ('from'), and not the beginning of the next word. This was undoubtedly written as *lond*, meaning that the scribe started to write *Londinio* instead of *Verulamio*, realised his mistake, and deleted it; this deletion, which would have amounted only to smoothing out the wax, left no mark on the wood. The scribe could then see that he would not have space for *Verulamio* (and elsewhere is disinclined to divide words between lines), so he postponed it until the next line.

(continued)

<WT45>

Fig 88 Stylus tablet <WT45> (inner face), wherein on 21 October AD 62 Marcus Rennius Venustus writes that Gaius Valerius Proculus is to bring from Verulamium to London, by 13 November, 20 loads of provisions … (scale 1:1)

(5)   *Verulamio*   Now St Albans, Hertfordshire. This *municipium*, as it is called by Tacitus (*Ann* 14.33), like London, whose status he leaves uncertain, was sacked in the Boudican revolt with the loss of 70,000 lives, a disaster he relates under the year AD 61 (*Ann* 14.29). This date was reasserted by Carroll (1979), but most scholars have preferred the earlier date of AD 60 (Birley 2005, 43–52), and this new document supports their argument by showing that both cities were active again as soon as October AD 62; it is striking evidence of their rapid recovery within little more than two years.

penoris onera uiginti   The size of the 'load' is not specified, whether it was by wagon (cf *Tab Vindol* 2, nos 316, 343; *Tab Vindol* 3, no. 649) or by pack-animal. For the use of *iumenta* ('beasts of burden'), cf <WT29>. Since payment was by load, and only in part apparently, with full payment being withheld until the contract was complete (see below, (7)–(9)), it would seem to be quite a small-scale operation: more like one man driving a wagon to and fro, than a string of pack-animals. Just over 20 days (22 in fact) are allowed for it, which might imply one load a day.

penus is unspecifically '(household) provisions', whence the derived adjective *penuarius* as a grade of the fish-relish (abbreviated to *COD*) imported from Spain.

(6)   The *denarii symbol* is a bold 'X' quite different from *x* in this hand. The horizontal mid-stroke is missing, probably because it coincided with an alternating band of hard grain; cf <WT37>.

(denarii) quadrans   The final *s* coincides with another letter, and is followed by two incomplete strokes. It looks as if the scribe began to write *uecturae* too soon, and corrected himself; the traces do not support an alternative reading of *quadrantem*. The basic meaning of *quadrans* is 'one-quarter', and it was thus applied to weights and measures such as the 'pound' (*libra*), 'pint' (*sextarius*) and 'acre' (*iugerum*). Here in <WT45>, where it is preceded by the *denarii symbol*, it evidently means one-quarter of a denarius (the coin), the equivalent of four *asses*. This seems to be the first instance of *quadrans* in this sense being spelt out, but many Vindolanda accounts specify *(denarii) (quadrantem)*, abbreviating *quadrantem* like *denarii* to a symbol (see in particular *Tab Vindol* 2, nos 185, 193, with 54–5; and cf <WT70> (3) and <WT72> (5)).

Quadrans is used absolutely to denote a very small coin, the quarter-*as*, but the monetary denomination is never made explicit as it is here. To charge one quarter-*as* for a day's work by a driver, wagon and draught animals, when a soldier earned 10 *asses* a day (Tacitus, *Ann* 1.17), 40 times as much, would be absurd. But even if the term *quadrans* seems ambiguous to us, the writer preferred it to *sestertius*, the brass coin equivalent to four *asses*.

uecturae is rather incomplete, but there are sufficient traces, besides its being demanded by the context. There is just a trace of final *e*,

as if dative rather than ablative. The term is also used in *Tab Vindol* 3, no. 649.ii, l 13 in the sense of 'carriage-moneys' (for which see the editors' note, and Adams 2003, 560).

(7)–(9)   These are difficult because the tablet is broken across (9), and the meaning of the last words in (7) and (8) is unclear. The payment of four *asses* per load is immediately qualified in some way, the 'condition' (*ea condicione*) which is to be met involving the sum of one *as* ((8), below). Unfortunately the preceding words at the end of (7), although they can easily be read as *per me mora* (literally, 'through me delay'), make no sense. There may be a trace of one more letter, perhaps *t*, but the *a* is exaggerated as if to mark the end of the line, like the *a* of *intra* in (3). The termination *-at*, however, would suggest a verb in the subjunctive, as would be expected in a clause introduced by *ut*. Otherwise there is no verb. The next clause is introduced by *quod si* ((8), 'but if'), and must therefore envisage a change of circumstances, most likely the fulfilment of the condition just mentioned. This is suggested by the reference to 'the whole' of something ((9), *om[n]e[m]*), but the preceding word, which certainly looks like *ulnam* ('elbow'), also cannot be interpreted; a word meaning 'consignment' might be expected.

(8)   *Londinium* is damaged by the break after *d*, but the reading is clear. The locative might have been expected, but the accusative would indicate the place 'to' which delivery was made, understanding the preposition *ad* which, despite *a Verulamio* in (4)–(5), might be idiomatically omitted before a place name (cf Suetonius, *Augustus* 86).

Londinium is preceded by two vertical strokes, the first of which is met by a short horizontal; since another subdivision of the denarius has just been mentioned, they are easily understood as the *asses*-symbol followed by the numeral '1'. This symbol, 'a longish vertical which slants to the right and has a short, more or less horizontal tick placed centrally to the left', occurs five times in a Vindolanda account (*Tab Vindol* 2, no. 186; see further ibid, 54).

The evidence is incomplete, therefore, but suggests that only three *asses* were to be paid at once for each load, the balance of one *as* being retained until 'the whole' of the 20 loads had been delivered. No doubt a reference was added to the deadline of 13 November, *intra diem s(upra) s(criptam)* or similar. Only when the contract had been duly completed, would the remaining 20 *asses* be paid, amounting to a lump sum of one and a quarter denarii.

The various omissions and errors suggest that this document has been copied. If it was the copy kept by Valerius Proculus, who after all had the greater need of recording the moneys due to him, its survival in London would suggest that this was where he based his transport business (*uelatura*), not in Verulamium.

<WT46> Silver fir; type 1 (Fig 89)
<6404>, [6594]; period 3 phase 1 (early), OA14
Incomplete, but preserving one end with a slight notch midway but only one hinge-hole (there were never two) and part of both sides. W 121.6mm; H (28.0)mm; Th R 4.5mm; Th F 3.3mm.

    The inner (recessed) face was reused but, unusually, the sharp cuts made by the last stylus can be distinguished from the extensive traces of previous text (drawn in outline):

      .   .   .

(1)   Idus Februarias *uacat*

… ?by the Ides of February (13 February).

(1)   It looks as if the text ended here, despite a medley of fainter letters in the rest of the line; they surely belong to the previous text. There is no sign that the day date was followed by a consular date, as the *actum* ('executed') formula would require, and indeed there is far too little space. The accusative of *Idus* may mean that the previous line concluded with a numeral, but *intra* seems more likely, the Ides being chosen as a deadline (cf <WT45>, *intra idus Nouembres*).

<WT46>

Fig 89 Stylus tablet <WT46> (inner face), noting ?by 13 February … (scale 1:1)

<WT47> Silver fir; type 1 (Fig 90)

<5166>, [2928]; period 3 phase 1 (early), OA134

Incomplete, but preserving part of one side. W (83.0)mm; H (18.0)mm; Th R 9.8mm; Th F 8.2mm.

On the inner (recessed) face remains of two lines of text:

.   .   .

(1)   *traces*

[…] Nonis Octobr[i]bus

.   .   .

… on 7 October …

(2)   Since it is in the ablative case, and not the accusative (with a numeral or perhaps *intra*), this day date is complete. But even if <WT47> is part of a financial or legal document, it is too slight to tell whether it belongs to the dated heading, or to the *actum* ('executed') formula at the end.

<WT47>

Fig 90 Stylus tablet <WT47> (inner face), noting 7 October … (scale 1:1)

<WT48> Silver fir; type 1 (Fig 91)

<6278>, [6485]; period 3 phase 1 (late), B9

Complete, except for one corner. The incomplete end (with saw-cut midway) is two conjoining fragments. The other end has the saw-cut midway between hinge-holes. W 142.0mm; H 112.0mm; Th R 7.0mm; Th F 4.2mm.

Two-thirds of the recessed, inner, surface has been worn away, but it survives towards the upper left and in a few other places:

(1)   Fo[nt]ei[o] Capitone [et *uacat*]
         I[u]lio Rufo c[o(n)s(ulibus) …]
    traces   [?coh(ortis) i]
    Vangio[num …] *traces*
(5)   .ator[…] *traces*
    filium […] *traces*
    traces […]e qu[
    omn[…]
    dic[…]
    about four lines lost

In the consulship of Fonteius Capito and Julius Rufus (AD 67), [*day and month. Writer's name and description*] of the First Cohort of Vangiones, … son … all …

(1)–(2)   The reading of *Capitone* is certain, and enough other letters survive to be sure of reading the names of the consuls of AD 67, Fonteius Capito and (Lucius) Julius Rufus. This confirms the restoration of a fragment of the Fasti for the year (*CIL* 10, no. 5405 = *ILS* 2(1), no. 6125), and incidentally shows that Degrassi (1952, 18), followed by Cooley (2012, 463), was mistaken in reversing their priority. This tablet's legible text is residual in its archaeological context (*c* AD 80–90/5).

Line (2) is indented, as if to mark the first two lines as a heading. The day and month would have followed *Rufo c[o(n)s(ulibus)*.

(4)   The reading of *uangio[…]* is also certain, and must refer to the *cohors I Vangionum milliaria equitata*, not to the German tribe of Vangiones from which it was originally raised. The cohort is first recorded by a diploma of AD 103 (*CIL* 16, no. 48), when it belonged to the garrison of Britain, and it remained here. Holder (1982, 123) sees it as raised in the aftermath of the revolt of Civilis and sent to Britain with Cerialis, but as Cichorius (1900, 346–7) observed, its existence in Upper Germany already in AD 50 is implied by Tacitus (*Ann* 12.27: *auxiliaris Vangionas … addito equite alario*), and it may now be suggested that it was one of the eight auxiliary cohorts transferred from Germany to Britain in AD 61 (ibid, 14.38). For others, see <WT33> and <WT55>. Unfortunately this new document, which locates it here in AD 67, is too fragmentary to contribute to the question of whether it was already milliary.

With its formal heading this was evidently a legal document (which incidentally saved it from reuse), but too little survives to identify it altogether. It seems to have been initiated by a soldier or veteran of the First Cohort of Vangiones, and the likely reference to his 'son' ((6), *filium*) and 'all' of something ((8), *omn[…]*) suggests that it was his last will and testament rather than a loan-note or similar, but this cannot be certain. Wills often begin with a third-person heading (*testamentum fecit*) and continue in the first-person, to institute a named person as heir, but the traces are too slight to identify any of the formulas here.

<WT48>

Fig 91 Stylus tablet <WT48> (inner face), wherein in AD 67, in the consulship of Fonteius Capito and Julius Rufus, […], of the First Cohort of Vangiones, writes … (scale 1:1)

<WT49> Silver fir; type 1 (Fig 92)

<3375>, [5229]; period 3 phase 1 (late), OA17

Incomplete, but preserving one end with saw-cut midway and part of both sides. W 143.0mm; H (71.0)mm; Th R 6.8mm; Th F 5.7mm.

The inner (recessed) face is worn and ridged, with traces of text in the top right corner:

(1)   [imp(eratore) Caes(are) Domitiano Aug(usto) G]ermanico xi T(ito) Aurelio
        [Fuluo ii co(n)s(ulibus) …]s [Octo]bres *uacat*
        traces
        .   .   .

When the Emperor Caesar Domitian Augustus Germanicus for the eleventh time and Titus Aurelius Fulvus for the second time were consuls (AD 85), on the […] day before the ?Nones of October (2–6 October). […]

(1)   Domitian's name and titles have been restored conventionally, but would have been rather cramped. That his colleague in his eleventh consulship was Aurelius Fulvus (for the second time) was not known to Degrassi (1952, 25). It has since been deduced from the very fragmentary notices of their consulship in *RMD* 4, nos 211‒12, and *RMD* 5, no. 328, a deduction which is confirmed by the present notice, which is somewhat less fragmentary. The date accords with the archaeological context (*c* AD 80–90/5).

(2)   The minute diagonal traces before the first *s* mark *nonas* or *idus*, more likely *nonas*. Three or four letters have been lost between the surviving letters of *[…]s* and *[…]bres*, which requires the restoration of October, not the longer names of September, November or December. Dio (*Hist Rom* 67.4) implies that Domitian renamed October 'Domitianus' in AD 84, which this text would refute; but the other evidence points to AD 86/7 or a little later (Scott 1936, 158–65).

There are minute traces elsewhere, but no indication of what sort of text this was.

<WT49>

Fig 92 Stylus tablet <WT49> (inner face), wherein in October AD 85, in the consulship of the Emperor Caesar Domitian Augustus Germanicus and Titus Aurelius Fulvus, … (scale 1:1)

<WT50> Silver fir; type 1 (Fig 93)

<6264>, [6104]; period 3 phase 1 (late), OA22

Incomplete, but preserving half of one end (broken at the knife-cut V-notch) and part of both sides. W 147.0mm; H (61.0)mm; Th R 7.1mm; Th F 6.9mm.

On the inner (recessed) face the text is not multiple, but there is a confusing mass of tiny bruises along the bands of grain, not all of which can be easily related to what is legible. There are six lines and the end of a seventh:

(1)　　M(arco) Licinio Crasso [F]r[u]gi et C(aio) Lae-
　　　　[cani]o Basso co(n)s(ulibus) […]embr[e]s.
　　　　Florentinus Sex(ti) Cassi […]ti
　　　　　　seru[u]s scrips[i] iussu domini
(5)　　　　mei eum accepisse pension-
　　　　　　es duas ex fundo uodatio
　　　　　　traces

In the consulship of Marcus Licinius Crassus Frugi and Gaius Laecanius Bassus (AD 64), on the [… day before the …] of […]ember. I, Florentinus, the slave of Sextus Cassius […]tus, have written by order of my master that he has received the two payments from the … farm …

(1)–(2)　　The order of consuls reverses that found elsewhere, in a military diploma (*CIL* 16, no. 5) and two inscriptions (*CIL* 3, no. 7368; 6, no. 2002). The date-numeral and the beginning of the month are lost, but it must have been September or later; slight and ambiguous traces suggest that it was November. This tablet's legible text is residual in its archaeological context (*c* AD 80–90/5).

(4)　　*ser[u]us*　　As Adams (2003, 564) notes, *seruus*, as opposed to *puer*, was a formal indicator of status, and was thus used of himself by the slave who wrote *Tab Vindol* 3, no. 347.

(4)–(5)　　*scripsi iussu domini mei*　　Much the same phrase is used by two slaves who write at their master's order and in his presence, in two tablets in the Sulpicii archive relating to the lease of granaries: *Diognetus C(aii) Novi Cypaeri servus scripsi iussu Cypaeri domini mei coram ipso* (*Tab Pomp Sulp*, no. 45 (2 July AD 37), ll 3–5); and *Nardus P(ublii) [Anni Seleuci servus scrip]si coram [et ius]su P(ublii) Anni Seleuci domini] mei, qu[od is negaret] s[e litt]eras [scire]* (ibid, no. 46 (13 March AD 40), ll 3–5). The second writes explicitly because his master claims to be illiterate, but in general for slaves acting as agents in financial matters, see Andreau (1999, 64–70). For another instance, see <WT27>. A letter at Vindonissa is addressed to Eurylus 'or to Chrysippus, his slave' (*aut Chrysippo servo eius*) (Speidel 1996, no. 50).

(5)　　*pensiones*　　In legal texts, this term usually means payments of rent. There is surely another instance in a London stylus tablet fragment from Lothbury (*RIB* 2(4), no. 2443.15; Table 13), where *petisionis* has been read, the editors understanding it as a scribal error for *petitionis*. The phrase which results, *petitionis item scriptis*, would mean (obscurely) 'by the terms likewise of the claim'. But the financial context implied by *pecuniam* ('money') is better served by reading *pensionis* ('of the payment'), simply by reading the apparent *ti* as *n*: they are almost indistinguishable in this hand. It is unnecessary to suppose a scribal confusion between the two, although this would be easier than supposing that *s* was written by mistake for *t*.

(6)　　*ex fundo*　　The preposition introduces the source of the two payments, and the reading *fundo* is quite acceptable, apart from making good sense. But the next word is difficult, although the letters are fairly clear. Presumably it qualifies *fundo* ('farm'), *-io* being an ablative ending in agreement unless it was continued in the next line, by *-nis* (for example) as the genitive of a personal name. Farms were usually identified by an adjective in *-ianus* derived from the name of their proprietor, but there is no sign of that here.

<WT50>

Fig 93 Stylus tablet <WT50> (inner face), wherein in AD 64, in the consulship of Marcus Licinius Crassus Frugi and Gaius Laecanius Bassus, Florentinus, the slave of Sextus Cassius […]tus, writes by order of his master that he has received the two payments from the … farm … (scale 1:1)

<WT51> Silver fir; type 1 (Fig 94)
<5782>, [6331]; period 3 phase 1 (late), OA23
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and much of both sides. W 133.7mm; H (77.7)mm; Th R 8.3mm; Th F 5.4mm.

This fragment amounts to about two-thirds of a tablet, and on the inner (recessed) face six lines of text can be read despite the traces often being quite faint. (1) and (3) are extended to the left, so as to mark new sentences, and the initial letters of (4), (5) and (6) are exaggerated. Most words are separated, especially in (3)–(5):

(1)   imper(atore) Ca[e]sare Vespasiano uii
                Tit[o] u c[o](n)s(ulibus) xi Ḳ(alendas) Nou(embres)
        opera in u Id(us) Nouembres
                inter Litugenum et
(5)   Magunum data ab
                Ca̤[e]sare praeiudico
                . . .

In the consulship of the Emperor Caesar Vespasian for the seventh time (and) of Titus for the fifth time, on the 11th day before the Kalends of November (22 October AD 76). Responsibility (for the case) between Litugenus and Magunus on the 5th day before the Ides of November (9 November) having been given by the emperor, my preliminary judgement is […]

(1)   *imper(atore)*   It is very unusual for *imperatore* to be abbreviated to its first five letters, instead of the usual three.
(1)–(2)   Dates in Flavian documents, in years when the emperor was consul, are commonly expressed by only his name and titles with the iteration-number, but here both consuls are named (as in *RIB* 2(1), nos 2404.34–5, two British lead ingots). This may have been because Titus was virtually his father's imperial colleague, but it contrasts with *RIB* 1, no. 172, the only other instance from Britain of Vespasian's seventh consulship, which probably named him alone. This was certainly the case with *ILS* 2(1), no. 4075 (Thrace). This tablet's legible text is (only just) residual in its archaeological context (*c* AD 80–90/5).
As in <WT44>, the iteration-numbers of the consulship are marked by a suprascript bar, but not the date-numerals in (2) and (3).
(3)–(5)   *opera … data ab Ca[e]sare*   This clause is the preamble to a judgement introduced by *praeiudico* (6). The ablative absolute means literally 'care having been taken by Caesar'. From the context it clearly refers to the appointment of a judge to hear a case between two named litigants (Litugenus and Magunus) on a specific date (9 November, 18 days ahead); since *praeiudico* (6) is in the first-person singular, it is the judge who is speaking. The context requires that *operam dare* be understood in the extended sense of 'to delegate responsibility (for hearing a case)', but an exact parallel remains to be found. The phrase is certainly used of magistrates in general performing their duties, most famously in the wording of the Senatus Consultum Ultimum, *dent operam consules* ('let the consuls see to it', quoted by Caesar, *Bell Civ* 1.5), and it is applied to appointed judges in particular. Thus Cicero reports to Atticus (*Ad Att* 13.49.1) someone's excuse for not having appeared in his support: 'he came to me and said that he had arranged to serve as judge on that very day' (*iudicem operam dare sibi constituisse eo die ipso*). And the *Lex Irnitana* (c 86), in specifying who is qualified for appointment as a judge by the magistrates or the provincial governor, excludes anyone prevented by illness from performing his duty (*cui morbus causa erit quo minus rebus [i]u[di]candis eo anno operam dare possit*).
(4)   *Litugenum*   The initial letter, which is the only *l* in this text, is of capital form, a long downstroke with a second stroke at right-angles.
(5)   *et Magunum*   Both parties have Celtic names which are otherwise well attested (Ellis Evans 1967, 217, 221), and were evidently not Roman citizens.
(5)–(6)   *ab | Ca[e]sare*   The word *Ca[e]sare* is damaged, and its final *e* is interrupted by the upward termination of *s* from the line below. This also seems to have happened to the *e* of *praeiudico*.
The appointment of a judge, attributed formally to the emperor, must have actually been made by the provincial governor (who was Sextus Iulius Frontinus) or by his deputy for jurisdiction, the *iuridicus*, if there was already one at this date (Salvius Liberalis being the first attested, probably in AD 78). The point cannot be pressed, but comparison with the *Lex Irnitana* (above) implies that London at this date did not have the annually elected magistrates with judicial powers (*duumviri iuri dicundo*) who might have made such an appointment.
(6)   *praeiudico*   The first two letters consist only of two long vertical strokes, and it would seem that the two shorter diagonals (for which less pressure was used) have left no trace. This is the first word of the ruling made by the appointed judge on a legal point which had arisen before the hearing itself, but unfortunately the tablet breaks off at this point.
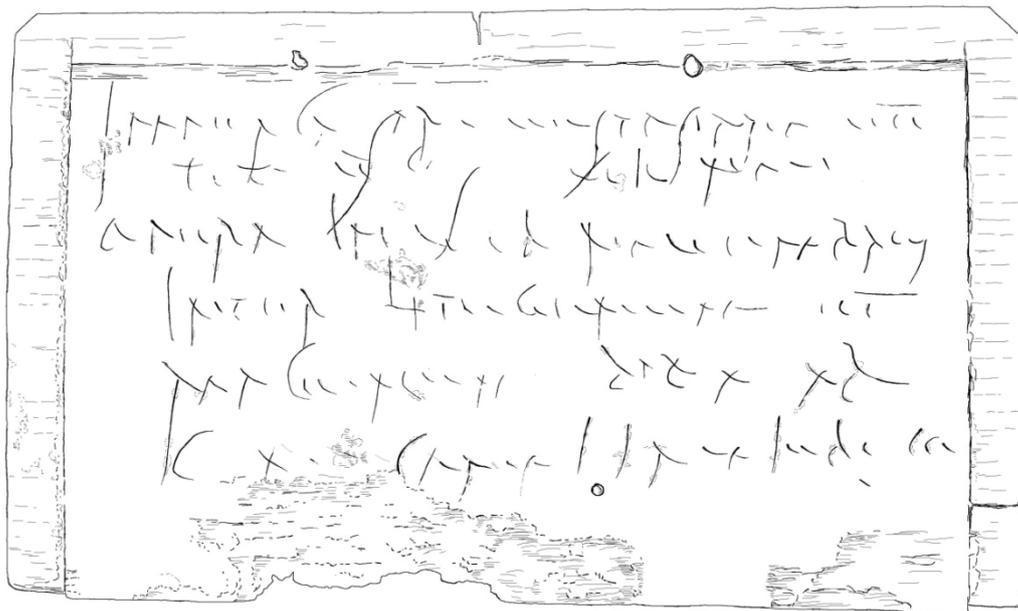
<WT51>

Fig 94 Stylus tablet <WT51> (inner face), wherein on 22 October AD 76, in the consulship of the Emperor Caesar Vespasian and Titus, the judge gives his preliminary judgement in the case of Litugenus and Magunus appointed for 9 November coming … (scale 1:1)

<WT52> Silver fir; type 1 (Fig 95)

<5777>, [4792]; period 3 phase 1 (late), OA34

Incomplete, but preserving half of one end (broken midway at the saw-cut with one hinge-hole remaining) and part of both sides. W 148.5mm; H (64.7)mm; Th R 7.1mm; Th F 6.2mm.

On the outer (plain) face is part of a sinuous line cut by a scored diagonal, perhaps a mark of cancellation (not illustrated).

On the inner (recessed) face are extensive traces of nine lines of text and the end of a tenth, but they are multiple except for (1):

(1)   imp(eratore) Domitiano Caesa[re Aug(usto) Germanico co(n)s(ule) …]

traces of eight more lines and the end of another

When the Emperor Domitian Caesar Augustus Germanicus was consul for the […]th time …

(1)–(2)   The 17 surviving letters of (1) occupy 54mm, with another 67mm available, space for about 21 more. Despite <WT49>, consular dates in Flavian documents often name only the emperor when he happened to be consul, which was often. The traces of (2), although poor, do not suggest a second consul's name; in fact, if the enclitic *enim* ('for') be read, they do not look like a date at all. There would have been space in (1) for Domitian's title *Germanico*, before *co(n)s(ule)* and the iteration-number. Domitian assumed the title after his tenth consulship (AD 83), so the numeral would have been XI (AD 85), XII (AD 86), XIII (AD 87), XIIII (AD 88), XV (AD 90), XVI (AD 92) or XVII (AD 95). Any of the possible consular dates from AD 85 onwards would fit with the archaeological context (*c* AD 80–90/5).

This reconstruction implies that there was a month-date in (2), which was indented, but there is no sign of it.

(3)–(9)   In the next seven lines, many letters can be recognised, but not how they relate to each other. Line (3) may read *regione* just before the break, and *quas* is clear in (5). But in all this medley, there is no significant word, let alone word-sequence, to help in disentangling the texts.

<WT52>

Fig 95 Stylus tablet <WT52> (inner face), written when the Emperor Domitian Caesar Augustus Germanicus was consul for the [...]th time ... (ie AD 85–8 or 90 or 92 or 95) (scale 1:1)

<WT53> Silver fir; type 1 (Fig 96)
<2085>, [2943]; period 4 phase 1, OA150
Largely complete, preserving the whole of one end (with saw-cut midway between hinge-holes), half of the other (broken at the saw-cut midway), and the whole of one side. But the other side is much fragmented. W 135.8mm; H 110.7mm; Th R 6.7mm; Th F 5.7mm.

The inner (recessed) face is badly ribbed and almost all the text is lost, except at the very top where the ribbing is less. A vertical line *c* 40mm long has been scored down the surviving text which, if it is not casual, may be a mark of cancellation. The surviving letters are fragmented and incomplete:

(1)   imp(eratore) Ċaeṣ(are) Doṃitiano Aug(usto) u̇iii cọ(n)s(ule) Idibus Mart(i)is
         Communis *traces* scribsi
         deb[ere] *traces* […]
         traces   quod […]
         ·   ·   ·

When the Emperor Caesar Domitian Augustus was consul for the eighth time, on the Ides of March (15 March AD 82). I, Communis … have written that I owe … which …

(1)   The iteration-number, unusually, precedes *co(n)s(ule)*. The remains of a suprascript bar (as in <WT44> and <WT51>) and four descenders would best suit the numerals IIII or VII, but neither is possible since Domitian's first consulship as emperor was VIII (AD 82); they continued until XVII (AD 95). He is not given the title *Germanico* which he assumed after his tenth consulship (AD 83), so the numeral is probably VIII (AD 82) or VIIII (AD 83). Spacing excludes VIIII, but VIII can be read by assuming that the first stroke of V has been lost; there is even a hint of it in a faint discoloration (not drawn). In view of this, the tablet's legible text is residual in its archaeological context (*c* AD 90/5–125).
Mart(i)is   Adams (2003, 537) notes three examples of this contraction from Vindolanda.
(2)   *Communis* is quite a common Latin cognomen, especially in Italy and Gallia Narbonensis; in Gaul and Britain it may have recalled the Celtic name element in *Commius/Comminius*. British instances are Hassall and Tomlin (1993, 317, no. 9: ownership-graffito on a pre-Conquest platter); *RIB* 3, no. 3041 (*c* AD 75); *RIB* 2(7), no. 2501.140; *RIB* 2(8), no. 2503.232; and *AE* 2003, no. 1053c.
Since this is an acknowledgement of debt (see below), the debtor's name *Communis* would have been followed by further identification, probably his filiation or status, perhaps that of freedman or slave (cf <WT27>, <WT44>, and perhaps <WT55>), but *filius*, *libertus* or *seruus*, even if abbreviated, cannot be read in the extensive but fragmented traces. The word before *scribsi* ends in *r*, but cannot be *ser(uus)*. Just possible is *fateor* ('I acknowledge'), a verb used in acknowledging debt, but it would be redundant before *scribsi*.
(2)–(3)   *scribsi | deb[ere]*   Although *me* might have been expected also, the phrase is formulaic in acknowledging a debt: cf <WT44> and the contemporary loan-note from Carlisle (Tomlin 1992, 147), *scribsi me debere*, where other instances are cited. The voicing of *p* to *b* in *scribsi* (for *scripsi*) is only a 'vulgarism'.
(4)   *quod* is probably the relative pronoun ('which'), not the conjunction ('because').

<WT53>

Fig 96 Stylus tablet <WT53> (inner face), wherein on 15 March AD 82, in the consulship of the Emperor Caesar Domitian Augustus, Communis acknowledges his debt … (scale 1:1)

Documents, date lost

<WT54> Silver fir; type 1 (Fig 97)
<7468>, [6586]; period 3 phase 1 (early), B7
Complete, in two conjoining fragments with some loss to the raised borders. W 139.0mm; H 120.0mm; Th R 6.8mm; Th F 6.5mm.

There are extensive traces of ten lines of text, a whole page, but although it is not multiple, the letters are incomplete and ambiguous. The hand is quite angular (eg *s* is only a long diagonal stroke) and the traces tend to be short diagonal strokes which are difficult to tell apart. In consequence the only legible line is (10), at the very foot:

traces of nine lines
(10)   [eiue] a[d] quem ea res | [pertinebit …]

… or to him whom the business will concern …

(1)–(10)   The formula in (10) provides for the alternative payment (or repayment) of money to a person other than the creditor named above; for other instances, see <WT44> (a purchase-note) and <WT55> (a loan-note). It identifies <WT54> as a legal document, and probably as a loan-note.

(1)–(2)   These might be expected to be the dated heading, but there is no good trace of consular names, let alone an imperial consulate, nor of any numeral or the name of a month. The letters *co* can be read towards the end of (2), but there is no sign of *s* after it, for *co(n)s(ulibus)*.

(3)   This might be expected to contain the debtor's name and a verb of acknowledgement such as *fateor* or *scripsi*, but although the sequence *ualeri* can be read at the beginning, it cannot be completed with *-us* for the nomen *Valerius*. Towards the end of the line is the sequence *scri*, but it cannot be completed with *-psi* or similar.

(4)   This apparently begins with *debe*, and *debe[re]* might be restored, since it is the usual infinitive ('to owe') in an acknowledgement of debt.

(6)   The last word is apparently the relative *quas*.

(8)   The first letters are *cen*, perhaps the numeral *cen[tum]*, '100'.

(10)   *[eiue] a[d] quem ea res*   This formula (see above) would have been completed on the next tablet by the verb *pertinebit*, showing that <WT54> is the first tablet of two or more, and almost certainly the first page of a triptych, containing the first half of the inner text.

*Fig 97 Stylus tablet <WT54> (inner face),
part of a legal document, probably the first
page of a loan-note (scale 1:1)*

<WT54>

<WT55> Silver fir; type 1 (Fig 98)
<6400>, [6588]; period 3 phase 1 (early), OA14
Almost complete, in two conjoining fragments preserving the whole tablet except for one end and another corner. W 146.0mm;
H (77.8)mm; Th R 8.2mm; Th F 5.8mm.

On the inner (recessed) face are extensive traces of 12 lines of text; they are not multiple, but they are rather faint and the strokes
are often more like a discoloration than an incision:

(1)   [et] sor[tem et eorum u]s{s}uras
         qua[s] debuerit probos recte
         curari qua(n)documque peti[eri]t
         traces   […]runt
(5)   Nar[cisso] Rogati Lingonis
         [rec]te [p]robe dari fide promis{s}it
         Atticus   *traces* ?[I]ng[e]nuo …illis
         eiue ad quem ea res pertinebit
      eosque [m]anu q(ui) s(upra) s(cripti) s(unt) coram dix{s}it se
(10)   debere et <h>abere et accepisse
         ante hanc diem Atticus
         traces

         .   .   .

… and the principal and the interest on them which he shall have owed … to be properly managed in good (coin) whenever he shall
have requested …
To Narcissus (the slave) of Rogatus the Lingonian, Atticus … has properly, truly, faithfully promised (it is) to be given, to Ingenuus …
or to him to whom the matter will pertain. And in the presence of those who have been written in (their own) hand above, Atticus
has said that he owes and holds and has received before this day …

(continued)

<WT55>

Fig 98 Stylus tablet <WT55> (inner face), the second page of a (cancelled) loan-note, regarding a loan by Narcissus the slave of Rogatus the Lingonian to Atticus, to be given to Ingenuus … (scale 1:1)

(1)–(11)   Despite the gaps in (4) and (7), there is more than enough to identify this as the second page of a loan-note, an acknowledgement of money lent and a promise to repay it with the interest due. The date implied by *ante hanc diem* (11) and the sum of money implied by *probos* (2) would have been stated on the first page, now lost, from which the names of the parties have been repeated, Narcissus the creditor and Atticus his debtor. If Atticus was described in (7), it is now illegible, but like Narcissus the slave of Rogatus, he was probably a slave (cf <WT50>, with note). The page has been lightly scored by two diagonal lines which intersect more or less in the middle, which would have been done when the note was cancelled (cf Speidel 1996, no. 3, 100–1, n15).

(1)–(2)   *[u]ssuras qua[s] debuerit*   The surviving text begins with a reference to the repayment of the principal (*sortem*) expressed in *denarios*, to judge by the masculine accusative plural *probos*, together with the interest due by that date (*ussuras*, feminine accusative plural). For the phrasing compare a Vindonissa loan-note dated 25 January AD 90 (Speidel 1996, no. 3): *sortem et usuras probas recte dari stipulatus est Sex(tus) Carisius Maximus*. Principal is likewise coupled with interest in the fragmentary <WT56>, as *sortis siue ussurae*. The geminated *s* in *[u]ssuras*, as in *promissit* (6) below, both of which also occur in <WT56>, is an alternative spelling intended to reinforce the [s] sound.

probos meaning 'good' refers to the coin (*denarios*) in which the loan is to be repaid; this adjective is often reinforced by *numeratos* ('counted out'), as in the London (Drapers' Gardens) loan-note of 3 December AD 158 (Table 13; Tomlin 2011a, 446–8, no. 9, fig 8), but there is no sign of it here.

(3)   The infinitive *curari* probably depends on *promissit* (6) like *dari* (6), but the formula, if there is one, seems to be unparalleled; apart from *dari*, the usual verb of 'repayment' is *reddere* (passive *reddi*).

Reading the rest of the line is complicated by traces of another text, notably *p* coinciding with *c* and *-rit* with *-que*. This is probably because the scribe altered or corrected his first draft. Initial *qua* is straightforward, but the next letter looks more like *b* than *d*; however, the sequence *-cumque* terminates a compound relative or conjunction, so it may be suggested that the scribe duly wrote *qua*, but then confused *a* with *n* (with which it shares the first two strokes) and may even have added a third stroke to make it into *n*. After *-cumque*, there is a good trace of *peti*–, but it is oddly preceded by *-rit*. So it looks as if he first wrote *qua(n)do petierit*, but then changed it to *qua(n)documque petierit*. This phrase is equivalent to *qua die petierit* ('on the day he shall have requested') found in two Dacian loan-notes, either in full (*FIRA* 3, no. 123 = *IDR* 1, no. 33) or abbreviated to its initial letters (*FIRA* 3, no. 122 = *IDR* 1, no. 35).

(4)   The traces of this line are still more difficult. Except perhaps for *be* and *cum*, almost nothing can be seen until *-runt* at the end of the line, a verbal termination in the third-person plural.

(5)   *Nar[cisso] Rogati Lingonis*   The genitive *Rogati* means that Rogatus cannot be the subject or object of *promissit* (6), but slaves were conventionally identified by their owner's name in the genitive (cf <WT44>), whether or not the term *seruus* ('slave') was made explicit; so the reference must be to a slave of Rogatus, whether or not he was acting as his agent (cf <WT50>, with note). Since the end of his name is lost, it is at first unclear whether he is the subject or object, but since the name *Atticus* occurs twice in the nominative, in (7) and (11), it is almost certain that Atticus is the debtor. The creditor's name begins with *nar*, which makes the restoration of *Nar[cisso]* inevitable, *Narcissus* being a name typical of slaves and freedmen.

Rogatus is identified as 'the Lingonian'. The Lingones were a tribe of Gallia Belgica, or rather Upper Germany after it became a province. The singular of *Lingones* is hardly ever found, but since it is a third-declension noun, it should be ★*Lingo*, and *[Lin]go* has been duly restored in *CIL* 14, no. 1821 (Ostia). *Lingonis* would now be its first instance in the genitive case. However, the form *Lingonus* is used by Martial (*Epig* 8.75, l 2, by implication a Gallic gladiator in Rome) and by Tacitus (*Hist* 4.55, the chieftain Julius

Sabinus); it is confirmed by *CIL* 13, no. 5911, *civis Lingonus*. Presumably both forms were current.

<WT55> does not say what Rogatus 'the Lingonian' was doing in London, but quite likely he was a soldier in a recently formed cohort of Lingones, which may be compared with the cohorts of Nervii (<WT33>) and of Vangiones (<WT48>) also attested. In AD 69 the Lingones supported Vitellius, but subsequently joined the revolt of Civilis. Wightman (1985, 68) suggests that their leader, Julius Sabinus, had been an equestrian officer like the rebel Julius Classicus (see note to <WT33>), but this need not imply that there were already regular cohorts of Lingones. That Lingones served in the Roman army before AD 69, however, is proved by the Claudio-Neronian cavalry tombstone of Togitius (*CIL* 13, no. 7034 (Mainz) = Boppert 1992, 136–7, no. 32), who is identified as LIN[…], but unfortunately the name of his unit has been lost. Four cohorts of Lingones served for centuries in the garrison of Britain, the *cohortes I, II, III* and *IIII Lingonum*, but they are first attested in Trajanic diplomas, and Holder (1982, 118) reasonably deduces that they were only raised after the suppression of the revolt of Civilis and came to Britain with Cerialis in AD 71. But now that <WT33> locates a cohort of Nervii in Britain by the early AD 60s, the same can be argued of the Lingones. <WT55> shares the same archaeological context [6588] as <WT33>, a context dated to *c* AD 65/70–80, which implies that this tablet's text was only just residual. Like the Vangiones, the four cohorts of Lingones were part-mounted (*equitatae*), so Rogatus may even have been a cavalryman like Togitius, his fellow-tribesman already mentioned; for the presence of cavalry in London, see <WT62> (with note).

(6)   *dari fide promissit*   This formulaic phrase is also used in <WT56>. The second *s* is much less firmly incised than the first, and almost coincides with the long *i*. Perhaps it was deleted by the scribe, but since he had already geminated the first *s* in *[u]ssuras* (1), it is more likely that he crowded his letters towards the margin.

(7)   After *Atticus*, the subject of *promissit* (6), there are traces which get stronger towards the end of the line, where the sequence *illi* is certain. They do not seem to identify the status or function of Atticus, which might have been expected. Instead there is quite good evidence of the sequence *ng[.]nuo*, which suggests the personal name *[I]ng[e]nuo* ('to Ingenuus'), followed perhaps by *Lucilli s(eruo)* ('the slave of Lucillus'), although *c* looks more like *u*. It remains puzzling, though, that after the mention of Narcissus, a different payee is apparently named; it can only be guessed that he was acting on Narcissus' behalf.

(8)   *eiue ad quem ea res pertinebit*   This formulaic phrase occurs also in <WT44> and <WT54>. Its cramped position here suggests that it was interlineated as an afterthought between (7) and (9).

(9)   The leftward extension of this line marks the beginning of a new sentence. The adverb *coram* when used as a preposition ('in the presence of') often follows its noun, as it does here; but it also governs the ablative case, so the accusative *eosque* is a solecism. 'They' can hardly be the denarii implied by *probos* (2), but must instead be the witnesses of this loan-note, who would have added their names to their seals in their own hand (*manu*); for this convention see the note to <WT62>.

If <WT55>, which is type 1, belonged to a three-tablet set, it must have been the third tablet, since it carries the second page of a legal text without being recessed and grooved for seals on the other face (type 2). It therefore carried the 'outer' text, the first page of which would have been written to one side of the seals on the second tablet (in the format illustrated in *Tab Vindol* 1, 45, fig 9). This is the force of *s(upra)* ('above'): the witnesses' seals and names would have been visible on the opposite tablet.

(10)   The 'vulgar' failure to aspirate *habere* occurs also in <WT37>. Adams (2003, 537) notes instances from Vindolanda, including *Tab Vindol* 3, no. 649.

(11)   *ante hanc diem*   'Before the day' on which the document was executed, probably expressed in a dated heading at the top and an *actum* ('executed') formula at the bottom. Both are now lost.

<WT56> Silver fir; type 2 (Fig 99; Fig 100)
<6341>, [6213]; period 3 phase 1 (early), OA19
Incomplete, but preserving part of both sides. W (131.6)mm; H (35.5)mm; Th R 7.7mm; Th F 5.7mm; W seal-groove 20.8mm.

There are remains of text on both faces, but complicated by traces of previous text(s). On the ungrooved face (Fig 99):

.   .   .

(1)   *traces* rum dari fide promis{s}it

     traces us

     sortis siue us{s}urae sub u[…]

     causae *traces*

     domu qu...stioni[…]

     traces

.   .   .

… (he) promised in good faith would be given … of the principal or of the interest …

(1)–(3)   The phrases in (1) and (3) can be paralleled in loan-notes, *sortis siue usurae* in Speidel (1996, no. 3: *sortem et usuras probas* …), and *dari fide promissit* and *[u]ssurae* in <WT55>. The reading is made difficult by the imperfect preservation of the letters and by distracting traces of previous text(s).

(1)   *promissit*   This alternative spelling with geminated *ss* is often found in the Vindolanda tablets, where Adams (1995, 89) notes that it was by now old-fashioned; here and in <WT55> it is part of a formula. Both spellings are found in one and the same document in the Sulpicii archive (*Tab Pomp Sulp*, no. 68, dated AD 39).

Both panels of the grooved face (Fig 100) are also inscribed, but it is not clear what relationship, if any, there is between columns (i) (left) and (ii) (right):

(i)		(ii)
. . .		
(1) *traces*		. . .
Rusticus qui	(1)	pecar[…]
singu		*traces*
[?laris]		…uici
. . .		. . .

… Rusticus who … ?bodyguard …

Column (i):

(2)   The cognomen *Rusticus* is clear, given that there is almost sign of the cross-stroke of *t*, and that the space after *rusti* is due to *c* not curving left as originally intended.

qui must have identified him further, for example *qui singu[laris est]* ('who is a *singularis*') or *qui et* ('also called' by an alternative name), but there is no good sign of this.

(3)   *singu[…]* is surely *singu[laris]*, '(governor's) bodyguard', but it is unclear whether it continued to the right, or into the next line. There is no sign of the expected *-laris*, nor of any qualification such as *co(n)s(ularis)*, or the name of the governor.

Column (ii):

(1)   *pecar[…]*   Nothing can be made of this sequence. A blundered *pec(u)ar[ius]*, a soldier in charge of cattle, seems unlikely.

(3)   The first letter is *s* or *f*, and the ending *uici*, so this is just possibly a Celtic name in *-uicus* in the genitive as patronymic, but no reading is possible.

One or two witnesses may thus have been soldiers (cf <WT61> and <WT62>), but this is by no means certain.

<WT56>

Fig 99 Stylus tablet <WT56> (ungrooved face), referring to a ?loan-note (scale 1:1)

<WT56>

Fig 100 Stylus tablet <WT56> (grooved face), ?witnesses, including Rusticus, a ?bodyguard (scale 1:1)

\<WT57\> Silver fir; type 1 (Fig 101)
\<6282\>, [6485]; period 3 phase 1 (late), B9
Complete, except for one corner of which two conjoining slivers remain. W 142.3mm; H 112.0mm; Th R 7.0mm; Th F 6.3mm.

    The surface of the inner (recessed) face is rather ribbed, which has fragmented many letters and made them indistinct although they are quite deeply incised and the text is not multiple. By measurement it can be calculated that three lines have been lost at the top. Then come illegible traces of two lines, followed by quite good traces of the remaining eight:

(1)   *traces*

             traces

           de...   [r]erum suar[u]-

           m agendarum persequen-

(5)   darumque omnium sponsion-

           em facere iudicio certare

           permis\<i\>sti *uacat*

       item autem praesens ille

            rem procurationem r...

(10)   [i]ngenuos d... ius

... you have permitted [*name*] to enter into an undertaking of doing and pursuing all his business (and) to contend in judgement. But likewise, he (being) present ... the matter, the management ... free-born (persons) ...

(1)–(10)   Interpunct was used to separate words, for example *sponsion|em* from *facere* (6), *item* from *autem* (8), *rem* from *procurationem* (9), but this is not always explicit because of the state of the surface.

(5)–(6)   *sponsion|em facere*   A *sponsio* is a legal undertaking, which often amounted to a contract.

(6)   The connection between the two infinitives, *facere* and *certare*, is not clear, but they can both be taken as dependent on *permis\<i\>sti* (7), despite there being no connective *et*.

(7)   *permis\<i\>sti*   After the sequence *permis* (obviously introducing the perfect tense of *permittere*), there is a badly-preserved letter followed by a bold *t*; and after *t*, one more letter, probably *i*. So it is not possible to read *permisit* or *permissum*, but quite easy to read *ss*, and to suppose that *permissti* is a slip for *permisisti*. Who 'you' is, the person who has 'permitted', cannot be determined; but he is evidently someone with judicial authority.

The rest of the line is uninscribed, which marks the end of the sentence; this is confirmed by the extension leftward of *item* at the beginning of (8).

(8)   The position of *item* marks the beginning of a new sentence. The reading of *autem* is complicated by descenders from above, and the diminutive cross-stroke of *t*.

(8)–(10)   *praesens* is perfectly clear, but the succeeding words are somewhat fragmented by the state of the surface, and their reading cannot be confirmed by the context, since most of this sentence is lost. They seem to be a string of accusatives governed by a verb now lost, the subject of which is *praesens ille*, the person identified somewhere in the first three lines.

<WT57>

Fig 101 Stylus tablet <WT57> (inner face), regarding legal permission (scale 1:1)

Lists of witnesses

<WT58> Silver fir; type 2 (Fig 102; Fig 103)
<7494>, [6737]; period 2 phase 3 (late), OA12 phase 1
Incomplete, preserving one end with saw-cut midway and about half of both sides. W 138.4mm; H (67.0)mm; Th R 7.6mm; Th F 5.6mm; W seal-groove 20.0mm.

The ungrooved face (Fig 102) is cracked across the middle from top to bottom, but not quite broken in two. There are extensive traces of six or seven lines of text, the bottom half of a page. Like the grooved face, they are multiple; many letters are recognisable, but they cannot be resolved into words except in the last line:

> . . .
> *traces of five or six lines*

(6) or (7)   -nium [Ve]getus Tutoris

… Vegetus, (son) of Tutor.

(6) or (7)   The first four letters of the last line (*nium*) complete a word from the previous line, probably in the accusative, since the traces do not allow the reading *om|nium*. Both cognomina are quite well attested, *Vegetus* being the more common; 'Vegetus' buys the slave-girl Fortunata (1 Poultry, Table 13; Tomlin and Hassall 2003, 374, no. 22), but he is not the same man, since he is an imperial slave.

(continued)

<WT58>

Fig 102 Stylus tablet <WT58> (ungrooved face), … Vegetus, (son) of Tutor (scale 1:1)

On the other, grooved, face (Fig 103) are extensive traces of text in both columns:

	(i)	(ii)
(1)	*traces*	*traces*
	traces	*traces*
	traces	*traces*
	Mercator	*traces*
(5)	Reductus	*traces*
	. . .	. . .

… Mercator … Reductus

Columns (i) and (ii):

Many letters are recognisable, but they overlap one another and cannot be disentangled. The text is multiple except in the last two lines of column (i), where the lettering is smaller and neater. The cognomen *Mercator* (i) (4) is well attested; instances include the dedicator of a London altar (*RIB* 3, no. 3002) who may have been an imperial slave. Abbreviated to MER, it may occur as a Bloomberg samian graffito (<5026>). *Reductus* (i) (5) is rare, and previous instances are North African (Kajanto 1965, 355; *AE* 1985, no. 908).

A vertical line was drawn down both panels, better preserved in (ii), which must have been done when a document was cancelled.

<WT58>

Fig 103 Stylus tablet <WT58> (grooved face), … Mercator … Reductus, witnesses (scale 1:1)

<WT59> Silver fir; type 2 (Fig 104)
<7475>, [6615]; period 2 phase 3 (late), OA12 phase 2
Incomplete, preserving one end with saw-cut midway and part of both sides. W 138.0mm; H (53.0)mm; Th R 10.0mm; Th F 5.4mm; W seal-groove 23.7mm.

The ungrooved face is uninscribed except for the descenders of a line of text along the broken edge, and some marks below which do not look like letters (not illustrated).

On the grooved face are what appear to be the names of witnesses:

	(i)	(ii)
(1)	Attio	Optati
	furato-	ri
	Durob[riuis]	
	. . .	

For Attius (the son) of Optatus, the thief, at Durobrivae …

(1)   *Attio* might be taken as nominative, not dative, but the name *Attio* would be almost unique (cf *CIL* 13, no. 7047, Mainz), whereas *Attius* is very common either as a nomen or a cognomen. *Optato* (dative) cannot be read; the last letter, by comparison with *o* elsewhere, cannot be *o*.

(2)   *furatori* is undoubtedly dative. It is a very rare derivative of the verb *furari*, meaning 'thief', and not surprisingly is not found as a cognomen.

(3)   There is no cognomen in *durob-*, whereas *Durobriuae* is the Roman name for Rochester (Kent); it is mentioned in the ink-leaf letter from Temple Court (Turner and Skutsch 1960; Chapter 6; GM31, ER444), *aput [Duro]briuas*.

(1)–(3)   At first sight this is a list of names, but the use of the dative and the non-personal names in (2) and (3) prevent it from being the usual list of witnesses. It reads like a parody of an address or even a wooden 'curse tablet' against Attius – a joke, perhaps.

<WT59>

Fig 104 Stylus tablet <WT59> (grooved face), … for Attius (the son) of Optatus, the thief, at Durobrivae … (scale 1:1)

<WT60> Silver fir; type 2 (Fig 105)
<6403>, [6588]; period 3 phase 1 (early), OA14
Incomplete, corner fragment. W (78.0)mm; H (33.0)mm; Th R 13.1mm; Th F 11.0mm.

At the top of the left panel of the grooved face is a zigzag resembling NNNN (drawn in outline) scored over *serus*, *r* being of capital form. *surus* cannot be read. This might be the rare name *Serus*, or intended for *ser(u)us* ('slave') (cf <WT70>); the latter would imply that the slave was unnamed, but identified by his master's name in the genitive (cf <WT27>), now lost. Whichever it was, *serus* was subsequently crossed out.

<WT60>

Fig 105 Stylus tablet <WT60> (grooved face), serus (? the name Serus or ser(u)us, *'slave'), crossed out (scale 1:1)*

<WT61> Silver fir; type 2 (Fig 106; Fig 107)
<6395>, [6581]; period 3 phase 1 (early), S43
Incomplete, but preserving half of one end broken at the saw-cut and part of both sides. W 138.7mm; H (85.2)mm; Th R 9.4mm; Th F 5.1mm.

The ungrooved face (Fig 106) is now worn and damaged, but has clearly been used; almost no trace of text remains, but diagonal strokes *c* 40mm long, some intersecting, have been scored across one end. They would have 'cancelled' a document of indebtedness such as a loan-note.

(continued)

<WT61>

Fig 106 Stylus tablet <WT61> (ungrooved face), with diagonal strokes scored across one end, cancelling what would have been a document of indebtedness such as a loan-note (scale 1:1)

On the grooved face (Fig 107), nothing is visible of column (i) in the left panel, but there are extensive traces of column (ii) in the right panel:

	(i)	(ii)
(1)	[?pecuniam]	mutuam
	[*no traces*]	Primus
		Billiccu[s]
		Vannii
(5)		callulxiuci
		uacat
		de<c>uriones
		traces
	. . .	. . .

?money on loan … Primus … Billiccus … (son) of Vannius … decurions …

(1) *mutuam* Despite its position, this cannot be a personal name; it is an adjective which ended a prose text, whether the latter concluded the previous tablet, or was the first line of this tablet as a heading to both columns. In any event, a reference to *[pecuniam] mutuam* ('money on loan') seems inevitable; this is supported by the crossing-out lines on the other face (see above). The two incomplete incisions above the line look unrelated, and must be the remains of *c* or *s* from a previous text.

(2) *Primus* Worn and damaged, and complicated by apparent traces of previous text. The name certainly begins *Pr*, and the surviving traces and spacing are consistent with *-imus*. It is a common cognomen.

(3) *Billicus* is a variant of the well-attested *Bellicus*, and is found in the feminine form *Billicca* (*CIL* 13, no. 2555); it has also been read as a samian potter's name, but this is probably a mis-reading of *Billicedo* and *Billicuro* (Hartley and Dickinson 2008b, 73) which, however, are cognate. The double *l* is simply two downstrokes; the diagonal which apparently extends the first belongs to *u* in the next line.

(4) *Vannii* Indented, and (to judge by the spacing) interlineated. This is the first name in the genitive case, apparently added to distinguish *Billiccus*, but the difficult reading of (5) and the loss of column (i) make this uncertain. The Celtic name *Vannius* is occasionally found; in Britain, it probably occurs in *RIB* 2(7), no. 2501.564, and also apparently in *RIB* 2(4), no. 2443.32★, a stylus tablet fragment from Lothbury (Table 13) bearing the address VANNIO ('to Vannius'). But Richmond, who examined it in 1953, concluded that the letters were modern.

(5) This is clearly not a name in *-us*, and the reading is complicated by lines which may be residual. If they are included, the letters dotted can be read, but they are very uncertain. The result does not suggest any known name.

(6) *de<c>uriones* The scribe seems to have written *de*, but then assumed that the second, curving stroke of *e* was *c* (which it half-resembles), and continued with *u*, thus omitting *c*. There is a gap between this line and the line above, as if *de<c>uriones* glossed two names to the left rather than those above, but this cannot be confirmed. A decurion called Silvanus is named twice in <WT62>, which is explicit evidence of cavalry (see note). Decurions may also be named in <WT37> and <WT76>.

<WT61>

Fig 107 Stylus tablet <WT61> (grooved face), regarding ?money on loan, witnesses … Primus … Billiccus … (son) of Vannius … decurions … (scale 1:1)

<WT62> Silver fir; type 2 (Fig 108; Fig 109)
<5780>, [6111]; period 3 phase 1 (late), OA17
Incomplete, but preserving one end with damaged saw-cut midway between hinge-holes, and part of both sides. W 146.3mm; H (70.8)mm; Th R 9.5mm; Th F 6.4mm; Th F at band 6.0mm.

   On the ungrooved face (Fig 108), there are extensive traces of about six lines in which many letters can be identified, but almost no sequences. The incisions are rather slight, and they belong to more than one text; many traces coincide, but in (3) two lines of letters can be seen to diverge, the lower line looking like *[…]britorum*, a genitive plural. Line (4) probably begins with *sed* ('but'), (5) with *accepit* ('he has received'), and (6) with *uetun[…]*, for *uetun[t]* or *uetun[tur]* ('they forbid' *or* 'they have been forbidden'). The word *accepit* would suggest a loan-note.

(continued)

<WT62>

Fig 108 Stylus tablet <WT62> (ungrooved face), probably a loan-note but with more than one text (scale 1:1)

On the other, grooved face (Fig 109) are the names and description of the last three witnesses:

	(i)	(ii)
	. . .	. . .
(1)	*traces*	tur(ma) […]
	Longinus	tur(ma) Mar[…]
	Agrippa	tur(ma) Siluani
	Verecundus	tur(ma) Siluani
(5)	*uacat*	*uacat*

[…], troop of […]; Longinus, troop of Mar[…]; | Agrippa, troop of Silvanus; | Verecundus, troop of Silvanus.

Columns (i) and (ii):
The usual number of witnesses is seven, so this is the bottom half of such a list. Although fragmentary, this is the only Bloomberg tablet to preserve the typical layout: the name is written in column (i) to the left of his seal, and further identified to the right in (ii). There are some unrelated traces (drawn in outline) from previous use of the tablet.

Column (i)
The first name is lost, but *Longinus* (2), *Agrippa* (3) and *Verecundus* (4) are common cognomina, well attested among the *equites singulares Augusti* in Rome (Speidel 1994, 449–52), the imperial mounted guards who were seconded from cavalry units in the provincial armies. 'Verecundus' is also a witness in <WT65>, but the handwriting does not look quite the same. Since the cognomen is so popular, they are probably not the same man. The tablets come from different archaeological contexts although of the same period (*c* AD 80–90/5).

Column (ii)
(2)   *Mar[…]*   Only the first letter of the decurion's name is certain, but traces to the right (unless they belong to previous use) support *ar*. There is space for two or three letters more, which would exclude *Martialis*. Possibilities (in the genitive) include *Marcus*, *Marinus*, *Marius* (cf <WT65>, with note on the element *maro-*) and *Martius*; like *Siluanus* (3)–(4), they are all common cognomina found among the *equites singulares Augusti* (see above).
(3)–(4)   *tur(ma) Siluani*   There are small but significant differences in how the same words were written in successive lines, indicating the work of different hands. This implies that each witness, if literate, was expected to write his name for himself against his seal, a convention explicit in <WT55>, which was uttered 'in the presence of those who have been written in (their own) hand above'. A good example is the surviving will of the cavalryman (*eques*) Antonius Silvanus (*FIRA* 2, no. 47), which bears his name and those of seven colleagues as witnesses, all written in different hands.

The four witnesses to <WT62> are also cavalrymen, identified as usual by their troop (*turma*) and the name of the troop-commander (*decurio*). Cf <WT61>, where another list refers to *de(c)uriones*; and <WT37>, which may identify men as *dec(urio),* and <WT76>. A wide range of copper-alloy harness fittings of types normally associated with Roman cavalry was also found at Bloomberg London (Marshall and Wardle in prep). The archaeological context of this tablet (*c* AD 80–90/5) leaves open the question of whether these men belonged to the part-mounted cohorts (*cohortes equitatae*) attested here in the AD 60s by <WT48> and <WT55>, or perhaps to the governor's mounted guards, the *equites singulares consularis* (cf <WT56>).

<WT62>

Fig 109 Stylus tablet <WT62> (grooved face), witnesses … […], troop of […]; Longinus, troop of Mar[…]; Agrippa, troop of Silvanus;
Verecundus, troop of Silvanus (scale 1:1)

\<WT63\> Silver fir; type 2 (Fig 110)
\<5793\>, [6422]; period 3 phase 1 (late), OA22
Largely complete; two conjoining fragments preserving one end (with a saw-cut midway between hinge-holes widened into a V-notch in the grooved face) and most of both sides. W 140.0mm; H 89.0mm.

The inner (recessed) face has been used several times, and no reading is possible of the extensive traces (not illustrated).

On the grooved face:

	(i)	(ii)
(1)	Abot[…]	*traces*
	Iuni[…]	*traces*
	Nama[…]	*traces*
	Num[…]	*traces*
(5)	Surun[…]	*traces*

Columns (i) and (ii):
Although the names in column (i) are incomplete, there is no good sign that they continued into column (ii), where there are extensive but faint traces of an earlier text (drawn in outline, Fig 110). There are also less extensive traces of an earlier text in the left panel (likewise drawn in outline). The tablet was evidently reused, as the inner face confirms. Unless the names have simply left no trace to the right of the groove, perhaps they were completed on the wax blobs of the seals in the groove.

Column (i)
(1) The traces are quite good, but there is no attested name *Abot[…]*.
(2) Presumably *Iunius* or a derived name (cf \<WT14\>, with note).
(3) *Nama[…]* is quite clear, and the sequence is so uncommon that *Namatobogius* (cf \<WT13\>) is a likely restoration.
(4) The reading is complicated by the earlier traces, but if the two descenders can be read as *m*, this is a name in *Num-*.
(5) The name *Surus* is quite common (it has been found in the City of London, on a copper-alloy name-tag or label, from Paternoster Square (NGT00): Tomlin and Hassall 2005, 490, no. 31; Watson 2006, 70–1, fig 69; 99, \<S58\>), and its derivative *Surinus* is well attested (eg *RIB* 1, no. 754 and perhaps *RIB* 2(7), no. 2501.529), but this seems to be an unattested variant, *Surunus*.

<WT63>

Fig 110 Stylus tablet <WT63> (grooved face), witnesses … ?Iunius; Nama[…] (?Namatobogius); Num[…]; Surunus (scale 1:1)

<WT64> Silver fir; type 2 (Fig 111; Fig 112)
<5794>, [6422]; period 3 phase 1 (late), OA22
Incomplete, but preserving part of both sides and one end with saw-cut midway extended by a V-shaped notch into the seal-groove.
W 139.0mm; H (29.3)mm; Th R 9.3mm; Th F 5.5/5.2mm; W seal-groove 26.7mm.

The ungrooved face has been used many times, but isolated letters can be identified (Fig 111). Some trailing lines suggest a crossing-out, the 'cancellation' of a loan-note.

On the grooved face (Fig 112):

	(i)	(ii)
(1)	Audaci	*traces*
	. . .	

(Seal) of Audax *or* Audacius …

(1)   The traces in the right panel are fainter and not aligned with *Audaci,* although the first letter could be read as *a*; but a reference to *audacia* ('boldness') is most unlikely. The cognomen *Audax* is well attested in Gaul, and occurs in Britain at Vindolanda (*Tab Vindol* 2, no. 186), Corbridge, Northumberland (*RIB* 2(6), no. 2494.104) and London (*RIB* 3, no. 3002, perhaps an imperial slave; a second instance from London may be *RIB* 2(7), no. 2501.83, *auda[…]*). The derived nomen *Audacius* is rare, but is borne by a soldier who dedicated an altar at Cologne (*AE* 1990, no. 728); it is also that of a samian potter (Hartley and Dickinson 2008a, 330). Since this is apparently the name of the first witness, *audaci* should be genitive, not dative. If *Audaci(s)* was intended, perhaps *s* was omitted for lack of space, or failed to register in the groove. Otherwise this is the contracted genitive of *Audacius*, in form at least a nomen. The same ambiguity is found on a lead die at Caerleon (*RIB* 2(1), no. 2409.10), where the owner's name in the genitive case is transmitted as COR AVDACI, *Cor(?neli) Audaci(?s)*.

<WT64>

Fig 111 Stylus tablet <WT64> (ungrooved face), used many times with trailing lines suggesting a crossing-out, the 'cancellation' of a loan-note (scale 1:1)

<WT64>

Fig 112 Stylus tablet <WT64> (grooved face), … (seal) of Audax or Audacius (scale 1:1)

<WT65> Silver fir; type 2 (Fig 113)
<7458>, [6545]; period 3 phase 1 (late), OA22
Complete, in two conjoining pieces. W 137.5mm; H 114.6mm; Th R 9.0mm; Th F 5.7mm; W seal-groove 22.2mm.

The ungrooved face is worn and damaged, with no trace of text, except for part of one line of large irregular letters. Intersecting strokes suggest that they have been crossed out or belong to more than one text. No reading is possible (not illustrated).

On the grooved face, in the panels either side of the groove (columns (i) and (ii)), the incomplete names of five witnesses:

	(i)	(ii)
(1)	Mari	*traces*
	Paulli	*traces*
	Sacc[i]	*traces*
	traces	*traces*
(5)	Verecu[n]	d[i] …
	uacat	*uacat*

(Seal) of Marius (*perhaps* Marus) … (seal) of Paullus … (seal) of Saccus … (seal) of … (seal) of Verecundus.

Column (i):
(1)   *Mari* is written over another name which continued into the line below. (These two letters might have extended *Mari* instead, but there was surely room for that above.) The cognomen has already occurred in London (*RIB* 2(8), no. 2503.318), and may be that of a decurion in <WT62>. Although *maro-* ('great') is a frequent Celtic name element (Ellis Evans 1967, 223–8), it is uncommon by itself as the cognomen *Marus*; *Marius*, although a Latin nomen, was probably thought to 'conceal' it, and is quite common.
(2)   The cognomen *Paullus* has also occurred in London (*RIB* 2(7), no. 2501.426).
(3)   There is no trace of any letter after *sacc*, but a single downstroke (for the genitive of *Saccus*) is a more likely loss than the termination *-onis* (for the genitive of *Sacco*, the more common form). This Celtic name is indirectly attested in Britain by a Dacian military diploma (*CIL* 16, no. 163) issued to a British veteran, Ulpius Longinus, son of Saccus.
(4)   A name beginning *ui* or possibly *ae*.
(5)   Although incomplete, the traces are sufficient to read the cognomen *Verecundus*, which was apparently completed in the genitive case by writing *d* (and presumably *i*) in the right panel. The traces further to the right seem to be different in quality and perhaps unrelated; they do not suit the derived (and uncommon) cognomen *Verecundianus*. *Verecundus* is a popular cognomen and, although Latin ('modest'), was probably thought to 'conceal' the Celtic name element *vero-* ('true'). The cavalryman Verecundus is a witness in <WT62>, but the handwriting does not look quite the same. <WT62> and <WT65> come from different archaeological contexts although of the same date (*c* AD 80–90/5).

Column (ii):
A few letters can be recognised, for example *r* in (1), but nothing can be read with certainty. Since the left panel already consists of cognomina, the right panel would have contained further identification (cf <WT62>). The traces are sufficient to exclude *tur(ma)* as in <WT62>, or the 'century' symbol, but the long descenders at the end of (1), (3) and (4) may be the genitive termination in *-i* of their fathers' names (patronymics).

<WT65>

Fig 113 Stylus tablet <WT65> (grooved face), witnesses … Marius (perhaps Marus) … Paullus … Saccus … […] … Verecundus (scale 1:1)

<WT66> Silver fir; type 2 (Fig 114)
<7438>, [4967]; period 3 phase 1 (late), OA28
Incomplete, but preserving part of one side. W (58.9)mm; H (39.0)mm; Th R 9.2mm; Th F 6.2mm.

On the ungrooved face is part of a list of names:

.   .   .
(1)   *traces*
      Macrin[us]
      Deuillu[s]
      traces
.   .   .

… Macrinus … Deuillus …

(1)–(4)   This resembles a list of witnesses, but, although the tablet has broken at the groove, just enough remains to show that this was the ungrooved face.

(1)   The 'diagonals' of *m* and *n* are unusually horizontal. *Macrinus* is quite a common cognomen, and <WT29> was sent to a man of this name.

(2)   The first letter resembles an incomplete *b*, but *d* is quite acceptable. *Deuillus* is a Celtic name incorporating the element *deuo-* ('god') (Ellis Evans 1967, 191–3), which has occurred once in Noricum (*ILLPRON*, no. 1147, *Ottus Deuilli f(ilius)*), but is well attested in the derived form *Deuillius/Deuillia*.

The grooved face is not inscribed (not illustrated).

<WT66>

Fig 114 Stylus tablet <WT66> (ungrooved face), … Macrinus … Deuillus … , ?witnesses (scale 1:1)

<WT67> Silver fir; type 2 (Fig 115; Fig 116)
<5723>, [4702]; period 4 phase 1, S88
Incomplete, preserving part of both sides and one end with saw-cut midway. W 138.7mm; H (74.9)mm; Th R 8.0mm;
Th F 5.4/5.1mm.

The ribbed surface of both faces is badly worn and damaged. On the inner (recessed) face (Fig 115):

(1)   *traces of four lines*
(5)   …i Caesaris […]
        ac[…]
        a iun[…] *traces*

(5)   *Caesaris* is the only word which can be read, and is perhaps a reference to 'the emperor' unnamed, since none of the other traces suggest an emperor's name. The archaeological context (*c* AD 90/5–125) is little help.
(6)   Towards the bottom of the page, the letters *ac* suggest the *actum* ('executed') formula, the place name followed by consular date and month-date.
(7)   The reading is far from certain, but if it is *A(ulo) Iun[io …]*, the only consuls possible are too late for the context, A(ulus) Iunius Rufus in AD 153, and A(ulus) Iunius Pastor in AD 163.

(continued)

<WT67>

Fig 115 Stylus tablet <WT67> (inner face), Caesaris is legible but badly worn (scale 1:1)

The grooved face (Fig 116) is the better-preserved:

	(i)	(ii)
(1)	*traces*	Ma<n>sueti
	traces	Sex{s}ti
	. . .	Neonis
		Aristi
		. . .

… of Mansuetus; … of Sextus; … of Neo; … of Aristus […]

Column (ii):

This consists of four cognomina in the genitive case, apparently in different hands, as might be expected of witnesses (see note to <WT62>). Without the text in column (i), it is not possible to tell whether they belong to Roman citizens or are the patronymics of non-Romans (*peregrini*).

(1)   Initial *m* is now incomplete, unless the scribe inadvertently treated *a* as its second element. The assimilation of *Mansuetus* to *Masuetus* is quite common; for a British example see *RIB* 2(8), no. 2503.311.

(2)   *Sexsti*   For the intrusion of *s* to reinforce the [ks] sound of *x*, see <WT44> (with note).

(3)–(4)   *Neo* ('new') and *Aristus* ('best') are both names of Greek derivation, but well attested in the west.

<WT67>

Fig 116 Stylus tablet <WT67> (grooved face), … Mansuetus; … Sextus; … Neo; … Aristus, witnesses (scale 1:1)

<WT68> Silver fir; type 2 (Fig 117)
<7524> [+]; -, -
Incomplete, corner fragment. W (83.5)mm; H (57.0)mm; Th R 9.0mm; Th F 5.2mm; W seal-groove 17.9mm.

On the grooved face only the top of column (i) survives. There are two names, both apparently complete, although the constituent letters, at least as now represented by scratches in the wood, are little more than downstrokes:

(1)   Tiberius
       Aprili
       .   .   .

Tiberius … ?(son) of Aprilius …

(1)   *Tiberius* is a nomen or cognomen here, since it would certainly have been abbreviated to *Ti(berius)* if it were the praenomen of a Roman citizen followed by his nomen and cognomen.
(2)   *Aprili* is either *Aprili(s)*, quite a common cognomen, or the derived nomen/cognomen *Aprilius* in the genitive case. It is unclear how it relates to *Tiberius* above. It is either the name of the next witness, in which case read *Aprilis* with omission or loss of the final *s*, or the cognomen/patronymic of Tiberius, either 'Aprili(s)' or '(son) of Aprilius/Aprili(s)'. On balance, 'Tiberius (son) of Aprilius' seems most likely.

There are extensive traces of text on the other face, but they seem to be multiple; they also include a number of long diagonals, which suggest that one text at least was a loan-note (or similar) which was subsequently 'cancelled' (not illustrated).

<WT68>

Fig 117 Stylus tablet <WT68> (grooved face), witnesses … Tiberius … ?(son) of Aprilius … (scale 1:1)

4.3 Accounts

<WT69> Silver fir; type 1 (Fig 118)
<7489>, [6720]; period 2 phase 3 (late), OA12 phase 1
Incomplete, corner fragment preserving almost the whole of one end with saw-cut midway, and part of one side. W 145.0mm; H (38.0)mm; Th R 9.7mm; Th F 8.0mm.

In the broken corner of the outer (plain) face is part of a rectangular recessed panel 53mm wide (not illustrated).

On the inner (recessed) face there is no sign of any text except for four isolated letters deeply cut:

(1)   xxxx

40, if this is a numeral, not a series of 'crosses' or some sort of check-mark.

<WT69>

Fig 118 Stylus tablet <WT69> (inner face), ?'40' (scale 1:1)

<WT70> Silver fir; type 2 (Fig 119)
<7469>, [6594]; period 3 phase 1 (early), OA 14
Incomplete, preserving one end with saw-cut midway and part of both sides. W 142.8mm; H (47.0)mm; Th R 9.8mm; Th F 6.0mm; W seal-groove 23.6mm.

On the ungrooved face are the traces, not multiple but rather faint, of five lines at the bottom of a page:

    .   .   .

(1)   ?Cat[ullus …]

    ?*uacat* f̣it quo[…]

    traces ?[ser](u)us ḍ (denarios) xui ?(quadrantem)

    Catullus [s]er(u)us Rom[?ani] Faụstini (mille) (mille) (denarios) lxu

(5)   ?*uacat* ?[Sene]cionịs se[r](u)us [   ] (denarios) ui

?Catullus …

    total …

[*name*], the slave [of *name*], 500: 16¼ denarii.

Catullus, the slave of Romanius Faustinus, 2000: 65 denarii.

[*name*], the slave of Senecio, [*numeral*], 6 denarii.

(1)–(5)   This is evidently an account, for which the tablet, since it is type 2, must have been reused; cf <WT39> (a letter, noting other instances). The best-preserved line is (4), but there are sufficient traces in (3) and (5) to suggest that they followed the same format: the names of a slave and his master, a numeral (but no hint of what is being enumerated), and a costing in denarii. The slaves, as in <WT50> (with note), were presumably acting as their masters' agents. A diagonal line has been drawn across part of (3), and twice across (4), suggesting that entries were checked off as they were paid.

(1)   Quite likely *Cat[ullus]*, as in (4).

(2)   *fit summa* and *fiunt* occur in Vindolanda accounts in the sense of 'total', which is probably the sense here. *quo* may be complete, but the surface is too poorly preserved to be sure it is not *quo[d]* or similar.

(3)   The numeral before the *denarii symbol* is probably a barred *d* for '500', a reading which is supported by (4), in which '2000' cost four times as much (65 denarii instead of 16¼ denarii). The cost in (3) is reckoned in denarii ('16') followed by two strokes. The first is horizontal, the second is below it, but much shorter and hooked, with the hint of an upward curve; so it is not a second horizontal for two *asses*, as in <WT72> (4), but 'the reversed *c* with bar' found in a Vindolanda account (*Tab Vindol* 2, no. 193, l 4) and which the editors think represents the quadrans of one denarius or 'a quarter-denarius' (ibid, 54–5). Cf <WT45> (6) with note.

(4)   This line, as already noted, is the best-preserved and elucidates the others. Since Catullus is a slave, he is unlikely to be the 'Catullus' of <WT14>, who is evidently a householder. The restoration of his master's nomen is not certain, but *Romanius* is much more common than *Romilius* or *Romulius*.

For other instances of the symbol for *mille* ('1000'), see <WT78>. One denarius buys almost exactly 30 items, whatever they are, which is half the price of the items in the beer account (<WT72>), so the items must be different.

(5)   There are sufficient traces of the master's cognomen to read *Senecionis*, without it being certain. There is no sign of text to the left, so it is likely that he had no nomen (and was thus not a Roman citizen), and that his slave is not actually named; in any case, there would not have been room for both names. But if there was a name there, it is more likely to have been the slave's. The numeral, for which cf (3) and (4), has been lost entirely. If it were *cc* ('200'), a costing of *(denarii) ui s(emis)* (6½ denarii) might be expected, but there is no sign of *s(emis)* after *ui*.

<WT70>

Fig 119 Stylus tablet <WT70> (ungrooved face), part of an account where slaves (Catullus, …) are acting for their masters (Romanius Faustinus, Senecio, …), and a costing in denarii (scale 1:1)

<WT71> Silver fir; type 1 (Fig 120)
<6289>, [6544]; period 3 phase 1 (early), OA15
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 137.2mm; H (69.2)mm; Th R 7.7mm; Th F 5.7mm.

The inner (recessed) face carries traces of three lines of text, with uninscribed space below, as if this is the end of the text:

.   .   .
(1)   *traces*
        traces
        acced(unt) (denarii) xx

… total: 20 denarii.

(1)–(3)   The traces are rather faint, and belong to more than one text. A few unrelated letters are identifiable, but only the third (and last) line is legible. It is evidently the sum of an account. The word *acced(unt)* is abbreviated with an interpunct.

<WT71>

Fig 120 Stylus tablet <WT71> (inner face), total: 20 denarii, the sum of an account (scale 1:1)

<WT72> Silver fir; type 1 (Fig 121)
<2048>, [3072]; period 3 phase 1 (early), OA134
Incomplete; two conjoining fragments preserving one end with saw-cut midway between hinge-holes, and part of both sides.
W 144.0mm; H (63.0)mm; Th R 6.0mm; Th F 5.2mm.

On the inner (recessed) face, the letters in (1)–(5) are rather faint and incomplete, but (6) and the beginning of (7) are firmly incised and quite legible; this helps in reading (1)–(5), since the text is repetitive:

(1)   rat[i]o Crispi cerues[a] (denarios) u
        traces as cu ?(denarios) uii
        (denarios) (asses) iii cerues{s}am per ?Butu(m) (denarios) s(emissem)
        traces (denarios) (asses) ii *traces*
(5)   ceruesa (denarios) (asses) ii ceruesa (denarios) s(emissem) ?(quadrantem)
        per Ianuarium ceruesa (denarios) i s(emissem)
        ex eo […]
        .   .   .   .

Account of Crispus, beer: 5 denarii.
… 105 [*units*]: 7 denarii
(and) 3 *asses*. Beer, through Butus: half a denarius.
… 2 *asses* …
Beer: 2 *asses*. Beer: half a denarius (and) one-quarter.
Through Januarius, beer: one (and) a half denarii.
From this …

(continued)

<WT72>

Fig 121 Stylus tablet <WT72> (inner face), account of Crispus in respect of sums due for beer supplied (scale 1:1)

(1)   A number of Vindolanda accounts are identified as *ratio* with a personal name in the genitive (see note to *Tab Vindol* 3, no. 686, l 1; ibid, 136), and at least three are lists of items supplied and the cost of each. The person named is probably the supplier, not the recipient, but this is not certain. *Tab Vindol* 2, nos 192 and 207 are both headed *a Gauone* ('from Gavo'), and identified overleaf as *ratio Gauonis* ('account of Gavo'), but in no. 207 the editors cannot be sure 'whether Gavo is collecting items from or distributing them to others' (ibid, 178, 179). *Tab Vindol* 3, no. 601, which is headed *ratio Flori* ('Account of Florus'), consists of four dated transactions: 'to Florus' (?) and 'to Modestinus' (?); 'to Florus' (*Floro*); 'through Florus' (*per Florum*); 'to Florus' and 'to Florus' (*Floro* twice). This 'Account of Florus' (*ratio Flori*) must either be 'an account of various transactions in which Florus was involved' (ibid, 63–4), or otherwise the Florus to whom goods were supplied is a different person from the Florus who supplied them.

The meaning of 'Account of So-and-so' must therefore be deduced from the content, but this may be incomplete. In view of *Tab Vindol* 2, nos 192 and 207 (above), he is more likely to be the supplier than the recipient. <WT72> is thus probably an account of sums due to (or paid to) Crispus in respect of beer supplied, either directly or through a named agent.

(2)   The traces are faint and ambiguous until the end of the line, which appears to be the accusative plural termination *-as* and the numeral *cu* ('105') followed by an incomplete *denarii symbol* and the numeral *uii* ('7').

(3)   The *denarii symbol* occurs twice in this line, at the beginning and at the end, and is written with a suprascript bar. This elaboration is unusual, but it can be seen again in (6), and probably also in (2) and (4). The first symbol in (3) is followed, not by a numeral, but by three short horizontal strokes which, by analogy with (4) and (5) (see note below), number *asses*. The *denarii symbol* was repeated from the previous line, whether by oversight, or to confirm that these marks represented coin. They bring the total cost of the previous item to 'seven denarii (and) three *asses*' (amounting to 115 *asses*), raising the possibility that *cu* is a slip for *cxv* ('115'): they would then cost one *as* each, or 16 to the denarius. Since the other entries all relate to beer, it may be conjectured that this unit (or item) was a measure of beer. The obvious candidate is the *modius* of 16 *sextarii*, the Vindolanda beer price (see below) being the equivalent of 12½ *modii* for one denarius, but unfortunately the traces in (2) do not support either *ceruesa* or *modios*.

The geminated *s* of *ceruessam* (3) is a 'vulgar' hypercorrection rather than an alternative spelling (see <WT56> (1), *promissit* with note), but is noteworthy since the word is spelled correctly in (1), (5) and (6). After it, the preposition *per* can safely be read (cf (6), with note), but the name which follows is difficult. There is no sign of the cross-stroke of *t*, but this is often lost in the grain; the spacing of the strokes makes *butu* a likely reading. A personal name *Butus* is not securely attested, but the Eccles (Kent) 'curse tablet' (Hassall and Tomlin 1986, 428, no. 2; 430–1, figs 1–2) apparently refers to *Butu* (nominative). The omission of final *-m* would then be a trivial 'vulgarism'. Perhaps the name incorporated the same element as *Butelus*, *Butio* and *Butrio*, attested as the names of samian potters (Hartley and Dickinson 2008b, 130–3).

(4)   The traces are illegible except for what looks like *(denarii) (asses ii)* midway, of which there is a better example in (5).

(5) Two entries for 'beer' and the cost. The first is only in *asses*, of which there were 16 to the denarius. They are denoted by 'short, horizontal ticks to a maximum of three' in some Vindolanda accounts (notably *Tab Vindol* 2, no. 182), a convention discussed by the editors (ibid, 55).

The vertical stroke after *s(emissem)* at the end of the line is more difficult. It is more leftward-curving than the numeral '1' after the *denarii symbol* in the line below and surely denotes a subdivision smaller than one-half (*semissem*). It cannot be two-sixteenths (two *asses*) or three-sixteenths (three *asses*), since these are denoted by the corresponding number of horizontal strokes in (4) and (5) respectively. One sixteenth (one *as*) in this document would therefore be a single horizontal stroke, despite taking the form of 'two vertical strokes, the first of which is met by a short horizontal' (*Tab Vindol* 2, 186) in <WT45> (3). This leaves one-quarter, the quadrans of a denarius (for which see <WT45> (6) with note). In some Vindolanda accounts it is apparently 'a longish *i* curling to the left with a short superscript bar' (ibid, 54), and this would seem to be the case here, although there is no sign of the suprascript bar, and in <WT70> (3) the symbol is somewhat different.

(6) As already noted, this is the best-preserved line and elucidates the others. The preposition *per* ('through') means that the beer was supplied by the agency of the person named, as in *Tab Vindol* 2, nos 186 and 190, where commodities are bought 'through' (*per*) named persons, for example a *metreta* of beer each *per Audacem* and *per Similem* (ibid, no. 186, ll 9–12, 22–3). Like Gracilis in the same document (ibid, ll 3, 5, 17, 19, *per Gracilem*), Audax and Similis are not vendors, but agents; and they do not supply the goods, but receive them, as the parallel entry '*to* Gracilis' (ibid, l 7, *Gracili*) makes explicit.

(7) *ex eo*   For this phrase, cf *Tab Vindol* 3, no. 607.a, l 3, where it introduces the use made of the previous item (thread used to repair a cloak). Here it probably introduces a breakdown of the sum assigned to Januarius.

In no more than six, somewhat repetitive, lines, there is notable variation of format. 'Beer' is *ceruesa* (nominative, correctly spelled) in (1), (5) and (6), but *ceruessam* (accusative, and hypercorrect) in (3). *ceruesa*, apparently nominative, may even be accusative, if the final (unsounded) *-m* was omitted, as it apparently was with *Butu* (3), but not with *Ianuarium* (6). The *denarii symbol* in (5) seems to be different from that in other lines. This all suggests that the account was not drawn up at one time, but that entries were made progressively, probably by more than one hand, when each delivery was made.

The Vindolanda tablets fortunately mention a price for beer (*Tab Vindol* 2, no. 186, l 12, already cited): one *metreta* cost eight *asses*, the equivalent of 100 *sextarii* ('pints') for half a denarius. In terms of *modii*, each one of 16 *sextarii*, this would be 25 *modii* for two denarii. The quantities implied by the cost-prices in <WT72> are therefore quite large; they would certainly have required barrels, so cf <WT14>, addressed to a cooper (*cuparius*). These quantities are 'wholesale', not 'retail', and it may be conjectured that Crispus is a brewer like Tertius (<WT12>), supplying a tavern. But, as already noted, it remains possible that he is the recipient, in fact the owner of the tavern. Without knowing who was keeping the account, it is not possible to settle this question.

<WT73> Silver fir; type 1 (Fig 122)
<5177>, [6063]; period 3 phase 1 (late), OA17
Incomplete, preserving half of one end, which has broken off midway at the saw-cut, and part of both sides. W 142.8mm;
H (59.0)mm; Th R 6.3mm; Th F 5.3mm.

On the inner (recessed) face, there are traces of seven lines of text, but they are shallow and fragmentary. Isolated letters can be recognised, *m* and *n* in particular, but no words. The only sign of this being an account is the barred numeral *cc* ('200') in (3), which may be followed by one or more digits. Line (5) ends with the nominative masculine termination *-inus*.

<WT73>

Fig 122 Stylus tablet <WT73> (inner face), '200' in an ?account (scale 1:1)

\<WT74\> Silver fir; type 1 (Fig 123)
\<5785\>, [6383]; period 3 phase 1 (late), OA22
Incomplete, preserving part of both sides. W 136.3mm; H (41.5)mm; Th R 7.5mm; Th F 5.6mm.

On the inner (recessed) face, there are extensive traces of four lines of text, but they are multiple and overlie other lines of text:

   . . .

(1)   quam tuam x s(emis)   *traces*
      m(odii) xui s(emis)   *traces*
      traces
      traces
      . . .

… which (*or* than) yours, 10½ … 16½ *modii* …

(1)–(4)   Evidently an account of some kind, not continuous text.
(1)   *x*   Possibly a *denarii symbol*, but there is no sign of the horizontal mid-stroke.
(2)   *m(odii)*   Abbreviated as *m* with suprascript bar, as in *Tab Vindol* 3, no. 746. *m* with *o* suprascript is more usual.
(3)–(4)   It is not possible to distinguish one text from another, but *ac* can be recognised in (3), and two barred numerals in (4).

<WT74>

Fig 123 Stylus tablet <WT74> (inner face), part of an account (scale 1:1)

\<WT75\> Silver fir; type 1 (Fig 124)
\<7457\>, [6545]; period 3 phase 1 (late), OA22
Incomplete, preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 137.0mm; H (64.0)mm; Th R 7.4mm; Th F 5.6mm.

On the inner (recessed) face are traces of one and a half lines, then a space, and two further lines at the bottom:

         .   .   .
(1)   Romanorum ?(denarios) *traces*

      traces

      uacat

      traces

      traces

… of Roman … ?(denarii) …

(1)–(2)   This does not appear to be continuous text, but some sort of annotation or account.

(1)   There are three descenders from the line above. The genitive plural *Romanorum* is either a noun ('of the Romans') or an adjective ('of Roman *somethings*'). It is followed by a large 'cross' which is rather bold to be a numeral ('10'); it looks more like a *denarii symbol*, but there is no trace of the horizontal mid-stroke, nor is it apparently followed by a numeral.

(2)   In the second half of this line, but out of alignment with it, is an enlarged *a* and an enlarged *s*, not necessarily related; and then a long diagonal stroke as far as the line of text at the bottom, as if to close off the intervening space.

<WT75>

Fig 124 Stylus tablet <WT75> (inner face), part of an annotation or account (scale 1:1)

<WT76> Silver fir; type 1 (Fig 125)
<7460>, [6545]; period 3 phase 1 (late), OA22
Complete, but in three conjoining pieces. W 146.2mm; H 121.0mm; Th R 7.0mm; Th F 6.3mm.

On the inner (recessed) face are traces of seven lines of text, but they are rather faint and confused by traces of earlier text on much the same alignment:

(1)   (denarios) xxx debet Ammonicus
            s..ae   ex uius de
        Pactumeius ?Adenhi filius
        ac *traces* adeco
(5)   *traces*
        […]e ?s(umma) ?(denarios) cui *uacat*
        traces

Ammonicus owes 30 denarii. … Pactumeius the son of ?Adenhus, … ?total 106 denarii.

(1)   In view of the well-preserved numeral which follows it, and since *debet* ('owes') implies a sum of money, the *denarii symbol* is certain, despite being complicated by other incisions. One of the vertical strokes might be taken with the numeral, to read IXXX ('29', not '30'), but the spacing suits XXX ('30').
The second *m* of *Ammonicus* is complicated by a redundant diagonal, presumably residual, and the second stroke of *o* was continued downwards to become the first stroke of *n*. Such ligatures hardly occur in the Bloomberg tablets. *Ammonicus* is a rare variant of the name *Ammonius* which, despite its apparent derivation from the Egyptian god Ammon, is quite widespread in the west; for Britain, see *RIB* 1, no. 2213 (Ardoch, Perthshire), the 1st-century AD tombstone of an auxiliary centurion. The form *Ammonicus* has only been found in Lusitania, at Emerita (Mérida, Spain) and nearby (*CIL* 2, no. 514; *EE* 8(2), no. 72).
(2)   Initial *s* is cut by a long curve from below, which is probably the first letter of (3), rather than part of *f* or barred *s* for *sextarii*. The next four letters are complicated by strokes which may be residual. Possibly it is a personal name ending in -*ae*, that of the person *to* whom Ammonicus owes the money.
Then there is a gap, followed by *ex* cut quite deeply, but only faint traces of *uius*. If these were taken together, *Exuvius* might be read, as a variant spelling of the rare name *Esuvius* (possibly to be restored in *RIB* 3, no. 3079), but this is only a possibility. The line ends with *de*, but not necessarily on the same alignment. Since it is unrelated to the next line, it is not a preposition, but either residual or perhaps an abbreviation for *decurio*. For evidence of (cavalry) decurions, see <WT62> (with note). If so, it would describe either Ammonicus (if interlineated below his name), or ?Exuvius.
(3)   *Pactumeius*   The initial letter looks more like *C*, but *p* and *c* can look rather alike in some cursive hands. The succeeding letters, although complicated by traces of others at a slightly higher alignment, make *Pactumeius* acceptable as a reading. This is quite well attested as a nomen, although it is not noted by Schulze (1933).
Adenhi   The reading looks good, but the name ⋆*Adhenus* is unattested.
filius   The first letter is incomplete, but in view of the succeeding -*ilius*, it is not *a* or *p*, but *f* made with a second single downward diagonal stroke (Chapter 2.3).
(4)   The line begins with an enlarged *a*, as if for *actum* ('executed') or *acceptum* ('received'), but neither can be read in the traces which follow, which are clearly those of two texts or more. The line ends with the sequence *adeco*, apparently after a gap, but if this is a name, it is unattested.
(5)   This is also multiple; individual letters can be recognised, but no words.
(6)   After *e*, which is rather slight and looks residual, the five letters beginning with *s* are enlarged and apparently followed by a space. This suggests that they stand alone, and were intended to be the summary or total of an account. Two Vindolanda accounts conclude with the sequence *s(umma) (denarii)* numeral (*Tab Vindol* 2, no. 191, ll 14–15; no. 192, l 9), which may be the case here. *s* is easily understood as *s(umma)*; the bold 'cross' must be the *denarii symbol*, not *x*, although there is no sign of its horizontal mid-stroke; and the apparent *a* must be read as *i,* by treating the diagonal stroke as residual or something from above, like the downstroke to its left which almost cuts *c*.

Fig 125 Stylus tablet <WT76> (inner face), detailing that … Ammonicus owes 30 denarii … Pactumeius the son of ?Adenhus, … ?total 106 denarii (scale 1:1)

4.4 Miscellaneous

Numerals

<WT77> Larch (*Larix decidua*); type 1 (Fig 126; Fig 127)
<7478> and <7479>, [6619]; period 2 phase 3 (late), OA12 phase 1
Incomplete, in two conjoining fragments (from the same context), preserving part of both sides. The end has broken off midway at a V-notch cut into the inner face of the border, and on the fore edge is scored a zigzag. W 132.0mm; H (45.0)mm; Th R 8.9mm; Th F 7.5mm.

On the outer (plain) face (Fig 126) is a grid of scored lines, horizontals (with the grain) *c* 5–8mm apart, verticals (against the grain) *c* 10mm apart. It is almost the same pattern as on <WT78>, but this is not part of the same tablet; it belongs to the other half of a pair (see note to <WT78>).

In one corner of the inner (recessed) face (Fig 127) is a figure, a numerical symbol (see note to <WT78>):

(1)   ?*uacat*
        ?*uacat* |$\overline{\mathrm{X}}$|
        .   .   .   .

1,000,000

(2)   The figure consists of X between sinuous vertical strokes, with a third sinuous stroke horizontally above. A fourth line has been drawn immediately below.
There are a few other traces, but they are very slight and isolated. They seem to be unrelated to this symbol, and even to belong to previous (or perhaps subsequent) use of the tablet. It is not clear which way up to take the symbol, but the bottom right corner is its likely position. <WT77> was hinged to <WT78> (see below) at the other end, since that is where the (now lost) hinge-holes were. Since <WT78> was inscribed downwards towards its own hinge-holes, the implication is that the second page (of which <WT77> is part) began after the hinge-holes. There is support for this interpretation in that the sinuous third stroke (see above) is in the style of the sinuous strokes either side, with the '1,000,000' symbol consisting as usual of X boxed in by three strokes, one either side and one above (see further, note to <WT78>, below). The fourth stroke is like the line below the '100,000' symbol in <WT78>, and was presumably added for emphasis or completion.

For the text as a whole and its interpretation, see the note to <WT78> (below).

<WT77>

Fig 126 Stylus tablet <WT77> (outer face), with grid of scored lines (cf <WT78> Fig 128); one of two leaves of a diptych with <WT78> (scale 1:1)

<WT77>

Fig 127 Stylus tablet <WT77> (inner face), with '1,000,000' symbol (cf <WT78> Fig 129) (scale 1:1)

<WT78> Silver fir; type 1 (Fig 128; Fig 129)
<7516>, [6778]; period 2 phase 3 (late), OA12 phase 1
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 134.0mm;
H (57.5)mm; Th R 8.5mm; Th F 7.4mm.

A rectangular recessed panel, 22 × 17mm, has been excised from one corner of the outer face (Fig 128). This face is scored with a grid of parallel lines, the horizontals (along the grain) *c* 5–10mm apart, the verticals (against the grain) *c* 5–8mm apart. It is crossed by two diagonal lines from corner to corner (incidentally cutting across the rectangular recessed panel, which must have been there already), and these lines would have crossed at the centre.
This pattern is much more elaborate than the simple lines on <WT82> and <WT83>, but is also found on <WT77>, which, however, does not conjoin. This is part of another tablet, since the wood species is different and its pattern does not include the diagonals of <WT78>, nor do the intervals of the vertical lines match. But <WT77> is the same as <WT78> in width and thickness, and the raised borders are the same. The three fragments are unique in being inscribed with nothing but numerical symbols. They come from the same land use and were found close together: <WT78> came from a dump deposit overlying another dump deposit containing the two conjoining fragments of <WT77>. They must therefore be fragments of two separate leaves from the same block, which were hinged together to make a diptych.

(continued)

<WT78>

Fig 128 Stylus tablet <WT78> (outer face), with grid of scored lines (cf <WT77> Fig 126); one of two leaves of a diptych with <WT77> (scale 1:1)

The text on the inner (recessed) face (Fig 129) consists of numerical symbols in two columns:

(i)	(ii)
. . .	. . .
(1) |)) ∞ ∞ ∞	|)) ((|))
|)) ∞ ∞ ∞ ∞	|)) ((|)) ((|))
((|))	|)) ((|)) ((|)) ((|))
((|)) ((|))	|)) ((|)) ((|)) ((|)) ((|))
(5) ((|)) ((|)) ((|))	((((|))))
((|)) ((|)) ((|)) ((|))	

(i)	(ii)
. . .	. . .
8000	60,000
9000	70,000
10,000	80,000
20,000	90,000
30,000	100,000
40,000	

Columns (i) and (ii):

Some of the symbols in (i) line (6) and (ii) lines (1)–(3) are incompletely preserved, but the traces are entirely consistent with this reading, which itself is confirmed by the obvious regularity of the sequence. The *mille* (1000) symbol is frequent in stone inscriptions, and also occurs in <WT77>. The symbols for '10,000', '100,000' and '1,000,000' are less common, but are sufficiently attested by stone inscriptions; they are discussed by Gordon (1983, 44–8) and tabulated by Cooley (2012, 358). They conveniently occur in sequence on the columns of the bronze abacus now in Paris (Kretzschmer and Heinsius 1951, 103, fig 4).

A line has been drawn immediately under the '100,000' symbol in (ii) which, like that under the '1,000,000' symbol in <WT77>, was presumably added for emphasis or to mark completion. Three straight lines have been scored over (i) lines (1)–(3), but it is unclear whether they simply mark its right edge or were meant to be a crossing-out. There are incomplete traces of a few ?letters to the right of the '100,000' symbol in (ii) (5), but they seem to be unrelated, like a few isolated traces elsewhere. They probably belong to previous use of the tablet, for which cf <WT77>.

It is difficult to restore the missing text. The sequence in column (i) implies that it continued '1000' | '2000' |'3000' | '4000' | '5000' | '6000' | '7000' above it, but this cannot be balanced with column (ii), from which only '50,000' is demonstrably missing. Nor is there any explanation of why <WT77> should be blank until '1,000,000' was inscribed at the very bottom. By analogy with <WT78>, the sequence from '200,000' to '900,000' would have been expected; but of this there is no sign.

The text is clearly not an account. Like the alphabets of <WT79>, it would seem to be 'writing-exercise', but confined to numerical symbols; the scribe might have been a trainee clerk or book-keeper, or even a schoolboy.

<WT78>

Fig 129 Stylus tablet <WT78> (inner face), two columns of numerical symbols, possibly 'writing-practice' (cf <WT77> Fig 127) (scale 1:1)

Alphabet

<WT79> Silver fir; type 1 (Fig 130; Fig 131)
<2086>, [2958]; period 2 phase 3 (early), OA120
Incomplete, in two conjoining fragments, preserving part of both sides and one end with saw-cut midway. W 135.0mm; H (72.0)mm; Th R 7.2mm; Th F 4.9mm.

On the outer (plain) face (Fig 130) is what appears to be the last two lines of an address, in capitals:

. . .
(1)   ABCDIIFGHIKL
    MNOPQRST
    uacat

(1)–(2)   It is in fact an alphabet, the last two letters (V and X) being omitted. The binding cord, if any, would have passed between II and F. But since it would also have been crossed by Q, which is apparently unbroken, it would seem that there was no binding cord when the alphabet was inscribed, and that the tablet was not being used for correspondence at the time. This is confirmed by the remains of another alphabet inside (see below).

If the alphabet ostensibly concluded an address, as its position in the lower half of the face would suggest, then perhaps it was a joke: an allusion to the literacy of the recipient, say as a letter-cutter, or one of the military clerks 'capable of teaching' (*librarii qui docere possint*) according to the *Digest* (50.6.7). But more likely, it was written here because the surface was still uninscribed, and thus available for 'writing-practice' (cf the numerals of <WT78>, Fig 129), if not as a demonstration of letterforms or literacy.

(continued)

<WT79>

Fig 130 Stylus tablet <WT79> (outer face), with alphabet, possibly 'writing-practice' (scale 1:1)

The inner (recessed) face (Fig 131) has been used many times, but over these traces are remains of large capital letters:

(1)   ABCDEFG[…]
      ·[…]

<WT79>

Fig 131 Stylus tablet <WT79> (inner face), with alphabet, possibly 'writing-practice' (scale 1:1)

Unusual format but not inscribed

<WT80> Silver fir; type 1 (Fig 18)
<7519>, [6779]; period 2 phase 3 (late), OA12 phase 1
Incomplete, but preserving one end with knife-cut notch midway between hinge-holes, and part of both sides. W 135.0mm; H (60.0)mm; Th R 7.1mm; Th F 5.3mm.

A second, smaller, notch has been cut midway in the broken end, indicating that the tablet was broken in half like <WT12> (with note) for reuse as a diptych in correspondence. But there is no sign of any address, or traces of text on the inner (recessed) face.

<WT81> Silver fir; type 1 (not illustrated)
<7521>, [6779]; period 2 phase 3 (late), OA12 phase 1
Incomplete, in two conjoining fragments preserving most of one end with saw-cut midway and part of both sides. W 140.5mm; H (47.4)mm; Th R 9.1mm; Th F 6.6mm.

On the outer (plain) face a rectangular recessed panel measuring 53 × 19mm has been excised at one corner. There is no trace of text, but on both faces there is an irregular line of punched shallow holes *c* 10mm apart, which do not go right through. They are probably casual damage.

<WT82> Silver fir; type 1 (not illustrated)
<6298>, [6586]; period 3 phase 1 (early), B7
Incomplete, but preserving most of one end with saw-cut midway, and part of both sides. W 143.2mm; H (57.6)mm;
Th R 9.6mm; Th F 8.4mm.

Two pairs of vertical lines have been scored down the outer (plain) face, but they are not letters. They were probably decorative, or to aid recognition; cf <WT83>, which is a little more elaborate, and the very elaborate pair <WT77> and <WT78>.

On the inner (recessed) face are faint traces of a few incomplete letters at line endings.

<WT83> Silver fir; type 1 (Fig 132)
<5792>, [6414]; period 3 phase 1 (early), OA15
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 147.1mm; H (46.6)mm; Th R 6.8mm; Th F 6.0mm.

Scored on the outer (plain) face are three vertical lines (two of them repeated), crossed by two converging diagonals which would have intersected and run from corner to corner. They were probably decorative, or to aid recognition; cf the less elaborate <WT82>, and the very elaborate pair <WT77> and <WT78>.

The inner (recessed) face has been used several times, and although the traces are extensive, they are illegible (not illustrated).

<WT84>, <WT85> and <WT86>
These three tablets all come from the same context [6465] and are unusually wide, c 176mm instead of the usual c 140mm. They would have formed a triptych, with <WT86> being sandwiched between <WT84> and <WT85>, so as to provide two inner text 'pages', a witness-list 'page' and an outer text 'page' (cf Fig 17). Unfortunately there is no trace of any text.

<WT84> Silver fir; type 1 (Fig 133)
<6274>, [6465]; period 3 phase 1 (late), B9
Complete, except for one corner. W 176.0mm; H 146.0mm; Th R 7.3mm; Th F 5.4mm.

<WT85> Silver fir; type 1 (Fig 133)
<6275>, [6465]; period 3 phase 1 (late), B9
Incomplete. W 176.0mm; H (62.0)mm; Th R 5.6mm; Th F 3.1mm.

<WT86> Silver fir; type 2 (Fig 133)
<6277>, [6465]; period 3 phase 1 (late), B9
Incomplete. W 177.0mm; H (130.0)mm; Th R 6.7mm; Th F 3.2mm; W seal-groove 27.7/25.8mm.

<WT83>

Fig 132 Stylus tablet <WT83> (outer face), with scored vertical and diagonal lines (scale 1:1)

<WT84>

Fig 133 (this and facing page and overleaf) Triptych of unusually wide stylus tablets, showing the four inner faces or 'pages', with schematic reconstructions: the inner face of type 1 outer tablet <WT84> (face 2; page 1); type 2 inner tablet <WT86> (faces 3 and 4; page 2 and witnesses); the inner face of type 1 outer tablet <WT85> (face 5; outer text) (scale 1:1)

tablet 1
(type 1)

inner text

tablet 2
(type 2)

tablet 3
(type 1)

outer text

<WT86>

Fig 133 (cont)

<WT86>

seals

tablet 1

tablet 2

witnesses

tablet 3

outer text

Fig 133 (cont)

seals

tablet 1

tablet 2

witnesses

tablet 3

outer text

<WT85>

Fig 133 (cont)

<WT87> Maple (*Acer* sp); type 4 (Fig 134; Fig 135)
<5180>, [6086]; period 3 phase 1 (late), B11 phase 2
Incomplete, in three conjoining fragments preserving one end and part of both sides. W 155.0mm; H 72.0mm; Th R 7.3mm; Th F 7.0mm.

    In the outer (plain) face (Fig 134), midway and towards the edge, a four-pointed 'star' has been neatly inserted; it is made of bone *c* 1mm thick, scribed with a centre-point within two concentric circles. Between it and the edge, there is a pierced hole, which suggests that it marked the end of the binding cord. Such a 'star' can be seen on the block of tablets carved in high relief on the tombstone at Salona (Split, Croatia) of the *beneficiarius consularis* Quintus Aemilius Rufus, a legionary seconded to the staff of the governor of Dalmatia (*CIL* 3, no. 12895; illustrated by Speidel 1996, 19, fig 4). Carratelli (1950) notes a 'star'-like incision in the outer face of a block of eight tablets from Herculaneum, Italy, but to judge by his description, it is only a recess; he is not aware of any inclusion. The same 'star'-like recess is visible on the outer face of a set of narrow (*c* 105 × 50mm) ivory stylus tablets in the museum at Aquileia, Italy (Brumat Dellasorte 1989, 47 with fig 76b), but again the inclusion is missing, so its survival in <WT87> is noteworthy. The third (broken) corner is charred, and there is no trace of any text.

(continued)

<WT87>

Fig 134 Stylus tablet <WT87> (outer face) with a four-pointed bone 'star' inserted in the surface (scale 1:1)

This is one of only two tablets made of maple, instead of the usual silver fir, and the format is also unique, since the inner (recessed) face (Fig 135) is divided vertically by a raised band 3mm wide into unequal panels, 130mm and 13mm wide respectively. When the wider panel was recessed, a small rectangle of the original surface was retained, measuring 3 × 4mm, its purpose being to prevent the surrounding wax from touching that of the similar tablet to which it was hinged: there is an example of this device at Vindonissa (Speidel 1996, no. 1), and an ancient description of it in a 4th-century AD papyrus (*P Fouad I*, no. 74) which is a shopping-list of items to buy in Alexandria. If this projection was more or less centred, the tablet would have been originally 155mm by only *c* 80mm, which is narrower than usual. The ivory tablets from Aquileia (above) also have such a central projection on their recessed faces. Unique in Britain, but with all these Continental parallels, <WT87> was undoubtedly imported, whether or not it was already in use.

This format is found in the final leaves of three multiple blocks of boxwood tablets found at Herculaneum, the largest of which measures 135 × 70mm (Carratelli 1950, 271, fig 26). They too have lost their text, but one of the narrow panels is unwaxed and has been inscribed in ink, perhaps with numerals; the implication is that it was intended for numerical annotation, although since the recess was obviously intended for wax, this ink inscription may not be primary or represent the original purpose. However, the waxing of both panels implies that the narrow panel was intended to provide a separate column to the right (or left) of the wider panel, or a separate line above (or below) it, depending on whether the tablet was being inscribed long-axis (along the grain) or short-axis (across it); this narrow panel would provide a reserved space in which to enter figures such as prices or totals. They could be deleted or altered as required, without any need to 'wipe' the whole tablet. An account such as <WT72> could have been compiled in this way. There is one example of this format from Vindonissa (Speidel 1996, 24–5), except that the narrow panel is aligned long-axis, with the grain.

<WT87>

Fig 135 Stylus tablet <WT87> (inner face) divided into two recessed panels, of different widths, with a small rectangle of the original surface retained to separate the larger waxed panel from the face of another tablet (scale 1:1)

<WT88> Silver fir; type 3 (Fig 136)
<6365> and <6367>, [6534]; period 3 phase 1 (late), OA22
Incomplete, in two conjoining fragments, preserving one corner and half of one end, since it has broken at the saw-cut midway.
W (93.5)mm; H (54.3)mm; Th R 8.1mm; Th F 2.8mm.

Both faces are recessed, and one is divided unequally into panels 32mm and 50mm wide by a vertical raised border 3–4mm wide (Fig 136). The 50mm panel is certainly original, and the 32mm panel evidently is, since it terminates in a cut edge. From the position of the saw-cut, it can be deduced that the tablet was originally 150mm wide, and was divided into three panels, 50mm, 32mm and 50mm wide respectively. This unusual format was evidently shared by <WT90>, and is the same as that of the stylus tablet from Milecastle 50 (Turf Wall) (Simpson et al 1935, 227 with fig 10). The fragmentary example from Vindolanda (*Tab Vindol* 1, pl 12, no. 1; Birley et al 1993, pl 24) has broken in just the same way. For two other examples from London, see Chapman and Straker (1986, 227–9, nos 9.2–.3).

<WT88>

Fig 136 Stylus tablet <WT88>, recessed face divided into panels (scale 1:1)

<WT89> Silver fir; type 1 (not illustrated)
<5783>, [6342]; period 3 phase 1 (late), OA34
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 181.0mm; H (41.6)mm; Th R 8.1mm; Th F 5.4mm.

   The tablet is unusually wide, and a series of holes, *c* 10mm apart as if for 'stitching', have been pierced all around the edge of the recessed surface. There are traces of about three lines of text, but probable signs of reuse, and no legible letters.

<WT90> Silver fir; type 3 (Fig 137)
<4280>, [4456]; period 3 phase 2, OA40
Incomplete, in two conjoining fragments preserving part of one side. W (89.5)mm; H(32.0)mm; Th R 7.7mm; Th F 4.1mm.

   Both faces are recessed, but one is divided vertically by a raised band 9mm wide (Fig 137). One panel is 39mm wide, its original width, but the other is now broken. In view of <WT88> (with note), it is likely that there were originally three panels side by side, the outer ones 39mm wide, the middle one somewhat narrower. There is almost no trace of text.

<WT90>

Fig 137 Stylus tablet <WT90>, recessed face divided into panels (scale 1:1)

4.5   Descripta

<WT91> Silver fir; type 1 (not illustrated)
<7502>, [6749]; period 2 phase 2, S5
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 134.4mm; H (58.2)mm;
Th R 8.7mm; Th F 7.5mm.

On the inner (recessed) face extensive traces, but shallow and incomplete. Hardly any letters are recognisable.

<WT92> Silver fir; type 2 (not illustrated)
<9115>, [6772]; period 2 phase 2, S45
Incomplete, corner fragment. W (86.0)mm; H (38.0)mm; Th R 8.6mm; Th F 7.6mm; W seal-groove 19.0mm.

On the (ungrooved) recessed face, a medley of lines including three or four six-pointed 'stars', but no sequences of letters.

On the grooved face scored lines, but no sequences of letters.

<WT93> Spruce (*Picea abies*); type 1 (not illustrated)
<7503>, [6750]; period 2 phase 3 (early), S33
Incomplete, but preserving part of both sides. W 141.7mm; H (17.9)mm; Th R 6.5mm; Th F 6.3mm.

The inner (recessed) face is worn, with faint traces of about two lines of text.

<WT94> Silver fir; type 2 (not illustrated)
<7504>, [6750]; period 2 phase 3 (early), S33
Incomplete, corner fragment in three pieces. W (77.0)mm; H (37.0)mm.

One piece carries part of two or three letters from the top right corner of the grooved face.

<WT95> Silver fir; type 1 (not illustrated)
<7505>, [6750]; period 2 phase 3 (early), S33
Incomplete, but preserving part of both sides. W 130.5mm; H (36.5)mm; Th R 7.2mm; Th F 6.0mm.

The inner (recessed) face has been used many times.

<WT96> Silver fir; type 1 (not illustrated)
<7507>, [6768]; period 2 phase 3 (early), S35
Incomplete, but preserving one end with saw-cut midway and part of both sides. W 138.0mm; H (74.4)mm; Th R 7.3mm;
Th F 6.4mm.

A rectangular panel, 59 × 19mm, has been excised from one corner of the outer (plain) face.

The inner (recessed) face is badly worn, with multiple traces of text in which a few letters can be recognised.

<WT97> Silver fir; type 1 (not illustrated)
<6412>, [6650]; period 2 phase 3 (late), B1 phase 2
Incomplete, in two conjoining fragments preserving part of both sides and part of one end with saw-cut and hinge-hole. W (71.4)mm; H (86.8)mm; Th R 6.0mm; Th F 5.5mm.

On the recessed face, traces of a few letters.

<WT98> Silver fir; type 1 (not illustrated)
<6391>, [6568]; period 2 phase 3 (late), B2
Incomplete, but preserving part of both sides and one end with a saw-cut midway. W 135.5mm; H (43.9)mm; Th R 7.7mm; Th F 5.5mm.

Extensive traces of text on the inner (recessed) face, but badly worn and illegible.

<WT99> Silver fir; type 1 (not illustrated)
<6394>, [6568]; period 2 phase 3 (late), B2
Incomplete, but preserving part of both sides. W (136.0)mm; H (16.5)mm; Th R 6.6mm; Th F 5.6mm.

The surface of the inner (recessed) face is badly worn, with slight traces of text.

<WT100> Silver fir; type 1 (not illustrated)
<11198>, [10233]; period 2 phase 3 (late), OA4
Incomplete, in three conjoining fragments preserving part of one end broken at the notch and part of both sides. W 132.0mm; H (45.0)mm; Th R 7.8mm; Th F 6.5mm.

A rectangular panel, 30 × 13mm, has been excised from one corner of the outer face.

The inner (recessed) face is worn, with a few diagonal incisions remaining.

<WT101> Silver fir; type 1 (not illustrated)
<7490>, [6720]; period 2 phase 3 (late), OA12 phase 1
Incomplete, in three conjoining fragments preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 149.0mm; H (87.8)mm; Th R 7.5mm; Th F 6.6mm.

The surface of the inner (recessed) face is comparatively well preserved, but is almost blank; there are a few isolated letters, but no sign that they belonged to words.

<WT102> Spruce (*Picea abies*); type 1 (not illustrated)
<7493>, [6737]; period 2 phase 3 (late), OA12 phase 1
Incomplete, but preserving part of one end. W (120.0)mm; H (45.0)mm; Th R 4.6mm; Th F 3.5mm.

In one corner of the outer (plain) face a rectangular recessed panel, *c* 50 × 20mm but now incomplete, has been excised.

<WT103> Silver fir; type 1 (not illustrated)
<7517>, [6778]; period 2 phase 3 (late), OA12 phase 1
Incomplete, but preserving part of both sides. W 133.3mm; H (37.2)mm; Th R 8.1mm; Th F 6.0mm.

The inner (recessed) face has been used many times.

<WT104> Silver fir; type 1 (not illustrated)
<11203>, [10212]; period 2 phase 3 (late), OA12 phase 1
Incomplete, but preserving most of one end with notch midway, and part of one side; the other side has broken off where the border was incised, so the original width would have been 136mm. W (127.0)mm; H (39.0)mm; Th R 5.1mm; Th F 3.9mm.

In one corner of the inner (recessed) face, illegible traces of about six letters at the beginning of a line.

<WT105> Silver fir; type 1 (not illustrated)
<6407>, [6615]; period 2 phase 3 (late), OA12 phase 2
Incomplete, but preserving part of both sides. W 136.3mm; H (33.0)mm; Th R 8.4mm; Th F 5.9mm.

On the inner (recessed) face, extensive traces of multiple texts.

<WT106> Silver fir; type 2 (not illustrated)
<6408>, [6615]; period 2 phase 3 (late), OA12 phase 2
Incomplete, but preserving a little of both sides. W 188.0mm; H (67.7)mm; Th R 9.2mm; Th F 7.2mm; W seal-groove 24.8mm.

The tablet is unusually wide. Traces of text on both faces, but multiple, and letters very incomplete.

<WT107> Silver fir; type 2 (not illustrated)
<7474>, [6615]; period 2 phase 3 (late), OA12 phase 2
Incomplete, in three conjoining fragments preserving two-fifths of one end and part of both sides. W 137.3mm; H (71.1)mm; Th R 12.6mm; Th F 8.8mm; W seal-groove 23.7mm.

The traces on the ungrooved face are little better than on the other face, but *quod* can be recognised in the middle of the first ine at the top of a page. So this is not the (dated) heading of a legal document, but the second page, as to be expected with type 2 (Chapter 2.4).

There are some illegible traces in both panels of the grooved face.

<WT108> Spruce (*Picea abies*); type 2 (Fig 10)
<7477>, [6615]; period 2 phase 3 (late), OA12 phase 2
Incomplete, in two conjoining fragments neatly broken either side at the incisions. W (55.0)mm; H (50.9)mm; Th R 5.4mm; Th F 5.3mm.

Both faces retain a partial coating of grey wax, but no trace of text.

<WT109> Silver fir; type 1 (not illustrated)
<6397>, [6586]; period 3 phase 1 (early), B7
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 143.6mm; H (63.2)mm; Th R 9.1mm; Th F 8.4mm.

On the outer (plain) face two pairs of lines each *c* 15mm apart have been scored deliberately, running presumably from one end to the other.

On the inner (recessed) face are some traces of text, but they are few and faint.

<WT110> Silver fir; type 1 (not illustrated)
<6402>, [6586]; period 3 phase 1 (early), B7
Incomplete, in two conjoining fragments preserving one end with saw-cut midway between hinge-holes, and part of both sides.
W 144.7mm; H (45.1)mm; Th R 7.3mm; Th F 5.0mm.

On the inner (recessed) face of the larger fragment, slight traces of a few letters.

<WT111> Silver fir; type 2 (not illustrated)
<9114>, [6586]; period 3 phase 1 (early), B7
Incomplete, but preserving part of both sides. W 139.0mm; H (47.5)mm; Th R 10.0mm; Th F 6.5mm; W seal-groove 8.5mm.

Traces of text on both faces, but no more than short diagonal strokes.

<WT112> Silver fir; type 1 (not illustrated)
<4802>, [5301]; period 3 phase 1 (early), OA14
Incomplete, but preserving part of one side; the other has broken at the border. One end is original, with the midway saw-cut widened inwards into a V-shaped cut. W (133.0)mm; H (36.7)mm; Th R 7.2mm; Th F 6.2mm.

On the inner (recessed) face, illegible traces of text in the worn surface.

<WT113> Silver fir; type 1 (not illustrated)
<4806>, [5301]; period 3 phase 1 (early), OA14
Incomplete, corner fragment. W (77.0)mm; H (35.0)mm; Th R 7.0mm; Th F 4.8mm.

Extensive but illegible traces of text which seem to be multiple.

<WT114> Silver fir; type 1 (not illustrated)
<6362>, [6510]; period 3 phase 1 (early), OA14
Incomplete, corner fragment. W (101.0)mm; H (28.7)mm; Th R 7.3mm; Th F 6.3mm.

On the outer (plain) face, a few incomplete letters of an address.

On the inner (recessed) face, a few illegible traces.

<WT115> Silver fir; type 1 (not illustrated)
<6410>, [6623]; period 3 phase 1 (early), OA14
Incomplete, but preserving one end with saw-cut midway and part of both sides. W 137.1mm; H (48.6)mm; Th R 8.6mm; Th F 6.3mm.

The inner (recessed) face is very worn, with traces of two or three letters.

<WT116> Silver fir; type 2 (not illustrated)
<7487>, [6707]; period 3 phase 1 (early), OA14
Incomplete, but preserving one end with a wide knife-cut notch and part of both sides. W 136.1mm; H (62.0)mm; Th R 8.8mm; Th F 6.1mm; W seal-groove 19.5mm.

On the ungrooved face are extensive traces, but the letters are incomplete and probably belong to multiple texts.

In one panel of the other, grooved, face is a single letter 17mm high scratched with a broad point, like the lettering of an address; it might be *ci*, *g* or *u*, or (read inverted) *d* not fully closed.

<WT117> Silver fir; type 1 (not illustrated)
<7508>, [6769]; period 3 phase 1 (early), OA14
Incomplete, but preserving half of one end broken at a knife-cut V-notch, and part of both sides. W 143.2mm; H (57.0)mm;
Th R 8.5mm; Th F 5.3mm.

On the inner (recessed) face, about five lines of text from the bottom of a page inscribed over extensive remains of earlier text.
A few letters can be recognised.

<WT118> Silver fir; type 1 (not illustrated)
<7512>, [6771]; period 3 phase 1 (early), OA14
Incomplete, but preserving one end with saw-cut midway and part of both sides. W 136.7mm; H (22.2)mm; Th R 8.6mm;
Th F 5.2mm.

On the inner (recessed) face, about three lines of text inscribed over many earlier traces from the bottom of a page; illegible except
for two or three letters.

<WT119> Silver fir; type 2 (not illustrated)
<9867>, [5153]; period 3 phase 1 (early), OA15
Incomplete, corner fragment. W (63.0)mm; H (56.5)mm; Th R 9.2mm; Th F 5.8mm.

On the ungrooved face are the traces of multiple text.

In the right column of the grooved face are two lines of text, boldly inscribed, but overlying earlier texts and illegible.

<WT120> Silver fir; type 2 (not illustrated)
<9868>, [5153]; period 3 phase 1 (early), OA15
Incomplete, but preserving part of one side. W (82.7)mm; H (37.0)mm; Th R 9.0mm; Th F 6.0mm.

Both faces are badly worn. On the ungrooved face, ample evidence that it was used many times.

On the grooved face, a few traces.

<WT121> Silver fir; type 2 (not illustrated)
<4289>, [5293]; period 3 phase 1 (early), OA15
Incomplete, but preserving part of both sides. W 137.0mm; H (34.5)mm; Th R 8.9mm; Th F 7.2mm; W seal-groove 24.3mm.

On the ungrooved face, faint diagonal traces from one line, but no letter identifiable. This fragment is preserved with the
fragment of another tablet (<10225>, type 1, larch (*Larix decidua*)), W 129mm, H 53mm, preserving part of both sides and one end,
with the midway saw-cut widened inwards into a V-shaped cut; there is no trace of text (not illustrated).

On the grooved face, a few traces, but more like crossing-out lines than letters.

<WT122> Silver fir; type 1 (not illustrated)
<5789>, [6390]; period 3 phase 1 (early), OA15
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 137.4mm; H (39.4)mm;
Th R 5.3mm; Th F 3.8mm.

The inner (recessed) face is ribbed and worn, with extensive traces of multiple text. At the bottom of the page, the last line begins

with *debeo* ('I owe'), which suggests a formal undertaking of payment or repayment (cf <WT44>), but the surrounding traces are illegible.

<WT123> Silver fir; type 1 (not illustrated)
<6268>, [6414]; period 3 phase 1 (early), OA15
Complete, except for about half of the raised border at one end. W 137.0mm; H 108.0mm; Th R 9.3mm; Th F 6.5mm.

The inner (recessed) face is damaged in places, but carries extensive traces of about 11 lines of text. Unfortunately they coincide with previous text(s), and the resulting palimpsest is illegible.

<WT124> Silver fir; type 2 (not illustrated)
<6355>, [6463]; period 3 phase 1 (early), OA15
Incomplete, but preserving part of both sides broken at the raised border. W (111.0)mm; H (41.0)mm; W seal-groove 22.5mm.

Trace of text on both faces, but very few letters identifiable.

<WT125> Silver fir; type 1 (not illustrated)
<6291>, [6544]; period 3 phase 1 (early), OA15
Incomplete, but preserving much of one end with saw-cut midway and part of both sides. W 135.6mm; H (58.6)mm; Th R 8.2mm; Th F 6.8mm.

On the inner (recessed) face, a few traces of text consisting of incomplete and illegible letters *c* 3–4mm high, and the occasional sinuous stroke *c* 20mm high which might be *s*. They bear no obvious relationship to each other.

<WT126> Silver fir; type 2 (not illustrated)
<6379>, [6556]; period 3 phase 1 (early), OA15
Incomplete, corner fragment. W (64.4)mm; H (43.1)mm; Th R 8.0mm; Th F (5.2)mm.

There are traces of text on both faces, but the letters are incomplete and faint.

<WT127> Silver fir; type 1 (not illustrated)
<6286>, [6567]; period 3 phase 1 (early), OA15
Incomplete, but preserving one end with saw-cut midway and part of both sides. W 140.0mm; H (52.1)mm; Th R 6.9mm; Th F 5.8mm.

On the inner (recessed) face are faint traces of text, apparently five lines to the foot of a page, but almost no letters are legible.

<WT128> Silver fir; type 1 (not illustrated)
<6296>, [6567]; period 3 phase 1 (early), OA15
Incomplete, but preserving part of one side. W (82.7)mm; H (24.6)mm; Th R 6.6mm; Th F 5.2mm.

On the inner (recessed) face a few traces of letters, very worn.

<WT129> Silver fir; type 1 (not illustrated)
<6384>, [6567]; period 3 phase 1 (early), OA15
Incomplete, but preserving part of both sides. W 137.6mm; H (30.0)mm; Th R 12.9mm; Th F 7.6mm.

The inner (recessed) face is badly damaged, with a few faint traces of text.

<WT130> Silver fir; type 1 (not illustrated)
<6389>, [6567]; period 3 phase 1 (early), OA15
Incomplete, but preserving part of both sides. W 137.0mm; H (39.0)mm; Th R 8.6mm; Th F 6.6mm. One end has broken near the raised border, since part of one hinge-hole remains.

On the inner (recessed) face, traces of long descenders which may not be letters but perhaps crossing-out lines.

<WT131> Silver fir; type 2 (not illustrated)
<6390>, [6567]; period 3 phase 1 (early), OA15
Incomplete, corner fragment. W (83.0)mm; H (39.0)mm; Th R 7.2mm; Th F 4.1mm.

Extensive traces on both faces, but they are multiple and illegible.

<WT132> Silver fir; type 1 (not illustrated)
<7462>, [6567]; period 3 phase 1 (early), OA15
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 135.5mm; H (33.4)mm; Th R 8.4mm; Th F 7.4mm.

The inner (recessed) face has been used many times.

<WT133> Silver fir; type 1 (not illustrated)
<7463>, [6567]; period 3 phase 1 (early), OA15
Incomplete, in two conjoining fragments preserving part of one end with saw-cut midway and one hinge-hole. W 136.0mm; H (13.0)mm; Th R 5.7mm; Th F 5.5mm.

On the outer (plain) face, the broken edge cuts across two groups of diagonal strokes which do not look like letters, although they respect the binding cord.

<WT134> Silver fir; type 1 (not illustrated)
<6340>, [6213]; period 3 phase 1 (early), OA19
Incomplete, but preserving part of both sides. W 138.4mm; H (34.0)mm; Th R 7.8mm; Th F 6.7mm.

On the inner (recessed) face, extensive traces of multiple text. Long diagonal lines have been scored across it, probably to cancel a loan-note or similar document.

<WT135> Silver fir; type 1 (not illustrated)
<7450>, [6213]; period 3 phase 1 (early), OA19
Complete, in two conjoining pieces. W 144.5mm; H 117.3mm; Th R 7.9mm; Th F 6.5mm.

On the inner (recessed) face extensive traces, quite well preserved in the lower fragment, of at least two texts which coincide.

<WT136> Silver fir; type 1 (not illustrated)
<2084>, [2841]; period 3 phase 1 (early), OA122
Almost complete, preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 80.7mm; H 82.8mm; Th R 5.2mm; Th F 3.0mm.

Like <WT181> and <WT21>, this tablet is unusually narrow. There is no sign of any text.

<WT137> Silver fir; type 1 (not illustrated)
<2049>, [3102]; period 3 phase 1 (early), OA134
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 136.4mm; H (37.2)mm; Th R 8.2mm; Th F 6.7mm.

The inner (recessed) face is badly worn, with traces of a few letters.

<WT138> Silver fir; type 1 (not illustrated)
<2050>, [3102]; period 3 phase 1 (early), OA134
Incomplete, but preserving one end and part of both sides. W 142.5mm; H (31.8)mm; Th R 6.7mm; Th F 3.6mm.

The inner (recessed) face is badly worn, with a few traces of multiple text.

<WT139> Silver fir; type 1 (not illustrated)
<6354>, [6431]; period 3 phase 1 (early), S46
Incomplete, but preserving a little of both sides. W 144.5mm; H (39.0)mm; Th R 7.9mm; Th F 6.9mm.

On the inner (recessed) face are isolated traces of text, but nothing legible.

<WT140> Silver fir; type 2 (not illustrated)
<6288>, [6374]; period 3 phase 1 (early), S52
Incomplete; corner fragment preserving the whole of one end with saw-cut midway between hinge-holes. W 131.8mm; H (54.8)mm; Th R 10.8mm; Th F 6.2mm.

A few faint traces of text on both faces, but nothing legible.

<WT141> Silver fir; type 1 (not illustrated)
<6351>, [6404]; period 3 phase 1 (early), S52
Incomplete, but preserving one end with saw-cut midway and part of both sides. W 140.2mm; H (51.7)mm; Th R 7.3mm; Th F 5.9mm.

On the inner (recessed) face extensive traces of text, but faint and multiple.

<WT142> Silver fir; type 2 (not illustrated)
<6415>, [6665]; period 3 phase 1 (early), S58
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 133.1mm; H (34.6)mm; Th R 10.0mm; Th F 5.8mm; W seal-groove 22.1mm.

Both faces are badly ribbed, with traces of two or three letters.

<WT143> Silver fir; type 1 (not illustrated)
<6416>, [6665]; period 3 phase 1 (early), S58
Incomplete, but preserving most of one end with saw-cut midway between hinge-holes, and part of both sides. W 135.4mm; H (32.6)mm; Th R 7.0mm; Th F 4.6mm.

On the inner (recessed) face, traces of a few letters.

<WT144> Silver fir; type 1 (not illustrated)
<5796>, [6423]; period 3 phase 1 (late), B9
Almost complete, in two conjoining fragments. W 150.1mm; H 126.9mm; Th R 6.0mm; Th F 5.7mm.

On the inner (recessed) face are traces of six lines of text, with space for another at the top; they are generously spaced, probably to accommodate the long descenders. Although this text does not seem to be multiple, it is only faintly incised, and hardly any letters are complete. The penultimate line apparently begins: *quantam rem* … ('as much property …').

<WT145> Silver fir; type 1 (not illustrated)
<5176>, [6013]; period 3 phase 1 (late), B11 phase 3
Incomplete; two conjoining fragments preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 142.5mm; H (49.0)mm; Th R 6.3mm; Th F 5.3mm.

On the inner (recessed) face extensive traces of text, but multiple.

<WT146> Silver fir; type 1 (not illustrated)
<3374>, [5229]; period 3 phase 1 (late), OA22
Incomplete, but preserving part of both sides. W 141.0mm; H (29.8)mm; Th R 7.1mm; Th F 6.0mm.

On the outer (plain) face many straight lines have been scored, intersecting more or at less at diagonals but not forming a pattern.

The inner (recessed) face has been used many times.

<WT147> Silver fir; type 1 (not illustrated)
<3379>, [5252]; period 3 phase 1 (late), OA22
Incomplete, but preserving part of both sides. W 143.0mm; H (53.8)mm; Th R 7.6mm; Th F 7.0mm.

On the inner (recessed) face, worn traces of two or three letters.

<WT148> Silver fir; type 1 (not illustrated)
<4247>, [5285]; period 3 phase 1 (late), OA22
Incomplete, but preserving one end with saw-cut midway and part of both sides. W 140.0mm; H (63.5)mm; Th R 6.2mm;
Th F 3.3mm.

The inner (recessed) face is badly worn and damaged. There are traces of a line of text near the end-border and of a few letters elsewhere.

<WT149> Silver fir; type 1 (not illustrated)
<6349>, [6345]; period 3 phase 1 (late), OA22
Incomplete, but preserving a little of both sides. W 135.4mm; H (54.1)mm; Th R 6.3mm; Th F 5.4mm.

The inner (recessed) face is badly worn, with a few traces of scored cancellation lines.

<WT150> Silver fir; type 1 (not illustrated)
<5786>, [6383]; period 3 phase 1 (late), OA22
Incomplete, but preserving one end broken at the saw-cut which was extended inwards in a V-notch, and part of both sides.

W 159.0mm; H (37.0)mm; Th R 6.0mm; Th F 5.0mm.

The inner (recessed) face has been used many times.

<WT151> Silver fir; type 1 (not illustrated)
<5797>, [6436]; period 3 phase 1 (late), OA2
Incomplete, but preserving part of one side; the raised border is unusually narrow (5.0mm). W (60.7)mm; H (22.5)mm; Th R 5.6mm; Th F 4.8mm.

On the inner (recessed) face, extensive traces of text, but multiple and illegible.

<WT152> Silver fir; type 2 (not illustrated)
<5799>, [6443]; period 3 phase 1 (late), OA22
Incomplete, in six conjoining fragments preserving one end with saw-cut midway between hinge-holes, and most of both sides. W 139.0mm; H (109.7)mm; Th R 7.6mm; Th F 4.9mm (groove 3.2mm); W seal-groove 25.3mm.

On the ungrooved face, a few traces of text but no identifiable letters.

On the grooved face, almost no traces at all.

<WT153> Silver fir; type 2 (not illustrated)
<5801>, [6443]; period 3 phase 1 (late), OA22
Incomplete, but preserving part of one side. W (85.9)mm; H (56.0)mm; Th R 9.6mm; Th F 5.7mm.

On both faces, isolated traces of text, but illegible and probably multiple.

<WT154> Silver fir; type 1 (not illustrated)
<9110>, [6443]; period 3 phase 1 (late), OA22
Incomplete, but preserving a little of both sides. W 130.8mm; H (23.0)mm; Th R 5.5mm; Th F 4.2mm.

On the inner (recessed) face, one line of text and the top of a second, but the letters are incomplete and illegible.

<WT155> Silver fir; type 1 (not illustrated)
<9111>, [6443]; period 3 phase 1 (late), OA22
Incomplete, in two conjoining fragments preserving part of one side. W (137.0)mm; H (24.0)mm.

On the outer (plain) face, part of a scored line which might be a descender, perhaps of *r* or *s* from an address.

On the inner (recessed) face, faint traces of two lines of text.

<WT156> Silver fir; type 1 (not illustrated)
<6374>, [6538]; period 3 phase 1 (late), OA22
Complete, except for the loss of two corners and part of the raised border. W 135.6mm; H 119.4mm; Th R 11.7mm; Th F 9.5mm.

The surface of the inner (recessed) face is quite well preserved, but there is no sign of text.

<WT157> Silver fir; type 1 (not illustrated)
<6375>, [6538]; period 3 phase 1 (late), OA22
Complete, except for some loss to the raised borders. W 134.8mm; H 112.4mm; Th R 8.0mm; Th F 7.0mm.

On the inner (recessed) face, a few sinuous descenders, presumably *s*. Otherwise no real trace of text.

<WT158> Silver fir; type 1 (not illustrated)
<7459>, [6545]; period 3 phase 1 (late), OA22
Incomplete, but preserving one end with saw-cut midway and part of both sides. W 147.0mm; H (90.0)mm; Th R 7.4mm; Th F 5.7mm.

On the inner (recessed) face, extensive traces of multiple texts.

<WT159> Silver fir; type 1 (not illustrated)
<5781>, [6224]; period 3 phase 1 (late), OA23
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 135.5mm; H (37.2)mm; Th R 7.5mm; Th F 5.9mm.

On the inner (recessed) face, a few diagonal strokes but no complete letters.

<WT160> Silver fir; type 1 (not illustrated)
<5778>, [4967]; period 3 phase 1 (late), OA28
Incomplete, but preserving part of one side. W (91.0)mm; H (34.7)mm; Th R 6.9mm; Th F 4.6mm.

On the inner (recessed) face, extensive traces of text, but they are multiple. Very few letters are legible.

<WT161> Silver fir; type 2 (not illustrated)
<7439>, [4967]; period 3 phase 1 (late), OA28
Incomplete, with both sides broken along the cuts made for the recessed faces. W 123.3mm; H (51.9)mm; Th F 5.8mm; W seal-groove 28.8mm.

There is a trace of text on both faces, but it is rather faint.

<WT162> Silver fir; type 1 (not illustrated)
<4283>, [4762]; period 3 phase 1 (late), OA31
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 135.8mm; H (65.7)mm; Th R 7.0mm; Th F 5.4mm.

On the outer (plain) face, some minute puncture-marks more or less in line, but they are probably not letters, and certainly not part of an address.

On the inner (recessed) face, faint traces of four lines of text; (3) is apparently indented and begins with a large *a*, so it is possibly an *actum* ('executed') formula, but this cannot be confirmed.

<WT163> Silver fir; type 1 (not illustrated)
<3311>, [5086]; period 3 phase 1 (late), OA31
Incomplete, corner fragment in two conjoining pieces. W (70.0)mm; H (45.9)mm; Th R 6.5mm; Th F 5.4mm.

On the inner (recessed) face, faint traces of multiple text.

<WT164> Silver fir; type 1 (not illustrated)
<4795>, [5129]; period 3 phase 1 (late), OA31
Incomplete, corner fragment. W (92.5)mm; H (31.0)mm; Th R 8.0mm; Th F 6.2mm.

The surface of the inner (recessed) face is much damaged. There are many short diagonal scratches, suggesting reuse, but no identifiable letters.

<WT165> Silver fir; type 1 (not illustrated)
<4246>, [5186]; period 3 phase 1 (late), OA31
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 135.3mm; H (75.4)mm; Th R 9.2mm; Th F 7.7mm.

Patches of black wax still adhere to the inner (recessed) face. Down the right edge, illegible traces of about nine lines of text.

<WT166> Silver fir; type 1 (not illustrated)
<5724>, [4898]; period 3 phase 1 (late), OA34
Incomplete, but preserving part of both sides. W 149.2mm; H (50.9)mm; Th R 8.6mm; Th F 6.2mm.

On the inner (recessed) face, extensive traces of about ten lines of text, but the letters are incomplete and probably multiple. They certainly overlie traces of other letters, and the combination is illegible.

<WT167> Silver fir; type 2 (not illustrated)
<83>, [340]; period 3 phase 1 (late), OA67
Incomplete, but preserving part of one end. W (63.6)mm; H (26.4)mm; Th R 5.6mm; Th F 4.1mm.

Very faint traces on both faces.

<WT168> Spruce (*Picea abies*); type 2 (not illustrated)
<3309>, [4067]; period 3 phase 1 (late), OA79
Incomplete, but preserving part of one end. W (68.7)mm; H (42.4)mm; Th R 6.5mm; Th F 4.2mm.

Both faces are badly ribbed and worn, with a few illegible traces on the ungrooved face.

<WT169> Silver fir; type 1 (not illustrated)
<3367>, [5214]; period 3 phase 1 (late), OA81
Incomplete, but preserving a small part of one side. W (101.0)mm; H (22.0)mm; Th F 6.3mm.

On the inner (recessed) face, badly worn and incomplete traces of about three lines of text, probably multiple.

<WT170> Silver fir; type 1 (not illustrated)
<10910>, [5061]; period 3 phase 1 (late), OA82
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 144.0mm; H (48.0)mm; Th R 5.9mm; Th F 2.6mm.

On the inner (recessed) face, extensive traces of multiple text.

<WT171> Silver fir; type 2 (not illustrated)
<10911>, [5061]; period 3 phase 1 (late), OA82
Incomplete, with no edge original. W (70.5)mm; W (49.0)mm; Th F 3.4mm.

Across one face lines have been scratched against the grain, which cut irregular marks which might be two or three letters from an address, but they look far from certain.

<WT172> Silver fir; type 1 (not illustrated)
<10914>, [5061]; period 3 phase 1 (late), OA82
Incomplete, corner fragment. W (74.0)mm; H (28.0)mm; Th R 6.8mm; Th F 5.8mm.

On the inner (recessed) face, a few incomplete traces of letters.

<WT173> Silver fir; type 1 (not illustrated)
<9869>, [10068]; period 3 phase 1, OA163
Incomplete, but preserving one end with saw-cut midway and one hinge-hole (but no sign of a second), and part of both sides. W 139.0mm; H (55.0)mm; Th R 5.0mm; Th F 4.0mm.

At the top right corner of the outer (plain) face, a rectangular recessed panel measuring 32 × 14mm has been neatly excised.

The inner (recessed) face is badly worn, with one or two traces of letters.

<WT174> Silver fir; type 1 (not illustrated)
<7441>, [5582]; period 3 phase 1, S280 phase 2
Incomplete, but preserving one end with saw-cut midway between hinge-holes, and part of both sides. W 138.6mm; H (54.2)mm; Th R 7.8mm; Th F 5.7mm.

The inner (recessed) face is rather damaged, with traces of four lines of text; a few letters are recognisable, but no words.

<WT175> Silver fir; type 1 (not illustrated)
<7447>, [5590]; period 3 phase 1, S280 phase 2
Incomplete, but preserving most of one end and part of both sides. W 134.6mm; H (59.0)mm; Th R 5.3mm; Th F 4.6mm.

The tablet is now badly warped, ribbed and worn. In the middle of the outer (plain) face is an isolated letter *m*, 8mm high, but no sign of any other letters.

<WT176> Silver fir; type 1 (not illustrated)
<4286>, [4797]; period 3 phase 2, OA40
Incomplete, but preserving part of both sides. W 142.5mm; H (24.9)mm; Th R 6.6mm; Th F 5.1mm.

    On the inner (recessed) face, extensive traces of text which may be multiple, but the surface is badly worn and no letter can be identified with certainty.

<WT177> Silver fir; type 2 (not illustrated)
<9885>, [10079]; period 4 phase 1, OA163
Incomplete, but preserving part of one end with, unusually, two notches midway, and part of both sides. W 145.0mm; H (36.0)mm; Th R 8.0mm; Th F 4.0mm; W seal-groove 32.0mm.

    Both faces are badly worn, with extensive traces of multiple text.

<WT178> Silver fir; type 1 (not illustrated)
<6420>, [6712]; period 4 phase 1, S88
Incomplete, in three conjoining fragments preserving part of both sides and part of one end. W 146.4mm; H (42.0)mm; Th R 5.6mm; Th F 5.0mm.

    The inner (recessed) face has been used many times and is illegible.

<WT179> Silver fir; type 2 (not illustrated)
<3315>, [5188]; period 4 phase 1, S186
Incomplete, but preserving part of one end. W (72.9)mm; H (30.9)mm; Th R 6.8mm; Th F 5.1mm.

    On both faces, faint traces of two lines of text.

<WT180> Silver fir; type 2 (not illustrated)
<6299>, [6558]; period 12, S132
Incomplete, but preserving one end with saw-cut midway enlarged into a V-notch between hinge-holes, and part of both sides. W 142.7mm; H (52.2)mm; Th R 8.4mm; Th F 7.4mm; W seal-groove 25.7mm.

    The ungrooved face has lost almost all its original surface. Traces remain of a few letters, but they belong to multiple texts.

<WT181> Silver fir; type 1 (not illustrated)
<6258>, [+]; -, -
Incomplete, but preserving the whole of one end with saw-cut midway between hinge-holes, and part of both sides. W 64.0mm; H (51.0)mm; Th R 5.4mm; Th F 5.2mm.

    Like <WT136> and <WT21>, this tablet is unusually narrow. There is no sign of any text.

4.6   Two stylus tags or labels

<WT182> Silver fir; type 5 (Fig 138)
<7706>, [6779]; period 2 phase 3 (late), OA12 phase 1
Complete. L 130.6mm; W 18.2mm; Th 6.3mm.

One terminal is rounded with a central hole for an attachment-cord, the other is ansate. It is thus more elaborate than <WT183> (below), but is not recessed. Three lines have been scored across one end, the numeral III ('3') or perhaps a mark of identification.

<WT183> Silver fir; type 5 (Fig 138)
<4248>, [5301]; period 3 phase 1 (early), OA14
Complete. L 99.0mm; W 28.0mm; Th R 6.3mm.

One end is rectangular, the other cut to an acute angle, in which there is a hole for an attachment-cord. One face is recessed, but there is no trace of any text.

<WT182>

<WT183>

Fig 138 Tags or labels <WT182> and <WT183> (scale 1:1)

5

Ink tablets: the texts

Reference to 'tablets' elsewhere in this volume is to waxed writing tablets inscribed with a stylus, but remains were also found of two ink-leaf tablets, inscribed with a pen. Like the Temple Court tablet found nearby in 1959 (Turner and Skutsch 1960; Chapter 6; GM31), they are in the 'letter format' well known from Vindolanda (*Tab Vindol* 2, 40–1): a rectangular wood-shaving was scored vertically down the middle, so as to be folded into a diptych; the text was written in two columns, (i) left and (ii) right. Apart from some illegible fragments (MOL acc no. 24479; Merrifield 1965, 182, pl 103), from the former Bank of London and South America (BOLSA) on Queen Street–Queen Victoria Street (GM144, Table 13), these are the only ink-leaf tablets yet found in London. The much later ink tablet from Drapers' Gardens (Tomlin 2011a, 446–8, no. 9, fig 8; Table 13) is a stylus tablet: the outer (plain) face was inscribed in ink with a text dated 3 December AD 158, which probably duplicated the inner text on wax.

Inkwells could be of pottery, glass or metal: finds from Bloomberg London and earlier excavations on the site at Bucklersbury House include fragments of copper-alloy inkwells (Marshall and Wardle in prep), and 12 fragments of samian inkwells were also recovered from Bloomberg London (Bryan et al in prep; cf Monteil 2008). Pens could be made from metal or organic material (the Latin word for pen, *calamus*, means reed). A substantial number of narrow-bladed knives, argued to be penknives and so part of writing sets, have been recovered from early Roman deposits at Bloomberg London. Fig 139 illustrates a metal cylindrical inkwell and pen, and a penknife, all from London.

ONE94 <2690>

MOL A1315

<6471>

Fig 139 A 1st-century AD lead/tin inkwell from 1 Poultry (ONE94 <2690>), a copper-alloy pen from Finsbury Circus (MOL A1315) and a penknife with iron blade and ivory handle <6471> from Bloomberg London (scale c *1:1)*

<WT184> Willow (*Salix* sp); ink-leaf tablet (Fig 140)
<11190>, [10141]; period 2 phase 3 (late), OA12 phase 1
Incomplete; in 12 fragments, some conjoining. (a) H (31.4)mm. (e)+(f) W 156.8mm; H (18.4)mm. (g)+(h) W 156.2; H (25.0)mm.
(k) H (32.3)mm. (e)+(f)+(g)+(h) W 313.0mm. Th 1.1–1.8mm.

The fragments were found together and probably belong to the same tablet. Fragments (b), (c) and (d) conjoin as shown in Fig 140, likewise (e) with (f), and (g) with (h). Since this was evidently a diptych folded down the middle and inscribed in two columns, the fold is marked by the straight edge between (a) and (b) and that between (f) and (g), but these edges do not actually conjoin. (j) and (k) (each comprising two joining fragments) cannot be placed, but exiguous traces of text show that they were originally the same way up as photographed. The original width of the tablet (313.0mm) is marked by the sequence (e), (f), (g) and (h).
The rounded ends of (e) and (h) would have projected beyond the vertical sides of the diptych, like the 'semicircular projection' at one end of the Temple Court tablet (Turner and Skutsch 1960, 108; Chapter 6.2; GM31), and were probably used as lugs to tie up the diptych after it had been folded. This feature is not found at Vindolanda, where diptychs often have a pair of notches and holes in either end, which would have served the same purpose. This may have been a later development: the archaeological context of <WT184> is *c* AD 62–65/70, while the Vindolanda tablets date from *c* AD 90 (*Tab Vindol* 2, 17, n1).
Since (a) contains part of the heading of a letter (the ends of the first four lines), it can be deduced that the upper edge is original, and that the straight right edge marks the divisions between columns (i) and (ii). (f) must be somewhere below (a), but does not conjoin. In cursive letters:

		(i)
(a) (1)		[…].arco ursuati salut-
	uacat	em
		[…]s in quibus mihi adscribis
		[…]mihi ui.orunameor
		. . .

.   .   .

(e)+(f) (1)		[…] quod in
	traces	necessaria
	traces	per pretor-
		. . .

(b), (c) and (d) probably contain the top left corner of column (ii). (g) is below them, but does not conjoin. In cursive letters:

	(ii)
(b) (1)	eti.[…]e[…]
	negotio[…]di
	parem gratiam recreatam .[…]
	. . .

.   .   .

(g)+(h) (1)	ut quidem[…]
	sentiam[…]
	meum […]
	. . .

Fragment (k) might belong to either column, depending on whether its straight left edge is due to the break in the middle of the diptych, or is part of the left edge of the whole. The former looks more likely, which would suggest column (ii):

(k) (1)

. . .

b[…] *traces* […]

[…]s tuas […]

traces   quod […]

[…] *traces* […]

. . .

The text is too fragmented for translation, but some words can be recognised. Their meaning is considered below.

Column (i):

(a) (1)–(2)   *salut|em* is divided between the lines and identifies them as the heading of a letter. This 'greetings' is preceded by the sequence *-uati*, which looks like a genitive termination, not the expected dative of *fratri* ('brother') or of the recipient's name. However, the sequence *-arco* looks like a dative, and since it is preceded by what could be the tail of *m*, *Marco* is a likely reading. This would suggest a letter 'to Marcus', who is then identified by a name in the genitive case, which is more likely to be his owner's name (as a slave) than his father's. It cannot be read with confidence, but is possibly *Ursuatus*, not an attested name, although *Ursus* is frequent and does produce names like *Ursinus* and *Ursacius*.

(a) (3)   This may refer to previous correspondence, for example *[epistula]s in quibus mihi adscribis* ('the letters in which you ascribe to me …'), but the meaning of *adscribis* is unclear; normally it is transitive, in the sense of ascribing something to somebody, but perhaps it is being used intransitively here, and means no more than *scribis* ('in which you write *to* me').

(a) (4)   After *mihi*, which is oddly repeated from (3), it is difficult to make anything of the sequence, although some letters are reasonably clear. *unam* might stand alone ('one'), perhaps preceded by *ui[g]or* ('vigour'), or might terminate a feminine noun in the accusative singular. The line ending *eor*, perhaps *meor*, suggests it was completed in the next line by *-um* ('of them' *or* 'of my …').

(e)+(f) (2)   After *necessaria* there is no sign of another letter, so the adjective is probably neuter plural, 'necessary (things)'.

(e)+(f) (3)   *per pretor|[…]* cannot be elucidated without knowledge of the context, but possibilities include *per pr(a)etor[em]*, 'through the praetor' (at Rome, presumably), and *per pr(a)etor[ium]*, 'through the official residence'.

Column (ii):

(b)+(c)+(d) (1)   This may begin with *eti[am]*, but the letters are enlarged as if to mark the heading of column (ii); if so, this is unlikely to have begun with *etiam* ('also'), unless it is a mistake for *item* (which begins a sentence in <WT57>).

(b)+(c)+(d) (2)   *negotio* is either ablative ('in business') or the remains of genitive-plural *negotio[rum]* ('of business matters').

(b)+(c)+(d) (3)   *parem gratiam recreatam* ('an equal favour restored', in the accusative) suggests a phrase meaning 'to repay a favour'.

(g)+(h) (2)   *sentiam* might be a verb ('I would think'), perhaps *[ad]|sentiam* ('I would agree'), or it might be the noun *[prae]|sentiam* ('presence') or *[ab]|sentiam* ('absence').

(continued)

Fig 140 Ink-leaf tablet <WT184>, a letter to ?Marcus (scale 1:1)

b
c
d

g
h

k

<WT185> Alder (*Alnus glutinosa*); ink-leaf tablet (Fig 141)
<4830>, [6078]; period 3 phase 1 (late), S85
Incomplete; in three fragments, two conjoining. (a) W (43.7)mm; H (26.9)mm. (b) W (36.1)mm; H (38.4)mm. (c) W (30.2)mm; H (39.4)mm. (a) + (b) W (79.8)mm. Th 1.1–1.3mm.

Fragments (a) and (b) conjoin, the break between them being due to the vertical fold scored down the centre of the diptych which divided the columns. Since (a) contains part of the heading of a letter, it can be deduced that the upper edge is original, and that (a) and (b) preserve part of the first lines of columns (i) and (ii) respectively. In cursive letters:

        (i)
(a) (1)   […]rio suo
        [*uacat* car]issimo salute<m>
        […]frater c[…]
        .   .   .
        (ii)
(b) (1)   subscrib[…]
        traces of four lines
        .   .   .

    Fragment (c) cannot be placed. In cursive letters:
        .   .   .
(c) (1)   *traces of six lines*
        .   .   .

[*Name*] to his dearest […]rius, greetings. … brother, … support …

Column (i):
(a) (1)   Neither *fratri* ('brother') nor *domino* ('lord') can be read before the possessive pronoun *suo*; the word ending in *-rio* must be the recipient's name in the dative. In the later 1st century AD (the archaeological context is dated *c* AD 80–90/5), almost every name ending in *-rius* would be a nomen, the only important exception being *Ianuarius*. This is the likeliest restoration, but it might be a nomen like *Valerius* used as a cognomen, or even a non-Latin name like *Catarrius* (<WT29>).
(a) (2)   [*car*]*issimo* follows directly in sense from *suo*, so it must have been preceded by a space, the usual indent in a letter-heading. There is no sign of the final *m* of *salutem* ('greetings'), nor indeed room for it; but since it was not sounded, it was liable to be omitted, a trivial 'vulgarism'. <WT29> is another example, but it does not happen in any of the Vindolanda letters. Adams (2003, 537) notes how rare the omission of final *-m* is at Vindolanda.
(a) (3)   *frater* is vocative, as often in the opening line of Vindolanda letters. It may have been followed by *c[arissime]* extended into the next line.

Column (ii):
(b) (1)   There is just trace of the second *b*, showing that the verb *subscribere* is in the present infinitive or present (perhaps future) tense. It is the only hint of the letter's content. Literally 'to write below', it can have various specialised senses, including 'to support'. In this sense it occurs once at Vindolanda, in a letter of recommendation (*Tab Vindol* 2, no. 250, l 7).

<WT185>

Fig 141 Ink-leaf tablet <WT185>, a letter to 'his dearest […]rius, greetings … ' (scale 1:1)

6

Appendices

6.1 Scientific analysis of wax surviving on a stylus tablet

Classical sources indicate that the wax on stylus tablets on which correspondents wrote was typically beeswax blackened by an admixture of a suitable agent (lamp-black/soot etc) (Chapter 2.2). Scientific analysis of such wax has seldom been undertaken, however, probably in part because the wax rarely survives. Samples of the grey wax adhering to the recessed panels of stylus tablet <WT108> (Fig 10) were therefore submitted for scientific analysis with the aim of establishing the composition of the wax.

This is a type 2 tablet, from a context dated AD 62–65/70 (period 2 phase 3 (late)), and identified as made of spruce (*Picea abies*). Four stylus tablets from Bloomberg London were identified as spruce (4/199); the vast majority are silver fir, probably recycled from imported wine casks (Chapter 2.1). These coniferous species are native to the central European alpine region in the north of the empire (Chapter 1.3, 'Identifying the wooden tablets to species').

Analysis of the lipid composition of the wax using high temperature gas chromatography/mass spectrometry

Lucy J E Cramp

Method

A small sample of 'wax' was scraped from <WT108> for analysis of the distribution of lipid biomarkers using gas chromatography/mass spectrometry (GC/MS) at the University of Bristol. This scraping was subdivided and an internal standard (C_{34} *n*-alkane) added to a 0.0061g portion, which was then sonicated in organic solvent (5ml $CHCl_3$/MeOH). The 'wax' sample was not completely solvent-soluble, with fragments of fibrous material (most likely wood also scraped from the tablet during sampling) remaining after the solvent was removed. After filtering through a lipid-extracted cotton wool plug, the total lipid extract was blown to dryness using a gentle stream of nitrogen. Derivitisation of the lipid components was carried out using 50µl *bis* (trimethylsilyl) trifluoroacetamide prior to screening using an Agilent gas chromatograph fitted with a high temperature non-polar column (30m × 0.32mm internal diameter by 0.1µm film thickness). The temperature programme comprised a 2 minute isothermal at 50°C, followed by an increase at a rate of 10°C min⁻¹ followed by an isothermal at 350°C for 15 minutes. After screening, the lipid extract was then submitted to high temperature gas chromatography/mass spectrometry using a Thermo Scientific Trace 1300 coupled with an ISQ single 280 quadrupole mass spectrometer fitted with a fused-silica capillary column (15m × 0.32mm) coated with dimethyl polysiloxane stationary phase (Rxi-1HT; film thickness 0.1µm), connected to a 0.53mm fused silica pre-column. The oven temperature was held isothermally for 2 minutes at 50°C, increased at a rate of 10°C min⁻¹ 283 to 280°C, then at a rate of 25°C min⁻¹ 284 to 380°C and finally held at 380°C for 5 minutes.

Results

As an important commercial product both today and in the past, the chemical composition of beeswax has been studied from various species, including *Apis mellifera* (western honeybee; Tulloch 1976) and others with distributions outside Europe (Aichholz and Lorbeer 1999). The chemistry of *A mellifera* comprises a distinctive series of hydrocarbons, long chain free fatty acids, mono-, di- and triesters, and hydroxy mono- and polyesters. *n*-alkanes vary in chain length between C_{23} and C_{31} (with C_{27} dominating in *A mellifera*), while *n*-alkanoic acids range from C_{20} to C_{36}. Monoesters comprise predominantly alkyl palmitates (C_{38} to C_{52}), with characteristic hydroxy monoesters comprising long chain alcohols (C_{24} to C_{38}) esterified mainly to 15-hydroxypalmitic acid, ranging between C_{40} and C_{54}. Due to the recalcitrant nature of beeswax, it has been widely recovered from archaeological contexts, from Neolithic pottery vessels (Copley et al 2005) through to medieval monastic candles (Frith et al 2004). From Roman contexts, beeswax has been chemically identified as a frequent component of Greco-Roman mummy balms from Egypt (Buckley and Evershed 2001) and portrait paintings (Regert et al 2001), Roman medical containers (Stacey 2011) and cooking pots (Kimpe et al 2002).

The lipid extract from the wax tablet contains the distinctive suite of components characteristic of beeswax, including *n*-alkanes (maximising at C_{27}), long chain fatty acids (C_{24}–C_{32}, maximising at C_{24}), *n*-alkanols (C_{22}–C_{32}, maximising at C_{30}) and palmitate mono- and monohydroxy acyl esters (C_{40}–C_{50}) and diesters (Fig 142). While the long-chain *n*-alkanols arise from the hydrolysis of wax esters, the low concentration of palmitic acid, which would also be released, suggests that the beeswax underwent an accelerated process of degradation (eg heating), resulting in the sublimation and loss of this fatty acid (Regert et al 2001). The palmitate wax ester distribution, which maximises at C_{40} with decreasing concentrations of higher molecular weight homologues, is unusual. *Apis mellifera* wax esters usually maximise at C_{46}, while the lower molecular weight components are most susceptible to hydrolysis, which results in preferential release of shorter chain alcohol moieties (ibid). The distribution also exhibits unusually high concentrations of hydroxy wax esters and diesters compared with modern and archaeological wax from *A mellifera* (Aichholz and Lorbeer 1999; Regert 2001). While this could be explained by an origin from non-European honey bee wax, this seems unlikely given the archaeological context, which tends to suggest that the wax would have been applied in this country.

It can therefore be concluded that the lipid composition of the wax contains all of the characteristic components of beeswax, including *n*-alkanes and palmitate mono-, hydroxy and diesters. The unusual distributions of the mono- and hydroxy esters may be explained by an unusual degradative pathway or another contribution, either endogenous to the wax, from the wooden tablet itself, or from the burial environment.

Fig 142 Partial high temperature gas chromatogram showing distribution of components of trimethylsilylated lipids identified from the wax on stylus tablet <WT108>: xA − n-alkane with carbon chain length x; xFA − free fatty acid with carbon chain length x; IS − internal standard; filled squares − n-alkanols with carbon chain length shown; filled triangles − palmitate alkyl esters with carbon chain length shown; filled circles − hydroxy wax esters; open squares − palmitate diesters

Analysis by scanning electron microscope with energy-dispersive spectrometry of a wax sample

Matthew J Ponting, Nicola George and Juliet Spedding

Introduction

A sample of grey wax from stylus tablet <WT108> was submitted for scanning electron microscopy with energy-dispersive spectrometry (SEM-EDS) analysis at the University of Liverpool, with the aim of establishing the chemical composition of the wax and the identification of any inclusions that might be responsible for the black/grey colour of the wax observed during cleaning and conservation.

Fig 143 Back-scattered electron image of a representative region of the wax scrapings

Method

The SEM used was a JEOL IT300 variable-pressure scanning microscope fitted with both secondary electron (SE) and back-scattered electron (BSE) detectors, together with an ultra-thin window EDS detector controlled by a Thermo EDS system. The sample of wax scrapings was mounted on a metal stub and placed in the sample chamber. No coating was applied. The analysis was conducted in low vacuum mode at an accelerating voltage of 15kV, counting for 100 seconds.

Results

The flakes of wax appeared reasonably uniform and were clearly full of small, angular and plate-like inclusions, generally less than 20μm in length (Fig 143). An energy-dispersive spectrum collected from across this region revealed that the bulk composition is predominantly carbon, with a small amount of sulphur (Fig 144).

Point analysis of individual inclusions indicates that these are carbon with a small amount of sulphur. This information, coupled with the inclusion morphology and the fact that there is no cellular structure apparent, would suggest that soot was used to colour the wax. Plate-like soot particles are produced by the burning of coal and charcoal (Jonker and Koelmans 2002,

3727) and the presence of sulphur would be consistent with this.

Discussion

The use of beeswax coloured with carbon as the writing medium in Roman writing tablets is well known (Wiseman 1955, 5), as is the use of other additives such as verdigris and, in the ancient Middle East, the mineral orpiment (arsenic sulphide). The latter two additives would colour the wax green and yellow respectively, while the addition of carbon imparts a black appearance to the writing surface. The addition of carbon as soot does not appear to be reported in the available scientific literature, but soot is well attested as a source of black pigment in antiquity, and Vitruvius describes a method for the production of soot for pigment by burning resin (*Arch* 7.10.2). Wiseman also reports experimental work that suggests that the choice of additive also changes the properties of the wax, retarding its solidification, thereby making it easier to impress cuneiform characters. It is suggested that the addition of carbon would have a similar effect, although the implications of the difference between impressed and inscribed writing characters is not discussed.

Fig 144 Energy-dispersive spectrum of a representative region of the wax scrapings (C – carbon; O – oxygen; S – sulphur)

6.2 Writing tablets previously found in London

In round figures, the *c* 400 Bloomberg tablets outnumber the 300 or so previously found in London. These number at least 298: 283 in the Museum of London accession-list on 12 May 2014 (Caroline McDonald, pers comm), 6 in the British Museum (Ralph Jackson, pers comm) and 8 in other museums (Royal Ontario Museum 5, Birmingham 2, Harrogate 1) (John Pearce, pers comm; cf Pearce 2004), and 1 now lost (*RIB* 2(4), no.

2443.14). Mention has already been made of the ink-leaf tablet (GM31, ER444) published by Turner and Skutsch (1960) from Temple Court, immediately south-west of and adjacent to Bucklersbury House (Merrifield 1965, 182, pl 103; Wilmott 1991, 18–33, 148 no. 599; Schofield 1998, GM31, also sometimes called Temple House) and some illegible fragments from the Bank of London and South America site on Queen Street–Queen Victoria Street (MOL acc no. 24479) (Chapter 5). Because most tablets are uninscribed or illegible, only 19 have been published in *RIB* (13 tablets found before the end of 1986: *RIB* 2(4), no. 2443, including no. 2443.14) and thereafter in *Britannia* (seven tablets, including

Table 13 Writing tablets found before the end of 1986 and published in RIB, together with those published subsequently in Britannia, mostly from the Walbrook area of the City of London

Archive site code* [and/or date found; repository]	Site address [or recorded findspot]	Description	References
[found in 1841]	[on site of Old Royal Exchange, EC3]	? names of two witnesses	*RIB* 2(4), no. 2443.17
[found probably in 1927; BM]	[in or near the Walbrook at Lothbury]	Rufus greets Epillicus and his 'mates' (*contubernales*) and tells him to 'sell that girl' (*illam puellam ad nummum redigas*)	*RIB* 2(4), no. 2443.7; Merrifield 1965, 182–3, pl 104; Adams 2002; Tomlin 2003, 50
[found in 1927; MOL]	[in or near the Walbrook at Lothbury]	oath sworn by Jupiter, the *genius* of Domitian, and 'native gods' (*deos patrios*)	*RIB* 2(4), no. 2443.11
[found in 1927; MOL]	[in or near the Walbrook at Lothbury]	money owed by Crescens (*pecuniam … soluere mihi debebit Crescens*); *pensionis* should probably be read for *petisionis* (see note to <WT50>)	*RIB* 2(4), no. 2443.15
[found in 1927; MOL]	[in or near the Walbrook at Lothbury]	'… for making a [?]ship' (*ad nauem faciendam*)	*RIB* 2(4), no. 2443.16
[found in 1927; MOL]	[in or near the Walbrook at Lothbury]	address, perhaps not genuine (see <WT61>)	*RIB* 2(4), no. 2443.32 *
[found before 1931; ?]	[?]	fragment reading […] *nunc vidisse* […]	*RIB* 2(4), no. 2443.14
[found in or before 1934; BM]	[in or near the Walbrook]	branded by 'the procurators of Britain'	*RIB* 2(4), no. 2443.2
GM144 [found in 1954; MOL]	Bank of London and South America (BOLSA) (formerly), 40–66 Queen Victoria Street, 82 Queen Street, EC4 (TQ 32480 81050)	? name of a witness	*RIB* 2(4), no. 2443.9
GM157 [found in 1955; MOL]	Bucklersbury House, 11–20 Walbrook, EC4 (TQ 32534 81046)	rectangular recessed panel on the outer (plain) face inscribed M TRA	*RIB* 2(4), no. 2443.8
GM240 [found in 1964–9; MOL]	Huggin Hill (Roman bathhouse), Upper Thames Street, EC4 (TQ 32260 80900)	names of four witnesses	*RIB* 2(4), no. 2443.18
1STS74	1–7 St Thomas Street, Southwark, SE1 (TQ 3273 8019)	branded with ?initials	*RIB* 2(4), no. 2443.1
TRM86	9–19 Throgmorton Avenue, 21 Austin Friars, EC2 (TQ 32890 81410)	legal inquiry dated 14 March AD 118 into the ownership of woodland in the canton of the Cantiaci	*RIB* 2(4), no. 2443.19; Hassall and Tomlin 1994, 302–4, no. 34
ONE94 <5160>	1 Poultry, EC2 (TQ 532580 181100)	deed of sale of the Gallic slave-girl Fortunata to the imperial slave Vegetus for 600 denarii	Tomlin and Hassall 2003, 373–4, no. 22; Tomlin 2003; Camodeca 2006; Tomlin 2011b, 515–17
ONE94 <5133>	1 Poultry, EC2 (TQ 532580 181100)	pair of tablets addressed to L(ucius) Iulius M[…]ianus, retaining some of the inner waxed surface	Tomlin and Hassall 2003, 374, no. 23; Tomlin 2011b, 515
ONE94 <5125>	1 Poultry, EC2 (TQ 532580 181100)	addressed to Sabinus (*Sabino ?Pirini*)	Tomlin and Hassall 2003, 374, no. 24; Tomlin 2011b, 517
ONE94 <5209>	1 Poultry, EC2 (TQ 532580 181100)	fragmentary address	Tomlin and Hassall 2003, 375, no. 25; Tomlin 2011b, 515
DGT06	Drapers' Gardens, 12 Throgmorton Avenue, EC2 (TQ 32830 81400)	first word of the *actum* ('executed') formula	Tomlin 2009, 337, no. 35
DGT06	Drapers' Gardens, 12 Throgmorton Avenue, EC2 (TQ 32830 81400)	ink-written copy (probably) of an illegible inner text, relating to the repayment of money with interest; dated 3 December AD 158	Tomlin 2011a, 446–8, no. 9

* Archive site code: see Schofield 1998; http://archive.museumoflondon.org.uk/laarc/catalogue
Repository abbreviations: BM = British Museum; MOL = Museum of London

RIB 2(4), no. 2443.19 (more fully), and one pair) (Table 13).

Of seven published from 1 Poultry (Tomlin 2011b), four have legible words (Tomlin and Hassall 2003, 373–5, nos 22–5). Of the 13 stylus writing tablets originally noted from Drapers' Gardens (Tomlin 2009, 336, n57), only five were inscribed and only one word could be recognised (ibid, 337, no. 35); one tablet was subsequently discovered to have writing in ink on the unrecessed face (Tomlin 2011a, 446–8, no. 9; Chapter 5).

6.3 Concordance of the writing tablets from Bloomberg London

The 405 stylus writing tablets, together with two stylus tags or labels, and two ink writing tablets excavated at Bloomberg London, both catalogued and non-catalogued, are detailed in Table 14 and Table 15.

Table 14 The writing tablets from Bloomberg London, by period and land use, with the catalogued items identified individually (cf Table 15)

Period	Land use	Count of all accessions	Count of all tablets	Count of catalogued tablet accessions	Count of catalogue entries	Correspondence (Chapter 4.1)			
						With name of recipient	Addresses acephalous, without name of recipient	Letter-text with first line	Letter-text with first line lost
2 phase 1									
	OA2	4	4	1	1				<WT30>
2 phase 2									
	S5	5	5	4	4	<WT1> <WT2>			
	S40	1	1	1	1		<WT17>		
	S45	2	2	1	1				
2 phase 3 (early)									
	OA120	1	1	1	1				
	S33	3	3	3	3				
	S35	3	3	1	1				
	S36	1	1	1	1				
2 phase 3 (late)									
	B1P2	4	4	1	1				
	B2	5	5	3	3		<WT18>		
	OA4	5	5	1	1				
	OA12P1	40	39	16	15	<WT3> <WT4>			<WT31>
	OA12P2	9	9	5	5				
3 phase 1 (early)									
	B3	1	1	0	0				
	B4P1	1	1	1	1	<WT5>			
	B4P2	1	1	0	0				
	B7	8	8	5	5				
	OA14	43	43	17	17	<WT6>	<WT19> <WT20>		<WT32> <WT33>
	OA15	54	54	27	27	<WT7> <WT8> <WT9>	<WT21>	<WT26>	<WT34> <WT35> <WT36>

Financial or legal documents (Chapter 4.2)			Accounts (Chapter 4.3)	Miscellaneous (Chapter 4.4)			Descripta (Chapter 4.5)	Stylus tags or labels (Chapter 4.6)	Ink tablets (Chapter 5)	Count of non-catalogued accessions	Count of non-catalogued tablets
Dated	Date lost	Lists of witnesses		Numerals	Alphabet	Unusual format but not inscribed					
										3	3
<WT44> (AD 57)							<WT91>			1	1
										0	0
							<WT92>			1	1
				<WT79>						0	0
							<WT93>			0	0
							<WT94>				
							<WT95>				
							<WT96>			2	2
<WT45> (AD 62)										0	0
							<WT97>			3	3
							<WT98>			2	2
							<WT99>				
							<WT100>			4	4
		<WT58>	<WT69>	<WT77>		<WT80>	<WT101>	<WT182>	<WT184>	24	24
				<WT78>		<WT81>	<WT102>				
							<WT103>				
							<WT104>				
		<WT59>					<WT105>			4	4
							<WT106>				
							<WT107>				
							<WT108>				
										1	1
										1	1
	<WT54>					<WT82>	<WT109>			3	3
							<WT110>				
							<WT111>				
<WT46>	<WT55>	<WT60>	<WT70>				<WT112>	<WT183>		26	26
							<WT113>				
							<WT114>				
							<WT115>				
							<WT116>				
							<WT117>				
							<WT118>				
			<WT71>			<WT83>	<WT119>			27	27
							<WT120>				
							<WT121>				

Table 14 (cont)

Period	Land use	Count of all accessions	Count of all tablets	Count of catalogued tablet accessions	Count of catalogue entries	Correspondence (Chapter 4.1)			
						With name of recipient	Addresses acephalous, without name of recipient	Letter-text with first line	Letter-text with first line lost
						<WT10>		<WT37>	
	OA19	13	13	5	5	<WT11>	<WT22>		
	OA72	1	1	0	0				
	OA76	1	1	0	0				
	OA122	1	1	1	1				
	OA125	1	1	0	0				
	OA134	6	6	4	4				
	S43	1	1	1	1				
	S46	1	1	1	1				
	S50	2	2	0	0				
	S52	2	2	2	2				
	S58	4	4	2	2				
	S148	1	1	0	0				
	S227	1	1	0	0				
3 phase 1 (late)									
	B9	20	20	6	6				
	B10	1	1	0	0				
	B11P1	1	1	0	0				
	B11P2	1	1	1	1				
	B11P3	2	2	1	1				
	OA16	1	1	0	0				
	OA17	12	12	6	6				
	OA22	40	39	28	27	<WT12>	<WT23>	<WT27> <WT28> <WT29>	<WT38> <WT39> <WT40> <WT41>
	OA23	4	4	2	2				
	OA28	5	5	3	3				
	OA31	6	6	5	5	<WT13>			

Financial or legal documents (Chapter 4.2)			Accounts (Chapter 4.3)	Miscellaneous (Chapter 4.4)			Descripta (Chapter 4.5)	Stylus tags or labels (Chapter 4.6)	Ink tablets (Chapter 5)	Count of non-catalogued accessions	Count of non-catalogued tablets
Dated	Date lost	Lists of witnesses		Numerals	Alphabet	Unusual format but not inscribed					
							<WT122>				
							<WT123>				
							<WT124>				
							<WT125>				
							<WT126>				
							<WT127>				
							<WT128>				
							<WT129>				
							<WT130>				
							<WT131>				
							<WT132>				
							<WT133>				
	<WT56>						<WT134>			8	8
							<WT135>				
										1	1
										1	1
							<WT136>			0	0
										1	1
<WT47>			<WT72>				<WT137>			2	2
							<WT138>				
		<WT61>								0	0
							<WT139>			0	0
										2	2
							<WT140>			0	0
							<WT141>				
							<WT142>			2	2
							<WT143>				
										1	1
										1	1
<WT48> (AD 67)	<WT57>					<WT84>	<WT144>			14	14
						<WT85>					
						<WT86>					
										1	1
										1	1
						<WT87>				0	0
							<WT145>			1	1
										1	1
<WT49> (AD 85)		<WT62>	<WT73>				<WT146>			6	6
							<WT147>				
							<WT148>				
<WT50> (AD 64)		<WT63>	<WT74>			<WT88>	<WT149>			12	12
		<WT64>	<WT75>				<WT150>				
		<WT65>	<WT76>				<WT151>				
							<WT152>				
							<WT153>				
							<WT154>				
							<WT155>				
							<WT156>				
							<WT157>				
							<WT158>				
<WT51> (AD 76)							<WT159>			2	2
		<WT66>					<WT160>			2	2
							<WT161>				
							<WT162>			1	1
							<WT163>				
							<WT164>				
							<WT165>				

Table 14 (cont)

Period	Land use	Count of all accessions	Count of all tablets	Count of catalogued tablet accessions	Count of catalogue entries	Correspondence (Chapter 4.1)			
						With name of recipient	Addresses acephalous, without name of recipient	Letter-text with first line	Letter-text with first line lost
	OA34	7	7	5	5				<WT42> <WT43>
	OA67	2	2	1	1				
	OA77P4	1	1	1	1	<WT14>			
	OA78	1	1	0	0				
	OA79	1	1	1	1				
	OA81	1	1	1	1				
	OA82	5	5	3	3				
	OA163	3	3	2	2	<WT15>			
	S66	1	1	0	0				
	S85	4	4	2	2	<WT16>			
	S151P3	7	5	0	0				
	S204	1	1	0	0				
3 phase 1 (undifferentiated)									
	OA185	3	3	0	0				
	S280P2	11	11	3	3		<WT24>		
	S292	1	1	0	0				
	S294	1	1	0	0				
3 phase 2 (undifferentiated)									
	OA33	1	1	0	0				
	OA40	10	10	2	2				
4 phase 1									
	B13P2	2	2	0	0				
	B17	1	1	0	0				
	OA90	2	2	0	0				
	OA150	2	2	1	1				
	OA163	4	4	1	1				
	S88	2	2	2	2				
	S186	2	2	1	1				
5 phase 1									
	B42RC	1	1	0	0				
	OA108P1	1	1	0	0				
	OA135	2	2	0	0				
6 phase 1									
	S174	1	1		0				
12									
	S132	1	1	1	1				
Unstratified									
		12	12	3	3		<WT25>		
Total		413	409	187	185	16	9	4	14

There are 187 catalogued accessions representing 185 catalogued units
There are 181 catalogued wax tablets
There are 2 catalogued ink tablets
There are 2 catalogued tags or labels

Key:
Land uses: P1 (etc) = phase 1 (etc); RC = room C

Financial or legal documents (Chapter 4.2)			Accounts (Chapter 4.3)		Miscellaneous (Chapter 4.4)		Descripta (Chapter 4.5)	Stylus tags or labels (Chapter 4.6)	Ink tablets (Chapter 5)	Count of non-catalogued accessions	Count of non-catalogued tablets
Dated	Date lost	Lists of witnesses	Numerals		Alphabet	Unusual format but not inscribed					
<WT52> (AD 85–95)						<WT89>	<WT166>			2	2
							<WT167>			1	1
										0	0
										1	1
							<WT168>			0	0
							<WT169>			0	0
							<WT170>			2	2
							<WT171>				
							<WT172>				
							<WT173>			1	1
										1	1
									<WT185>	2	2
										7	5
										1	1
										3	3
							<WT174>			8	8
							<WT175>				
										1	1
										1	1
										1	1
						<WT90>	<WT176>			8	8
										2	2
										1	1
										2	2
<WT53> (AD 82)										1	1
							<WT177>			3	3
		<WT67>					<WT178>			0	0
							<WT179>			1	1
										1	1
										1	1
										2	2
										1	1
							<WT180>			0	0
		<WT68>					<WT181>			9	9
10	4	11	8	2	1	11	91	2	2	226	224

Table 15 Non–catalogued writing tablets from Bloomberg London, by accession number, period and land use

Period	Land use	Count of all accessions	Count of all tablets	Count of catalogued tablet accessions (see Table 14)	Count of catalogue entries (see Table 14)	Count of non-catalogued accessions	BZY10 acc no.
2 phase 1	OA2	4	4	1	1	3	<6421>, <11193>, <11207>
2 phase 2	S5	5	5	4	4	1	<7523>
	S40	1	1	1	1	0	-
	S45	2	2	1	1	1	<7514>
2 phase 3 (early)	OA120	1	1	1	1	0	-
	S33	3	3	3	3	0	-
	S35	3	3	1	1	2	<7486>, <7506>
	S36	1	1	1	1	0	-
2 phase 3 (late)	B1P2	4	4	1	1	3	<6413>, <6419>, <7485>
	B2	5	5	3	3	2	<6392>, <6393>
	OA4	5	5	1	1	4	<11180>, <11197>, <11204>, <11206>
	OA12P1	40	39	16	15	24	<6409>, <6411>, <7480>, <7481>, <7482>, <7488>, <7492>, <7495>, <7496>, <7497>, <7498>, <7509>, <7510>, <7511>, <9117>, <9118>, <9119>, <11194>, <11195>, <11199>, <11200>, <11201>, <11202>, <11205>
	OA12P2	9	9	5	5	4	<6406>, <7472>, <7473> <7476>
3 phase 1 (early)	B3	1	1	0		1	<5791>
	B4P2	2	2	1		1	<6350>
	B7	8	8	5		3	<6285>, <7466>, <7467>
	OA14	43	43	17		26	<4796>, <4797>, <4798>, <4799>, <4800>, <4801>, <4803>, <4804>, <4807>, <6270>, <6297>, <6357>, <6359>, <6360>, <6361>, <6363>, <6364>, <6399>, <6417>, <6418>, <7470>, <7471>, <7491>, <7513>, <10226>, <10228>
	OA15	54	54	27		26	<4288>, <4290>, <4292>, <5779>, <5798>, <6292>, <6293>, <6294>, <6380>, <6381>, <6382>, <6386>, <6387>, <7456>, <7461>, <7465>, <7960>, <7961>, <7962>, <7963>, <7965>, <7967>, <9112>, <9113>, <10225>, <10227>
	OA19	13	13	5		8	<6342>, <6343>, <6344>, <6346>, <6347>, <7452>, <7453>, <7454>
	OA72	1	1	0		1	<4295>
	OA76	1	1	0		1	<4293>
	OA122	1	1	1		0	-
	OA125	1	1	0		1	<453>
	OA134	6	6	4		2	<2041>, <2044>
	S43	1	1	1		0	-
	S46	1	1	1		0	-
	S50	2	2	0		2	<6405>, <7483>
	S52	2	2	2		1	<6287>
	S58	4	4	2		2	<6414>, <10148>
	S148	1	1	0		1	<4294>

Table 15 (cont)

Period	Land use	Count of all accessions	Count of all tablets	Count of catalogued tablet accessions (see Table 14)	Count of catalogue entries (see Table 14)	Count of non-catalogued accessions	BZY10 acc no.
	S227	1	1	0		1	<2046>
3 phase 1 (late)	B9	20	20	6		14	<5802>, <5803>, <5804>, <5805>, <5806>, <6271>, <6272>, <6273>, <6276>, <6279>, <6280>, <6281>, <6283>, <6284>
	B10	1	1	0		1	<5171>
	B11P1	1	1	0		1	<5182>
	B11P2	1	1	1		0	-
	B11P3	2	2	1		1	<5183>
	OA16	1	1	0		1	<4245>
	OA17	12	12	6		6	<3372>, <3373>, <3376> <5728>, <6265>, <9109>
	OA22	40	39	28		12	<5784>, <5787>, <5790>, <5800>, <6266>, <6267>, <6269>, <6353>, <6366>, <6369>, <6376>, <7451>
	OA23	4	4	2		2	<5725>, <6262>
	OA28	5	5	3		2	<6261>, <10386>
	OA31	6	6	5		1	<4287>
	OA34	7	7	5		2	<4792>, <4793>
	OA67	2	2	1		1	<164>
	OA77P4	1	1	1		0	-
	OA78	1	1	0		1	<3310>
	OA79	1	1	1		0	-
	OA81	1	1	1		0	-
	OA82	5	5	3		2	<10912>, <10913>
	OA163	3	3	2		1	<9871>
	S66	1	1	0		1	<4794>
	S85	4	4	2		2	<5178>, <5179>
	S151P3	7	5	0		7	<3305>, <3306>, <3307>, <4788>, <4789>, <4790>, <4791>
	S204	1	1	0		1	<3308>
3 phase 1 (undifferentiated)	OA185	3	3	0		3	<5172>, <5173>, <5174>
	S280P2	11	11	3		8	<5727>, <6338>, <7440>, <7442>, <7444>, <7445>, <7446>, <7449>
	S292	1	1	0		1	<7443>
	S294	1	1	0		1	<5726>
3 phase 2	OA33	1	1	0		1	<5169>
	OA40	10	10	2		8	<3357>, <4281>, <4282>, <4285>, <5795>, <6259>, <6260>, <10916>
4 phase 1	B13P2	2	2	0		2	<5167>, <5168>
	B17	1	1	0		1	<4244>
	OA90	2	2	0		2	<3312>, <3313>
	OA150	2	2	1		1	<2045>
	OA163	4	4	1		3	<9884>, <9894>, <10149>
	S88	2	2	2		0	-
	S186	2	2	1		1	<3314>
5 phase 1	B42RC	1	1	0		1	<2047>
	OA108P1	1	1	0		1	<2097>
	OA135	2	2	0		2	<2081>, <2082>
6 phase 1	S174	1	1			1	<3303>

Table 15 (cont)

Period	Land use	Count of all accessions	Count of all tablets	Count of catalogued tablet accessions (see Table 14)	Count of catalogue entries (see Table 14)	Count of non-catalogued accessions	BZY10 acc no.
12	S132	1	1	1		0	-
Unstratified	-	12	12	3		9	<456>, <458>, <2038>, <3302>, <5175>, <6257>, <10142>, <10143>, <11196>
Total		413	409		187	226	

Key:
Land uses: P1 (etc) = phase 1 (etc); RC = room C

FRENCH, GERMAN AND ITALIAN SUMMARIES

Résumé

Madeleine Hummler

Le site de Bloomberg London est la fouille de niveaux romains la plus étendue et la plus importante à avoir été menée dans la Cité de Londres au cours des vingt dernières années. Par sa diversité et son volume le mobilier romain récupéré dans les couches saturées d'eau représente un ensemble d'importance internationale, dont les tablettes à écrire décrites ici constituent un aspect essentiel.

Les fouilles de Bloomberg London, conduites en 2010–14, font partie d'une opération d'archéologie préventive programmée sur une aire de 1,2 ha au sud de Queen Victoria Street et de Bucklersbury, sur le site du nouveau siège européen de Bloomberg LP. Le site, déjà bien connu pour la découverte dans les années 1950 d'un temple de Mithra datant du IIIe siècle apr. J.-C., offrait la possibilité de mener des recherches archéologiques dans la vallée du Walbrook. La Londres romaine avait été établie à proximité immédiate du site, à l'est, tout juste cinq ans après l'invasion de la Bretagne en 43 apr. J.-C. Pendant la seconde moitié du Ier siècle apr. J.-C. des niveaux alternants de remblais et de construction se sont succédés, à la suite de l'aménagement des voies at des ponts enjambant le Walbrook.

Au total 405 tablettes de cire en bois (servant à écrire avec un stylet) ainsi que deux étiquettes de tablettes et deux tablettes à écrire à l'encre (il s'agit de minces planchettes de bois inscrites à la plume) ont été retrouvées à Bloomberg London, ce qui plus que double le total des tablettes à écrire récupérées à ce jour dans toutes les autres fouilles de Londres. Des textes lisibles figurent sur 80 des nouvelles tablettes, publiés intégralement ici. Notre étude considère également la forme et l'épigraphie des tablettes, leur morphologie et les types de lettres utilisées, et comprend une démonstration de la façon de fabriquer des tablettes en recyclant des tonneaux importés.

Les Romains utilisaient des tablettes à écrire pour leurs documents juridiques et pour tenir leur comptabilité ainsi que pour leur correspondance plus générale, pour prendre des notes et écrire des notes de service de toutes sortes ; il existe aussi des exemples de tablettes réutilisées pour des exercices d'écriture. Huit documents portent une date, et une séquence archéologique étroitement datée nous permet de démontrer que la vaste majorité des textes datent d'entre les années 50 et 80 apr. J.-C., au contraire des fameuses tablettes provenant des forts de Vindolanda, qui eux datent d'entre les années 80 et environ 110 apr. J.-C.

Les tablettes donnent une idée des aspects plus formels, officiels, juridiques et commerciaux de la vie à Londinium immédiatement avant et après sa destruction par Boudica en 60/61 apr. J.-C. Le premier document financier de la cité (daté du 8 janvier 57 apr. J.-C.) illustre la description que Tacite a donnée de Londres à la veille de sa destruction comme « fourmillant de marchands et de commerce ». Un contrat daté du 21 octobre 62 apr. J.-C concernant le transport de 20 chargements de provisions de St Albans à Londres suggère que ces deux villes ont rapidement refait surface deux ans à peine après leur

destruction. D'autres lettres se rapportent à des affaires financières : on y trouve un billet à ordre, la perte de bêtes de somme, un appel à investir ou encore une offre de conseil à un financier dont les mauvaises affaires l'avaient couvert de ridicule « sur tout le marché ». Beaucoup sont des billets d'emprunt, y compris un document portant la date du 15 mars 82 apr. J.-C. Une décision préliminaire dans une affaire judiciaire datant du 22 octobre 76 apr. J.-C. qui devrait être entendue le 9 novembre ressort du domaine de la justice.

En tout on retrouve les noms de 92 individus, dont beaucoup étaient vraisemblablement des Londoniens romains ; bien des documents ont dû être écrits à Londres même. On connait les noms de 25 destinataires, dont un certain Tertius surnommé « le brasseur » ; cet individu est également connu à Carlisle. Trois lettres sont expressément adressées à des personnes habitant « à Londres ». Des esclaves et des affranchis figurent aussi dans les documents ; ils agissaient parfois comme agents de leurs propriétaires ou patrons. Un destinataire est un vétéran de l'armée impériale (*emeritus Augusti*) et les militaires sont souvent évoqués dans les écrits (les femmes, par contre, n'y figurent pas). Les documents confirment les dires de Tacite, qui informe que la garnison avait été renforcée après la défaite de Boudica, en faisant allusion à deux cohortes, celles des Vangions et des Lingons, et en nommant certains officiers de cavalerie et cavaliers. Un certain Classicus, qui était préfet de la sixième cohorte des Nerviens, peut être identifié comme le rebelle notoire de 70 apr. J.-C. Les tablettes non seulement illustrent la vie en Bretagne romaine et au-delà, mais font aussi entendre les voix de ces Londoniens romains qui résonnaient dans leur capitale provinciale au cours du premier demi-siècle de son existence.

Zusammenfassung

Madeleine Hummler

Die Ausgrabungen von Bloomberg London waren die größten und wichtigsten Untersuchungen, die in den letzten 20 Jahren innerhalb der römischen Stadt London stattgefunden haben. Die Menge und Vielfalt der römischen Gegenstände, die in den wassergesättigten Schichten gefunden wurden, bilden einen Befund von internationaler Bedeutung. Darunter spielen die Schreibtafeln, von deren hier berichtet wird, eine wesentliche Rolle.

Die Bloomberg Ausgrabungen wurden zwischen 2010 und 2014 in einem Bereich von 1,2 ha südlich von Queen Victoria Street und Bucklersbury durchgeführt, in Voraus des Neubaus des neuen europäischen Hauptsitzes der Firma Bloomberg LP. Die Fundstelle, die schon bekannt war, weil man dort einen Tempel von Mithra des 3. Jhs n.Chr. in den 1950er Jahren entdeckt hatte, bot die Gelegenheit, das Tal des Walbrooks archäologisch zu untersuchen. Die ursprüngliche römische Stadt London, die knapp fünf Jahre nach der Invasion Britanniens im Jahre 43 n.Chr. gegründet wurde, lag unmittelbar östlich der Fundstelle. In der zweiten Hälfte des 1. Jhs n.Chr. war die

Fundstätte von alternierenden Geländeerhöhungs- und Bauschichten gekennzeichnet, als das Areal nach dem Bau von Straßen und Brücken über den Walbrook bebaut wurde.

Insgesamt sind 405 Schreibtafeln (Holztafeln, die mit Wachs beschichtet waren und auf deren man mit einem *stilus* oder Griffel schrieb) sowie zwei Anhänger oder Etiketten, die zu Schreibtafeln gehörten, und zwei dünne hölzerne Schreibtafeln, auf deren man mit Feder und Tinte schrieb, auf der Bloomberg Ausgrabung geborgen worden, also mehr als das Doppelte aller anderen Schreibtafeln, die in früheren Ausgrabungen in London gefunden worden sind. Auf ungefähr 80 der Schreibtafeln stehen lesbare Texte, die wir hier vollständig veröffentlichen, noch erhalten. Wir bewerten auch die Form und die epigrafischen Eigenschaften der Schreibtafeln, ihre Typologie, die Form der Buchstaben und zeigen, wie die Schreibtafeln aus wiederverwendeten importierten Fässern hergestellt wurden.

Die Römer haben Schreibtafeln für rechtliche und finanzielle Dokumente gebraucht, sowie auch für den generellen Schriftverkehr, für Mitteilungen und sonst allerlei Notizen; es gibt auch Beispiele von Schreibübungen. Unter den Dokumenten sind acht Exemplare innerlich datierbar, und die eng datierte Nachfolge der Schichten hat es ermöglicht, die überwiegende Mehrzahl der Texte in die 50er bis 80er Jahren n.Chr. zu datieren, im Gegensatz zu den bekannten Schreibtafeln aus den Lagern von Vindolanda, die zum Zeitabschnitt zwischen ungefähr 80 und 110 n.Chr. gehören.

Die Schreibtafeln vermitteln ein Bild des formellen, offiziellen, rechtlichen und wirtschaftlichen Lebens in Londinium unmittelbar vor und nach der Zerstörung der Stadt durch Boudica im Jahre 60/61 n.Chr. Das erste Finanzdokument der Stadt (8. Januar 57 n.Chr.) bestätigt die Beschreibung von Tacitus, der London als „voll von Unternehmern und Handel" gerade bevor der Zerstörung der Stadt geschildert hat. Ein Vertrag vom 21. Oktober 62 n.Chr., der den Transport von 20 Lasten von Lebensmitteln von St Albans nach London betrifft, weist darauf hin, dass sich beide Städte sehr rasch (etwa ein oder zwei Jahre) nach ihrer Zerstörung erholt haben. Andere Briefe, die Finanzielles betreffen, erwähnen einen Schuldschein, den Verlust von Lasttieren, einen Aufruf für Betriebskapital oder ein Angebot einen Finanzier, der so unbedacht geliehen hat, dass er „vom ganzen Markt" ausgelacht wurde, zu beraten. Bei vielen Dokumenten handelt es sich um Schuldscheine, wie z.B. einer, der am 15. März 82 n.Chr. ausgestellt wurde. Ein vorläufiger Entschluss vom 22. Oktober 76 n.Chr. betrifft einen Rechtsfall, der in einem Gehör am 9. November vor Gericht kommen sollte.

Insgesamt werden 92 Individuen, darunter wahrscheinlich zahlreiche römische Londoner, genannt und viele Dokumente wurden vermutlich in London hergestellt. Man kennt die Adressen von 25 Empfängern, wie z.B. „der Brauer" Tertius, der auch in Carlisle bekannt war; drei Briefe sind ausdrücklich an Personen „in London" adressiert. Es gibt auch Sklaven und Befreite, die manchmal als Stellvertreter ihrer Besitzer oder Gönner tätig waren. Ein Empfänger war ein Reichsveteran (*emeritus Augusti*) und das Militär spielt eine führende Rolle in den Mitteilungen (die Frauen fehlen dagegen gänzlich). Die

Dokumente belegen den Bericht des Tacitus, dass die Besatzung des Lagers nach der Niederlage von Boudica verstärkt wurde, indem sie zwei Kohorten (diejenigen der Vangionen und der Lingonen) erwähnen und Reiter und Kavallerieoffiziere nennen. Ein Hinweis auf einen gewissen Classicus, der *praefectus* der VI. Kohorte der Nervier war, kann mit einem bekannten Rebellenführer von 70 n.Chr. in Zusammenhang gestellt werden. Die Schreibtafeln erleuchten nicht nur den Alltag in der Römerzeit innerhalb und außerhalb Britannien, sondern wiedergeben auch die Stimmen der Londoner, die in der Provinzhauptstadt in den ersten 50 Jahren ihres Bestehens lebten.

Sommario

Genevieve Carver

Lo scavo di Bloomberg London è stato lo scavo archeologico più ampio e significativo di livelli Romani nella City di Londra per un ventennio. I reperti raccolti dai depositi saturi d'acqua rappresentano per la sua quantità e varietà un insieme di importanza internazionale, del quale le tavolette di scrittura che raccontiamo qui formano una parte fondamentale.

Gli scavi di Bloomberg London sono stati eseguiti dal 2010 al 2014 durante la ristrutturazione di un'area di 1,2 ettari sud di Queen Victoria Street e Bucklersbury, dove hanno costruito la nuova sede centrale del Bloomberg LP. Il sito, già conosciutto per la scoperta negli anni 1950 di un tempio di Mitra datato al 3° secolo dC, ci ha offerto la possibilità di studiare archeologicamente la valle del Walbrook. La Londra romana è stata fondata immediatamente ad est del sito, entro cinque anni dell'invasione romana nel 43 dC. Durante la seconda metà del 1 ° secolo dC, alternavano periodi in cui si alzava il terreno e si costruiva edifici, poiché la edificazione seguiva la costruzione di strade e ponti attraverso il Walbrook.

In totale, 405 tavolette di scrittura a stilo (tavolette di legno cerate incise con uno stilo) sono state trovate a Bloomberg London, insieme a due etichette per tavolette e due tavolette di scrittura all'inchiostro (sottile lastre di legno segnate con una penna), molto più del doppio del numero totale di tavolette rinvenute a Londra fino a questo punto. Delle nuove tavolette, circa 80 portano testi leggibili, i quali riportiamo integralmente qui. Il nostro discorso considera la forma e tipologia delle tavolette, incluso la epigrapfia e la forma delle lettere, e dimostra come le tavolette potrebbero essere fatte da botte riciclate.

I romani usavano le tavolette di scrittura a stilo per documenti legali e conti finanziari, e anche per comunicazioni generali, appunti e note di vari tipi, incluso alcuni esempi di tavolette riutilizzate per esercizi di scrittura. Solamente otto documenti sono datati direttamente, però la sequenza delle fasi archeologiche è talmente ben definita che è possibile dire che la maggior parte dei testi provengano dagli anni 50 a 80 dC, al contrario dei testi ben conosciuti dal forte di Vindolanda, datati più o meno agli anni 80 a 110 dC.

Le tavolette ci informano degli aspetti più formali, ufficiali, legali e commerciali della vita a Londinium immediatamente prima e dopo che fosse stata distrutta da Boudica nel 60/1 dC. Il primo documento finanziario della città (datato al 8 gennaio 57 dC) illustra la descrizione di Londra alla vigilia della sua distruzione scritta da Tacito, come città «pienissima di uomini d'affari e commercio». Un contratto datato al 21 ottobre 62 dC che riguarda il trasporto di 20 carichi di provisioni da St Albans a Londra implica che entrambe le città avessero recuperato rapidamente dopo essere state distrutte solamente uno o due anni in precedenza. Altre lettere che si preoccupano di affari finanziari fanno riferimento a diverse cose, incluso una cambiale, la perdita di animali da trasporto, un ricorso per capitale operativo, e un consiglio offerto ad un finanziere il cui prestito malaccorto lo ha fatto oggetto di ridicolo «tra tutto il mercato». Molti sono bigliettini con prestiti, compreso uno datato al 15 marzo 82 dC. Un testo giudiziario datato al 22 ottobre 76 dC rappresenta una decisione provvisoria riguardo a una causa che doveva essere dibattuta il 9 novembre.

92 persone sono state identificate in totale, delle quali molte erano potenzialmente londinesi, e un gran numero dei documenti probabilmente era stato scritto a Londra. Le lettere sono indirizzate a circa 25 riceventi, compreso Tertio «il birraio», che è conosciuto anche a Carlisle, e tre lettere sono indirizzate a persone «a Londra». Schiavi e liberti figurano nei documenti, a volte come rappresentanti dei suoi padroni o patroni. Un ricevente è un reduce imperiale (*emeritus Augusti*), e i militari figurano molto spesso in questi testi (le donne, al contrario, mancano). I documenti fanno riferimento a due altre coorti, i Vangioni ed i Lingoni, ed ai nomi dei suoi cavallegeri ed ufficiali, verificando il resoconto di Tacito, il quale afferma che la guarnigione fosse rinforzata dopo la sconfitta di Boudica. Classico, il prefetto della sesta coorte dei Nerviani che è menzionata in un documento, dovrebbe essere il ribelle famoso nel 70 dC. Le tavolette riflettono non solo la vita nella Britannia romana, ma danno voce ai Londinesi romani vissuti nei primi 50 anni della capitale della provincia.

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INDEXES

INDEXES TO LATIN TEXTS

Compiled by Roger S O Tomlin, with Ann Hudson

These indexes include only references to Chapters 4 and 5 (the texts). For references in the rest of the volume please see the 'General index' (below).

Listing is by writing tablet catalogue number (<WT#>). If both faces are inscribed, they are distinguished as '(a)' or '(b)'.

For the use of brackets and other punctuation see 'Conventions used in transcribing the tablets' on page 7.

I, Calendar

8 January AD 57: Nerone Claudio Caesare Augusto Germanico ii L(ucio) Calpurnio Pisone co(n)s(ulibus) ui Idus Ianuarias <WT44>

21 October AD 62: P(ublio) Mario Ce<lso> L(ucio) Afinio Gallo co(n)s(ulibus) xii Kal(endas) Nouembr(es) <WT45>

13 November (AD 62): Idus Nouembres <WT45>

AD 64: M(arco) Licinio Crasso [F]r[u]gi et C(aio) Lae[cani]o Basso co(n)s(ulibus) [...]embr[e]s <WT50>

AD 67: Fo[nt]ei[o] Capitone [et] I[u]lio Rufo c[o(n)s(ulibus)] <WT48>

22 October AD 76: imp(eratore) Ca[e]sare Vespasiano uii Tit[o] u c[o](n)s(ulibus) xi K(alendas) Nou(embres) <WT51>

9 November (AD 76): u Idus Nouembres <WT51>

15 March AD 82: imp(eratore) Caes(are) Domitiano Aug(usto) uiii co(n)s(ule) Idibus Mart(i)is <WT53>

2–6 October AD 85: [imp(eratore) Caes(are) Domitiano Aug(usto) G]ermanico xi T(ito) Aurelio [Fuluo ii co(n)s(ulibus) ... ?Nona]s [Octo]bres <WT49>

AD 85 or later: imp(eratore) Domitiano Caesa[re Aug(usto) Germanico co(n)s(ule) ...] <WT52>

Year unknown

13 February: Idus Februarias <WT46>

7 October: Nonis Octobr[i]bus <WT47>

25 December: iix K(alendas) Ianuarias <WT37>

II, Personal names

Doubtful names and identifications are preceded by a question mark, and if the name depends on conjecture, reference to the commentary is indicated by 'n'.

Roman citizens are listed by both nomen and cognomen, and also by praenomen if known. Non-Romans (*peregrini*) are listed by their cognomen, followed by their father's name (patronymic) if known; the father's name is also listed. Freedmen and slaves are identified by their cognomen, and also by their sometime owner (patron) or present owner respectively, if these are known; the names of patrons and owners are also listed. Where status or occupation is known, it is noted after the name.

Augustus, *Caesar* and *Germanicus* are imperial titles rather than names, but they have been included, together with imperial nomina and cognomina when used. Also included are the names of consuls, likewise used to date documents. (See also Index I, Calendar).

Acephalous: names whose beginning is lost

[...]anus <WT17>
?[...]carus <WT36> n
?[...]iaca <WT19>
[...]inus, *scrIXIplarius* <WT18>
[...]linagus *or* [...]linagius, *father of* Namatobogius <WT13>
[...]nor, *son of* Gessinus <WT23>
[...]ricirianus <WT25>
[...]rius <WT185>(a)
[...]tus <WT50>

Abot[...] <WT63>
?Adeco <WT76> n
?Adhenus, *father of* Pactumeius <WT76>
Afinius Gallus, L(ucius), *consul* <WT45>
Agrippa, *eques* <WT62>
Ambiccus, *father of* Martialis <WT5>
Ammonicus <WT76>
Aprilius, *perhaps* Aprili(s) <WT68>
Aristus <WT67>(b)
Atignomarus <WT37>
Atticus <WT15>, <WT55>
At(t)icus <WT31>(a)

Attius, *son of* Optatus <WT59>
Audax *or* Audacius <WT64>
Aug(ustus)
  unidentified emperor <WT20>
  see also Domitianus; Nero
Aurelius [Fulvus], T(itus), *consul* <WT49>

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Bassus, C(aius) Lae[cani]us, *consul* <WT50>
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Billicu[s], *son of* Vannius <WT61>
?Butus <WT72>

Caesar
  unidentified emperor <WT67>(a)
  see also Domitianus; Nero
Caes(ar) *see* Domitianus
Ca[e]sar *see* Vespasianus
C(aius) *see* Lae[cani]us Bassus; Valerius Proculus
Calpurnius Piso, L(ucius), *consul* <WT44>
Calventius Ing[enuus] <WT26>
Capito, Fo[nt]ei[us], *consul* <WT48>
?Carus <WT36> n
Cassius [...]tus, Sex(tus) <WT50>
Catarrius <WT29>
Catullus <WT14>
Catullus, *slave of* Faustinus <WT70>
Celsus, P(ublius) Marius, *consul* <WT45>
Classicus, *praefectus* <WT33>
Claudius *see* Nero
Claudius Danucus, Ti(berius) <WT3>
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Cornelius S[.]tta <WT3>
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Crispus <WT72>

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Diadumenus <WT29>
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?Exuvius <WT76> n

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Florentinus, *slave of* Cassius [...]tus <WT50>
Florus <WT10>
Fo[nt]ei[us] Capito, *consul* <WT48>
Frontinus <WT34>
[F]r[u]gi, M(arcus) Licinius Crassus, *consul* <WT50>
[Fulvus], T(itus) Aurelius, *consul* <WT49>

G(aius) *see* C(aius)
Gallus, L(ucius) Afinius, *consul* <WT45>
Germanicus *see* Nero
[G]ermanicus *see* Domitianus
Gessinus, *father of* [...]nor <WT23>
Gratus, *freedman of* [S]purius <WT44>
Gratus, *son of* Iunius <WT2>

Ianuarius <WT72>
?[Ianua]rius) <WT185>(a) n
?[I]ng[e]nuus <WT55>
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Interui[n]aris <WT23>
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Iunius, *cuparius* <WT14>
Iunius, *father of* Gratus <WT2>
Iunius, *father of* Luguseluus <WT4>

Lae[cani]us Bassus, C(aius), *consul* <WT50>
Licinius Crassus [F]r[u]gi, M(arcus), *consul* <WT50>

Litugenus <WT51>
Longinus, *eques* <WT62>
L(ucius) *see* Afinius Gallus; Calpurnius Piso
Luguseluus, *son of* Iunius <WT4>

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Macrin[us] <WT66>
Magunus <WT51>
Ma<n>suetus <WT67>(b)
Mar[...], *decurion* <WT62>
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Marius, *perhaps* Marus <WT65>
Marius Celsus, P(ublius), *consul* <WT45>
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Paullus <WT65>
Pirinus, *father of* Sabinus <WT11>
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Primus <WT61>
Proculus, C(aius) Valerius <WT45>
P(ublius) *see* Marius Celsus

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Rufus, (Lucius) I[u]lius, *consul* <WT48>
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S[a]lvius M[...], M(arcus) <WT27>
S[a]tta, Cornelius <WT3>
Secundio, *patron of* Vialicus <WT27>
[?Sene]cio <WT70> n
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Silvanus, *decurion* <WT62>
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Tutor, *father of* [Ve]getus <WT58>(a)

Valerius Proculus, C(aius) <WT45>
Vannius, *father of* Billicu[s] <WT61>
[Ve]getus, *son of* Tutor <WT58>(a)
Venustus, *patron of* Tibullus <WT44>
Venustus, M(arcus) Renn[iu]s <WT45>
Verecu[n]d[us] <WT65>
Verecundus, *eques* <WT62>
Vespasianus, *emperor* <WT51>
Vialicus, *freedman of* Secundio <WT27>

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IV, Military and official terms

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V(b), Numerical symbols

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Compiled by Ann Hudson

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All street names and locations are in London unless specified otherwise
County names within parentheses refer to historic counties

The more than 400 wooden writing tablets published here are an assemblage of international importance from a Roman provincial capital. The more formal, official, legal and business, aspects of life in the new city of Londinium in its first half-century are revealed in these documents. They include the earliest known hand-written – and the earliest financial – document from Britain, dated AD 57, and the earliest reference by name to 'London' in a tablet dated to AD 65/70–80. Loan-notes, letters and various business transactions reflect a London 'very full of businessmen and commerce' (in the words of Tacitus) both before and after its destruction by Boudica in AD 60/1, with the military featuring strongly. Slaves, freedmen, traders, soldiers and the judiciary all make an appearance. Many of the documents were probably written in London, and many of 92 people named are potentially Roman Londoners.

Preserved in waterlogged deposits in the Walbrook valley, the tablets were recovered from a tightly-phased archaeological sequence which illustrates westward development of the city founded following the invasion of Britain in AD 43. Aspects of the tablets themselves that are discussed include a demonstration of how the stylus tablets were probably made by recycling imported barrels; analysis of the wax applied to the surface of stylus tablets; the form of the tablets and how they were used; their epigraphy; and the content of some 80 legible texts.

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