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 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 It was superseded in his research agenda by the massive three-volume work on *Ptolemaic Alexandria* (Oxford University Press, 1972) and by the *Lexicon of Greek Personal Names,*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 Sasanow (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 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...
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 steleai 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 gymnasia 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 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.

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

CPI 314: Monumental architraval dedication to Ptolemy III and Berenike II from Hermopolis.
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 the massive British Museum Catalogues or the American Numismatic Society’s Greek Coins. 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.

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.

Right: Gold coin attributed to Croesus, King of Lydia, mid 6th century BC.
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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: Electrum stater bearing the ‘seal of Phanes’, perhaps produced at Ephesus in the late 7th century BC.
© The Trustees of the British Museum.
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/
ARCH: https://www.greekcoinage.org/arch-project.html
Nomisma: http://nomisma.org

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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 that there is no ancient narrative account for the island after the sack of Syracuse by Rome in 212 BC.

Where else can we turn for an understanding of the ‘the crossroads of the Mediterranean’, Braudel’s ‘continent in miniature’, and the interactions of Sicels, Elymians, Phoenicians, Greeks, Carthaginians, Ocean-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 Gualtieri (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...
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 century onwards, quickly outpaced the 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 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 Selinuntès 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
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.
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 preliminarily 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 Kaikos’ 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 the 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
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 Batuša 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 commentariensis aurariarum Delmarum (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

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 Rošia 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 (Inscripțiile 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 (Inscripțiile Daciei Romane, I, 42–3) (Fig. 3).
The earliest record for Dalmatians in Dacia is dated to AD 131, and by this date it would appear that the intensity of Dalmatian gold mining was on a downward trajectory. The chemical signature for the Dalmatian gold source identified in figure 2 peaks by AD 120 and is on the decline by AD 140. As such, the movement of Dalmatian miners into Dacia at around AD 130 provides a very plausible explanation for the cessation of the intensive exploitation of this particular source at this point in time. Simply put, it looks like many of the miners who were responsible for the output of Dalmatian gold mines had left the province and were now located in Dacia. Our second tellurium-rich source occurs in coins dating from AD 130 to AD 161 (for example the aureus of Antoninus Pius shown in Fig. 4) and, unlike the previous source, is now high in antimony (Fig. 5). ‘High’ antimony, ‘high’ tellurium gold is quite rare in the trace element data set, and so again potential sources are immediately limited. The movement of Dalmatians into the Dacian city of Alburnus Maior seems to coincide with the intensive exploitation of this antimony-rich gold telluride source. Roşia Montană contains multiple telluride minerals, but most importantly it contains the mineral nagyagite – an antimony-bearing gold telluride. As such, it produces gold that is relatively rich in both antimony and tellurium. This source, is most probably located at Roşia Montană in Dacia, the mines at which seem to be most active from the early second century until AD 167. The proposed provenance of Roşia Montană links this source to a set of mines that: we know were heavily exploited by the Romans; had a chronology that broadly matches that of the trace element ‘fingerprint’ seen in the gold coinage; and has an appropriate mineralogical and geological profile. As such, this provenance can be proposed with relative confidence.

Furthermore, the movement of Dalmatians into Alburnus Maior from approximately AD 130 attested to by our epigraphic evidence could explain the relatively sudden emergence of gold from Roşia Montană in the trace element profile of the gold coinage. Equally, it would appear that by the mid-160s the chemical ‘fingerprint’ of this particular source was no longer dominating the trace element profile of the gold coinage, which is chronologically congruent with the latest wax tablet from the mine that dates to AD 167. It would appear, then, that Dacian gold took the place of Dalmatian gold as an important source within the Roman gold supply network and was most intensely exploited between approximately AD 130 and AD 161.

The gold mines at Roşia Montană and across the rest of the ‘golden quadrilateral’ of the Western Carpathians must surely have been part of the motivation for Trajan’s conquest and annexation of Dacia. As to the ‘profit motive’ for conquest, it is all too easy to focus on immediate plunder – how the victorious army seizes the treasure of the vanquished, brings it back home and uses it to pay for its military expenses, victory monuments, public largesse or religious benefactions. These sorts of simplistic narratives are fuelled by exaggerated accounts by ancient authors of the volume of plunder captured. These exaggerations are particularly egregious for the Dacian Wars, with a Byzantine epitomator preserving the claim of Trajan’s doctor, T. Statilius Crito, that over two million kilos of gold and four and a half million kilos of silver were captured. There have been attempts to rehabilitate these figures by arguing that an error in transcription caused them to be magnified by ten, but even then there is still no real merit to the idea that these are in any way reliable. When thinking about the economic benefits of conquering Dacia for the Romans, a focus on the immediate amount of gold captured is somewhat misplaced. With Trajan’s annexation of Dacia, the Romans had gained control over a mining region that would go on to be one of the most important sources of gold for the empire for at least 30 years.

In short, I hope that what all this has shown is that the documentary evidence was invaluable for the accurate interpretation of the scientific data gathered from the Ashmolean’s Roman gold coins. An accurate understanding of the chemical data is important in order to get the best possible picture of the Roman gold supply network, which can then provide us with a better understanding of how the Roman economy functioned.

George Green has recently completed an AHRC funded Collaborative Doctoral Partnership Studentship at the Ashmolean Museum in conjunction with the University of Warwick. His research is currently presented for a wider audience in the display “Lasers, Hoarding and Roman Gold Coinage” in Galley 7 at the Ashmolean Museum.

Fig. 5: Antimony in aurei struck between AD 1 and AD 300 with greater than 1ppm of tellurium.

Fig. 4: Aureus of Antoninus Pius, AD 140–143, RIC 75, Rome (Ashmolean Museum).

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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 copying of older religious material; demotic 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. 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. 1. Louvre inv. 278. © 2018 Musée du Louvre, Dist. RMN-Grand Palais/Christian Décamps.

Fig. 2. Louvre inv. 91. © 2018 Musée du Louvre, Dist. RMN-Grand Palais/Christian Décamps.
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 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...
Six Years On

Scott Vanderbilt

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 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.

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 RIBs editors for differentiating the rainbow hues of sandstones afforded by Britain's richly varied geology. Fortunately, in this case, only two are presented.

Possible the identification and tracking of more than 11,000 persons, places, 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.

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Dating of inscriptions is one of the vexing challenges that researchers face. Careful consideration before making use of this filter is advisable. But the user would be cautioned to deliberate setting of start and end date range boundaries.

Filtering differs in that a set of sliders allow the user to adjust dates. Inscriptions bearing dates that fall within the chosen range will be displayed. By default, only those dates set within the default range (AD 43–410) will be presented. The desired filters having been set, clicking 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.

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**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 volumes I and II by Roger Goodburn, Helen Waugh, and Sheppard Freer. 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.

**Volume III**

In the mold of those prepared for volumes I and II by Roger Goodburn, Helen Waugh, and Sheppard Freer, Volume III in the mold of those prepared for volumes I and II by Roger Goodburn, Helen Waugh, and Sheppard Freer. 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.

**URLs**

- RIB Online: https://romaninscriptionsofbritain.org/
- LatinNow: https://latinnow.eu/
- RIB Bibliography on Zotero: https://www.zotero.org/groups/2148684/rib/library
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 RIIIG 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 Epigrafia 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).

Translingualism: a new spin on old material

Alex Mullen
It seems very likely that the majority, if not all, of 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’oeuvre 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 / BUDDVTON 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 European linguistics and the Celtic languages, translated, using our knowledge of Indo-European, we have assessed clues, and trying to unpick the assumptions objects, considering the contextual and other what we know, and do not know, about these new approaches to epigraphy, I have assessed as ‘Come girl, take my little kiss/cock’. In working on these items for a volume on European linguistics and the Celtic languages, translated, using our knowledge of Indo-European, we have assessed clues, and trying to unpick the assumptions objects, considering the contextual and other what we know, and do not know, about these new approaches to epigraphy, I have assessed as ‘Come girl, take my little kiss/cock’.

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’épigraphe). 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 filus and filia, and by extension puer and puella, particularly in the feminine’ (Adams 2007 Regional diversification 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 filus and filia, and by extension puer and puella, particularly in the feminine’ (Adams 2007 Regional diversification...
of Latin p. 303). This would be a clever choice of appellation if one wanted to communicate simultaneously to both Latin and Gaulish speakers. *vimpita*, 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 *gwyp* or *gwyn*. 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 Auxerre follows the same pattern: the first word, *currm*, ‘beer’, is Gaulish (seen also in the personal name Curmissagios ‘beer seeker’ and Old Irish *cwrw* ‘beer’), but is likely to have been borrowed into the Latin of the area. *Term* for beer seem to have been borrowed from local languages into regional varieties of Latin (Marcellus of Bordeaux mentions *currm* and another form referring to ‘beer’ (also attested at Tab. Vindol. 628): *in potionem cervesae aut currmi 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*

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.

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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 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 1 245)”

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).

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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).

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 Gualttherus early epigraphic study of Sicily, published 1624. Courtesy of Arachne, University of Cologne