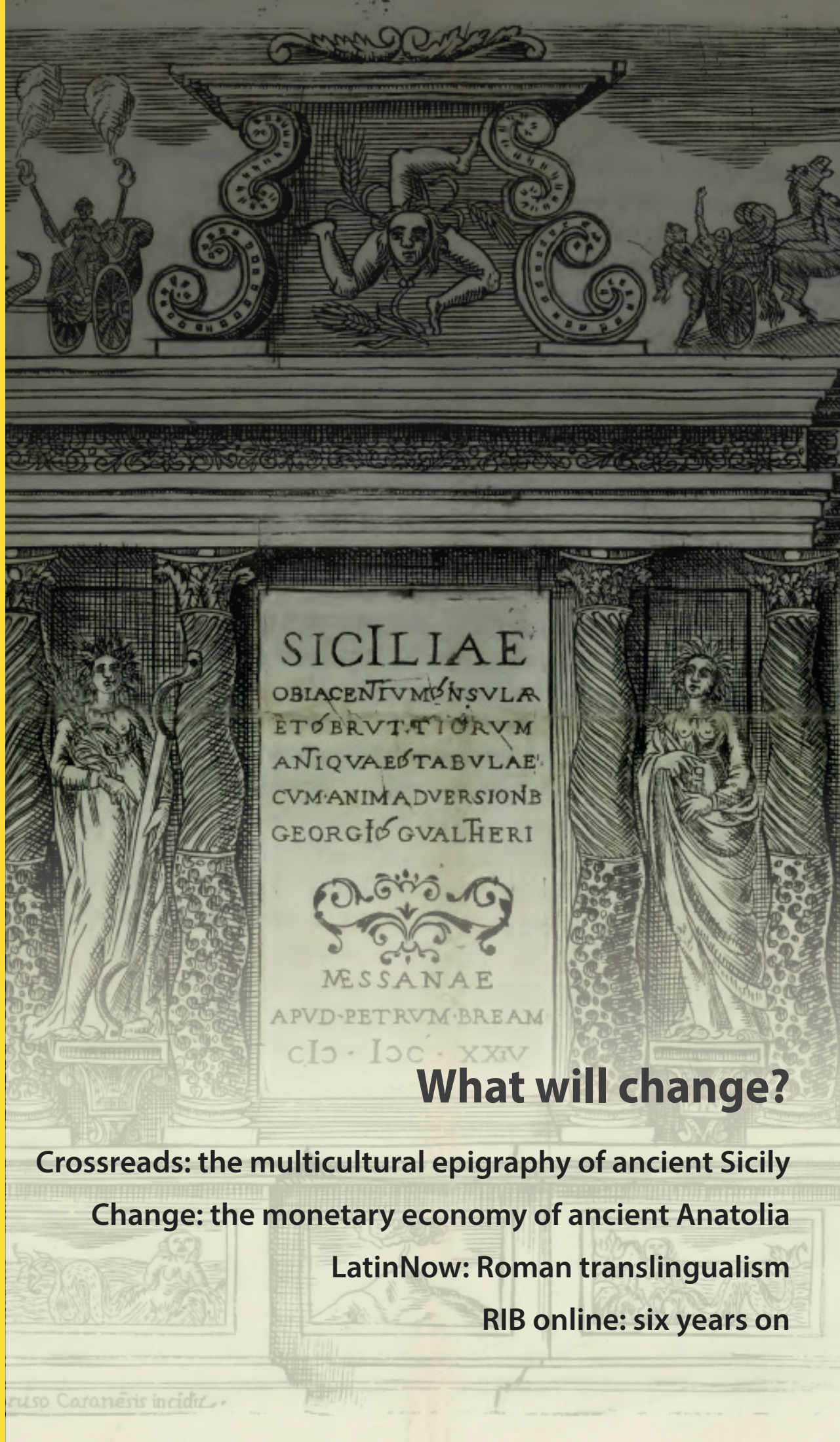


# Centre for the Study of Ancient Documents

THE UNIVERSITY OF OXFORD | NEWSLETTER 25



## What will change?

**Crossreads: the multicultural epigraphy of ancient Sicily**

**Change: the monetary economy of ancient Anatolia**

**LatinNow: Roman translingualism**

**RIB online: six years on**



# The Corpus of Ptolemaic Inscriptions

Alan Bowman

The end of 2020 and the beginning of 2021 will see the publication by Oxford University Press of two books: *The Corpus of Ptolemaic Inscriptions, Part 1, Volume 1*, and *The Epigraphy of Ptolemaic Egypt*, both in the CSAD series Oxford Studies in Ancient Documents.

The origin of these publications lies in the profound connection of the late Peter Fraser (1918–2007) with Alexandria and Egypt which began in 1943 when he was in Alexandria recovering from wounds sustained in the second battle of El Alamein and learning

Greek in preparation for his role in the Special Operations Executive which saw him parachuted into the Peloponnese. After the war, as Lecturer in Hellenistic History and Fellow of All Souls College, his Egyptian interests continued and deepened and in 1953 he began a project to collect and re-edit all the Greek inscriptions from Ptolemaic Egypt and its empire. He continued to work on this until the mid-1970s but it was not completed in his lifetime. It was superseded in his research agenda by the massive three-volume work on *Ptolemaic Alexandria* (Oxford University Press, 1972) and by the *Lexicon of Greek Personal Names*, a long-term team project which occupied him to the end of his life.

Fraser examined all of the extant inscriptions he collected, by autopsy and from squeezes and photographs, and made transcripts and extensive notes collated against existing publications. When he died his archive was deposited in the CSAD. This consisted of a two-part dossier of handwritten transcripts of Greek inscriptions from Egypt (346 items) and from the Ptolemaic Empire (c. 250 items), along with notebooks, draft introductions, a mass of paper squeezes and photographs, and a manuscript on Hellenistic epigraphic palaeography based on a graduate seminar class which he gave in the early 1980s.

Although published editions of almost all this material were already available in one place or another, close examination of the archive suggested that it would be essential to revise and complete this work both as a tribute to a great scholar and for its intrinsic importance. No other such corpus exists. In 2013 the AHRC awarded us a three-year grant which enabled the project to begin in the hands of a team consisting of Alan Bowman, Charles Crowther, Simon Hornblower, Rachel Mairs, Kyriakos Savvopoulos and Margaret Sasanov (succeeded in 2017 by Chloe Colchester).

A first basic step was to update and revise Fraser's dossier of inscriptions from Egypt in the light of recent scholarship. We then augmented his dossier by adding inscriptions published after he stopped collecting systematically in the 1970s, with a cut-off date of 2016. There are two other important additions to his archive. First we decided to

include all of the Greek metrical inscriptions. Given his well-known interest in this genre it is a mystery to us why he decided to exclude them, but he left no clue about his thinking. Second, we decided that the Hieroglyphic and Demotic sections of bilingual and trilingual texts should be included in order to provide a holistic rendering of the monuments. This Fraser could not have done but the welcome inclusion of Rachel Mairs in the project team has enabled us to acquire the necessary linguistic expertise.

Facsimiles and squeezes of all texts (with very few exceptions) have been re-examined and collated. In addition to that Kyriakos Savvopoulos was able to undertake a fieldwork trip in Egypt in 2015 during which he was able to make new digital photographs of many of the inscriptions that are still *in situ* in Thebes, Abydos, el Kanais and the Aswan region (see Newsletter 19). We were also fortunate to be able to use advanced digital imaging technology to capture new images of some iconic monuments, including a stele from Aswan in the British Museum and the famous obelisk from Philae which stands in the grounds of the Bankes estate at Kingston Lacy in Dorset (Newsletter 18 and 19).

The outcome of all the work of revision and updating is that the *Corpus of Greek Inscriptions from Ptolemaic Egypt, Part 1* now consists of 650 items and will be



CPI 210: Dedication to Anubis by the dog-breeder (kynoboskos) Pasos in favour of Apollonios and Zenon.



CPI 605: Dark granite statue base with inscription.



published in 3 volumes, of which the first, containing 206 inscriptions from Alexandria and the Delta, will appear early in 2021. The publication of Volumes 2 and 3 will follow soon after that and an online version of the whole corpus, containing abridged versions of all of the texts and lemmata will also be made available in 2021. This will be the only comprehensive corpus of such bilingual and trilingual inscriptions and will reflect the need to appreciate cultural contact and diversity in this multi-cultural landscape.

Work has already begun on the second part of Fraser's archive, the inscriptions from the Ptolemaic Empire. Fraser's original dossier of c. 250 texts has been augmented by around 500 additional items, the great majority (c. 350 collected and recorded by Kyriakos Savvopoulos as part of a separate project) from Cyprus, for which Fraser, although he was well aware of its importance, had recorded only 40 documents.

An integral part of the project was a conference in April 2016 at which a series of contextual studies, both by members of the project team and by a number of invited scholars, explored the broader political and cultural connotations of different aspects of this large aggregate of Greek and Greek-Egyptian epigraphic documentation. These twelve studies were

published in October 2020, in advance of the Corpus, in a volume edited by Alan Bowman and Charles Crowther (*The Epigraphy of Ptolemaic Egypt*).

The studies cover a wide range of topics including the history, recording, decipherment and reception of the Greek and bilingual inscriptions of Hellenistic Egypt, as well as the different physical characteristics of the Greek and Egyptian stelai on which texts were inscribed.

The Greek epigraphic tradition in the cities of Naukratis, Alexandria, and Ptolemais, where the institutions of Greek civic government and society—assemblies, councils, magistrates, and privileged citizen bodies and gymnasial culture—are found and commemorated in public and private inscriptions reveals them as comparable in language and context to those of other Hellenistic cities. The literary criteria underpinning the Greek metrical compositions (whether composed individually or 'made-to-order' for specific deceased persons, seventeen of whom are women) can be judged against the wider canvas of Hellenistic epigram and the poems have much to tell us both about the ethnicity and literary and cultural preferences of the Greeks, Egyptians and Jews who set them up.

The membership of military communities—exemplified most clearly at Memphis and in the garrisons at Hermopolis in the late second and the first century illustrates both their communal profiles and the desire of individual soldiers or kleruchs (allotment-holders) to commemorate themselves as individuals, a phenomenon not found in anything like this form before the Ptolemaic period.

Religious themes are discussed in relation to dedications by individuals, expressed in Greek through the formula *ὑπέρ* ('in favour of') the monarch(s), which show consciousness of a personal relationship more direct than anything found in pharaonic epigraphy. The dedicatory plaques found in foundation deposits of temples raise questions of identity and cultural change, in which the phenomenon of bilingualism and multilingualism in the epigraphy is central. Likewise, cases in which the same individuals, or people from the same backgrounds, describe or display themselves in

CPI 314: Monumental architraval dedication to Ptolemy III and Berenike II from Hermopolis.

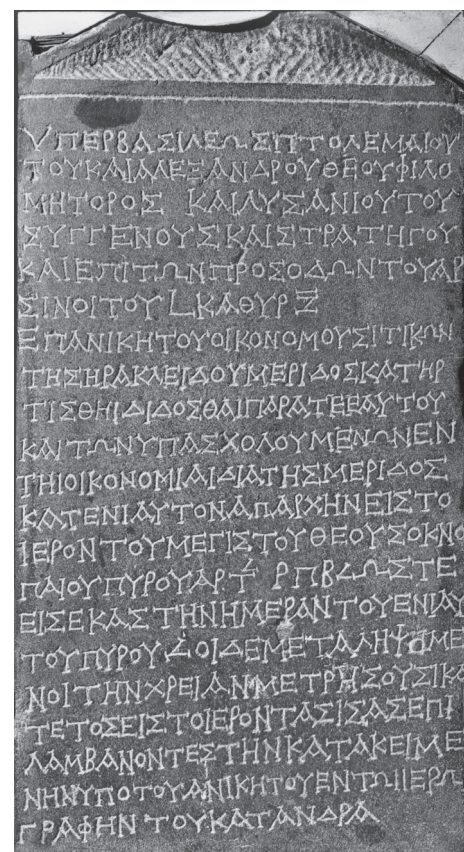
different languages and different terminology in the same inscriptions or set of inscriptions show how much there is to be learned from a juxtaposition of the epigraphic and the papyrological evidence.

The volume concludes with a detailed analysis of the palaeography of the Greek texts, building on Fraser's unpublished manuscript discussion of the palaeography and chronology of Hellenistic inscriptions among which documents from Egypt are well represented. For Fraser palaeography was above all a key to dating, but it was also a visual and visible projection of identity, assimilation, power and a form of artistic expression.

The richness and variety of this collection of studies, for which there is no precedent in recent scholarship, highlights the importance of this unique body of documentary material from the Ptolemaic kingdom.



with a bilingual text for Ptolemy I Soter.



CPI 208: Dedication from Soknopaiou Nesos of wheat in favour of Ptolemy X Alexander.



# Big Change

Andrew Meadows

Those who work in the field of Roman numismatics will have noticed a substantial tilt in the discipline in the last decade. Where once the massive British Museum Catalogues and the defining volumes of *Roman Republican Coinage* and *Roman Imperial Coinage* served as the pillars of the subject, some digital interlopers have appeared. It may come as a surprise that one of the more arcane subdisciplines of the study of the Ancient World has led the way, but so it has been. The reasons for this are simple enough. The highly ordered world of Roman numismatics lends itself well to digital structures. But more importantly, a decision was taken early to embrace the use of Linked Open Data, and, with the leadership of the American Numismatic Society (ANS) in New York, multiple institutions throughout the world bought into the approach. The result is a suite of new tools developed in New York and Oxford that have revolutionised how we describe Roman coins and, crucially, how we assemble large data-sets from the widely scattered collections of those coins throughout the world.

*Online Coins of the Roman Empire*, *Coinage of the Roman Republic Online* and *Coin Hoards of the Roman Republic* led the way in New York, and *Roman Provincial Coinage Online* and *Coin Hoards of the Roman Empire* followed in Oxford. To take just the first and last of these: OCRE, under my directorship and with \$300,000 funding from the National Endowment for the Humanities (NEH), now describes 41703 different varieties of Roman Imperial Coinage, and on the framework provided by that typology has assembled (at time of writing) 132,761 specimens from 43 contributing collections and projects; CHRE, under the directorship of Chris Howgego and with funding from the Augustus Foundation contains records for 10,903 hoards from 48 project-partners in 25 countries. This has been a huge collaborative exercise and, it should be pointed out, with the exception of the two largest projects just described, has been achieved largely without major grant

support. Instead, these advances have relied upon expertise and labour underwritten by the American Numismatic Society, the British Museum, the Bibliothèque nationale de France (BnF) and the Münzkabinett in Berlin, among many others.

But if the Roman world is being cultivated nicely, the Greek landscape has looked a little less well-tended. There is no printed reference work for the coinage of the 'Greek' world comparable to that of

And, while all agreed that the term 'Greek' was hardly appropriate, there was no other obvious alternative! As a result of this meeting an umbrella project was formed, Online Greek Coinage, which now sits under the auspices of the International Numismatic Council, with the aim of co-ordinating an international push towards the creation of a complete typology for all non-Roman, and non-northern-European ('Celtic') coinage. At the heart of this lay the nomisma.org project, where the standards for description would be set.

Six years later the results are already impressive. In Germany, the *Corpus*

*Nummorum* project has now attracted two tranches of funding from the Deutsche Forschungsgemeinschaft, to produce the typologies for Thrace, Mysia and Troas. In Greece, the project Kyprios Charakter, funded by the Greek Government and the European Social Fund, has begun work on ancient Cyprus. In New York, the ANS has won a second grant from the NEH for a project devoted to the Hellenistic Royal Coinages. From 2015–2017, Oxford and the BnF contributed to this initiative through a joint AHRC-Labex grant of €200,000 for the Oxford-Paris Alexander Project (OPAL), devoted to the coinage of Alexander the Great. In 2018, Oxford, the BnF and the University of Valencia were successful in bidding for a further €570,000 for a project under the European Joint Programming Initiative on Cultural Heritage. The aim of this project, ARCH, which will conclude in 2021, is two-fold. At a regional level, one part of the project, under the leadership of Professor Pere Pau Ripollès in Valencia, will deliver a complete typology of the pre-Roman coinages of Spain. At a global level, a team in Paris under the leadership of Dr Frédérique Duyrat, is cataloguing the entire Paris collection. In Oxford, I, in collaboration with John Pybus of the Oxford E-Research Centre, am in the process of turning this cataloguing into a typological framework for the whole of 'Greek' coinage. This 'skeleton' typology, we hope, will provide an archway to the detailed work carried out by existing projects and new ones.



*Electrum stater bearing the 'seal of Phanes', perhaps produced at Ephesus in the late 7th century BC.*

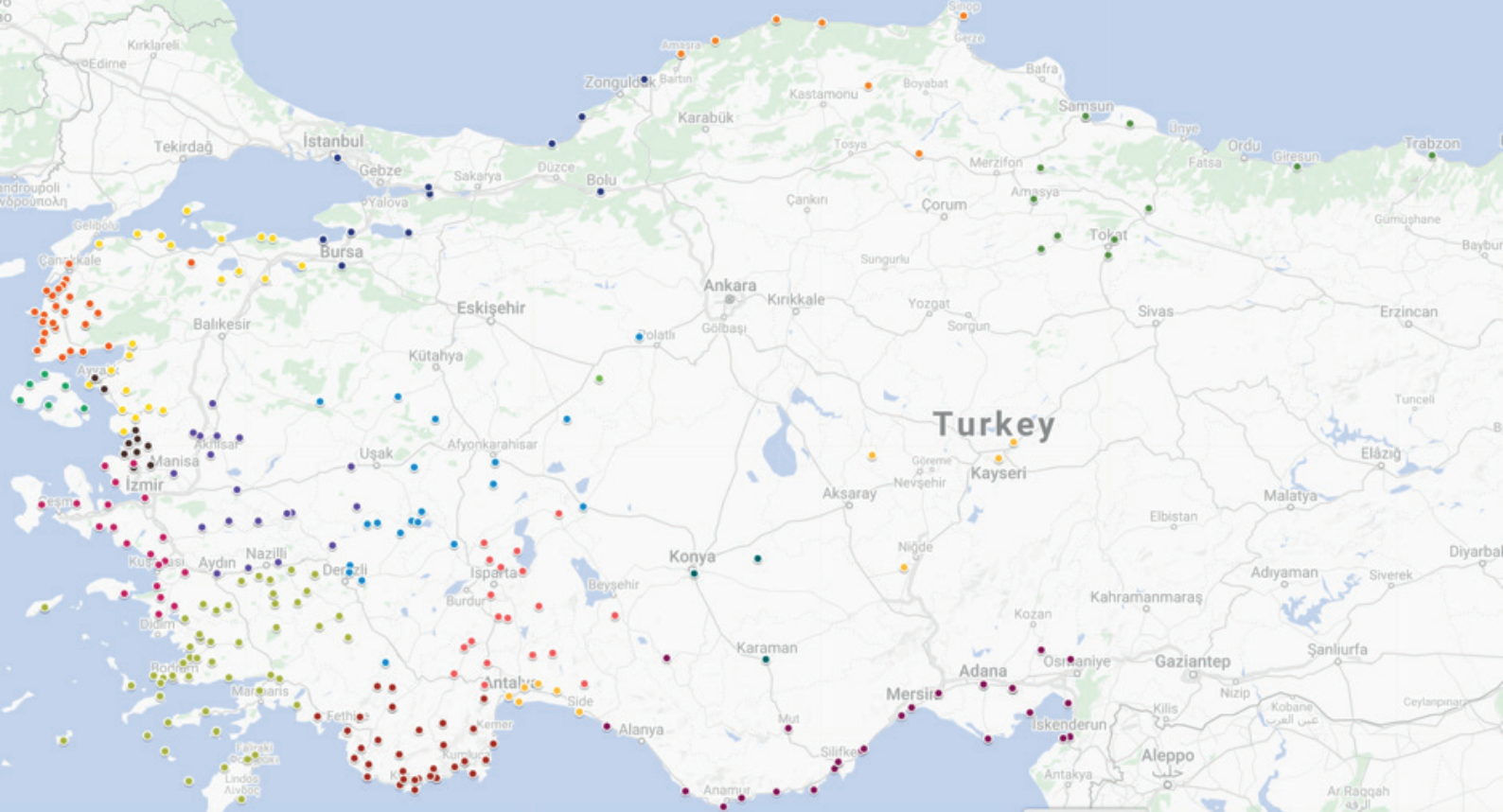
© The Trustees of the British Museum.

Roman Imperial Coinage for the Roman. To a large extent this is, of course, because what falls under the modern rubric of 'Greek' numismatics covers a variety of periods and cultures, from Spain to Afghanistan, from the 7th century BC to the Battle of Actium. In 2014, an international meeting was hosted at the BnF in Paris to discuss the problem. Three things were immediately agreed. The task was too big for one person or institution. An international project based, as for Rome, on the principals of Linked Open Data was needed.

*Right: Gold coin attributed to Croesus, King of Lydia, mid 6th century BC.*

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### *The Mints of Pre-Imperial Anatolia*

And now there is a big new project. In 2020, in collaboration with the British Museum in London and the Münzkabinett in Berlin, I have been awarded a grant of €2 million by the European Research Council, not only to create the typology for Asia Minor, but also to begin to explore what can be done with this mass of data once it is organised and set alongside other types of evidence. A 'five-year mission' now begins to assemble the evidence for monetary change in Anatolia, from the beginning of coinage in the late 7th century BC through to the coming of Rome. As an interdisciplinary project that has at its heart numismatics, epigraphy and historical enquiry, it finds a natural home at CSAD. CHANGE is the project's name, and change, we hope, it will bring....

#### **Websites referred to:**

##### **Roman Sites**

Online Coins of the Roman Empire (OCRE): <http://numismatics.org/ocre/>  
 Coinage of the Roman Republic Online (CRRO): <http://numismatics.org/crro/>  
 Coin Hoards of the Roman Republic (CHRR): <http://numismatics.org/chrr/>  
 Coin Hoards of the Roman Empire (CHRE): <http://chre.ashmus.ox.ac.uk/>  
 Roman Provincial Coinage online: <http://rpc.ashmus.ox.ac.uk/>

##### **Greek Sites**

Online Greek Coinage (OGC): <http://www.greekcoinage.org/>  
 Inventory of Greek Coin Hoards (IGCH): <http://coinhoards.org/>

Hellenistic Royal Coinages (HRC): <http://numismatics.org/hrc/>

Corpus Nummorum: <http://www.corpus-nummorum.eu/index.php>

Kyprios Charakter (Cyprus): <http://kyprioscharacter.eie.gr/en/cyprus-coins/>

ARCH: <https://www.greekcoinage.org/arch-project.html>

**Nomisma:** <http://nomisma.org>

*CHANGE has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme. Grant agreement No. 865680.*







For several years now Jonathan Prag (Professor of Ancient History in the Faculty and tutorial fellow at Merton College) has been developing an online digital corpus of the inscriptions of ancient Sicily: *I.Sicily* (<http://sicily.classics.ox.ac.uk/>). He has recently won an ERC Advanced Grant to develop the Crossreads project, which will explore the epigraphic culture of the island in much greater depth. Here he explains some of the thinking behind that project.

If you try to study the history of ancient Sicily through the *Cambridge Ancient History*, you will encounter a striking phenomenon: volumes 3–7 contain a number of substantial chapters dedicated to the history of the island, beginning with Greek colonisation in the west in the eighth and seventh centuries BC, and continuing down to the third century BC with chapters on Agathocles, Pyrrhus and the Punic Wars. But from the Punic Wars onwards, Sicily disappears from view, except for occasional pages in thematic chapters. As the nineteenth-century German historian of Sicily, Adolph Holm, put it (Holm 1898: 67), “After the fall of Syracuse and Agrigento, the importance of Sicily was far from that of before; a Roman province has its own history to only a very limited degree.” It is hardly coincidental there is no ancient narrative account for the island after the sack of Syracuse by Rome in 212 BC. That situation is compounded by the fact that the only substantial texts to mention Sicily thereafter are Diodorus Siculus’ account of the great slave revolts of the second century BC,

and Cicero’s monumental invective against the notorious figure of Gaius Verres. This makes it easy to construct a narrative of Sicilian history that, in prioritising Hellenic culture (more visible than others in the spectacular temples and other physical remains on the island), concludes that the island went into an irreparable decline with the Roman conquest (and implicitly is scarcely worth of study). In correspondence with his co-author Denis Mack-Smith, Moses Finley, author of the only modern English single-volume account of the island in antiquity, wrote “If you start the whole story of outside alien invaders with them [the Greeks], you are left with the obviously intolerable position that the pre-Greek Sicels etc. are the only true Sicilians. I think we must treat the Greeks apart, not as colonialists but as genuine Sicilians (they were there long enough).”

Where else can we turn for an understanding of the ‘the crossroads of the Mediterranean’, Braudel’s ‘continent in miniature’, and the interactions of Sikels, Elymians, Phoenicians, Greeks, Carthaginians, Oscan-speaking Italians, Romans, Jews, Christians and many more? Archaeology is of course one option, but if you want the ancient stones to speak, epigraphy is another, providing us with a wealth of ancient texts on stone and many other materials, in many different languages. Easier said than done, however.

The first published corpus of Sicilian inscriptions was produced in 1624 by Georgio Gualtheri (the Austrian scholar Georg Walther), containing

some 357 texts from Sicily and the surrounding islands. Gualtherus, and his successors such as the Principe di Torremuzza (two editions, 1769/1784) simply recorded texts in whatever language they found them, by location. However, with the rise of the great corpus projects of the 19th century, which sought to produce comprehensive records of the epigraphic texts, languages were split off into discreet projects and corpora (*Corpus*

*Inscriptionum*

*Latinarum*,

*Inscriptiones*

*Graecae* –

and the less

complete/

successful

*Corpus*

*Inscriptionum*

*Semiticarum*), with

the result that texts

that originally stood next to each other were completely separated and could not easily be reunited. These projects also prioritised Greek and Latin, and that focus has continued through much of the subsequent scholarship. To take one particularly neat example, the inscriptions of ancient Messina were recently republished by the Messina university epigraphist Irma Bitto (*Le iscrizioni greche e latine di Messina*, 2001); however, the important contemporary Oscan inscriptions (Fig. 1) find no place in this work and remain relegated to a distinct and more obscure publication tradition (recently

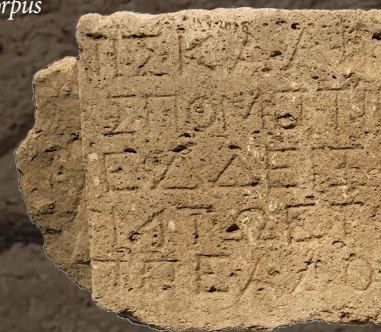


Fig. 1. An Oscan dedicatory inscription.

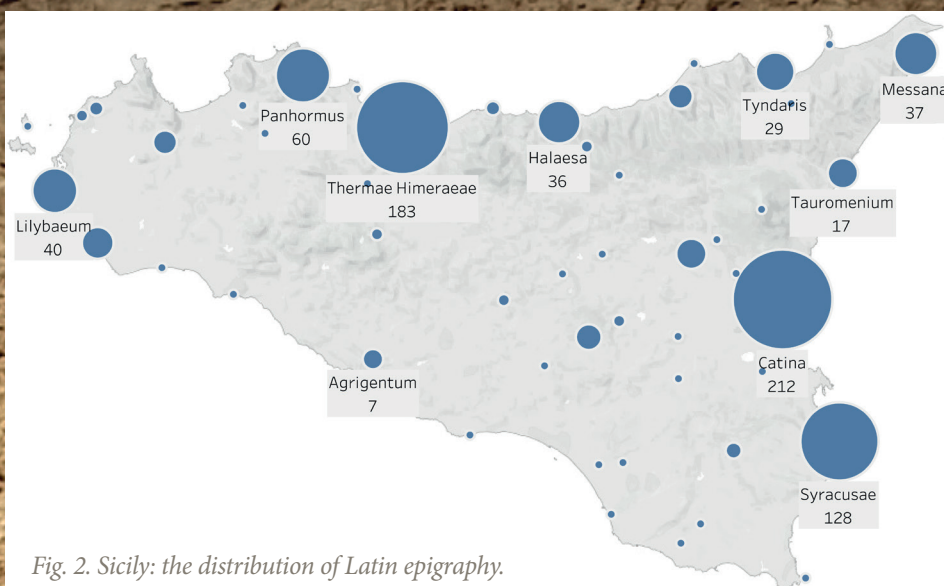


Fig. 2. Sicily: the distribution of Latin epigraphy.

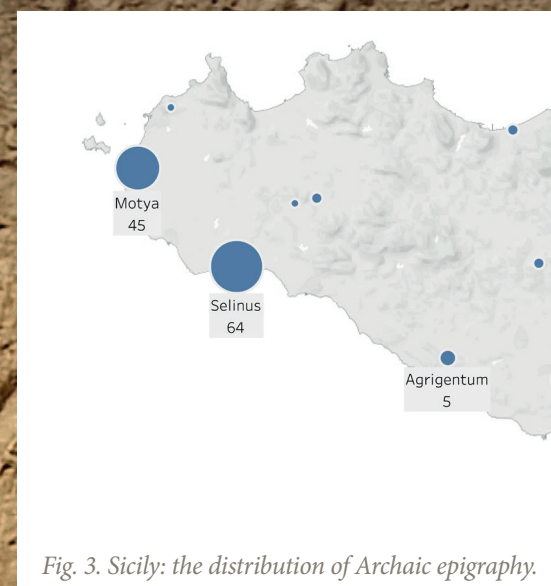


Fig. 3. Sicily: the distribution of Archaic epigraphy.



# the crossroads of the ancient Mediterranean

an Prag

rescued, however by M. Crawford et al., *Imagines Italicae*, 2011). Furthermore, such corpora have traditionally tended to prioritise monumental texts on stone and metal, often passing over both the more fragmentary texts and the less formal texts on ceramic and other portable objects (so-called *instrumentum domesticum*).

In addition to the separation of texts by language (and/or museum

collection, and/or locale), the rapid increase in new material, which came with the rise of archaeology on the island from the later nineteenth

scription from Messina (ISic 1620).

ability of systematic publication to keep track of new texts. Consequently, any systematic study of the Sicilian material became increasingly challenging, to say the least. In order to begin to be able to say something about the linguistic and cultural interactions on the island as evidenced by the thousands of ancient texts that survive (I currently estimate between four and five thousand texts on stone from the island in antiquity; *CIL* X and *IG* XIV each published c.500), a new comprehensive corpus has become necessary. Coincidentally, the rise of digital methods in epigraphy, and in particular the

EpiDoc TEI XML standard (<https://sourceforge.net/p/epidoc/wiki/Home/>) for encoding epigraphic texts and the information about them in a machine-readable and actionable format, mean that such a corpus can incorporate far more information (and imagery), in a far more flexible fashion, than the inevitable limitations imposed by traditional paper publication.

With the support of the University's John Fell Fund (and significant technical work by James Cummings, formerly of Oxford University IT Services, and James Chartrand, of Open Sky Solutions), we have steadily transformed a personal database, originally constructed between 2001 and 2004, into an EpiDoc corpus, published online since 2017 as *I.Sicily* (<http://sicily.classics.ox.ac.uk> and <https://isicily.org>). On the one hand, *I.Sicily* makes the epigraphic texts of Sicily freely available to both the public and the research community as never before. On the other, the data makes it possible to begin to analyse the Sicilian epigraphic landscape more easily and in more depth than ever before.

Through the data in *I.Sicily*, it is possible to trace the changing patterns of epigraphic culture on the island, over the entire sweep of antiquity (seventh century BC to approximately the seventh century AD). At present, this analysis is limited to texts engraved on stone. At its most basic, this allows us to trace the changing use of languages for public epigraphy over time on the island. This does not, of course, necessarily

CROSSREADS has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme. Grant agreement No. 885040.

correspond to the languages in daily use on the island – although close analysis of the texts, particularly more private texts such as funerary inscriptions, does have considerable potential to reveal features of local language use and of potential interference between languages. In the case of Sicily, what becomes predominantly clear is that while Greek is the dominant epigraphic language in the pre-Roman period, for the first three centuries of the Imperial period Latin to some extent takes over – only to fade more rapidly than Greek into the background again. The well known Latin 'epigraphic habit' is particularly obviously an Augustan-to-Severan phenomenon in Sicily, given that the Roman conquest took place some two centuries before Latin epigraphy appears in any significant way on the island, and Roman rule continued well beyond its demise; the primary focal points for Latin inscriptions are the veteran colonies established by Augustus, and the cities upgraded to colonial status in the Severan period (Fig. 2); exceptions to this correlation are few and mostly easily explained).

One notable feature in the early period is the extent to which substantial epigraphic practice on stone is concentrated in the areas of Greek and Phoenician colonisation, with Mozia's *tophet* sanctuary and Selinunte's necropoleis and sanctuaries providing primary areas of epigraphic activity (Fig. 3). The growing differences between Phoenicio-Punic epigraphic practice (which continues at scale in Carthage in the Hellenistic period, but largely

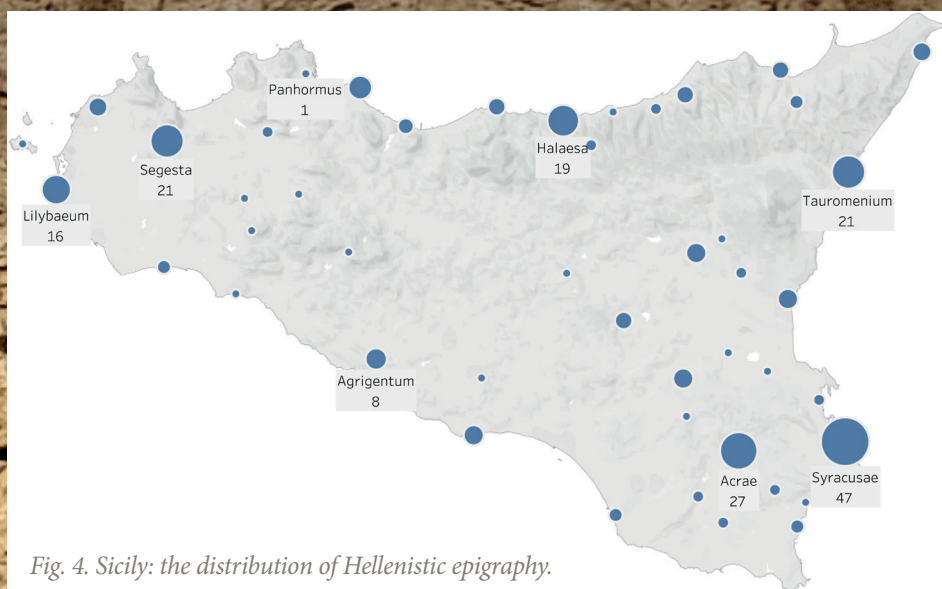
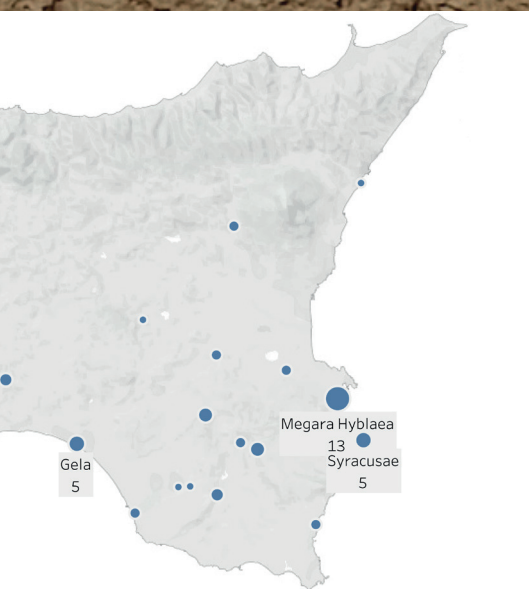


Fig. 4. Sicily: the distribution of Hellenistic epigraphy.



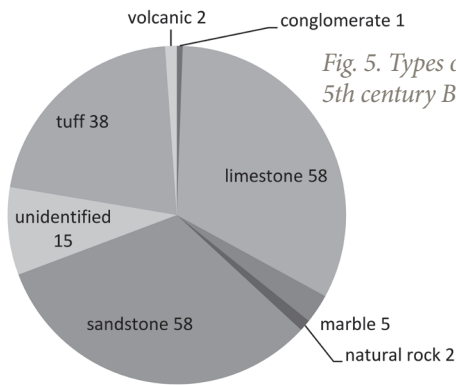


Fig. 5. Types of stone in Sicilian inscriptions (7th – 5th century BC).

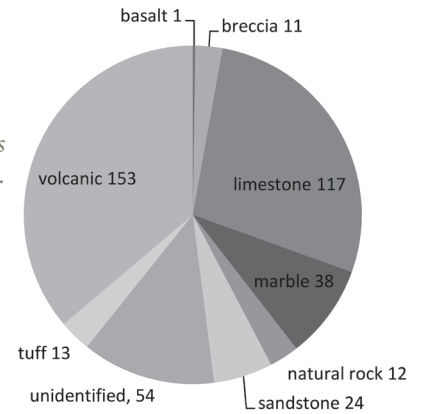
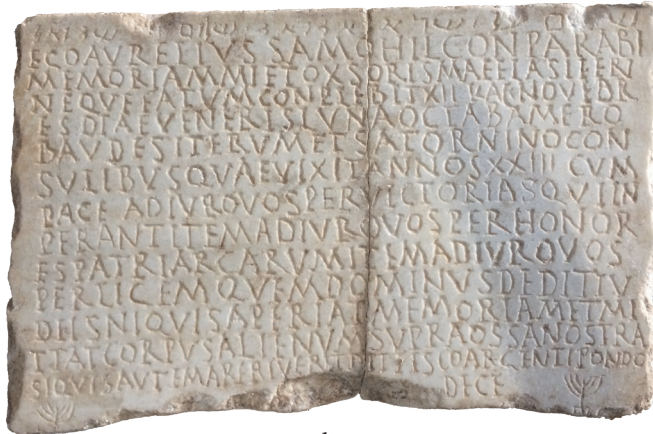


Fig. 6. Types of stone in Sicilian inscriptions (4th – 1st century BC).

Fig. 7 (below left). The 4th-century AD funerary inscription of Aurelius Samohil from Catania (ISic 781).



disappears

in Sicily with the sack of Mozia and the apparent Hellenisation of the Punic settlements of Solunto, Panormus and Lilybaeum) and the rapidly developing phenomenon of urban public epigraphy in Greek Hellenistic Sicily is revealed in the correlation between increasing urbanisation and epigraphy on the island in the Hellenistic period (Fig. 4). This shift is also clearly visible in the increasing diversification of materials on which these texts are engraved, with a rise in high-cost imported materials such as marble in the same period (Figs. 5–6).

These few preliminary glances at patterns in the epigraphic culture of the island give a foretaste of what the Crossreads project hopes to achieve. *I.Sicily* started as a collection of very basic data about the texts on stone (material, typology, chronology, etc.). More recently, and in the opening phase of Crossreads, the focus has moved towards making sure not only that that ‘metadata’ is comprehensive, but also that the actual text of every inscription is fully checked and encoded. *I.Sicily* to date has only focused upon stone texts (much like the majority of earlier corpora), of which c. 70% are funerary inscriptions (Fig. 7), while many of the rest are monumental public texts, like the Oscan inscription above. However, there are perhaps as many texts again, of very different sorts, to be found on metal (including curse tablets, of which Sicily is a rich source), ceramic, and other objects and materials (Fig. 8). Many of these are much less formal, more private texts, such as ownership graffiti on pottery (a category which, e.g., provides the

almost the only evidence for the Elymian language in Archaic western Sicily); others relate to economic activity, such as the stamps to be found on bricks and pottery – or even the legends on coinage, which are rarely included in epigraphic corpora.

The first year of the Crossreads project will be devoted to completing the work of corpus-building, revising

and improving all the existing entries, and expanding the corpus to include the full range of other types of text. Thereafter, we aim to exploit that corpus in a much broader range of ways in order to maximise the potential of such a cross-lingual, cross-material, and typologically inclusive dataset. Three sub-projects, led by separate post-doctoral specialists, will focus on three areas: linguistics, petrography, and palaeography. In the area of linguistics, a number of major projects have already developed methods for annotating digital texts with information on the morphology of language and syntax; at the same time, recent work on Sicilian epigraphy has begun, with much success, to apply the methods and approaches of socio-linguistics to analysing points of language contact and interference. This work has cast new light on the nature of cultural interaction on the island, observing, e.g., North African influence on the Latin-speaking communities and eastern Mediterranean influence in the Greek-speaking communities (the majority of communities, however, displaying significant levels of bilingualism). However, to develop these insights fully, both in time and space, entails a much more systematic analysis of the entirety of the available texts. In the field of palaeography, new tools, developed primarily in the field of mediaeval manuscript studies, will enable us, almost for the first time, to

undertake a systematic, ‘objective’ analysis of the letterforms in use across the island over more than a millennium; when this is combined with the ability to compare letterforms and so writing systems across different languages, a whole new area of ‘language contact’ opens up. Lastly, while the use of stone and the monumentalisation of text is a well-observed and widely discussed phenomenon, very rarely does this incorporate any sort of rigorous, scientifically based analysis of the stone employed. We aim to develop the first petrographic database for Sicily, conducting full petrological analysis of the stone inscriptions of the island. Such a resource will move the analysis far beyond the basic observation about imported marble noted above, and opens up a host of possible insights on the socio-economic aspects of public epigraphy (as well as providing a valuable resource for the archaeology of the island in general). A final benefit of building all this data into a digital corpus is that these analyses will not exist in isolation, as discrete projects; it is the possibility of combining these different approaches and their insights that makes Crossreads truly exciting, re-reading texts at the crossroads of the Mediterranean.

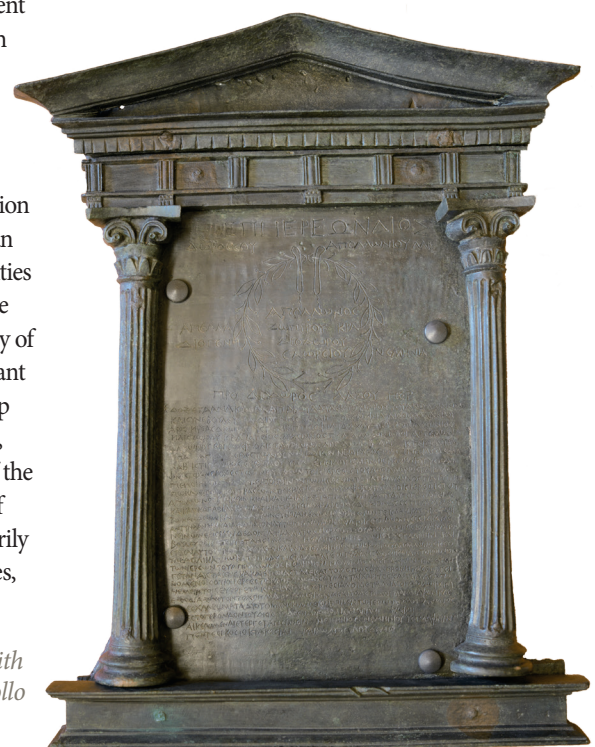


Fig. 8. A 1st-century BC bronze tablet with an honorary decree for the priests of Apollo Nemenios, from Halaisa (SEG 59.1100).



# A re-edition of the so-called Pitane-Mytilene Dossier from Pergamon (*I.Pergamon* I 245)

Julian Schneider

Ongoing epigraphic fieldwork in Pergamon will lead to the publication of a supplementary volume of the *I.Pergamon* inscription corpus series. This will collect all unpublished finds alongside the re-editions of inscriptions published only in preliminary form that were not included in one of the two *I.Pergamon* collections produced by Max Fränkel in 1890 and 1895, respectively. As numerous fragments were transferred to Berlin at the beginning of the German excavations, one main focus of the project is a systematic survey of all extant inscriptions still locatable in modern-day Bergama. This editorial project is being directed by Prof. Andreas Victor Walser (University of Zurich) and in cooperation with the German Archaeological Institute (Prof. Felix Pirson, Istanbul, and Prof. Christof Schuler, Munich), and shall eventually facilitate the accessibility to Pergamon's rich epigraphic remains for scholars and students of Greek and Roman Antiquity, alike.

Among the discoveries of these recent fieldwork campaigns, several findings can be ascribed to a large and fragmentary stele from the sanctuary of Athena on the acropolis of Pergamon. Twenty-five fragments had already been discovered in the early years of the German excavations at Pergamon and were subsequently published by M. Fränkel as *I.Pergamon* I 245 in 1890. The stele, roughly 2m high, features three separate documents: a decree of the city of Pitane (I), located on the west coast of Asia Minor; a corresponding decree of Mytilene (II), the most influential city of Lesbos at that time; and an arbitral award by five Pergamene judges (III). The monument, therefore, takes us back to a case of interstate arbitration during the Hellenistic period, when two cities issued decrees agreeing to appoint five Pergamene envoys as judges, entrusting them with a resolution to their dispute. Their issue at stake concerned the exact location of a boundary line as well as the ownership of land holdings 'in the plain of the Kaïkos' river in the vicinity of Pergamon. In the resulting

arbitration award (III), fascinating for its exhaustive nature and attention to detail, the Pergamene judges reflect on judicial procedure, determine the border delineation, and comment on the historical evidence presented by both parties to substantiate their decision in favour of Pitane. The dispute had apparently originated from a sale of land, formerly belonging to the *peraia* of Mytilene on the coast of Asia Minor, and acquired by the city of Pitane; the transaction had been negotiated by Antiochos I in the early third century BC. More than a century later, Mytilene challenged the border line, Pitane's possession of certain land holdings and, as a consequence, the legality of the territorial sale altogether. This monument thus provides significant insights into the topography and the local history of a micro-region in Pergamon's vicinity.

Whilst the general outline of judicial procedure and historical development were already comprehensible to M. Fränkel in his *editio princeps* of the dossier, the fragmentary condition of the text was improved significantly through restorations by W. Dittenberger and L. Robert and was reprinted in major collections such as the *Orientis Graeci Inscriptiones Selectae* (OGIS) no. 335 and *IG XII Suppl.* no. 142. One additional fragment had already been published in 1902, when, in 1937, L. Robert reported having found a 'petit fragment inédit' pertaining to the dossier but relegated his discovery to a single line contained in a footnote. In the course of recent fieldwork campaigns, I rediscovered this fragment in the warehouse in Bergama and managed to identify two other unpublished fragments ascribable to this inscription. Of these recent discoveries, one fragment covers an important missing section of the Pergamene arbitral award, which allows us to improve our understanding of the rationale behind the judicial procedure.

In light of these findings, a complete and thorough re-edition of the whole monument has become a promising project I am very

grateful to have been granted permission to carry out as part of my dissertation at the University of Vienna (supervised by Prof. Thomas Corsten, a Research Associate at the CSAD). My work will include a critical review of the fragments already published in *I.Pergamon* I 245, all of which are now located in Berlin at the Pergamon Museum. With the support of Prof. Klaus Hallof and Dr Sebastian Prignitz, I studied and fully documented these fragments in 2019.

How can we reconstruct the arbitration procedure? What do we learn of the topography of the disputed lands and the local history? And finally, what was Pergamon's role as an arbitrator? My forthcoming paper at the Oxford Epigraphy Workshop will allow me to discuss these crucial questions pertaining to this captivating document with renowned experts in the field of Greek epigraphy and Ancient Greek diplomacy.

*Julian Gabriel Schneider is a graduate student at the University of Vienna.*

*I.Pergamon* I 245 (Pergamon Museum, Berlin).







# Metallurgical analysis of gold coins from Dacia

George Green

The extraordinary ability of the Romans to exploit natural resources across the empire meant that the Roman metal supply network was highly complex. In terms of gold mining and extraction sites, we have strong archaeological evidence for intense gold extraction in the Roman period in modern day Spain, Portugal, Wales, Austria, Croatia and Romania; and we have explicit references in our literary sources to gold mining in modern day Bulgaria and Turkey. Across all of these regions we have evidence for hundreds of potential Roman gold mining sites — either the Roman mine shafts themselves or the remains of Roman mining infrastructure. Understanding the Roman gold supply network is important for understanding the wider economic networks that sustained the Roman Empire. In order to build this picture of the gold supply network we need to know what gold is being used by the Romans and when. This requires the use of highly precise scientific techniques to determine how the chemical profile of Roman gold changes over time.

As part of my doctoral work, I was very fortunate to be able to chemically analyse just fewer than 600 Roman gold coins, dating from 46 BC to AD 477, held

by the Ashmolean Museum. This was performed using a technique called laser ablation inductively coupled plasma mass spectrometry at Oxford's Department of Earth Sciences. I removed an almost imperceptible amount of gold from the edge of the coin using a laser (Fig. 1), this sample was passed through a mass spectrometer that identifies the trace elements within the gold, which then allowed me to determine the chemical 'fingerprint' for each coin. The aim was to match the chemical 'fingerprint' of the gold coins to the 'fingerprint' of gold sources in order to determine which mines were being exploited by the Romans at specific times.

Moving from the characterisation of a gold source to its provenance is, unfortunately, not as simple as playing a game of chemical Snap. Characterising a gold source is essentially describing the major, minor and trace elements seen in the gold. Provenance is where we begin to move away from scientific fact and towards scholarly opinion. As such, while the 'fingerprint' of your object may match that of a known source, there are a variety of 'what ifs' that raise reasonable doubts as to its provenance. For example, what if there is another unknown source that matches even more closely? What if the chemical signature isn't caused by

one source, but is in fact an artefact of multiple different sources being mixed together? For many archaeometallurgical studies, these hurdles are insurmountable. However, for the Roman Imperial period we have a wealth of historical, documentary and archaeological evidence that we can use to narrow the range of plausible gold sources at certain times. By combining the metallurgical data with the literary, documentary and archaeological evidence, we can be much more confident about the provenances that we propose. This sort of approach I found particularly useful when interpreting my metallurgical data from the early second century.

The laser ablation work showed that from the late first century until the middle of the second century, tellurium-rich gold was being used to make Roman gold coinage. Tellurium is a good element to see as gold tellurides are a relatively uncommon gold bearing mineral, and so the range of possible mining locations becomes narrowed accordingly. First we see an iron-rich, high tellurium, low antimony gold source in the chemical record, which seems to be most intensely exploited between AD 100 and AD 120, before declining by AD 140 (Fig. 2).

In terms of chronology, writers from both the late first century and second century



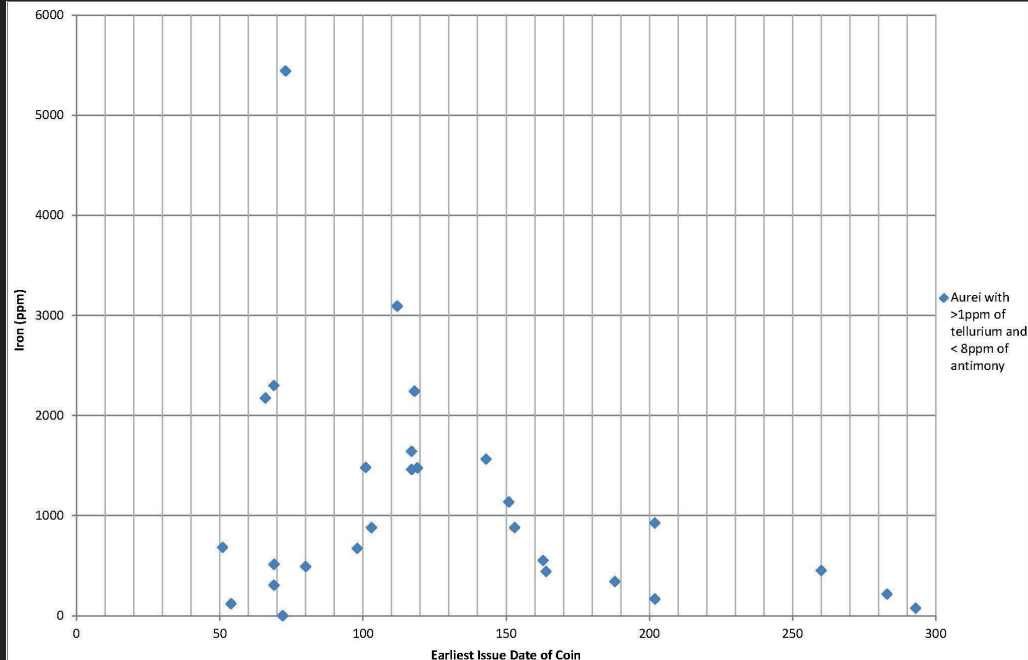
Fig. 1 (left). Gold coins in the ablation chamber about to be sampled by the laser.

Fig. 2 (right): Iron in aurei dating between AD 1 and AD 300 with greater than 1ppm of tellurium and less than 8ppm of antimony.

AD mention gold mining in Dalmatia: for example, Martial (*Epigrams*, X.78), Statius (*Silvae*, 1.2.140–57), Pliny (*Naturalis historia*, XXXIII.67) and Florus (*Epitome of Roman History*, II.25) all do so. Hirt, in his 2010 work on Imperial mines and quarries, identifies ancient mining activity in what is now central Bosnia; and the presence of aqueducts and basins around the central Bosnian villages of Bistrica and Batušā is highlighted by Glicksman, in his 2018 article on mining in Roman Dalmatia, as further evidence of Roman mining activity in this particular region. Furthermore, there is epigraphic evidence from Solona dating to the first century AD that records the existence of a *commentariesis aurariarum Delmatarum* (Dessau, 1914/16, #1595) who was seemingly responsible for the administration of the gold mining operations in the province; and at Ilidža a bronze ‘mining coin’ with the legend *metalli Ulpiani Delm* dating to AD 112 has been found, which is the latest datable evidence linked to gold mining in Dalmatia. It follows that Dalmatia is a plausible region for this particular gold source at this time.

Moreover, it would seem that the mineralogy of the gold mines near Gornji Vakuf-Uskoplje — located in what is now the Central Bosnia Canton of the Federation of Bosnia and Herzegovina — match particularly well with the iron-rich, ‘low’ antimony gold telluride source detected in the trace element data. Prof. Ivan Jurković (d. 2014), one of the leading experts of the geology of the mineral resources of the countries of the former Yugoslavia, published a study of the metallogeny of Central Bosnian gold ore deposits in 1995 and recorded the mineralogy at various sites. The ore deposits at Gornji Vakuf-Uskoplje were recorded as pyrite-rich, gold tellurides that did not contain antimony bearing minerals. The ores at Gornji Vakuf-Uskoplje were

Fig. 3 (right): The wax tablet from Alburnus Maior, dated to the 20th of May AD 164, which preserves the terms under which Titus Beusantis contracted a labourer to work in the gold mines. (Photo: Marius Amarie: courtesy of the Capodopere19 project <http://www.capodopere2019.ro/about.html> at the National Museum of Romanian History).



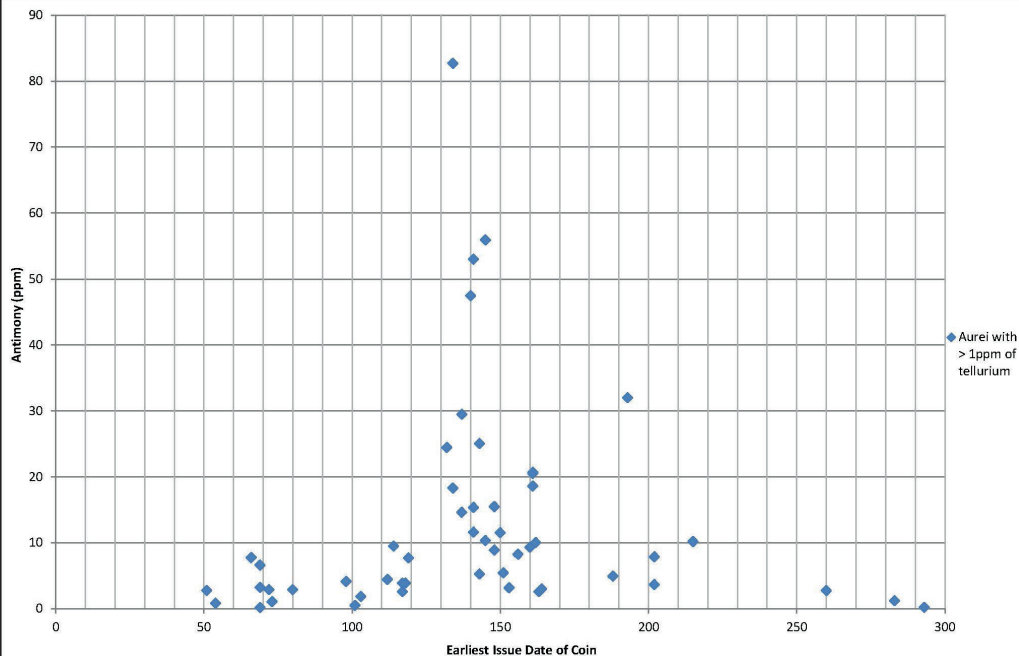
the only deposits recorded that contained tellurium, gold and iron bearing minerals without antimony-rich ones. This, combined with the remains of Roman aqueducts and hydraulic infrastructure nearby at Bistrica, suggests that this was the source of the gold detected in the trace element data.

That Dalmatia was the provenance of this particular gold source is made even more convincing by the fact that the chronology of its decline in the trace element data broadly matches that of the migration of Dalmatians into the Dacian city of Alburnus Maior, located at the gold mines at Roşia Montană. Distinctively Dalmatian names and tribal names are recorded at Alburnus Maior in a variety of inscriptions and in administrative documents preserved on wax tablets. The

wax tablets provide the best evidence for the chronology of the arrival of Dalmatians into Dacia as they occasionally have consular dates recorded alongside the business transaction, contract or agreement on the tablet. These tablets mention: *collegia* (professional associations) of Dalmatian ethnic groups, such as the *genio collegi Sardiatarum* (*L'Année Épigraphique* 2003, 2006, #1491) for the Sardeates from Western Bosnia; areas occupied primarily by particular Dalmatian tribes, such as the part of the city occupied by members of the Pirustae tribe, the *vicus Pirustarum* (*Inscriptiile Daciei Romane*, I, 39); and Dalmatian individuals involved in gold mining, such as *Titus Beusantis qui et Bradua* who was recorded employing a man to work in the gold mines (*Inscriptiile Daciei Romane*, I, 42–3) (Fig. 3).









# Labelling the dead

## The Mummy Labels in the Louvre

Adrienn Almásy-Martin

The conquest by the troops of Alexander the Great in 332 BC marked a new era in the history of Egypt. The Egyptian ruling class was now the Greek-speaking Macedonians and the language of the high administration became Greek, although at the village level Egyptian was still used. By the early Roman Period this had changed, with practically all the administrative material now written in Greek, and Egyptian effectively confined to religious, funerary and literary texts. This resulted in an Egyptian-speaking society that wrote legal and administrative documents in Greek, but for religious texts the three Egyptian scripts, hieroglyphic, hieratic and demotic, continued to be used. Hieroglyphic texts were typically only found carved on temple walls; hieratic, a cursive form of hieroglyphs, was now mainly confined to the copying of older religious material; demotic was the cursive script that had been in general use in Ptolemaic Egypt. It was originally developed for administrative purposes, but later had been deployed for the writing of all types of texts.

Mummy labels are small wooden tags pierced and originally attached to the neck or placed on the chest of mummies and widely used in Graeco-Roman Egypt between the 1st century BC and the 3rd century AD, with the majority belonging to the 2nd–3rd century AD. Most of them were purchased from antiquities dealers and their archaeological context is not known. They were inscribed in Demotic or in Greek, or, in many cases, in both languages (on opposite sides). The content of the bilingual labels

reveals that the Greek and the Demotic were written with slightly different purposes. The Greek text contains only personal data about the deceased: name, parents' names, occasionally age at death, introduced by the verb ἐβίωσεν, 'lived'. In the Demotic, on the other hand, we find variations of a short funerary formula that also appears in funerary papyri: 'May his soul live before Osiris-Sokar, the great god, lord of Abydos'. On some labels this funerary formula is even written in hieratic, followed by personal details in Demotic (see Fig. 2). From this discrepancy between the Demotic and Greek texts we can conclude that the Greek had primarily an administrative function, while the Demotic principally served religious/funerary purposes. The exact function of the labels, however, is still not fully understood. They certainly were used as identification tags for the deceased and the Demotic texts with their short religious formula suggest that they could also serve as funerary equipment or possibly as a substitute for a funerary stela. Now the question raised is why both languages appear on these objects, even when they come from the same period and the same place? Mummification was carried out in workshops, where we can assume that it was important to ensure there was no mix-up in the identification of the corpses prior to their being handed over to the family or to the undertakers! Not everyone will have been familiar with both scripts and one must assume that some knew only Greek and others only Demotic, even if they were all native-speaking Egyptians, but can this really be the main reason why some

Fig. 1. Louvre inv. 278.

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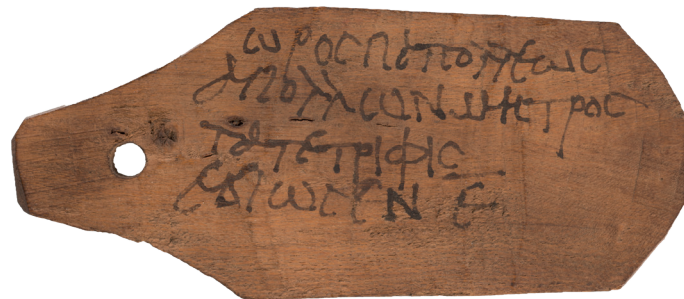
texts were bilingual and some only in Greek or Demotic?

Mummy labels are kept in most of the museums around the world. The Louvre possesses today the largest collection of mummy labels (approx. 1,800), which have been only partially studied. They were all bought on the antiquities market and the majority come originally from the Panopolis area (modern Akhmim, Middle Egypt), according to internal evidence (e.g. toponyms and personal names). Panopolis was a strongly Hellenized Egyptian town that became a cultural centre in the Roman Period. The mix of dynamic changes generated by the impact of Hellenism and the continuity of indigenous customs resulted in a unique cultural environment from which emerged emblematic figures like the poet Nonnos, the monk Shenoute and the alchemist Zosimos.

The Louvre collection is a major source for onomastic studies of the Panopolite region. Egyptian personal names were often composed with divine names or with reference to deities, especially those venerated locally. Min, whose syncretistic form is Pan, was one of the main protective gods of Panopolis and often appears in theophoric names of the local population, like Paminis or Peteminis. Consequently, unprovenanced labels can often be connected to Panopolis on the basis of these personal names. The aim of our project is to provide a comprehensive publication of this collection with translation and textual analyses, incorporating Michel Chauveau's previous studies. This material also provides us with data for more extended research, which includes (1) bilingualism among the mixed Egyptian/Greek community; (2) interaction between Egyptian and Greek funerary practices; (3) the use of Greek as a local dialectal language; (4) the life-course of the community; and (5) the biculturalism of the Egyptian population.

Fig. 2. Louvre inv. 91.

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As the sixth anniversary of the debut of *The Roman Inscriptions of Britain Online* approaches, it seems a fitting time to revisit the inception, status quo, and the future of this digital epigraphy project.

## History

*RIB Online* is the brainchild of an American computer programmer whose enthusiasm for Romano-British archaeology and epigraphy was sparked by an eight-day holiday walking the Hadrian's Wall Path in Northumberland with his children in 2010. Initially conceived as a part-time endeavour expected to fill no more than six months of idle evenings and weekends, it very quickly became apparent how woefully inadequate this estimate was. Four years and thousands of hours of self-funded effort later, *RIB Online* made its internet debut in September 2014.

The site was modeled after the groundbreaking digital corpora of the *Inscriptions of Aphrodisias* (*InsAph*) and *Roman Tripolitania* (*IRT*). It sought to make publicly accessible the rich body of 2,400 epigraphical texts from the printed edition of R.G. Collingwood and R.P. Wright's *The Roman Inscriptions of Britain*, Vol. 1, *Inscriptions on Stone*, first published in 1965, and brought up-to-date by the addenda and corrigenda compiled by R.S.O. Tomlin in the 1995 reprint. In 2015, the website editor was contacted by Alex Mullen and a collaboration was forged that would bring *RIB Online* within

the ERC-funded *LatinNow* project and provide funding for major improvements and significant expansion of content, to date including the third volume of *RIB*, the *Vindolanda Tablets*, and the recently published *Bloomberg Tablets*, bringing the total number of inscribed texts to 3,914. This new version of *RIB Online* was launched publicly on the anniversary of Claudia Severa's birthday party on the 11th September 2019 (Fig. 1).

What, one might justifiably ask, are the key advantages of a digital corpus? First, convenience: not everyone has all the volumes of *RIB* and complete runs of *JRS* and *Britannia* at their fingertips. It collates information from different volumes relating to the same inscription within the same webpage, so, for example, the user is alerted to a new reading published subsequently in *Britannia*. Second, the user has a wide range of searching and mapping options. All content has been completely digitised and encoded using the EpiDoc/TEI XML standard, a format that allows extensive enrichment of the texts with metadata and geospatial information and which enable a fully featured search functionality.

Among the searchable metadata associated with each inscription are places of origin, holding institutions, dates, type of material, text classification, method of execution, dimensions, letter heights, decoration and

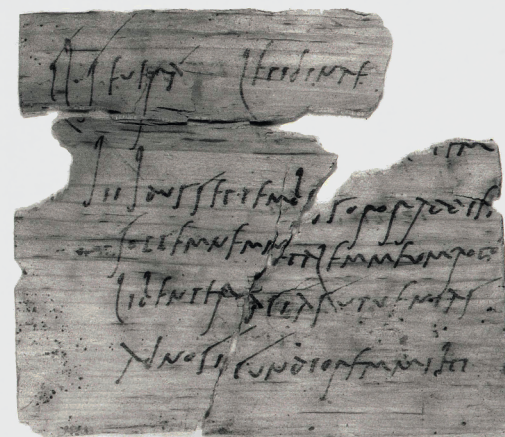


Fig. 1 Tab. Vindol. 291, the Claudia

iconography, and archaeological context. Just as important are the associated identifiers, which facilitate access to other internet resources including institutional accession numbers, URLs to objects on institutional websites, and corresponding identifiers within other epigraphic databases such as EDH, Clauss-Slaby, and Trismegistos.

Every inscription record also contains geospatial coordinates which allow mapping of findspots, places of origin, and modern locations, whether in museums, repositories, or *in situ*. Lastly, a separate relational database has been created containing every single named or referenced entity in each inscription record. This collection makes

Fig. 2 Search results for search on Coventina.

[Home](#) / [Inscriptions](#) / [Search Results](#)

## SEARCH RESULTS

Filters:

- TEXT CATEGORY 1
- TYPE 2
- MATERIAL 3
- RIB SITE 4
- INSTITUTION 5
- PERSONAL NAME 6
- LATIN WORD 7
- DATE RANGE 8

**15** INSCRIPTION(S) MATCH THE QUERY: **COVENTINA**

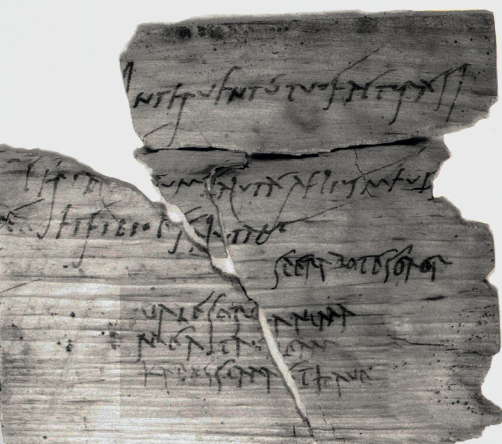
NO FILTERS APPLIED.

Inscription No.	Site	Description	Origin Date
<b>RIB 1528</b>	Carrawburgh	Altar dedicated to Coventina	n/a
<p><i>Deae Coventinae</i>   Vinomathus votum solvit libens merito To the goddess <b>Coventina</b> Vinomathus willingly and deservedly fulfilled his vow.</p>			
<b>RIB 1527</b>	Carrawburgh	Dedication to Coventina	n/a
<p><i>Nimphae Coventinae</i>   [...]tianus decurio   [...] SLE[IV]   [...] merito To the Nymph <b>Coventina</b> ...[t]ianus, decurion, ... deservedly [fulfilled his vow].</p>			
<b>RIB 1523</b>	Carrawburgh	Altar dedicated to Coventina	n/a
<p><i>Deae Convetinae</i>   votum rettullit Mausaeus   optio cohortis primae Frixiavonum</p>			



# Six Years On

Vanderbilt



a Severa birthday party invitation.

possible the identification and tracking of more than 11,000 persons, places, organizations and other named entities, and their publication as linked open data (LOD), enabling interconnectivity with external data sources such as gazetteers of ancient places (e.g. Pleiades) and cooperation with other research projects, present and future.

A comprehensive bibliography of the more than 5,500 published works referenced throughout the corpora is maintained and made available both on the website itself and in a public group library on Zotero.

## Using RIB Online

One of the challenges posed in presenting a large digital corpus of inscriptions is how to provide access to a wide variety of potential users. Many will already know exactly which individual inscriptions they're after. For them, a search by number interface permits direct access to the desired items. Others may be interested in geographical subsets of inscriptions, for instance those found at a single site, or housed in a single institution. These are catered for by the ability to browse sites and institutions by name. Finally there are those who have a particular interest or research question. For example, let us assume the user is keen to find auxiliary unit commanders who worship the Romano-British water goddess Coventina.

The first step would be to initiate a search, either using the search box in the top navigation bar on every webpage, or from the dedicated search page, which contains several tips on how to use the search

function. Entering the name 'Coventina' and clicking the Search button will return a set of results. (See Fig. 2)

Now, in the case of Coventina, we have a relatively small result set of only 15 inscriptions, but it will still provide an instructive example of one of the more sophisticated querying features, namely, filters. Because each inscription in the corpus has been categorized by the several criteria previously mentioned, it is possible to apply these filters alone or in combination to winnow a large result down to a more manageable set. Each of the eight available filters appear in the left-hand part of the interface, and are indicated by numbers in red corresponding to their respective descriptions below. Filter options are exposed by clicking the right arrow. To each filter option is a "badge" containing a number corresponding to the occurrences of that filter option within the search results.

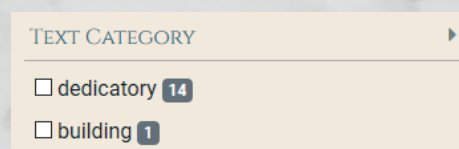


Fig. 3. Text category filter options.

1. Text Category (Fig. 3) is drawn from a typology of 42 types of text function. In the Coventina example, only two categories appear, of which, unsurprisingly, "dedicatory" is used in all cases but one. The building stone is an aberration, more about which, anon.

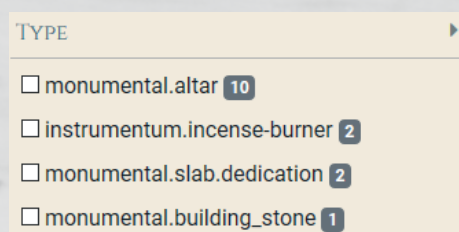


Fig. 4. Object Type filter options.

2. Object Type (Fig. 4) — Similar to the case of Text Category, a small set of values, again constrained by the nature of the search term, with 'altar' being the most frequent.

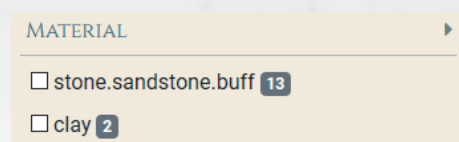


Fig. 5. Material filter options.

3. Material (Fig. 5) describes the physical nature of the support, which can have a large number of possible values, particularly given the fondness of RIB's editors for differentiating the rainbow hues of sandstones afforded by Britain's richly varied geology. Fortunately, in this case, only two are presented.

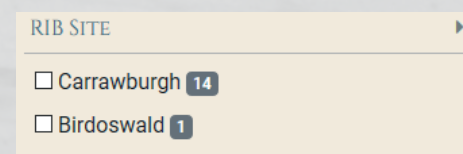


Fig. 6. RIB Site filter options.

4. RIB Site (Fig. 6) — In the first volume of RIB, editors Collingwood and Wright's principal inscription-grouping scheme involved geographical sites, excluding milestones, *aliena*, and *falsa*. Expanded by R.S.O. Tomlin with volume III, the number of sites now totals 260. In the Coventina example, every known votive offering has been found in a single location, which is confirmed by the numbers indicated. The Birdoswald outlier is a red herring, representing an inscription bearing a name possibly cognate with Coventina, but highly unlikely to be a reference to the goddess herself. It appears in the search results because Coventina is mentioned in its commentary.

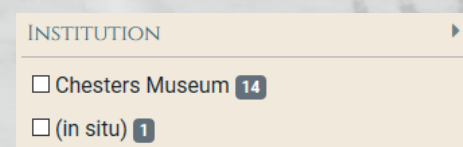


Fig. 7. Institution filter options.

5. Institution (Fig. 7) — Again, the subject of our search constrains all of our results to a single institution, the venerable Chesters Museum (which earns the notable distinction of ranking third in the list of repositories holding the most lapidary inscriptions in the whole of RIB, surpassed by the Great North Museum in Newcastle and only just by Tullie House in Carlisle).

6. Personal Name (Fig. 8) — Occasionally the occurrence of a personal name in an inscription can be helpful in narrowing the focus of a search. The reason Coventina's name has two fewer results than the total number is on account of (1) the aforementioned Birdoswald inscription, and (2) RIB 1530, a clay incense burner found in Coventina's



PERSONAL NAME

- ☐ Aelius 1
- ☐ Aurelius 2
- ☐ Bellicus 1
- ☐ Campester 1
- ☐ Cosconianus 1
- ☐ Coventina 13
- ☐ Coventus 1
- ☐ Crotus 2

Fig. 8. Personal Name filter options.

Well which was originally interpreted by RIB's editors as a dedication to Coventina, but subsequently re-examined by R.S.O. Tomlin, whose revised reading indicated otherwise. (The observant reader may wonder why a clay object was included in a corpus published with the subtitle "Inscriptions on Stone"; such puzzlement would be entirely justified.)

LATIN WORD

- ☐ dea 10
- ☐ votum 10
- ☐ et 2
- ☐ laetus 2
- ☒ praefectus 2

Fig. 9. Latin Word filter options.

7. Latin Words (Fig. 9) — Like Personal Names, Latin words can be very helpful in particular research questions. Such filters are made possible by the complete lemmatization of every word in the corpus. Readers keeping score at home might like to know that there are only 1,739 unique lemmata in the entirety of RIB Online, providing yet further evidence of the ruthless efficiency of the Romans in all matters, including their vocabulary. And in the case of this example, given the interest in auxiliary unit commanders, a quick scan of the list of words reveals *praefectus*, which promises much, and so a tick is made in the corresponding box.

8. Date Range (Fig. 10) — Here the means of filtering differs in that a set of sliders allow the setting of start and end date range boundaries. But the user would be cautioned to deliberate carefully before making use of this filter. Dating of inscriptions is one of the vexing

current shortcomings of RIB Online. This type of data has proven to be particularly difficult to reliably nail down. Fewer than 20% of lapidary inscriptions bear texts with internal evidence or have sufficiently secure archaeological contexts that support confident attribution of dates any narrower than the default range of AD 43–410. A significant portion of those may benefit from closer examination and slightly less scrupulous application of the website editor's initial philosophy of not deviating from the information offered in the printed editions, particularly for inscriptions originating in the military zone in the north. An ongoing project within LatinNow is examining the entire corpus of Latin inscriptions from all of the northwestern provinces in an effort find correlations between certain textual formulae (e.g. fully spelled out vs. abbreviated *Dis Manibus*, etc.) and securely dated texts that may support the formulation of actionable dating criteria that could be applied to otherwise undatable inscriptions. For the current example, the foregoing admonition will be heeded, and the sliders will be left unaltered.

DATE RANGE

A.D. 40 - 410

0 50 100 150 200 250 300 350 400 450 500 550 600

☐ Include undated inscriptions

Fig. 10. Date Range filter options.

The desired filters having been set, clicking the Apply Filters will present the user with a suitably narrowed set of results. In the present example, the original set of fifteen inscriptions has been reduced to three. Top of list is RIB 1534 (Fig. 11), a dedication to Coventina [sic] by one Titus D(...) Cosconianus, praefect of the First Cohort of Batavians, which rates as a successful outcome; and we are rewarded with an interesting orthographic variant as a treat.

### Challenges and Future Plans

Significant progress has been made on the next round of improvements to the site, which will include all nine fascicules of Vol. 2 of RIB, comprising the *Instrumentum Domesticum* and all additional items reported in the annual reports in *Britannia*. These are currently expected to be made available in mid 2021. Another task is a full set of indexes to RIB



Fig. 11. RIB 1534, a dedication to Coventina by a praefect of the First Cohort of Batavians. Photo: Scott Vanderbilt

Volume III in the mold of those prepared for volumes I and II by Roger Goodburn, Helen Waugh, and Sheppard Frere. A new advanced search interface is also currently on the drawing board. Intended as an alternative to the current search interface, not a replacement, it will allow a very surgical application of multiple search criteria at an individual field level. We would also really like to respond to our users' requests for more (and colour!) images and we continue to work on the issue of dates.

Beyond this, it is expected that all smaller in-progress corpora will be added, including the curse tablets from Bath (*Tabulae Sulis*) and Uley, the Carlisle writing tablets (*Tabulae Luguvalienses*) and the stylus tablets from Vindolanda. Accomplishing these goals would allow the RIB Online to lay claim to being the only digital corpus to have comprehensive coverage of all published Latin texts within a single Roman province.

RIB Online is part of LatinNow, a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (Grant agreement No. 715626). The Faculty of Classics hosts the website, supported by the Haverfield Bequest.

### URLs

RIB Online: <https://romaninscriptionsofbritain.org/>

LatinNow: <https://latinnow.eu/>

RIB Bibliography on Zotero: <https://www.zotero.org/groups/2148684/rib/library>





Fig. 1. Inscribed spindle whorl from Autun (Mullen and Darasse 2018 Gaulish. Language, writing, epigraphy, Figs 30–31).

VINR·E·I·V·W  
MARCOS·I·OR

# Translingualism: a new spin on old material

Alex Mullen

A particularly vibrant sub-field of sociolinguistics focuses on the way that epigraphic remains can be used to reconstruct linguistic and cultural contacts in the ancient world. Intensive work on collecting, interpreting and digitizing epichoric epigraphies has allowed access to more materials for our analysis of linguistic contacts and better understanding of the languages involved (e.g. the *Hesperia* and *RIIG* projects). In tandem, sustained interest in Latin and Greek ‘inscriptions mineures’ has created a wider base of materials in the classical languages in which to find traces of contact phenomena with local languages. Recent work on contact phenomena has also tended to privilege a *sociolinguistic*, rather than a narrowly linguistic, approach and has shown its value in responding to big historical questions. As a result it has been integrated into interdisciplinary research projects seeking to write socio-cultural histories of parts of the ancient world, for example, Jonathan Prag’s work on multicultural Sicily (*‘Crossreads’*) and my own on Latinization in the north-western Roman provinces (*‘LatinNow’*).

Since the publication of Adams’ influential *Bilingualism and the Latin Language* (2003) a generation of researchers has been considering the categorization, terminologies and interpretations of bilingual material, and collecting evidence from the ancient world (e.g. Estarán 2016 *Epigrafía bilingüe del Occidente romano*; Mullen and James 2012 *Multilingualism in the Graeco-Roman worlds*). Following Adams, whose framework was based on modern sociolinguistic studies, we have tended to split bilingual phenomena into three: *interference* (features from L1 (first

language) unintentionally transferred into L2), *borrowing* (adoption and integration of any linguistic element into one language from another) and *code-switching* (switch between languages between or mid-sentence). All of which depend on the neat distinction between, and categorization of, languages.

Anyone who has worked with multilingual texts, however, knows that sometimes the linguistic complexity resists these neat categories. One set of material for which our analytical system seems inadequate are the texts on Roman spindle whorls (Fig. 1). The inscribed spindle whorls were identified as such in 1914 by the French scholar Héron de Villefosse who published the first corpus.

These small weights (av. c. 1.5 cm high x 2.5 cm diameter) placed at the end of the spindle to help regulate the speed of the spin would have been extremely numerous in the Roman world (wool is spun before being woven) but whorls are not usually inscribed in Latin in the Roman period (there are a few examples in Palaeohispanic and other non-Latin languages). So this set, which now numbers two dozen, is unique in the Roman context. All but two are made from the same material, namely the bituminous schist from the quarries of Autun in France. Half the known examples were found in that major Roman centre (Augustodunum), the rest in eastern France, with a couple of outliers in Germany and Switzerland (Fig. 2).



Fig. 2. Find-spots of inscribed spindle whorls.



It seems very likely that the majority, if not all, these inscribed objects were made in Autun (Fig. 3). Skill and planning would have been needed to cut the decoration and lettering into the small surface area, which is almost always divided into two sections with roughly half of the text on each. The similarities in the lettering on the whorls suggest that some may have been inscribed by a small group sharing epigraphic practices and aware of the features of lapidary epigraphy (Fig. 4). We know experienced workers of schist were operating at Autun and producing a range of materials (for example, wall and floor decoration, dice, game counters, jewellery) which were sometimes inscribed (Rebourg 1996 *L'œuvre au noir: l'emploi du schiste à Augustodunum*). The texts on whorls can be broadly ascribed the function of 'speaking objects', relaying direct speech or speaking themselves, some are in Latin, some Gaulish (the Celtic language of Gaul), some both. The addressees seem to be female in several cases and some seem to have amatory/erotic content. For example, MONI GNATHA GABI / BUÐDVTON IMON a Gaulish utterance, which can be translated, using our knowledge of Indo-European linguistics and the Celtic languages, as 'Come girl, take my little kiss/cock'.

In working on these items for a volume on new approaches to epigraphy, I have assessed what we know, and do not know, about these objects, considering the contextual and other clues, and trying to unpick the assumptions

(such as who might be literate, gender stereotypes, cultural environments, dating, language) underlying our scholarship over the decades. One of the problems confronting scholars is that all but 3 of the 24 inscribed whorls have no archaeological context and, as a result, assumptions have sometimes led commentators to unsubstantiated claims. For example, linguists have tended to assume a third or fourth century AD date for the texts, based on the view that the mixed use of both Gaulish and Latin may be indicative of declining bilingual competence and so dating the texts to the period when 'Gaulish was fading from use' (Adams 2003 p. 197). The three known archaeological contexts and other clues suggest rather a first to third century date, with the most likely date range c. 90–235 AD. It has also been argued that these are not the belongings of low-status women, but rather of elite women in relatively luxurious contexts (the Penelope/Lucretia vision of textile work) (Dondin-Payre 2005 in *Le monde romain à travers l'épigraphie*). But the contexts we have do not necessarily support the reconstruction of elite spinners, and one of the three known find spots is a 'zone artisanale', found along with four loom weights in a series of rooms. Commentators have also assumed, given the sometimes 'amatory' context and addressees, that the inscribed objects must be gifts from men to women. But, apart from assumptions about sexual banter being the preserve of men, there is no clear reason to assume a male author/commissioner in *all* the cases. If we are

willing to consider the possibility that some of these texts were used by women who may have been working in groups in workshops, we might wonder whether some of these messages may have been created by women for other members of the group, and themselves, to enjoy (e.g. SALVE SOROR). The black schist whorl with white lettering would have created a striking party piece, spinning so that the object becomes a blur and only revealing the inscribed message once it had slowed. Co-workers in close quarters working on relatively monotonous tasks will often create distractions for themselves, for example work songs and in-group stories, language and humour.

Our current bilingualism framework does not help much with some of the more interesting bilingual texts. Take, for example, the following texts (Fig. 5):

NATA VIMPI / CVRMI DA 'pretty girl, give me beer' (Autun)

NATA VIMPI / VI(nu?)M POTA 'pretty girl, drink ?wine' (Auxerre)

(g)nata, 'girl', which also occurs as *nata* and *gnatha* in other whorl texts, is a noun in Latin and Gaulish from their shared Indo-European inheritance. Adams tentatively suggests that 'the similarity of *natus*, -a to Gaulish *gnatus*, -a gave it some currency in the Latin of Gaul alongside the more usual terms *filius* and *filia*, and by extension *puer* and *puella*, particularly in the feminine' (Adams 2007 *Regional diversification*

Fig. 3. Image of a schist whorl from a funerary stele depicting a spindle and distaff, from l'Évêque, Autun. © Loïc Lecoq (CC BY-NC-SA)

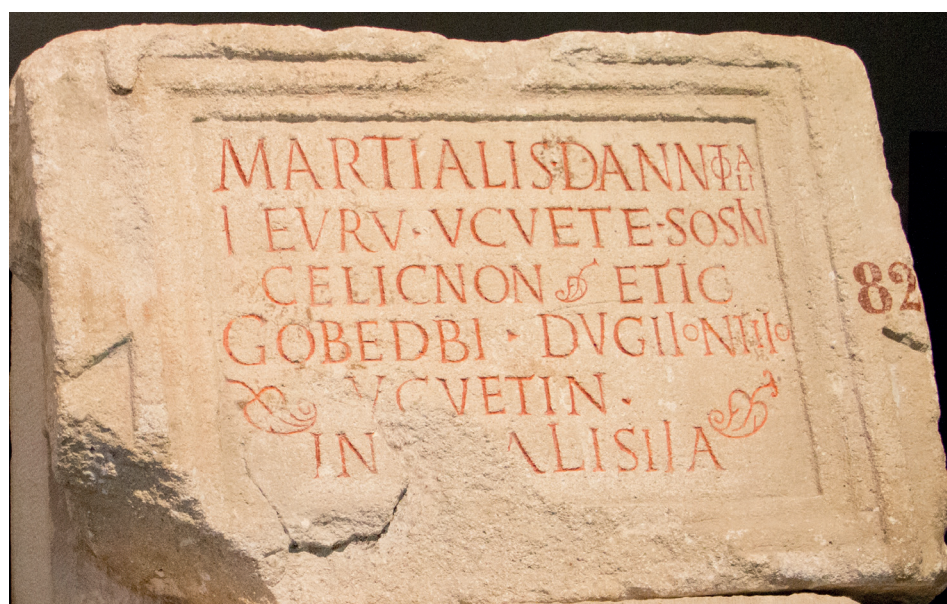


Fig. 4. Gallo-Latin inscription from Alise-Sainte-Reine, (RIG II.1 L-13) © Conseil Départemental de la Côte-d'Or, Musée Alésia, dépôt du Musée Municipal d'Alise-Sainte-Reine.







second-century AD  
from the cemetery Pont-  
de Cargouët, Inrap  
(C-ND 4.0).

of Latin p. 303). This would be a clever choice of appellation if one wanted to communicate simultaneously to both Latin and Gaulish speakers. *vimpi*, here in the vocative, means 'pretty' in Gaulish, and is commonly attested in these spindle whorls and on other *instrumenta* such as brooches (e.g. AVE VIMPI). The origin of the word is unclear but it is likely to be related to Welsh *gwypm*. Given its wide distribution on *instrumenta* it might well also have been current in a regional form of Gallic Latin, and may have worked bilingually. The second half of the example from Autun follows the same pattern: the first word, *curmi* 'beer', is Gaulish (seen also in the personal name Curmisagios 'beer seeker' and Old Irish *cuirm*, Welsh *cwrw* 'beer'), but is likely to have been borrowed into the Latin of the area. Terms for beer seem to have been borrowed from local languages

into regional varieties of Latin (Marcellus of Bordeaux mentions *curmi* and another form referring to 'beer' (also attested at *Tab. Vindol.* 628): *in potionem cervesae aut curmi mittat*, XVI 33). *da* is the imperative of the verb 'to give' and, thanks to shared Indo-European origins, exists in both Latin and Gaulish. Following this analysis all four words could be understood as entirely Gaulish, entirely Gallic Latin or both. The second half of the example from Auxerre is more difficult to interpret, due to the uncertainties over the interpretation of VIM. This has been taken in unabbreviated form as Latin *vim*, meaning literally 'force' but perhaps having sexual reference, plus *pota*

'drink', or Gaulish *vimpota* (a hypothetical form based on *vimpo-*, meaning unclear) or as an abbreviation of Latin *vinum* 'wine', plus *pota* 'drink', or *potavim(us)* (either 'we have drunk' or (for *potabimus*) 'we shall drink') (see *Recueil des Inscriptions Gauloises* II.2 p. 334). Trying to interpret this message reminds us of the importance of not 'fixing' the text in print: the text is written around the curved exterior of the whorl with no obvious starting point, meaning the words could be read VIM POTA or POTA VIM. The most likely interpretation, 'drink wine', would take the first half as Latin/Gaulish/both and the second as Latin.

The terminology of bilingualism currently used in Classics does not cope well with such flexible 'homophonic' use of linguistic resources as seen in these texts. Rather than seeing these as evidence of linguistic decline, we might instead consider that these could be skilful ways to address various linguistic competences. Here language cannot be attached to one language at all: the polysemy is deliberate. We wonder whether the linguistic resources, from the perspective of those using them at least, might not be seen as strictly composed of two languages, but rather as a continuum of repertoire that could be used flexibly.

Flexibility of linguistic practices is seen in multilingual contexts across time and space: it does not necessarily involve creating hybrid languages or simply switching between two separate languages as in the well-documented process of code-switching,

but encompasses a wider range of subtle and fluid linguistic practices. Modern sociolinguists might employ the term *translingualism* to describe this multilingual linguistic fluidity. This term may serve as a useful addition to our conceptual toolkit when dealing with multilingual texts such as those on the whorls or in the pottery accounts from La Graufesenque, and helpfully reminds us that the languages carved up, described and labelled by linguists may not map onto the linguistic experiences of those that use them. In a period before nation states and without systematic, universal education, we find evidence on the ground amongst the provincial population that perhaps speech was not split into linguistic entities in the way that we are, and some high-status Romans were, trained to recognize. Speech was a more flexible linguistic resource for its users than we sometimes assume armed with our Indo-European lexica and grammars of Latin. In provincial Roman Gaul perhaps the creators of the spindle whorls did not see language in such black and white terms.

For those interested in reading more, please contact the author at [alex.mullen@nottingham.ac.uk](mailto:alex.mullen@nottingham.ac.uk).

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Fig. 5. Replicas made for LatinNow by Potted History of spindle whorls with the texts: NATA VIMPI / CVRMI DA; NATA VIMPI / VI(nu?)M POTA; MARCOSIOR MATERNIA (photo Pieter Houten).







## Oxford Epigraphy Workshop Michaelmas Term 2020

*The Epigraphy Workshop has resumed online at its regular time, on Monday 1–2pm, in a virtual space on Microsoft Teams or Zoom — a link will be circulated prior to each meeting. Do feel free to contact [chloe.colchester@classics.ox.ac.uk](mailto:chloe.colchester@classics.ox.ac.uk) if necessary.*

### Monday 12 October:

Adrienn Almásy-Martin (LGPN), “Greek and Demotic graffiti from the quarry of Gebel el-Silsila”

### Monday 26 October:

Julian Schneider (Vienna and CSAD), “New fragments of an old territorial dispute: A re-edition of the so-called Pitane-Mytilene-dossier from Pergamon (*I.Pergamon* I 245)”

### Monday 2 November:

Anna Willi (Nottingham, LatinNow), “Inscribed writing equipment”

### Monday 9 November:

Charlotte Tupman (Exeter), “Applying machine learning to the study of inscribing texts”

### Monday 23 November:

Mat Carbon (Queen’s University, Kingston, Ontario), “Aphrodite at Knidos: Understanding the regulation of a civic cult”

\*Please note that this paper will be at 2.00 pm rather than 1.00pm\*

### Monday 30 November:

Eddie Jones (Oxford), “Athenian inscribed accounts”

Convenors: Charles Crowther, Christina Kuhn, Andrew Meadows, and Juliane Zachhuber

## Visitors to CSAD

Due to COVID-19 the Centre is currently only able to offer virtual access for a very limited number of academic visitors working in fields related to its activities. Enquiries concerning admission as an academic visitor should be addressed to the Centre’s Director, Prof. Andrew Meadows ([andrew.meadows@new.ox.ac.uk](mailto:andrew.meadows@new.ox.ac.uk)).

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### Circulation and Contributions

This is the twenty-fifth issue of the Centre’s Newsletter. The Newsletter is also available online ([www.csad.ox.ac.uk/CSAD/Newsletters](http://www.csad.ox.ac.uk/CSAD/Newsletters)).

We invite contributions to the Newsletter of interest to scholars working in the fields of the Centre’s activities — epigraphy, papyrology and numismatics understood in the widest sense.

Contributions, together with other enquiries and requests to be placed on the Centre’s mailing list, should be addressed to the Centre’s Administrator, Dr Chloe Colchester, at the address below.

Cover image: The title page from Georg Gualtherus early epigraphic study of Sicily, published 1624.  
Courtesy of Arachne, University of Cologne