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Eleri H. Cousins

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Chapter 3

Materializing epigraphy: archaeological and sociolinguistic approaches to Roman inscribed spindle whorls

*Alex Mullen**

Epigraphic perspectives

This chapter explores sociolinguistic and archaeological approaches to epigraphy and demonstrates how they might work through a detailed analysis of the enigmatic corpus of Roman inscribed spindle whorls. Epigraphists might argue that they are already archaeologists and, indeed, within the textual realm of ancient world studies, they are some of the most field-based and object-oriented practitioners. Autopsy is such an important part of epigraphic analysis that many end up being intimately engaged with the inscribed objects, for example through making squeezes or more modern imaging and recording techniques such as Reflectance Transformation Imaging (RTI).[1] When the objects are *in situ*, epigraphists will often expend effort reaching them, experiencing the topography, sight-lines, proximity to urban centres and light sources, all of which help to inform interpretations even if the details may not appear in the epigraphic corpora. Autopsy is no new thing: a drawing of one of the fathers of modern epigraphy, Theodor Mommsen, at work shows him perched partly on a donkey, partly on a ladder, both positioned in water, heading up to look

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[1] A number of epigraphists have worked extensively with scientists to optimize imaging techniques such as multispectral analysis and RTI for ink-written/painted texts and incised texts respectively and to use computers to aid in character identification. Key early work was undertaken by Alan Bowman and Melissa Terras, see Bowman and Brady 2005 and Terras 2006. These imaging techniques now are arguably as much an epigraphical tool as an archaeological one.

at an inscription on a bridge,[2] and, a couple of millennia earlier, both Craterus of Macedon and Pausanias collected inscriptions and used them in their works, in some cases having perused them in context.[3]

It is fair to admit, however, that often objects and context *have* been of secondary (or lesser) concern and "epigraphists have often been viewed as narrow technicians whose conceptual myopia prevents them from seeing beyond the edges of their stones".[4] Epigraphic corpora have been designed primarily to present texts, through transcription, edition, and commentary. This can even be the case for the corpora produced by those with archaeological experience: the norms set by the discipline are followed. So even if deep contextual knowledge has informed the interpretation, users of these corpora may not appreciate the details, value, and role of that context. Texts can take on lives of their own in paper/digital form and become de-materialized. Some epigraphic corpora are so focused on a narrowly linguistic, rather than a *socio*linguistic, perspective that scholars have even published the two versions of bi-version bilingual inscriptions in separate corpora, *i.e.*, splitting them along language lines, severing the texts not just from the object but also from one another: *CIL* VIII and *The Roman Inscriptions of Tripolitania* (1952) give the Latin inscriptions but not the parallel Punic versions.[5] Such divorcing from the social-cultural context in which the linguistic expressions were created does not help our historical and sociolinguistic analyses.

Sociolinguistic and archaeological epigraphy

A sociolinguistic and archaeological approach to epigraphy puts people at the centre of the analysis. It entails integration of the analysis of macro and micro sociolinguistic features of epigraphic evidence and of archaeological approaches – for example, appreciation of materiality, context, and phenomenology – in order to understand social interactions and identities.

Where possible, consideration of context, at all scales, is important. This means not only a detailed appreciation of the immediate context of the inscribed object itself including the uninscribed objects with which it was found, but also its broader site, region, provincial, even imperial, context, and its relation to other objects, inscriptions and society, language and culture.[6] Materiality, namely the focus on the object and

[2] Bodel 2001, xvi.

[3] For Craterus, see *FGrH* 342 and Higbie 1999; for Pausanius, see Habicht 1984.

[4] Bodel 2001, 1. The move towards more archaeological epigraphic corpora can be seen in the new project to re-edit the Gaulish inscriptions, RIIG (*Recueil informatisé des inscriptions gauloises*) https://riig.huma-num.fr/ (last accessed 11.5.2020). For some of the issues faced in creating digital editions which adequately present textual, material, and visual aspects of epigraphy in an encoding schema compliant with the EpiDoc guidelines, see Morlock and Santin 2014.

[5] See Millar 1968, 131.

[6] Modern sociolinguists have created a sub-field, *Linguistic Landscapes*, over the past two decades which is concerned with written language in urban contexts. Their approaches tend to be relatively ahistorical

its relations to human practice, must also be included in a rigorously sociolinguistic and archaeological approach to epigraphy.[7] This can be considered in situations when the object is known but its context is not, or only partially.[8] Another ingredient in the mixture is phenomenology.[9] This puts human experiences at the centre of the reconstruction of the ancient world and interrogates the realities of creating, displaying, viewing, touching,[10] using the inscribed objects, thinking through how pleasurable, difficult or unusual these might have been in terms of the individual's or community's experience, and what sorts of cognitive and linguistic processes might have been informed by those and similar experiences. A phenomenological approach to an inscription carved into the rock face in the Cerdagne region (eastern Pyrenees), to take a random example, would require, amongst other things, analysis of its location (including sightlines and light sources), routes to the rock face for carving, best positions for reading/viewing, conditions at different times of the year and so on.[11]

Ancient *socio*linguistics has gained significant traction in recent years. It is concerned with language use and change related to all aspects of society, and has deployed epigraphy as one of its key sources of evidence. It may take a range of different forms, including macro sociolinguistic analysis – addressing questions such as which language is used, when and where, for example – and micro sociolinguistic analysis, which may entail the collection of non-standard and standard linguistic features from epigraphic remains and making in-depth quantitative and qualitative analyses supported by data on social factors. There are numerous routes for exploration. I previously argued that it might be possible, using detailed cross-cultural knowledge of communities and individuals exhibiting language contact phenomena, to diagnose which ancient communities might have produced which types of bilingual texts and

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and they have not as yet linked up well with other fields that have had similar concerns for some time, see Pavlenko and Mullen 2015. Tools used extensively by archaeologists such as Geographic Information Systems can be usefully harnessed to plot epigraphic landscapes and to coordinate a range of non-epigraphic data to support detailed contextual analysis; this is part of the work in the LatinNow project, see https://latinnow.eu/ (last accessed 11.5.2020).

[7] For a book-length treatment of materiality and texts, see Piquette and Whitehouse 2013.

[8] A range of tools employed by the archaeological community, such as petrological or metallurgic analysis, can be used by epigraphists, for example to understand better the origins and therefore possible costs and effort required to obtain the material for inscription. J. Prag's ERC-funded "Crossreads" project on the multilingual epigraphies of Sicily has petrological analysis as a research strand. See also d'Encarnação 1984. Often this information, if included in the printed corpora, does not get transferred into the online digital corpora.

[9] For seminal works on phenomenology in archaeology, see Tilley 1994; Hamilton and Whitehouse 2006.

[10] For work on touching writing materials, see Hoskin and New 2017 on fingerprints on medieval seals.

[11] For the most recently published rock-cut inscription in Latin, with references to the other publications, see Ferrer i Jané *et al.* 2020. Viewshed analysis (for thinking about which features of the human-made or natural landscape can be seen from inscriptions and vice versa) might well work for these *in situ* inscriptions, whose rural context has remained similar over centuries. To my knowledge this has not been applied to contexts involving monumental Roman epigraphy, presumably partly because precise knowledge of original display contexts and the surrounding built environment can be elusive.

features.[12] The matrix used the number of languages present in the community, the type of external links and levels of ethnolinguistic vitality as the main variables.[13] The argument was that in circumstances where only bilingual epigraphic texts remain, very tentative assumptions could be made about the possible nature and contacts of the communities. However, such models of community dynamics and epigraphic remains, whilst useful in visualising how factors might interrelate, are necessarily reductive and tend not to cope adequately with the messiness and complexity of human linguistic relations which ancient sociolinguists are so keen to explore.[14] The model is therefore just one element in the delicate balancing act of understanding partial evidence: applying the most effective sociolinguistic approach to ancient materials requires assembling as many tools as possible, operating at different scales of analysis as appropriate and carefully coordinating the results. In this chapter I argue for the utility of a new concept, *translingualism*, currently used in modern sociolinguistics, for our ancient world investigations. Translingualism puts a focus on the fluidity and complexity of linguistic repertoires and encourages us to think beyond bounded linguistic entities such as standard languages and the stock interpretations and concepts of bilingualism studies currently used in Classics (see below, pp. 57–59).

These archaeological and sociolinguistic elements are closely intertwined and should, wherever possible, be used together. There is still plenty of scope for cross-disciplinary collaboration in epigraphy: understanding each other's disciplines and learning from one another is essential. Archaeologists, partly because of the legacy of post-processualism (especially in the UK/US), the nature of the evidence, and the time and methods required in the recovery of that evidence, are acutely aware of the subjectivity and difficulty of interpretation. Epigraphists do not come from a disciplinary environment where such concerns are so pervasive. It might be argued that epigraphic subjectivity is generally more readily recognised at the level of readings and less so when it comes to reconstructing meaning, functions, and significance in broader context. Perhaps the most valuable aspect of a more self-consciously archaeological epigraphy is the constant questioning of assumptions and weighing up of possible interpretations. Many epigraphists already do this, but perhaps not with the doggedness of those trying to make material culture "speak". Texts can make us think they are telling us what we need to know, and we ought to question that every time.

The inscribed spindle whorls of eastern Gaul

The Roman inscribed spindle whorls from eastern Gaul will serve as a case study in which sociolinguistic and archaeological approaches can be combined, by applying

[12] Mullen 2012; 2013a.

[13] Ethnolinguistic vitality was introduced from modern sociolinguistic studies to Classics in Mullen 2012. The vitality of an ethnolinguistic group is "that which makes a group likely to behave as a distinctive and collective entity within the intergroup setting" (Giles *et al.* 1977, 308).

[14] For ancient sociolinguistics, see Clackson 2015; Mullen 2016.

a phenomenological perspective and an awareness of assumptions and uncertainties. In particular I shall consider whether assumptions about gendered interactions, and even language itself, have hindered the analysis of this corpus.

Spindle whorls (French *pesons de fuseau/fusaïoles,* German *Spinnwirteln*) are common finds in Roman (and both later and earlier) contexts.[15] They are weights placed on the spindle to increase the torsion of the twist and to allow the spinner to use one hand to draw out the thread and maintain the spin (Fig. 3.1).[16] Since wool is spun before it is woven, vast numbers of these items must have been used across the Roman world over several centuries.[17] They are made from a range of materials, including ceramic, bone, metal, and stone. A few examples from the Iron Age, Republican, and post-Roman periods inscribed in various non-Latin languages are known and yet, despite the Roman world's obsession for writing on things,[18] imperial-period whorls do not appear to have been inscribed, with the exception of an unusual corpus of two dozen from eastern Gaul.[19]

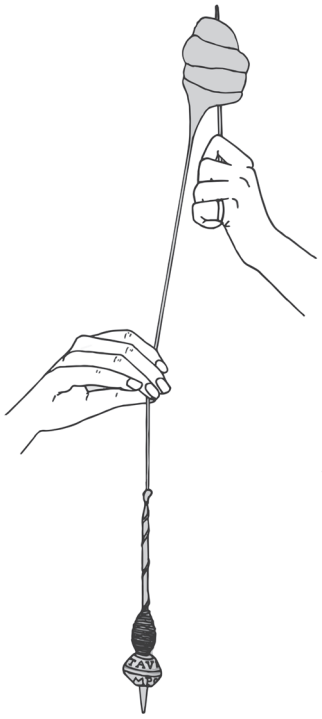

Fig. 3.1: Spinning with a distaff, drop spindle, and whorl. Drawing: Jane Masséglia, LatinNow.

Table 3.1 assembles the corpus of imperial-period inscribed spindle whorls, split into two parts, the first listing 11 examples with find-spots in Autun (Fig. 3.2) and the second roughly the same number of examples that have been found beyond that settlement (Fig. 3.3). It seems likely that most of these items were made at Autun: some of the material has been scientifically analysed and the bituminous schist that has been identified can be traced to the quarries of Autun.[20] Experienced workers of schist at Autun produced a range of materials, for example, wall and floor decoration, dice, game counters, jewellery, sometimes with inscriptions.[21] Skill and planning would have been needed to cut the decoration and

[15] For textile manufacture in the western provinces, see Wild 1970; 2002; 2003; Allen *et al.* 2017, 221–30.
[16] Harlow forthcoming. See Barber 1992, 39–78 for practical details of spinning in prehistory.
[17] The *Rural Settlement in Roman Britain* project found that they were "among the most common types of object recovered at sites across the province" (Allen *et al.* 2017, 226).
[18] For inscribed examples in Celtiberian and Iberian language from the Iberian peninsula, see Castro Curel 1980; Ferrer i Jané 2008; Beltrán Lloris *et al.* 2021.
[19] Héron de Villefosse 1914 collects a first corpus of this unusual group, correctly identifying the object type and linking them to inscriptions on drinking vessels.
[20] For details of the petrological investigations, see Dondin-Payre 2006, 145 n. 10; Maggetti *et al.* 2009.
[21] For the use of schist at Autun, see Rebourg 1996.

Table 3.1: Corpus of imperial-period inscribed spindle whorls.

No.	*Inscription*	*Reference*	*Notes*
		Find-spot: Autun (France)	
1	ACCEDE / VRBANA	*ILTG* 523; Rebourg 1996, n°119; Dondin-Payre 2004, n°11	Collection Bulliot
2	SALVE / DOMINA	Rebourg 1996, n°126 bis[22]; Dondin-Payre 2004, n°3	
3	AVE VALE / BELLA TV	*CIL* XIII 2697 and 10019.18; Rebourg 1996, n°127; Dondin-Payre 2004, n°1	
4	GENETA / VISCARA	*ILTG* 526; Rebourg 1996, n°121; Dondin-Payre 2004, n°4; *RIG* II.2 L-114	Collection Bulliot
5	LAVTA / LAVTA	Rebourg 1996, n°126; Dondin-Payre 2004, n°5	
6	MARCOSIOR / MATERNIA	*ILTG* 527; Rebourg 1996, n°123; Dondin-Payre 2004, n°6; *RIG* II.2 L-117	Collection Bulliot (Figs 3.2, 3.4)
7	MATTA DAGOMOTA / BALINE E NATA	*ILTG* 528; Rebourg 1996, n°120; Dondin-Payre 2004, n°7; *RIG* II.2 L-115	Collection Bulliot
8	NATA VIMPI / CVRMI DA	*ILTG* 529; Rebourg 1996, n°122; Dondin-Payre 2004, n°8; *RIG* II.2 L-112;	Collection Bulliot (Fig. 3.4)
9	NATA VIMPI B(ene) S(alve) V(ale) / TOTVNVCI	Chardron-Picault and Dondin-Payre 2000; Dondin-Payre 2004, n°12; *RIG* II.2 L-118	
10	VEADIA TVA / [T] ENET	*ILTG* 531; Rebourg 1996, n°125; Dondin-Payre 2004, n°10; *RIG* II.2 L-116	Collection Bulliot
11	AVE DOMINA / SITIIO	*ILTG* 524; Rebourg 1996, n°128; Dondin-Payre 2004, n°2	Collection Bulliot; unpierced and hemispherical in form
		Find spot: various	
12	TAVRINA / VIMPI	*ILTG* 530; Dondin-Payre 2004, n°9; *RIG* II.2 L-113	Sennecey-le-Grand (France); Collection Bulliot[23]
13	NATA VIMPI / VI(nu?)M POTA	*CIL* XIII 10019.20; Dondin-Payre 2004, n°18; *RIG* II.2 L-121	Auxerre (Faubourg Saint-Martin) (France) (Fig. 3.4)
14	TIONO VIMPI / MORVCIN	*CIL* XIII 1324; Dondin-Payre 2004, n°20; *RIG* II.2 L-111	Gièvres (France)

(Continued)

[22] "Un autre peson aurait été découvert lors des mêmes travaux, mais il est dans une collection particulière" (Rebourg 1996, 109) ("Another spindle whorl [number 2] was apparently discovered during the same works [Plan d'eau du Vallon, 1976], but it is in a private collection").

[23] Erroneously assigned to the Autun set by various scholars, see *RIG* II.2 page 324 for information on the find-spot.

Table 3.1: (Continued)

No.	*Inscription*	*Reference*	*Notes*
15	DA MI	*CIL* XIII 10019.21; Dondin-Payre 2004, n°15	Langres (France)
16	SALVE TV / PVELLA	*CIL* XIII 5885, 10019.19; Dondin-Payre 2004, n°19	Langres (France)
17	EMEME / FELIX	Barthèlemy 1976, p. 7 and pl. II; Dondin-Payre 2006	Mâcon, Flacé (France)
18	PACTVS / ITALIA	*RIG* II.2 p.319 i	Suin (France)
19	AVE / VIMPI	Dondin-Payre 2004, n°21; 2006; *RIG* II.2 L-122	Nyon (Switzerland)
20	MONI GNATHA GABI / BUÐÐVTON IMON	*CIL* XIII 2827; Desforges 1924; Dondin-Payre 2004, n°17; *RIG* II.2 L-119	Saint-Révérien, environs (France)
21	GENETTA IMI / DAGA VIMPI	*ILTG* 525; Héron de Villefosse 1914; Dondin-Payre 2004, n°16; *RIG* II.2 L-120	Sens, or environs (France)
22	IMPLE ME / SIC VERSA ME	*CIL* XIII 10019.17; Dondin-Payre 2004, n°14	Löwenbrücken, close to Trier (Germany); *black ceramic*
23	SALVE / SOROR	*CIL* XII 5688 19; Dondin-Payre 2004, n°13	Vienne, or environs (France) (ancienne Collection Girard); *grey ceramic*
24	CARA VIMPI / TO CARANTO	Binet and Dondin-Payre 2002	Amiens (France)

lettering into the small surface area of the whorl,[24] which is almost always divided into two sections with roughly half of the text on each (Figs 3.2, 3.4). The similarities in the lettering suggest that some may have been inscribed by a community sharing epigraphic practices. The only two that are certainly not made of schist, numbers 22 and 23, are ceramic.[25]

Only half a dozen of the two dozen published to date have any indication of archaeological context and the dating of the corpus cannot be confidently offered except in loose terms.[26] Dondin-Payre argues that the whorls should be dated to the first to third centuries AD, and that any more precise dates are "arbitraires pour la plupart, car elles sont fondées sur des préjugés culturels et non sur des critères

[24] The schist whorls are roughly 1.5 cm high × 2.5 cm diameter.

[25] Number 14, now lost, was described as being made of "serpentine noire" (*RIG* II.2 p. 320), though it could well have been schist. Number 19 was thought to be ceramic before petrological analysis (Dondin-Payre 2006).

[26] The editor of the first corpus noted that none was found with others: "[t]ous ces petits monuments paraissent avoir été recueillis à l'état isolé; du moins on n'a jamais signalé de trouvaille en comprenant deux ou plusieurs" (Héron de Villefosse 1914, 226) ("all these small items seem to have been found in isolation; at least, no finds comprising two or more have ever been reported"). Numbers 9, 12, 17, 19, 21, 24 have some associated archaeological information.

Fig. 3.2: Inscribed spindle whorl from Autun (number 6) (Mullen and Darasse 2018, figs 30–31).

objectifs".[27] Loth, Meid, and Adams all state that they date to the third or fourth century AD, but without detailed supporting evidence.[28] It is difficult to do much more than assign an imperial-period dating, though number 24 comes from a structure that was constructed in AD 90 and destroyed by fire in 125/130,[29] 9 was found in a context dated to the second half of the second century AD, 12 was found during excavations of a villa in 1858 with a coin of Domitian (*c.* AD 88–90) and 19 has been tentatively dated to the second century AD.[30] This evidence, combined with Rebourg's view that schist from Autun was most commonly worked in the second and third centuries, with a concentration in the Severan period, might suggest a date range of *c.* AD 90–235 for the whorls.[31] If the similarities of practice can be attributed to a localised phenomenon, which may have been linked to the period of operation of a small number of carvers at one or more whorl-producing workshops/households, then the period of activity may have been shorter. I shall consider possible contexts for the creation of these inscribed items below (see below, pp. 48–55).

Several of the whorls have texts composed in Latin, for instance numbers 1–3, 5, 11, 15–18, 22–3 in Table 3.1, and others in Gaulish, the Celtic language spoken in Gaul,[32]

[27] Dondin-Payre 2005, 136, "for the most part arbitrary, since they are based on cultural prejudices and not on objective criteria".
[28] Loth 1916, 169; Meid 1983, 1030; Adams 2003, 196.
[29] Binet and Dondin-Payre 2002, 133.
[30] Dondin-Payre 2006, 153.
[31] Rebourg also suggests that the evidence of inscribed *instrumentum domesticum* points to a Severan dating for the inscribed schist spindle whorls (1996, 15). There are not enough distinctive features in the texts on the whorls to support this narrower dating and number 24 cannot be Severan.
[32] For recent introductions to Gaulish, see Lambert 2018; Mullen and Darasse 2020.

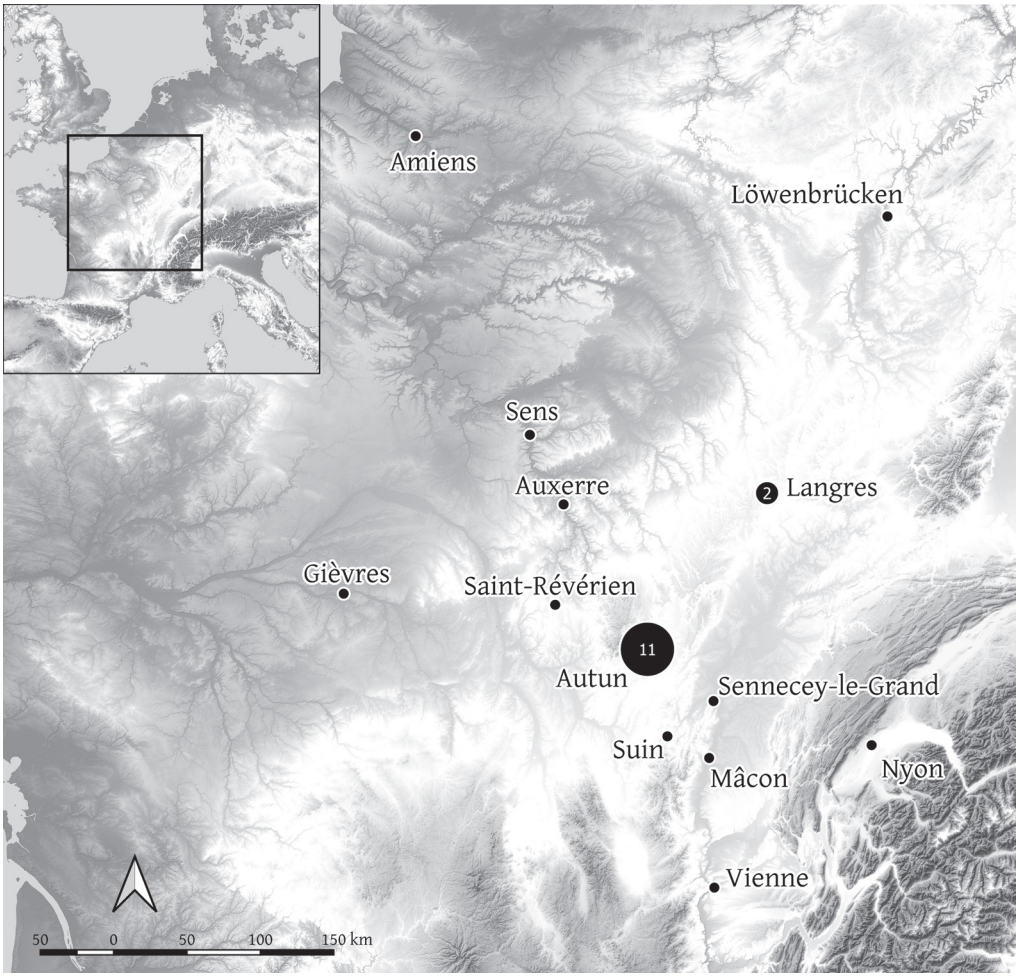

Fig. 3.3: Find-spots of imperial-period inscribed spindle whorls. Map: Pieter Houten, LatinNow.

for example numbers 7, 14, 20, 21. A high proportion seem to be not obviously in a single language (4, 6, 8–10, 12–13, 15, 19, 24), which has excited linguists who, working with notions of languages as bounded linguistic resources, have deconstructed the utterances into two languages and used the concepts and terminology of bilingualism in their analysis (see below, pp. 56–57).

The texts can be ascribed the function "speaking objects", relaying direct speech or speaking themselves. They apparently address a female in several cases and some seem to have amatory/erotic content.[33] For example, number 20: MONI GNATHA GABI

[33] Roman loom weights are more commonly inscribed and most carry texts relating to their production. One, from Zaragoza, dating to the early first century AD, however, seems similar to the Autun spindle whorl inscriptions, with direct speech and a reference to amatory relations: *multas telas texat, bonum uirum inueniat. ama lateres! facimus fausta felicia* ("Let her weave many threads, let her find a good husband. Love

/ BUĐĐVTON IMON a Gaulish utterance, which can be translated, using knowledge of Indo-European linguistics and the Celtic languages, as "Come girl, take my little kiss/cock".[34] Scholars have assumed that these are gifts from men to women – "les galants qui offrent l'objet à la femme"[35] – and there has, until now, been little questioning of this core assumption.

Uncertainties of context and interpretation

The leading modern commentator on the inscribed spindle whorls has reminded us of "la nécessité de considérer ensemble l'implantation géographique, l'aspect, le matériau et les inscriptions pour évaluer la spécificité, donc l'importance historique des documents".[36] Unfortunately one striking thing about this set of inscribed material is the lack of archaeological context for most of the examples. As can be seen in Table 3.1, most appear in *CIL* XIII, indicating the early date of their discovery, and 7 of 11 from Autun were part of the Collection Bulliot, which provided no details of their original find context. Thus commentators have tended to create their own visions of by whom and where these objects were used. It has been suggested that the whorls are from "luxueux" domestic settings, not from "un environnement artisanal anonyme".[37] The motivation for this seems to be the context of number 24, a huge building covering originally at least 2,500 m^2, with areas of habitation, plus commercial and storage facilities. Whilst the structures have been attributed to the "élite amiénoise",[38] given that the spindle whorl was found in a destruction level, it is impossible to say whether it was used by a Lucretia-style elite *matrona* spinning and then weaving in a comfortable atrium,[39] or the result of a completely different

loom-weights! We make lucky and happy things") (Beltrán and Beltrán 2012). The non-Latin inscriptions on spindle whorls from the Iberian Peninsula, dating to the second and first centuries BC, have been split into four types in Beltrán Lloris *et al.* forthcoming: short inscriptions of one to three signs (the majority); texts of pseudo writing or alphabets; texts containing names; a small group of longer texts that have been previously interpreted as amatory/erotic. The authors caution that the interpretation of this latter group is not at all secure, and one might suspect it may have been inspired by the texts in the Autun collection (the texts are unrelated, the only link being the choice of object). For a small number of possible earlier examples of inscribed spindle whorls from the Mediterranean world, see Tsori 1959 for Judaea; Bagnasco Gianni 1999 for Etruria; Sauvage and Hawley 2013 for Ugarit. The example from Çatal Höyuk published by Gevirtz in 1969 has been deemed a forgery (Levenson 1973).

[34] See Eska 1998 for the *tau gallicum*, in this inscription represented by a double-barred D.

[35] Héron de Villefosse 1914, 229, "the admirers who offer the object to the woman".

[36] Dondin-Payre 2005, 143, "the need to consider geographical location, appearance, material and inscriptions together to assess the specificity, and therefore the historical significance, of the documents".

[37] Binet and Dondin-Payre 2002, 137, "an ordinary artisanal environment".

[38] Binet and Dondin-Payre 2002, 133, "the elite from Amiens [Samarobriva]".

[39] In the Roman context textile work seems to have been deemed a worthy feminine pursuit for all sections of society. Apparently, Augustus wore clothes made by his sister, wife, daughter, and granddaughters (Suet., *Aug.* 73).

scenario, involving non-elite members of the extended *familia*, for example, producing textiles in one part of the vast complex.[40]

There are only four archaeological descriptions on which to draw for possibly useful information concerning the context of the primary use of these objects in the textile-making process: numbers 9, 17, 19, and 24. Of these, number 17 is relatively vague – an urban domestic setting. Number 9, found in 1992, is described as having been found in a "zone artisanale", dated to the second half of the second century, found along with four loom weights in a series of rooms. Number 19 was found in a modest urban domestic setting, in a small building with everyday objects, including a small number of higher quality. Number 24 was an isolated find with no precise context within the aforementioned vast "maison", with commercial areas and storage to the west of *Samarobriva*, destroyed by fire in AD 125/130. Since the little archaeological information may point in part towards artisanal/lower-status domestic environments, we should be cautious in focusing exclusively on a higher-status domestic interpretation.

Likewise, the circumstances of their production are uncertain. As mentioned previously, the material from which most of them are carved comes from Autun. Dondin-Payre argues that the concentration of texts on the whorls made in Autun is not a distribution created by preservation biases and modern practices but rather "[l]a raison réside dans la combinaison entre plusieurs facteurs: l'exploitation d'un support, ce schiste spécial et celle d'une compétence technique, le savoir-faire des artisans locaux conjugué avec une compétence linguistique et graphique imputable au niveau culturel élevé de la capitale des Éduens, où l'écrit est familier".[41] Whilst we might be nervous of making such generalisations about cultural levels and literacy, it is certainly the case that the inscribers of at least some of these texts had knowledge of lapidary epigraphy, since some of the features ape Roman epigraphic practices: the use of capitals, abbreviations, interpuncts, and, most strikingly, the ansate frame motif and hedera of number 9.[42] So since the texts share numerous features, should we imagine a workshop producing (most of) these items, in which there were a small number of literate craftsmen who could "personalise" these objects with a message? In this scenario, many of the whorls then did not move far from their place of origin but some travelled beyond Autun with the spinners. Alternatively, the Autun craftsmen who produced these attractive whorls may have moved around to sell their items and

[40] Slaves must have been employed extensively in textile production, see Harper 2011, 128–35. Slaves skilled at spinning were known as *quasillariae.*

[41] Dondin-Payre 2005, 136, "[t]he reason lies in the combination of several factors: the exploitation of a medium, this special schist and the technical skill, the expertise of local craftsmen combined with linguistic and graphic skills ascribable to the high level of culture of the capital of the Aedui, where writing was common".

[42] This need not be exclusively a result of direct interaction with Latin epigraphy, of course, since Gallo-Latin lapidary examples, though significantly less common, also use epigraphic features derived from Latin models. The Gallo-Latin inscription from Alise-Sainte-Reine (*RIG* II.1 L-13), for instance, is inscribed within an ansate frame motif and includes hederae, interpuncts, and ligatures.

may have taken commissions for texts at markets or by the roadside. In both contexts spinners, or those buying the whorls for them, might have passed on messages orally to the engraver who placed them on the whorls. A completely different reconstruction in which people independently compose and write similar looking and sounding messages on items that are not usually inscribed in the Roman world, seems a less likely scenario. Carving these texts into the small schist whorls would have required some skill, and one possessed by those who worked regularly with the material.

With both the context of production and the context of use uncertain, the objects themselves and the combination of their physical and textual characteristics become the principal portal into their social function. Commentators have been interested by the amatory/erotic nature of some of these texts and have tended to extrapolate from the small number that may be "suggestive" and have seen the greetings and exhortations to drink in the same light. The agents behind the speaking objects have, following gender stereotypes, been taken to be men.[43] Meid notes in support of this perspective "[d]ass die Sprecher Männer sind, kann man aufgrund unserer Weltkenntnis vermuten. Die Äusserungen sind Ausdruck einer Art von Anbandelei, gehören also zum Ritual des amourösen Spiels".[44] Again we should question this assumption and consider other visions of interpersonal dynamics. One proposition to contemplate is that the agency behind the texts may not be, or may not *only* be, male. If some of these texts are used by women working in groups in workshops (indeed this reconstruction might be supported by the context of number 9), we might wonder whether some of these messages may be created by women for other members of the group, or for themselves, to enjoy.[45] Here, a phenomenological perspective, focusing on the material capacities of the whorls, helps to draw out their

[43] Beltrán and Beltrán 2012, 139 state in passing the view held by many that the texts are "seguramente realizados en los talleres y vendidos a varones para que, a su vez, los regalaran a muchachas" ("surely made in the workshops and sold to men so that they could, in turn, give them as gifts to girls"). The assumption that the authors are men also fits neatly with the view that levels of literacy amongst women were extremely low – an established "fact" that has not in fact been properly established, see now the commentary in Eckardt 2017, 154–75. There is much scope for detailed work on the social dimensions of literacy in the provinces, see Mullen 2021.

[44] Meid 1983, 1030, "that the speakers are men can be assumed from our knowledge of the world. The utterances are expressions of a kind of flirtation, that is, they are part of the ritual of amorous play".

[45] There is no reason to believe that all the workers must have been women, but many, if not all, probably were, given the bulk of the literary, burial, and iconographic evidence. However, some male burials contain spindle whorls (though these are usually regarded as evidence of men owning workshops) (Rafel 2007) and there are depictions of males spinning, for example the depiction of the male thigh spinner from a sarcophagus now in the Terme Museum, Rome. This evidence and the comments that flax spinning was suitable for men in Pliny the Elder (*HN* 19.3.18) suggest that Lovén's argument that it was "impossible for a man at any social level to be associated with wool work and, in particular, spinning, since it so distinctly represented femininity" (Larsson Lovén 2007, 233, see also Larsson Lovén 2013 for gender and textile work in Roman Italy) might need to be qualified. As Harlow remarks we need "to beware of taking an over-simplistic view of normative statements" (forthcoming). For gender and textile production in pre-history more generally, see Costin 2013. For the issue of assigning gendered use to small finds, see Allason-Jones 1995.

potential for multi-sensory appeal. The dark-coloured whorls with white lettering would have created a striking visual effect, repeatedly spinning so that the object becomes a blur and then slowing to reveal the message. Co-workers in close quarters engaged in relatively monotonous tasks will often create distractions for themselves, for example work songs and in-group stories, language, and humour.[46] The texts are short but two of the longer ones, numbers 8 and 13, may even have a rhythmic quality to them.[47] Perhaps they tap into an in-group language to which we now have very limited access. We should hesitate before assuming that sexual "banter" is the preserve of men.

Though there is on-going debate about the extent to which personal names feature in these texts, most linguists agree that there are perhaps only two or three names of addressees (?*Maternia* (number 6); *Taurina* (10); ?*Italia* (18)) and none of the addresser.[48] We might wonder, therefore, whether that makes it less likely that these were gifts, since part of sending such amatory messages is often to inscribe the names of the people involved. Instead the references on the whorls are to (using nouns) *domina* "mistress", *geneta/genetta* "girl", *puella* "girl", *gnatha* "girl", *soror* "sister"; (noun and adjective) *nata vimpi* "pretty girl", *vimpi morucin* "pretty girl", ?*cara vimpi* "dear girl"; (adjectives) *urbana* "refined", *bella* "pretty", *felix* "lucky". Whilst these could all be the outputs of male admirers, the possibility of women composing messages for themselves or others in the workshop should not be excluded. SALVE DOMINA, for example, might be a reference to the leader of the working group (it has a wide semantic range, spanning from a generic "Mrs" to sexual content)[49] and SALVE SOROR is arguably just as likely to be the utterance of a woman than a man: *soror* is used by unrelated female friends from the first century BC (as with *frater*),

[46] Examples of Scottish work songs (used to accompany numerous forms of repetitive work, such as spinning wool, but also fulling cloth, milking cows, churning butter etc.) can be found here: https://blog.europeana.eu/2016/08/no-bees-no-honey-no-work-no-money-an-introduction-to-scottish-work-songs/ (last accessed: 1.8.2020).

[47] We know of weaving/spinning/grinding work songs in the ancient world, *e.g.*, in Catull. 64 and Plut., *Conv. sep. sap.* 14. Whatmough 1949, 389 notes that pretty much any text of more than a couple of words long can be scanned "after a fashion", and warns against the tendency of some scholars to hunt for verse everywhere. For references to singing by female Roman textile workers, see Harper 2011, 135.

[48] Dondin-Payre (2001, 318–27, 333–41; 2005) argues that certain words can be read both as names or as the lexemes that form them: Adiatu, Damus, Matta, Totunuca (analysed as Celtic); Cara (Celtic/Latin); Bella, Geneta, Lauta, Maternia, Taurina, Vimpus ('noms latins à fréquence celtique'); Domina, Italia, Nata, Puella, Viscara, Vrbana (Latin). The names designated as Celtic are not secure and many of the other names are barely attested. For Bella, Geneta, Lauta, Vimpus, Domina, Nata, Puella an onomastic interpretation seems less likely. The names are not commonly used (a search across the LatinNow epigraphic dataset from the north-western provinces returns only two, possibly three examples of *puella* used as a name out of a total of around seventy) and *vimpi*, for example, is found as an adjective or an adjectival substantive in numerous cases, including in the phrase AVE VIMPI found on moulded brooches (*RIB* II.3, 2421.41 (Colchester) and Feugère and Lambert 2011 (Laon)). For the meaning "pretty" for *vimpi*, see Lejeune 1976, 96–104, which is preferable to the suggestion of Whatmough 1949 of an imperative "spin" (the moulded brooches now further undermine his case).

[49] For details, see Dickey 2002, 77–109.

though it is also, more rarely, used with sexual reference.[50] Number 21, found in 1913 in the tomb of a woman alongside four ceramic vessels, might be most eloquent for the question of agency: GENETTA IMI / DAGA VIMPI. This can be analysed as "girl, I am/my, good, pretty", meaning either "I am a good, pretty girl" or "my good, pretty girl". The uncertainty in the translation lies in the word IM(M)I in Gaulish, which may be either a verb or a possessive adjective.[51] Since IMMI occurs on a bowl from Les Pennes-Mirabeau (Bouches-du-Rhône) (*RIG* I G-13) where it probably means "I am", it seems on balance the more likely interpretation for the whorl, the suggestion of a possessive adjective perhaps being motivated by the assumption that these must be texts by men.

As with many of the other texts, either reading of number 21 can be endowed (or not) with amatory content, depending on the preconceptions we bring to our interpretations. These erotic/amatory readings, however, need not erase female agency or female involvement in the creation of the whorls: indeed, when combined with a focus on aspects of the materiality and phenomenology of these objects, this sort of female-centred reading has the potential to undermine our normative models of the interplay between spinning and femininity. Those models have been shaped by the literary topos of the Roman matron sitting dutifully at her loom, and archaeologists have argued that chastity and moral standards are symbolised by spinning tools being used in the *deductio* ceremony from the early Roman period (part of the marriage ritual) and their appearance on tombstones (especially common in the eastern empire) and in burials.[52] Spindle whorls, however, also exhibit a close connection to the female body. They were in close bodily contact with the spinner, who may have rolled the whorl down the thigh to begin the spinning process.[53] This action may, but need not, support the interpretation of at least some of these textual messages as erotic.[54] Commentators have also identified the action of inserting the

[50] See Dickey 2002, 125–6. Dondin-Payre 2005, 138 notes that it could also be the object addressing the spinner or other parts of the spinning equipment.

[51] For the term IM(M)I, see Lejeune 1976, 96–104.

[52] See, for example, Cottica 2007 and Larsson Lovén 2007. Neither of these authors mentions the inscribed spindle whorls, which seem strangely absent from the non-linguistic/epigraphic scholarship. For *deductio*, see Torelli 1984.

[53] The attractive little whorls may also have been hung around the neck when not in use. Indeed number 14 was initially thought to be an amulet (*RIG* II.2 p. 321). All commentators have assumed that they were used in spinning, rather than being made as replicas. Of the inscribed whorls for which I could find information, six are between 10–12 g, two are *c.* 21 g and one is very light, at just 6 g. These are towards the lighter end of Roman spindle whorl weights and would probably have been used to spin fine yarn. We cannot exclude the possibility that these were not used at all but were replicas, trinkets, or similar. Example 11 from Autun (but with no further contextual information) is interesting in this regard as it has not been pierced and is of hemispherical form. Whether it was intended to be a spindle whorl but had not yet had its centre bored through is unclear. Dice and games counters are also made in schist from Autun (Rebourg 1996).

[54] The link between the act of weaving and physical union is discussed by Scheid and Svenbro 1994.

material into the whorl as being symbolic of sexual relations.[55] Further support for the erotic/amatory interpretation derives from the links between these and similar texts on drinking vessels, as Loth remarks: "Vénus fait une redoutable concurrence à Bacchus sur les *vasa potoria* de la Gaule"[56] Indeed several of the whorl texts mention drinking specifically. So the whorls could potentially reflect the female enjoyment of sexuality, drink, and communal work, rather than the values of the ideal *matrona*.

The texts, whatever their precise means of creation or manner of use, add to the evidence for a highly textual Roman world. But a world of texts does not necessarily mean a population of literates, and levels of literacy were never high.[57] Certain occupations did encourage functional literacy, however, as demonstrated in the large pottery workshops such as La Graufesenque and schist carvers may have found writing for account-keeping and for inscribing their objects financially beneficial.[58] The texts also suggest that perhaps some of the end-users could read them or that their acquaintances could, and a passive form of literacy, at different levels of competence, may have been relatively widespread, including amongst women. Who these "end-users" may have been is not clear from the texts, but Dondin-Payre pertinently remarks that just because names in these short texts are single names (linguists read just one or two single names, Dondin-Payre up to 17) does not mean that the women were not citizens,[59] indeed after AD 212 they are perhaps quite likely to have been. She rightly reminds us that the functional nature of the object and the innuendo of some of the messages should not force us to assume participants of lower social status. But she goes even further in arguing that "ceux qui achètent, font graver, reçoivent, ou offrent des fusaïoles inscrites, ne sont pas des indigènes arriérés, incapables d'apprendre un latin correct, non romanisés et non concernés par une promotion civique".[60] Her view that the subtlety of the language points to educated and well-off clients will be reconsidered when we turn to the linguistic resources in play (see below, pp. 55–59).

From other evidence we may know the names, or at least see the faces, of two possible spinners from Autun, whose funerary stelae were found with a group of around 200 uncovered in 2004 in excavations of the cemetery Pont-l'Évêque on the outskirts of Augustodunum. Several of the stelae present what appear to be tools of trade and all have been dated to the first half of the second century AD. One is around 1 m high and presents a woman in a rounded niche taking up the top half of the stone. In her right hand she holds a goblet (common in the iconography of the

[55] Meid 1983, 1043.

[56] Loth 1916, 178, "Venus is a formidable rival of Bacchus on the *vasa potoria* of Gaul". For a categorization of erotic texts on *instrumentum domesticum*, see Thüry 2008.

[57] For recent work on inscribed small finds and literacy, see references in Mullen 2021.

[58] For the La Graufesenque graffiti, see Marichal 1988; Adams 2003, 687–724; Blom 2010–2012; Mullen forthcoming a. For schist carving at Autun, see Rebourg 1996.

[59] Dondin-Payre 2005, 141.

[60] Dondin-Payre 2005, 141, "those who buy, have engraved, receive, or offer inscribed spindle whorls, are not backward locals, unable to learn correct Latin, unromanised and unconcerned by civic advancement".

Fig. 3.4: Image of funerary stele depicting a woman holding a goblet, spindle, and distaff from cemetery Pont-l'Évêque, Autun (Venault et al. *2009, number 22). © Loïc de Cargouët, Inrap (CC BY-NC-ND 4.0).*

stelae from this cemetery) and in her left a spindle and distaff are held to her chest (Fig. 3.4). The stele is briefly presented as number 22 in Venault *et al.* 2009 and the text edited as *[Hila(?)]ricla | D(iis) M(anibus)*, with the name above the head and the abbreviated formula on either side. The stone is cut relatively roughly and the editors state that their suggestion for the name was arrived at "par désespoir".[61] The identification of the spindle and distaff is clear though. The other stele, bigger at 1.5 m, although damaged at the bottom, has the text *D(iis) — Trita — M(anibus)* (number 45), beneath the figure of a woman inside a rectangular niche. This woman carries a jug with a wide rim in her left hand and an object in her right hand, with thumb and index finger extended, which has been interpreted as "without a doubt" a distaff.[62] What makes these two stelae, found in the same city that produced the unusual inscribed spindle whorls, particularly interesting, is that spinning representations in funerary contexts are not very common in the western provinces (though they are more so in the east). Whilst it is possible that the imagery might make reference to the *deductio* ritual where the bride would carry a spindle and distaff, it seems more likely, given the presence of professional tools in several of the other reliefs from the same cemetery (*e.g.*, the hammer and tongs of metal working (number 5)), that these can be related to the occupation of the women depicted. Unfortunately the textual information on the stelae is not especially illuminating – arguably the single name may suggest peregrine status (unlike on the whorls, there is clearly space for further names), but it is hard to say more. The name in the first has not been transmitted with any certainty. The name of the second may well be Celtic. In the presentation of the stelae the editors note that Kajanto argues that *Tritus -a* is an Illyrian name but that this evidence indicates that, though rare, it is in fact a Latin name from the past

[61] Venault *et al.* 2009, 155, "out of desperation".
[62] Venault *et al.* 2009, 167.

participle of Latin *tero*.[63] It is more likely that this is simply the commonly attested Celtic personal name meaning "third" (equivalent to Latin *Tertia*).[64] The clothing depicted in both reliefs matches local styles, the wide sleeved robe in number 45 being similar to that in the set found in the archaeological assemblage from a second-century AD burial at Les Martres-de-Veyre.[65] The combination of evidence perhaps makes it likely that this woman may have had a local (possibly, but not necessarily, Celtic-speaking) background. Sadly, though it is an enticing link to make, we have no idea whether these women had anything to do with people involved with the inscribed whorls from Autun. But nevertheless the stelae show us the faces, just as the whorls may offer us some words, of those ubiquitous spinning women who are not usually seen or heard.

Translingualism: flexibility of linguistic resources

The language used on the whorls may help us to think further about the composers of the texts and their relationships with the linguistic context in which they were writing. The issue of the heterogeneity of the linguistic composition of the texts on whorls has attracted interest from scholars exploring bilingualism in the Roman world. Implicitly following the conception of the linguistic repertoire being split into bounded entities called "languages", commentators have spent time analysing the texts in terms of whether they contain what is called "Latin" and "Gaulish". Particularly intriguing have been the texts that do not fit neatly into either category, but instead show elements of both.

Take, for example, numbers 8 and 13 (Fig. 3.5):

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* in number 9 and as *gnatha* in 20, 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".[66] This would be a clever choice of appellation if one wanted to communicate simultaneously to both Latin and Gaulish speakers. *vimpi,* here used in the vocative, means "pretty" in Gaulish, and is commonly attested in these spindle whorls and on other *instrumentum* such as brooches.[67] The origin of the word is unclear but it is likely to be related to Welsh *gwymp.* Since it appears in

[63] Venault *et al.* 2009, 167, citing Kajanto 1965, 356–7.
[64] For examples see Delamarre 2007, 185.
[65] See van Driel-Murray 1999.
[66] Adams 2007, 303.
[67] For *vimpi*, see n. 57 and Meid 1983, 1032–3; *RIG* II.2 pp. 321–2.

Fig. 3.5: Replicas of spindle whorls numbers 6, 8, 13, made for LatinNow by Potted History. Photo: Pieter Houten, LatinNow.

repeated phrases such as AVE VIMPI it might also have been current in a regional form of Latin (which we might loosely term "Gallic Latin"), and hence may also 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"),[68] but it is likely to have been borrowed into the Latin of the area. The drink was a staple of western provincial life and was produced locally and of pre-Roman heritage.[69] Terms for it seem to have been borrowed from local languages into regional varieties of Latin.[70] *da* is the imperative of the verb "to give" and, thanks to shared Indo-European origins, exists in both Latin and Gaulish.[71] 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", and here perhaps having sexual reference,[72] 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").[73] 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

[68] For Curmisagios, see Delamarre 2007, 80.
[69] For alcoholic drinks in Gaul, see Laubenheimer 2015.
[70] On *cervesa* as "wheat beer" and *curmi* as "barley beer", see Nelson 2003. *Cervesa* is attested *c*. AD 100 at Vindolanda (*Tab. Vindol.* 628): *cervesam commilitones non habunt quam rogó iubeas mitti* "my fellow-soldiers have no beer: please order some to be sent", and in a number of provincial inscriptions, including one on a third–fifth-century AD ceramic cup from Vannes (Morbihan): [...] BIBIS C[ER]VESA GRATIS "you drink beer for free" (Simon 2001, 29) and another on a large, fourth-century AD vessel from Mainz (Germany): IMPLE OSPITA OLA DE CERVESA DA "Hostess, fill the vessel with good beer (?)" (*Année épigraphique* 1992, no. 1287). Marcellus of Bordeaux mentions *curmi* and *cervesa* as ingredients to put into a cough mixture: *in potionem cervesae aut curmi mittat* (XVI 33).
[71] *RIG* II.2 p. 323. Meid 1983, 1034 urges caution on the assignment of Latin/Celtic labels to this form, but then opts in preference for Latin.
[72] I have not, however, found the phrase *vim potare* with sexual reference elsewhere and it does not occur in Adams 1982.
[73] See *RIG* II.2 p. 334 for these options.

likely interpretation, "drink wine", would take the first half as Latin/Gaulish/both and the second as Latin.

The inscribed whorls were described by Meid as being in a mixed jargon,[74] a "typisches Kompromißprodukt"[75], which made communication easier in a bilingual environment. Adams, in his ground-breaking work *Bilingualism and the Latin language*,[76] rejected this description, stating that "[t]here are certainly no grounds for setting up a mixed language, neither fully Latin nor fully Gaulish, which might have become established at a transitional stage in the process of Romanisation".[77] Instead he interpreted these short texts as showing "code-switching", the switch from one language to another within or between sentences. He surmises that "[a]t a time of advanced Romanisation, when Gaulish was fading from use, code-switching into Gaulish or the use of simple Gaulish phrases might have offered a sort of language of intimacy, a language which has become fossilised in semi-public form in the banter of the spindle whorls".[78]

Code-switching has been a popular topic amongst classicists in recent years and has led to insights into the use of languages, cultural interactions, and identities in the Roman world.[79] Used beyond the narrowly linguistic, code-switching is a way to approach identities that does not assume one or the other identity (for example Roman or indigenous) or even hybridity. Wallace-Hadrill supported bilingualism, and specifically code-switching, as a model for understanding cultural interaction in the Roman world because in his view an individual did not need to be Greek or Roman or native, nor a fusion, but could be all three at the same time.[80] Other models, including even hybridization, assume a replacement of old identities with new, whereas the model of bi/multilingualism "points the way to other possibilities: of populations that can sustain simultaneously diverse culture-systems, in full awareness of their difference, and code-switch between them".[81] Code-switching reflects "the power of multiple identities" and "their strategic deployment in diverse contexts".[82]

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[74] Meid 1983, 1030.

[75] Meid 1983, 1034.

[76] Studying Classics has always entailed an appreciation of bilingualism and biculturalism, of course, but it is only in the last two decades that full engagement with modern bi- and multilingualism theory and practice has begun, following pioneering work by Adams. For studies using evidence other than the literary see, for example, Adams *et al.* 2002; Adams 2003; Biville *et al.* 2008; Cotton *et al.* 2009; Mullen and James 2012; Mullen 2013a.

[77] Adams 2003, 197.

[78] Adams 2003, 197. The perceived linguistic context – a decline of Gaulish – seems to have motivated the late dating by linguists. This context, however, is not necessarily indicated by the linguistic content. Texts in more than one language do not *necessarily* reflect a lack of competence and a decline in the vitality of languages.

[79] See Elder and Mullen 2019 for a detailed study of code-switching in Roman letters and its value for understanding individuals, politics, culture, and society and for extensive references to earlier secondary literature.

[80] Wallace-Hadrill 2008, 3–7.

[81] Wallace-Hadrill 2008, 27–8.

[82] Wallace-Hadrill 2008, 85.

One issue with the code-switching analysis, however, is that it generally assumes the interplay of bounded linguistic entities which we call "languages" and a link from these to specific identities.[83] Discussions of code-switching tend to have reductive tendencies: the switch is between different cultural identities encoded through language, Latin for Roman and other, Gaulish, in this case, for local/indigenous. Both concepts – identities and languages – are not always so straightforward to capture. Identities are complex, fluid, and overlapping: in short, hard to identify. In a period before nation states and without systematic, universal education, evidence on the ground amongst the provincial population sometimes suggests that language was not carved up into linguistic entities in the way that we, or some high-status Romans, were trained to recognize, and that speech was a more flexible linguistic resource for its users than we sometimes assume armed with our Indo-European lexica and grammars of Latin. Some of these texts on whorls seem to resist code-switching analysis: they can be simultaneously read in either, or both, languages, rather than alternately one language then the other. Rather than trying to force the bilingual texts into a code-switching scheme we might instead appreciate the flexibility of linguistic resources at play.

In other linguistic terms these texts show "bilingual homonymy" and examples of "lexical ambiguity". Some modern linguists explore the cognitive processes that underlie lexical ambiguity resolution/lexical disambiguation and might see the "ambiguous" words in our texts almost as a problem to be resolved. Instead, these might be skilful ways to address various linguistic competences. Here language cannot be attached to one language at all: the polysemy is deliberate. 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, providing windows into culture and identities that sometimes overlap, sometimes merge, and sometimes stay distinct. We could argue that the output may be a way of showing awareness of, and ability to negotiate, multiple identities, but this may be an overly academic commentary: the output may be playful.

This flexibility of linguistic practices is seen in multilingual contexts across time and space: it does not necessarily involve creating stable mixed languages or switching between two separate languages as in the well-documented process of code-switching, but encompasses a wider range of subtle and fluid, sometimes ephemeral, linguistic practices. The multilingual skills on display in the spindle whorls are by no means necessarily the preserve of the highly educated and well-to-do. Indeed, the very well trained might arguably be less likely to accept "non-normative" language in writing. Modern sociolinguists might employ the term *translingualism* to describe this multilingual linguistic fluidity. This term will serve as a useful addition to our conceptual toolkit when dealing with multilingual inscriptions such as those on the whorls which do not neatly fit into our existing terminologies and helpfully reminds

[83] For issues with using the model of bilingualism for cultural contacts more broadly, see Mullen 2013b.

us that the languages carved up, described, and labelled by linguists may not map onto the linguistic experiences of those that use them.

Translingualism (linked to the field of *translanguaging*, rather than to the earlier *literary translingualism*)[84] refers to the notion of "going-beyond" Languages (with a capital L), namely "the deployment of a speaker's full linguistic repertoire without regard for watchful adherence to the socially and politically defined boundaries of named (and usually national and state) languages".[85] Whilst many support the social justice focus of the advocates of translanguaging, there have been criticisms.[86] Most relevant for us, it seems that in the concerted attempt to move entirely away from "Language", some scholars have effectively denied the existence of languages altogether. But this is an untenable stance: clearly Languages *do* have meaning in some contexts, for example, they have linguistic reality for linguists and as the standard languages of nation states. These perspectives can be relevant when analysing the intricacies of linguistic resources, practice, and interaction. The concept of *translingualism*, used to refer to the complexities of linguistic realities in bi- and multilingual situations (both the outputs and the mindsets), but not pushed so far that "Languages" no longer exist, is relevant for some modern multilingual environments and for thinking about how some individuals and communities in the Roman provinces used, and may have viewed, their language.[87]

A new spin on old material

> The implements of the industry may be lost forever, like the "songs of the weaving women" that lilted through the streets of a late ancient city, but it is the historian's task to sense the vanished artefact and to hear the "rhythms" of those whose labor was taken in the endless cycles of the spindle and loom.[88]

Thus an historian of slavery encourages us to reanimate the long silent spinning women of the Roman world. Strangely the words on the inscribed whorls from Autun have been absent from the work of those who have otherwise done so much to shine a light into the often-overlooked work of millions of women across the Roman world. The texts have been known for over a century and the corpus now totals two

[84] For *literary translingualism* and the Graeco-Roman world, see Bozia and Mullen 2021.
[85] Otheguy *et al.* 2015, 281. The main drivers behind this concept have been pedagogical, with adherents arguing that monolingual teaching environments that do not appreciate the complexity of linguistic resources of bilingual children are poor contexts for their learning.
[86] Note, for example the lively exchange, between MacSwan 2017 and Otheguy *et al.* 2019. One key criticism has been that it is not all as new as they would have us believe: the notion that users of more than one language do not necessarily view their linguistic resources as the bounded entities that linguists describe and that psycholinguistically they are not two (or more) monolinguals in one person are arguments that pre-date the recent interest in translanguaging (*e.g.*, Grosjean 1989).
[87] See further, Mullen forthcoming b.
[88] Harper 2011, 135.

dozen. They have intrigued epigraphers and particularly those linguists interested in investigating Gaulish and bilingualism in Gaul. But the disciplinary boundaries that, despite the rhetoric, are still strong, have prevented their incorporation into the extensive scholarship on ancient textiles and the societies and individuals involved with them. This chapter has brought the inscriptions and their contexts closer together and has presented a new spin which must be considered in discussions of the topos of the virtuous woolworker.

An archaeological and sociolinguistic lens has enabled us to be explicit about the limits of our knowledge and the role our assumptions play in constructing our interpretations. Our ability to reconstruct ancient social realities is restricted and texts have meanings that are not "set in stone". Nevertheless, we have exploited the epigraphic remains to the fullest by deploying an interdisciplinary epigraphy, combining archaeological and sociolinguistic perspectives, and bringing in evidence not previously considered with these materials, for example, the stelae from Autun. This has led to new commentary on the dates, social backgrounds of the spinners, and possible contexts for the creation of the whorls. Reconstructions of possible realities have been offered through a phenomenological approach based on clues from the material itself.

Another significant step, which will be relevant for other textual materials from the ancient world, is the introduction of the term *translingualism* as a way to describe the fluidity of multilingual resources deployed in the texts from Autun, and the possible linguistic perspectives of their users. Our existing terminology of bilingualism is not sufficient to cope with these enigmatic offerings. The argument is not that code-switching was not a feature of bilingual communities and individuals in the ancient world – it clearly was[89] – but that we should not attempt to force these multilingual texts to fit into a code-switching analysis. Language itself is a social construct (with "Language-focused" meaning for many, but not necessarily *all* users) and identities may not be easily directly identified with languages. The particular ethno-national linguistic perspective of modern nation states, which sees languages as reified and linked directly to territories and ethnic/national identities, should not be automatically assumed for the whorl carvers and spinners of Autun.

Bibliography

Adams, James N. 1982. *The Latin Sexual Vocabulary*. London: Duckworth.

Adams, James N. 2003. *Bilingualism and the Latin Language*. Cambridge: Cambridge University Press.

Adams, James N. 2007. *The Regional Diversification of Latin 200 BC – AD 600*. Cambridge: Cambridge University Press.

Adams, James N., Mark Janse, and Simon Swain. 2002. *Bilingualism in Ancient Society. Language Contact and the Written Text*. Oxford: Oxford University Press.

[89] See Adams 2003; Elder and Mullen 2019.

Allason-Jones, Lindsay. 1995. "'Sexing' Small Finds." In *Theoretical Roman Archaeology: Second Conference Proceedings*, edited by Peter Rush, 22–32. Aldershot: Avebury.

Allen, Martyn, Lisa Lodwick, Tom Brindle, Michael Fulford, and Alexander T. Smith. 2017. *New Visions of the Countryside of Roman Britain: Volume 2: The Rural Economy of Roman Britain*. London: Society for the Promotion of Roman Studies.

Bagnasco Gianna, Giovanna. 1999. "L'acquisizione della scrittura in Etruria: materiali a confront per la ricostruzione del quadro storico e culturale." In *Scritture Mediterranee tra il IX e il VII secolo a. C.*, edited by Giovanna Bagnasco Gianna and Federica Cordano, 80–105. Milan: Ed. ET.

Barthèlemy, A. 1976. "Découvertes archéologiques sur le chantier du nouvel hôpital à Flacé." *Annales de l'Académie de Mâcon* 53: 1–14.

Beltrán Lloris, Francisco and Miguel Beltrán Lloris. 2012. "*Ama lateres!* Sobre una pesa de telar relativa al lanificium." *Sylloge Epigraphica Barcinonensis (SEBarc)* 10: 127–48.

Beltrán Lloris, Francisco, Carlos Jordán Cólera, and Ignacio Simón Cornago. 2021. "The Inscriptions on Pottery of Hispania Citerior (2nd-1st Century BCE): A Case Study of the Inscriptions on Spindle Whorls." In *Epigraphy on Ceramics. The Instrumentum Domesticum, Its Textual Genres and Its Functions in Ancient Societies*, edited by Wim Broekaert, A. Delattre, Emmanuel Dupraz, and María José Estarán Tolosa, 139–161. Geneva: Droz.

Binet, Éric and Monique Dondin-Payre. 2002. "La première fusaïole inscrite trouvée à Amiens." *Revue Du Nord* 84: 133–7.

Biville, Frédérique, Jean-Claude Decourt, and Georges Rougemont, eds. 2008. *Bilinguisme gréco-latin et épigraphie*. Lyon: Maison de l'Orient méditerranéen.

Blom, Alderik H. 2010–2012. "Language at La Graufesenque: The Evidence of the Potters' Graffiti." *Keltische Forschungen* 5: 13–53.

Bodel, John. 2001. "Epigraphy and the Ancient Historian." In *Epigraphic Evidence: Ancient History from Inscriptions*, edited by John Bodel, 1–56. London: Taylor and Francis.

Bowman, Alan K., and Michael Brady, eds. 2005. *Images and Artefacts of the Ancient World*. Oxford, New York: Oxford University Press.

Bozia, Eleni and Alex Mullen. 2021. "Literary Translingualism in the Greek and Roman Worlds." In *The Routledge Handbook of Literary Translingualism*, edited by Steven G. Kellman and Natasha Lvovich, 45–59. New York, Abingdon: Routledge.

Castro Curel, Zaida. 1980. "Fusayolas Ibéricas, antecedentes y empleo." *Cypsela* 3: 127–46.

Chardron-Picault, Pascale and Monique Dondin-Payre. 2000 [2002]. "Une nouvelle fusaïole inscrite à Autun." *Antiquités Nationales* 32: 209–17.

Clackson, James. 2015. *Language and Society in the Greek and Roman Worlds*. Cambridge: Cambridge University Press.

Costin, C. L. 2013. "Gender and Textile Production in Prehistory." In *A Companion to Gender Prehistory*, edited by Diane Bolger, 206–27. London, Wiley-Blackwell.

Cottica, Daniela. 2007. "Spinning in the Roman World: From Everyday Craft to Metaphor of Destiny." In *Ancient Textiles: Production, Crafts and Society*, edited by Carole Gillis and Marie-Louise Nosch, 220–8. Oxford: Oxbow Books.

Cotton, Hannah M., Robert G. Hoyland, Jonathan J. Price, and David J. Wasserstein. 2009. *From Hellenism to Islam. Cultural and Linguistic Change in the Roman Near East*. Cambridge: Cambridge University Press.

d'Encarnação, José. 1984. *Inscrições Romanas do Conventus Pacensis*. Coimbra: Coimbra Inst. de arqueologia.

Delamarre, Xavier. 2007. *Noms de personnes celtiques dans l'épigraphie classique*. Paris: Errance.

Desforges, A. 1924. "Fusaïole à inscription gauloise." *Bulletin de La Société Préhistorique de France* 21: 260–1.

Dondin-Payre, Monique. 2001. "L'onomastique dans les cités de Gaule Centrale (Bituriges Cubes, Eduens, Senons, Carnutes, Turons, Parisii)." In *Noms, identités culturelles et Romanisation sous le Haut-Empire*, edited by Monique Dondin-Payre and Maria-Theresa Raepsaet-Charlier, 193–341. Brussels: Le livre Timperman.

Dondin-Payre, Monique. 2004. "Les pesons de fuseaux inscrits en Gaule Romaine." *Bulletin de la Société Nationale des Antiquaires de France* 2000: 198–205.

Dondin-Payre, Monique. 2005. "Épigraphie et acculturation: l'apport des fusaïoles écrites." In *Le monde Romain à travers l'épigraphie : méthodes et pratiques*, edited by Janine Desmulliez and Christine Hoët-Van Cauwenberghe, 133–46. Lille: Université Charles-de-Gaulle – Lille III.

Dondin-Payre, Monique. 2006. "Du nouveau dans un dossier original: la fusaïole inscrite de Mâcon (Saône et Loire) et la fusaïole inscrite de Nyon (Confédération Helvétique)." *L'antiquité Classique* 75: 143–54.

Elder, Olivia and Alex Mullen. 2019. *The Language of Roman Letters: Bilingual Epistolography from Cicero to Fronto*. Cambridge: Cambridge University Press.

Eska, Joseph. 1998. "Tau Gallicum." *Studia Celtica* 32: 115–27.

Ferrer i Jané, Joan. 2008. "Ibèric Kastaun : un element característic del lèxic sobre torteres." *Cypsela* 17: 253–71.

Ferrer i Jané, Joan, Javier Velaza, and Noemí Moncunill. 2020. "Une nouvelle inscription rupestre latine d'Err (Pyrénées-Orientales)." *Latomus* 79: 78–88.

Feugère, Michel and Pierre-Yves Lambert. 2011. "Une belle gauloise... A propos d'une fibule inscrite de Laon." *Etudes Celtiques* 37: 147–52.

Gevirtz, S. 1967. "A spindle Whorl with Phoenician Inscription." *Journal of Near Eastern Studies* 26: 13–16.

Giles, Howard, Richard Bourhis, and D. Taylor. 1977. "Towards a Theory of Language in Ethnic Group Relations." In *Language, Ethnicity and Intergroup Relations*, edited by Howard Giles, 307–48. London, New York: Academic Press.

Grosjean, F. 1989. "Neurolinguists, Beware! The Bilingual Is Not Two Monolinguals in One Person." *Brain and Language* 36: 3–15.

Habicht, Christian. 1984. "Pausanias and the Evidence of Inscriptions." *Classical Antiquity* 3.1: 40–56.

Hamilton, Sue and Ruth Whitehouse. 2006. "Phenomenology in Practice: Towards a Methodology for a 'subjective' Approach." *European Journal of Archaeology* 9.1: 31–71.

Harlow, Mary. Forthcoming. "Spinning – the Invisible Profession." In *The Value of Making: Theory and Practice in Ancient Craft Production*, edited by H. Hochscheid and B. Russell. Turnhout: Brepols.

Harper, Kyle. 2011. *Slavery in the Late Roman World, AD 275–425*. Cambridge, New York: Cambridge University Press.

Héron de Villefosse, H. 1914. "Un peson de fuseau portant une inscription latine incisée, trouvé à Sens." *Bulletin Archéologique du Comité des Travaux Historiques et Scientifiques*, 213–30.

Higbie, Carolyn. 1999. "Craterus and the Use of Inscriptions in Ancient Scholarship." *Transactions of the American Philological Association* 129: 43–83.

Hoskin, Philippa and Elizabeth New. 2017. "Imprint: A Forensic and Historical Investigation of Fingerprints on Medieval Seals." *Medieval Prosopography* 32: 249–52.

Kajanto, Iiro. 1965. *The Latin Cognomina*. Helsinki: Societas scientiarum Fennica.

Lambert, Pierre-Yves. 2018. *La langue gauloise*. 3rd ed. Paris: Errance.

Larsson Lovén, Lena. 2007. "Wool Work as a Gender Symbol in Ancient Rome. Roman Textiles and Ancient Sources." In *Ancient Textiles: Production, Crafts and Society*, edited by Carole Gillis and Marie-Louis Nosch, 229–36. Oxford: Oxbow Books.

Larsson Lovén, Lena. 2013. "Female Work and Identity in Roman Textile Production and Trade: A Methodological Discussion." In *Making Textiles in Pre-Roman and Roman Times. People, Places Identities*, edited by Margarita Gleba and Judit Pásztókai-Szeőke, 109–25. Oxford: Oxbow Books.

Laubenheimer, Fanette. 2015. *Boire En Gaule*. Paris: CNRS.
Lejeune, Michel. 1976–1978. "Notes d'étymologie gauloise." *Études Celtiques* 15: 95–104.
Levenson, Jon D. 1973. "The Spindle Whorl from Chatal Hüyük: A Forgery." *Bulletin of the American Schools of Oriental Research* 209: 37–40.
Loth, Joseph. 1916. "Remarques aux inscriptions latines sur pesons de fuseau trouvés en territoire gaulois et, en particulier, à l'inscription celtique de Saint-Révérien (Nièvre)." *Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres*, 168–86.
MacSwan, Jeff. 2017. "A Multilingual Perspective on Translanguaging." *American Educational Research Journal* 54, no. 1: 167–201.
Maggetti, Marino, Albert Jornet, Monique Dondin-Payre, and Véronique Rey-Vodoz. 2009. "La fusaïole Gallo-Romaine inscrite de Nyon: provenance et technique." *Annuaire d'Archéologie Suisse* 92: 252–5.
Marichal, Robert. 1988. *Les graffites de La Graufesenque*. Paris: CNRS.
Meid, Wolfgang. 1983. "Gallisch oder Lateinisch? Soziolinguistische und andere Bemerkungen zu populären Gallo-Lateinischen Inschriften." *Aufstieg und Niedergang der römischen Welt* II.29.2: 1019–44.
Millar, Fergus. 1968. "Local Cultures in the Roman Empire: Libyan, Punic and Latin in Roman Africa." *Journal of Roman Studies* 58: 126–34.
Morlock, Emmanuelle and Eleanor Santin. 2014. "The Inscription between Text and Object: The Deconstruction of a Multifaceted Notion with a View of a Flexible Digital Representation." In *First EAGLE International Conference on Information Technologies for Epigraphy and Cultural Heritage, The Europeana Network of Ancient Greek and Latin Epigraphy*, edited by Silvia Orlandi, Raffaella Santucci, Vittore Casarosa, and Pietro Maria Liuzzo, 325–50. Rome: Sapienza università editrice.
Mullen, Alex. 2012. "Introduction. Multiple Languages, Multiple Identities." In *Multilingualism in the Graeco-Roman Worlds*, edited by Alex Mullen and Patrick James, 1–35. Cambridge: Cambridge University Press.
Mullen, Alex. 2013a. *Southern Gaul and the Mediterranean. Multilingualism and Multiple Identities in the Iron Age and Roman Periods*. Cambridge: Cambridge University Press.
Mullen, Alex. 2013b. "The Bilingualism of Material Culture? Thoughts from a Linguistic Perspective." *HEROM* 2: 21–43.
Mullen, Alex. 2016. "Sociolinguistics." In *The Oxford Handbook to Roman Britain*, edited by Martin Millett, Louise Revell, and Alison Moore, 573–98. Oxford: Oxford University Press.
Mullen, Alex. 2021. "Socio-Literacy: An Interdisciplinary Approach to Understanding Literacy in the Roman North-West." In *Aprender la escritura, olvidar la escritura: nuevas Perspectivas sobre la historia de la escritura en el Occidente romano*, edited by Noemí Moncunill and Manuel Ramírez-Sánchez, 349–372. Vitoria: Universidad de Pais Vasco.
Mullen, Alex. Forthcoming a. "Transformations de la Gaule sous l'Empire Romain: une culture de l'écrit au service de la production de masse." In *La culture de l'écrit en Méditerranée occidentale à travers les pratiques épigraphiques (Gaule, Ibérie, Afrique du Nord)*, edited by Michèle Coltelloni-Trannoy and Noemí Moncunill, 131–62. Leuven: Peeters.
Mullen, Alex. Forthcoming b. "Language shift, attitudes and practices in the Roman West." In *Multilingual Practices Through the Ages: From Antiquity to the Present Day*, edited by Aneta Pavlenko, Pia Lane and Alexandre Dûchene. Cambridge: Cambridge University Press.
Mullen, Alex and Coline Ruiz Darasse. 2018. *Gaulish. Language, Writing, Epigraphy*. Zaragoza: Universidad de Zaragoza.
Mullen, Alex and Coline Ruiz Darasse. 2020. "Gaulish." *Palaeohispanica* 20: 749–83.
Mullen, Alex and Patrick James. 2012. *Multilingualism in the Graeco-Roman Worlds*. Cambridge: Cambridge University Press.
Nelson, Max. 2003. "On a Beautiful Girl and Some Good Barley Beer." *Etudes Celtiques* 35: 257–9.

Otheguy, Ricardo, Ofelia García, and Wallis Reid. 2015. "Clarifying Translanguaging and Deconstructing Named Languages: A Perspective from Linguistics." *Applied Linguistics Review* 6, no. 3: 281–307.

Otheguy, Ricardo, Ofelia García, and Wallis Reid. 2019. "A Translanguaging View of the Linguistic System of Bilinguals." *Applied Linguistics Review* 10, no. 4: 625–51.

Pavlenko, Aneta and Alex Mullen. 2015. "Why Diachronicity Matters in the Study of Linguistic Landscapes." *Linguistic Landscapes* 1: 114–132.

Piquette, Kathryn E. and Ruth D. Whitehouse, eds. 2013. *Writing as Material Practice: Substance, Surface and Medium*. London: Ubiquity Press.

Rafel Fontanals, Núria. 2007. "El textil como indicador de género en el registro funerario Ibérico." *Treballs d'Arqueologia* 13: 113–44.

Rebourg, Alain. 1996. *L'oeuvre au noir: l'emploi du schiste à* Augustodunum. Autun: Musée Rolin.

Sauvage, Caroline and Robert Hawley. 2013. "Une fusaïole inscrite en ougaritique au Musée d'Archéologie Nationale de Saint-Germain-En-Laye." In *Études Ougaritiques III*, edited by Valérie Matoïan and Michel Al-Maqdissi, 365–94. Leuven/Paris/Walpole MA: Peeters.

Scheid, John and Jesper Svenbro. 1994. *Le métier de Zeus: mythe du tissage et du tissu dans le monde Gréco-Romain*. Paris: La Découverte.

Simon, Laure. 2001. *Vannes: Le sanctuaire gallo-Romain de Bilaire. Volume 2: les mobiliers.* DRAC Service Regional de l'Archéologie de Bretagne.

Terras, Melissa. 2006. *Image to Interpretation: An Intelligent System to Aid Historians in Reading the Vindolanda Texts*. Oxford: Oxford University Press.

Thüry, Günther E. 2008. "Die erotischen Inschriften des *instrumentum domesticum*: ein Überblick." In *Instrumenta Inscripta Latina. 2, Akten des 2. Internationalen Kolloquiums, Klagenfurt, 5.–8. Mai 2005*, edited by Manfred Hainzmann and Reinhold Wedenig, 295–304. Klagenfurt: Verlag des Geschichtsverein für Kärnten.

Tilley, Christopher. 1994. *A Phenomenology of Landscape. Places, Paths and Monuments*. Oxford: Berg.

Torelli, Mario. 1984. *Lavinio e Roma: riti iniziatici e matrimonio tra archeologia e storia*. Rome: Quasar.

Tsori, N. 1959. "A Spindle Whorl with Hebrew Inscription." *Israel Exploration Journal* 9, no. 3: 191–2.

Van Driel-Murray, Carol. 1999. "A Set of Roman Clothing from Les Martres-de-Veyre, France." *Archaeological Textiles Newsletter* 28: 11–15.

Venault, Stéphane, Simone Deyts, Yann Le Bohec, and Yannick Labaune. 2009. "Les stèles funéraires de La nécropole de Pont-l'Évêque. Contextes de découverte et étude du corpus." *Bulletin Archéologique* 35: 129–204.

Wallace-Hadrill, Andrew. 2008. *Rome's Cultural Revolution*. Cambridge: Cambridge University Press.

Whatmough, J. 1949. "GAULISH *uimpi*." *Language* 25, no. 4: 388–91.

Wild, John Peter. 1970. *Textile Manufacture in the Northern Roman Provinces*. Cambridge: Cambridge University Press.

Wild, John Peter. 2002. "The Textile Industries of Roman Britain." *Britannia* 33: 1–42.

Wild, John Peter. 2003. "The Romans in the West, 600 BC–AD 400." In *The Cambridge History of Western Textiles*, edited by David T. Jenkins, Vol. 1, 77–93. Cambridge: Cambridge University Press.