Ornella Salati

New Evidence on Latin Military Pay-Records: *P.Harr*. inv. 183e *recto*

aus: Zeitschrift für Papyrologie und Epigraphik 203 (2017) 263–271

© Dr. Rudolf Habelt GmbH, Bonn

New Evidence on Latin Military Pay-Records: P.Harr. inv. 183e recto*

I. Introduction

The question of how much Rome paid for its legionaries and auxiliaries is one of the most extensively studied topics in military historiography, and deservedly so¹. Army pay from Caesar to Diocletian is, indeed, a relevant issue connected not just to military matters, but also to the political, economic, and social history of Rome in a broader sense. With this wider purpose both literary and documentary evidence has been used by historians to establish the pay rates and to reconstruct the relationship between the salary of the legionaries and that of the auxiliaries². In particular, it seems not inappropriate to say that Egyptian papyri are the main source of information for us, as, together with economic data, *i.e.* payments and prices, they provide details on equipment and supplies as well³. Moreover, the papyrological evidence bears witness to the daily work of military clerks and concretely shows the practice of writing such documents⁴. Comparison with evidence coming from elsewhere, in particular from Palestine (Masada)⁵, proves that these registers followed similar patterns. In this respect, Robert O. Fink rightly regrets the great loss among military papyri⁶.

Now, the text which forms the subject of this paper, and published here for the first time, can be added to the list of extant pay-records. Its nature is made evident both by format and content, which are discussed in detail in sections II and IV. Several examples attesting to rates of pay are known from Roman provinces: *T.Vindon.* XII 2 (AD 38), *P.Masada* 722 (AD 72), *P.Gen.* inv. Lat. 1 recto I (= Rom.Mil.Rec. 68 = ChLA I 7a; AD 81 or 83), *P.Gen.* inv. Lat. 4 (= Rom.Mil.Rec. 69 = ChLA I 9; late I AD), *T.Vindol.* II 200 (AD 97–102/3), *T.Vindol.* II 180 (AD 104–20), *P.Princ.* III 143 (= ChLA IX 402; early II AD), *P.Berol.* inv. 6866 A–B + *P.Aberd.* 133 + *P.Reinach* inv. 2222 (= Rom.Mil.Rec. 70 = ChLA X 410 + IV 228 + XVIII 663; AD 193–6), *P.Vindob.* inv. L 72+82 verso (= Rom.Mil.Rec. 71 = ChLA XLIV 1298; II AD), *P.Ryl.* II 273a (= Rom.Mil.Rec. 72 = ChLA IV 243; II AD), *P.Hamb.* inv. Gr. 310 (= ChLA XI 495; AD 193–211), *P.Princ.* inv. 7743c (= SB XX 14386 = ChLA IX 404; AD 276–82), *P.Berol.* inv. 14100 recto (= ChLA X 446; III AD), perhaps *P.Lond.* inv. 1774 (= ChLA III 212; III AD)⁷. Among these documents, *P.Harr.* inv. 183e recto closely

^{*} The research leading to these results has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (Grant agreement no 636983); ERC-PLATINUM project, University of Naples 'Federico II'.

¹ The literature on the topic is particularly extensive. See R. Alston, Roman Military Pay from Caesar to Diocletian, *JRS* 84 (1994), 113–23, esp. 113 n. 1–2, with earlier bibliography, to which we can add J. Joachim, Der Sold der römischer Soldaten im 3 Jh. n.Chr.: Bemerkungen zu ChLA 446, 473 und 495, *ZPE* 53 (1983), 217–27.

² An overview of the sources is provided by Alston (n. 1), and M. A. Speidel, Roman Army Pay Scales, *JRS* 82 (1992), 87–106 (= repr. in id., *Heer und Herrschaft im Römischen Reich der Hohen Kaiserzeit* (Mavors 16) (Stuttgart 2009), 349–80). The financial papyrological evidence from Egypt is collected and discussed by S. Daris, *Documenti per la storia dell'esercito romano in Egitto* (Milano 1964), 91–116, and by R. O. Fink, *Roman Military Records on Papyrus* (Philological Monographs of the American Philological Association, 26) (Cleveland 1971), 243–76.

³ However, an inventory of equipment and supplies can be found also in Veg. mil. 2.9–10.

⁴ Overall, for features of the military documentation see G. R. Watson, Documentation in the Roman Army, *ANRW* II 1 (1974), 493–507; S. E. Phang, Military Documents, Languages, and Literacy, in P. Erdkamp (ed.), *A Companion to the Roman Army* (Malden 2007), 286–338; Y. Le Bohec, L'écrit au sein de l'armée romaine, du I^{er} au III^e siècle de notre ère, in Y. Perrin (ed.), *Neronia VIII. Bibliothèques, livres et culture écrite dans l'empire romain de César à Hadrien* (Actes du VIII^e Colloque international de la SIEN, Paris, 2–4 octobre 2008) (Bruxelles 2010), 192–207.

⁵ See *P.Masada* 722, with the remarks of H. M. Cotton and J. Geiger, *Masada II. The Yigael Yadin Excavations* 1963–1965, *Final Reports. The Latin and Greek Documents* (with a contribution of J. D. Thomas) (Jerusalem 1989).

⁶ Fink (n. 2), 242. The scholar calculates that at least 225.000.000 of individual pay records were produced from Augustus to Diocletian.

⁷ This short list just includes Latin evidence. Consequently, Greek documents are omitted, in spite of their importance.See, for instance, the well-known *P.Panop.Beatty* 2, which attests to a series of payments of money by a στρατηγός to several

resembles *P.Gen.* inv. Lat. 1 *recto* I, *P.Gen.* inv. Lat. 4, and *P.Masada* 722, which are also roughly contemporary to it. The layout of the accounting is the same, as well as the graphical arrangement with the mixture of capitals and cursive script. And, as the commentary will show, also some entries, expressed in common formulas, correspond to each other.

II. The document

The fragment belongs to the collection of papyri in the Cadbury Research Library, Birmingham, and was purchased in Egypt in winter 1922–23 by Dr James R. Harris, along with many other items. It is unknown and quite uncertain where it was found. According to the statements of the dealers, most of the other papyri purchased with it came from the Oxyrhynchites nome⁸.

The document, measuring 4.5×10 cm, is written on the *recto*, along the fibres, of a medium-dark papyrus with black ink, slightly vanished in the right portion⁹. Afterwards, it was turned over and re-used for an anonymous Greek lyric work, dated on paleographic grounds between the mid-I and mid-II AD¹⁰. Given its literary nature, only the *verso* was published in 1935 by John Enoch Powell who, however, informed the reader of 'vestiges of two columns of Latin' on the other side, tentatively dating back to the IAD¹¹. Nevertheless, until now the news has not drawn the attention of the scholars.

The fragment preserves just part of the top margin of *ca*. 2.4 cm, while it is broken on the other sides. It is composed of two pieces joined on the basis of the *verso*'s content, and preserves two columns, separated by an irregular *intercolumnium*¹². Both columns are incomplete at the bottom, and the first one appears lacking the first line as well. In addition, this column is very damaged and its left side, in which the entries were listed, is missing and only the figures are partially preserved. Also in the second column no line is complete and only the left portion with the notation of each entry is preserved. Nevertheless, since the two columns provide complementary information, we may make out what the figures represent and, therefore, partially reconstruct the content.

The graphical layout of the papyrus is noteworthy. The scribe uses capital script for the first line, constituting the heading of the document, and old Roman cursive for the text. This mixture is clearly functional to the content and underlines the main elements of the document. The capital letters are large in size and almost squared (see in particular D, N), with the exception of O, that is perfectly circular, and of L, with an almost vertical descender, prominently extended downwards¹³. In the first column, in the word *Nice*, C consists of a single and curved stroke, that descends below the line-writing and meets the shaft of E. Also the ornamental drawn of this letter may be noted: the first horizontal stroke is made up of a fine and diagonal stroke, drawn out in the superior space, while the third horizontal stroke climbs down. Both shapes of the letters find a good parallel in *P.Ryl*. IV 608 (= *ChLA* IV 245), a recommendation letter from Iulius Celer to Terentius Hermeros (mid-I AD)¹⁴.

units in Thebaid. On this document see now the remarks of M. Colombo, *P.Panop. Beatty* 2 e la paga dell'esercito imperiale da Augusto a Diocleziano, *AncSoc* 46 (2016), 241–90.

⁸ See the *Preface* in J. E. Powell, *The Rendel Harris Papyrus of Woodbrooke College* (Cambridge 1936) v–vi. I could not find any other useful information about the provenance of the papyrus in the archive of the Library.

⁹ TM 110834

¹⁰ P.Harr. I 35 (= TM 65564, LDAB 6815, MP³ 1960).

¹¹ Powell (n. 8), 19

¹² The space between col. I 2 and col. II 1 amounts to 0.7 cm. Towards the middle of the second column the line beginnings shift gradually to the right and the maximum space is between col. I 6 and col. II 5, where it measures 2.9 cm.

¹³ This letter-shape recalls that of the so-called 'scrittura a sgraffio'. See also the figure L in col. I 3, that is made up of a single vertical stroke looking more like I. For the main features of the capital script see especially P. Fioretti, Sulla genesi della capitale romana 'rustica', *Segno e Testo* 12 (2014), 29–76, who suggests that this writing originated from the practice of painted writings.

¹⁴ In particular, for C see *cessu* in 1. 8 and for E see the second one in Celer and the first one in Hermeroti in 1. 1, and *est* in 1. 7.

The chiaroscuro is much in evidence, made by a calamus with a wide tip: the thickest pen-strokes are the diagonal left to right descenders, while the finest pen-strokes are the uprights. The horizontal strokes show middle thickness. Overall, this script is notably calligraphic and elegant: ornamental upper and lower serifs lie at the ends of the uprights of I, L, and N.

As far as the cursive script is concerned, the hand appears quite clear and upright. The first letter in each line is larger than the rest to underline the opening of the paragraph; moreover the scribe has a fondness for long ornamental vertical strokes that break the bilinearity downwards. These features are mostly evident in line 2, where the first vertical stroke of A is flamboyantly prolonged under the base-line, and in line 5, in which F consists of a long upright that meets C of the following line¹⁵. For the rest, there is no great variation in size and the height of the letters ranges from 0.2 cm to 0.3 cm. As in the heading, also in the text the extremities of some letters are decorated and little hooks occur mostly at the top and the bottom of vertical strokes (see F in line 5, T in line 7, and L in line 8). An ornamental hook is visible also in line 9, at the left end of the T's horizontal stroke.

Apart from lines 9 and 10, separated by a blank space of 0.6 cm, the average interlinear space amounts to 0.2 cm. The shapes of some letters are particularly useful in dating the papyrus. A, in three strokes, shows the middle bar disconnected and joined to the extremity of the third stroke. A comparable form occurs in other military papyri, such as in *P.Berol*. inv. 14084 (= *ChLA* X 431), official letter from *curator cohortis II Thebaeorum* (ante AD 119), and in *P.Heid*. inv. Lat. 8 (= *ChLA* XI 501), accounts of ala *Commagenorum* (AD 48–52). C in angular form appears very small, E has a large C-shape with the bar at the middle, N resembles the Greek letter π , R consists of two strokes, whose first one descends below the line of writing, while U is written in two curvy strokes. Similar features may be found in *P. Aberd*. 61 (= *ChLA* IV 224), a receipt in epistolary form (AD 48/9). Lastly, the figures in the first column look like those in *P.Hawara* 19 (= *Rom.Mil.Rec*. 131 = *ChLA* IV 239), accounts (I/II AD).

In light of these similarities, the document can certainly be dated to the IAD. No medial point or other marks can be seen. No attempts have been made, it seems, to leave space between words. There is no obvious sign of the involvement of more than one scribe.

¹⁵ This F is made in two parts, joining the short horizontal stroke and the vertical shaft together; this shaft also shows a tiny hook open to the left. The second stroke, connected in the middle of the shaft, tends to slant slightly downwards. For this second feature the letter does not correspond exactly to any example, but shows some similarity to the form in *PSI* VI 729 (= *ChLA* XXV 782; AD 77), and *P.Oxy.* VII 1022 (= *Rom.Mil.Rec.* 87 = *ChLA* III 215; AD 103).

III. Text

Diplomatic Transcript:

Col. I

Col. II



P.Harr. inv. 183e rectoReproduced by permission of Cadbury Research Library:Special Collections, University of Birmingham

I 1] . lower part of a curved stroke \parallel 3 on the left edge of the lacuna a tip of an arched stroke survives, perhaps part of R \parallel 5] . upper portion of a diagonal to the right stroke, perhaps]X \parallel 6] . . tip of a horizontal stroke, followed by the right part of oblique strokes, perhaps figures

II 6 in this line vanished ink \parallel 8 . [on the edge of the lacuna upper and lower portions of two curved strokes \parallel 10] . . . [dot-like trace followed by upper portion of a letter containing a horizontal stroke, after blank space a dot-like trace on the edge of the lacuna \parallel 11] . dot-like trace \mid po or co, followed by an upright ending with an ornamental hook \parallel 12 on the edge of the lacuna a dot-like trace

Reconstructed Text:

Col. I

```
].
                                     1 NICE(NUS)
            accepit stip(endi- ) - - - d]r(achmas) CCXLVII s(emis)
                             ex eis ]
                                   ] . V (obolos) IV
      5
                                   ] . . XII
Col. II
                   L(UCIUS) CLODI[US
                               accepit [stip(endi- ) - - - dr(achmas) CCXLVII s(emis)
                                    [ ex eis
                                 in vi[ctum - - - V (obolos) IV
                                 faena[ria - - - XII
      5
                                 calig[as fascias
                                 saturn[alicium k(astrense)
                                   in le . [
                                   tuni[ca
      9bis
      10
                                   ]...[
                             ].[..]po.[
                            elt hab[uit ex pri(ore)
```

- I 2] NICE(NUS) (lege] NICAE(NUS)), aut fortasse] NICE(A) (lege]NICAE(A)) || 3 accepit stip(endi) aut stip(endium) || 4 ex eis] supplevi coll. P.Gen. inv. Lat. 1 recto II 5.15.25
- II 2-4 omnia supplevi coll. P.Gen. inv. Lat. 1 recto I || 2 accepit [stip(endi) aut stip(endium) || 6-7 omnia supplevi coll. P.Gen. inv. Lat. 1 recto I || 12] hab[et ex prio(re) proposui coll. P.Gen. inv. Lat. 1 recto II 12.22

IV. Commentary

- I. 1: This line might contain the consular date, with brief forms of names and titles, as customary in such records, and that would explain its shortness compared with line 2. If it is correct, one may think that the trace on the left edge of the lacuna belongs to S of the abbreviation *cos*. Although what remains is too small to confirm the reading, the presence of the consular date in this papyrus may be taken as virtually certain. In similar documents the consular date may refer to the date of the payments recorded ¹⁶, or more probably, as Kaimio has pointed out ¹⁷, to the date of enlistment. In fact, in military evidence the date of enlistment usually occurs at the head of the entry. That would mean that, as in *P.Gen*. inv. Lat. 1 *recto* I, the two soldiers were enlisted in the same year.
- 2: *Nice*: In view of the comparison with other pay-records, the word indicates the *origo* of the soldier, whose name is lost in lacuna. Both *P.Gen*. inv. Lat. 1 *recto* I and *P.Masada* 722 show that the abbreviation was standard and here the expansion into the adjectival form *Nice*(*nus*) is only a possible alternative to the

¹⁶ See the instance of *P.Gen*. inv. Lat. 1 recto I, in which, in addition to the mention of consulship of Lucius Asinius at the head of the column (col. II 1), the date is also written in the text, in the entry 'accepit stip i an iii do dr ccxlvii s'. The first editors, J. Nicole and Ch. Morel, Archives militaires du I^{er} siècle. Texte inédit du Papyrus latin de Génève, No 1 (Geneva 1900), 7, expand the abbreviation do in Do(mitiani) (col. II 3; III 2). Among other scholars also Daris (n. 2), 30, accepts this expansion, that would refer to AD 83. On the contrary, A. von Premerstein, Die Buchführung einer ägyptischen Legionsabteilung, Klio 3 (1903), 1–46, at 6–7, expands the abbreviation in do(mini), suggesting a different date (i.e. AD 81). This date is accepted, for instance, by Fink (n. 2), 246, and R. Marichal, Chartae Latinae Antiquiores, I (Dietikon–Zürich 1954), 12 (= nr. 7).

¹⁷ J. Kaimio, Notes on the Pay of Roman Soldiers, Arctos 9 (1975), 39–46, at 43–4, followed by Alston (n. 1), 116.

ablative $Nice(a)^{18}$. The strong presence of Eastern soldiers in Egyptian units is well-known, but the evidence for men coming from Bithynian area is quite sporadic¹⁹. As to the orthography, the conversion of the diphthong ae in the monophthong e is a well-attested phenomenon in papyrological evidence²⁰.

- 3: CCXLVII *s(emis)*: Probably the most remarkable feature of the papyrus lies in this entry, with the amount of the *stipendium*. The same rate is also attested to in *P.Gen*. inv. Lat. 1 *recto* I (col. II 3.14.24; III 2.12.23), according to a close reading of Robert O. Fink, instead of the sum of 248 drachmae proposed by the first editors²¹. In the present document the reading of the abbreviation for *s(emis)*, with a tall head-stroke, is fully clear and confirms that this was the pay-rate.
- 4: *ex eis*]: The restoration is suggested by the comparison with *P.Gen*. inv. Lat. 1 *recto* I, in which this entry is placed in the middle of the column (see col. II 4.15.25; col. III 3.14.24). The broad blank space between the lines here numbered as 3 and 5, as well as between lines 2 and 4 in the second column, speaks in favor of its restoration. A variant of this formula, followed by the verb *solvit*, can be found just in *P.Masada* 722.5 and 12²².
- 5:] .V (*obolos*) IV: This line opens the list of stoppages. Also in *P.Gen*. inv. Lat. 4 (1.7bis.9.11.26.27bis.28) occurs the abbreviation *a* of *asses*, the equivalent of obolos, that was an adequate coin for many purchases of daily life²³. Further instance of this abbreviation is provided by *P.Oxy*. IV 737 (= *ChLA* V 308), dated to Augustus' reign. The sum of money refers to food, as can be assumed by the left edge of the second column. However, it remains hard to clarify, when compared with the sums given by contemporary pay-records. In fact, the costs of food and of other goods were deducted from pay at fixed rates in all provinces. This is clearly shown by the exact coincidence between the 80 Alexandrian drachmae in *P.Gen*. inv. Lat. 1 *recto* I and the 20 *denarii* in *P.Masada* 722. Nevertheless, it should be borne in mind that we are dealing with a very mutilated papyrus and just a portion of the sum, as well as in the following entries, is preserved.
- 6:] . . XII: The two traces are doubtful: as far as the second one is concerned, the figure X would be a possible reading, but the narrow space between the numbers makes this possibility rather uncertain. Alternatively, one could think that the second trace is part of the following X: a similar shape of the figure, with an additional oblique stroke on the right part, can be found in *P.Berol*. inv. 14106 (= *ChLA* X 453), accounts (III AD). Nevertheless, this sign remains unexplained²⁴. Conversely, if the amount is complete, the cost for *faenaria* would amount to XII drachmae and would not be much different from the X drachmae given by *P.Gen*. inv. Lat. 1 *recto* I.
- II. 1: L(UCIUS) CLODI[US: this soldier is not otherwise known. Moreover, due to the lacuna, it is impossible to known the precise details of the nomenclature and whether the *tria nomina* are written, as the period and the analogy with *P.Gen*. inv. Lat. 1 *recto* I would suggest. The absence of *cognomen* can be found in *P.Masada* 722.3²⁵. For soldiers belonging to the *gens Clodia*, of Italian origin, see the table in *P.Gen*. inv. Lat. 1 *verso* V 6 (= *Rom.Mil.Rec*. 9), *P.Oxy*. LXXIII 4955.16.26 (I/II AD), and *T.Vindol*. II 255.1 (AD 97–102/3).
- 2: *accepit*: The presence of this verb is one of the details that makes the nature of the document clear. [*stip(endi-*): Although the restoration is certain, we cannot know the exact way of its expansion. Here the abbreviation *stip* is suggested by the comparison with *P.Gen.* inv. Lat. 1 *recto* I (col. II 3.14.24; col. III

¹⁸ Cotton and Geiger (n. 5), 49–50 choose the adjectival form, while Marichal (n. 16), 12 prefers the ablative.

¹⁹ The evidence is listed by G. Forni, *Il reclutamento delle legioni da Augusto e Diocleziano* (Roma 1953), 166; id., Estrazione etnica e sociale dei soldati delle legioni nei primi tre secoli dell'impero, *ANRW* II 1 (1974), 339–91, at 378.

²⁰ J. N. Adams, *Social Variation and the Latin Language* (Cambridge 2013), 73–5. A particular instance of misspelling of the place-name is provided by a Latin-Greek inscription from Gölpazari-Dikenli Geçit (*post* AD 198), at East of the city: see *AE* 1984, 833.14: *pro praetore a Niceae* (*sic*). On this see also D. French, *Roman Roads and Milestones of Asia Minor*, I (Oxford 1981), 56 (= nr. 12a).

²¹ Fink (n. 2), 243, and Nicole and Morel (n. 16), 6–7.

²² See Cotton and Geiger (n. 5), 38, 51. The complete formula is, actually, *ex eos solvi*, and shows the generalization of the accusative as the propositional case. On this phenomenon see Adams (n. 20), 254–6.

²³ See Ch. Howgego, The Supply and the Use of Money in the Roman World, *JRS* 82 (1992), 1–31, 19.

²⁴ See R. Marichal, *Chartae Latinae Antiquiores*, X (Dietikon–Zürich 1979), 73 (= nr. 453).

²⁵ On this see the remarks of Cotton and Geiger (n. 5), 49.

2.12.23), but in *P.Berol*. inv. 6866 A–B + *P.Aberd*. 133 + *P.Reinach* inv. 2222 the form *stipendi* occurs, and there is no agreement whether it can be read as accusative *stipendi(um)* or partitive genitive *stipendi*. In this second case, the genitive, meaning 'of' or 'from the salary', would imply that we are dealing with just the total expenditure, and not with the total *stipendium*. This, therefore, would support Watson's theory, according to which these documents are more likely to be records of *deposita*²⁶. On the contrary, the use of the genitive *stipendi* appears certain in *P.Masada* 722.5 and 12²⁷. The condition of the fragment also prevents us from knowing the exact pay period to which the document refers.

4: in vi[ctum: Unlike both P.Gen. inv. Lat. 1 recto I and P.Masada 722, where the deduction for food occupies the second place, here it is listed first. A different arrangement, though minimal, would suggest a not too strict uniformity in military documentation. This deduction is a detail provided only by papyri, in contrast with the silence of literary sources (see notably Tac. ann. 1.17).

5: faena[ria: Mommsen suggested interpreting the word as 'beddings'²⁸, while Premerstein read it as 'animal fodder'²⁹. Given its position in the list of stoppages, this second possibility seems to be more probable. However, since we are not able to know the exact amount for this deduction, it is impossible to state whether the involved soldiers were *equites* or not.

6: calig[as fascias: This entry occupies the same place as the caligas fascias recorded in *P.Gen*. inv. Lat. 1 recto I, which suggests the restoration in this line. Also *P.Masada* 722 shows the same sequence of entry for boots, but there is no mention of belts. Caligae, typical of the Roman soldiers, are usually interpreted as 'boots', rather than 'sandals' or 'slippers', because of the nailed sole and the long laces³⁰. The account of *T.Vindol*. II 186.8, including miscellaneous items and quantities, lists 100 spikes for shoes (caligares). Apart from pay records, another occurrence of the word can be found in *P.Mich*. VIII 468 (= *ChLA* XLII 1217; early II AD), containing the request from Claudius Terentianus to Claudius Tiberianus to send him low and roomy boots (1. 24–5: caligas cori | subtalare). The letter also attests to the existence of a kind of boot with ornamental buttons (1. 25–6: caligae autem nuclealtae)³¹. Lastly, unfortunately, hereafter the cost of the items cannot be recovered and compared with the sums furnished by contemporary records³².

7: saturn[alicium k(astrense): The position of this entry is the same as in P.Gen. inv. Lat. 1 recto I.

8: *in le*. [: In view of the similarity with the Geneva papyrus, here one might expect the entry *in vestitorium*, but the reading of L is secure, and also the traces on the right edge of the lacuna are not like those of S. The best hypothesis is perhaps that we have a reference to linen clothes (*linteamina*); for instance, the word, in the form *lentiamina*, occurs in the correspondance of Claudius Terentianus (*P.Mich.* VIII 471.11.34 = *ChLA* XLII 1220; early II AD). As an alternative, this entry could cover an expense for something other than clothing, such as for weapons. One may compare the list of items provided by *P.Berol.* inv. 6765 (= *ChLA* X 409), record of a legionary *fabrica* (II/III AD). In the document both the adjective *levisatares* (col. I 10) and the noun *levesatae* (col. II 10) are employed, but their meaning remains unclear³³.

²⁶ G. R. Watson, The Pay of the Roman Army: Svetonius, Dio and the *quartum stipendium*, *Historia* 5 (1956), 332–40; id., The Pay of the Roman Army: the Auxiliary Forces, *Historia* 8 (1959), 372–8; id. (n. 4), 498–9. This theory has been reshaped by Colombo (n. 7), 283–6.

²⁷ The editors interpret this genitive as a quantitative genitive and take it as a positive argument for Watson's theory; see Cotton and Geiger (n. 5), 44.

²⁸ Th. Mommsen, Ägyptische Legionäre, *Hermes* 35 (1900), 443–52, 451 (= *Gesammelte Schiften* VI (1910), 118–27, 126), followed by H. M. D. Parker, *The Roman Legions* (Chicago 1928), 217.

²⁹ von Premerstein (n. 16), 10.

³⁰ See for this meaning A. Walde and J. B. Hofmann, *Lateinisches etymologisches Wörterbuch* (Heidelberg 1954), I s.v.

³¹ Recent archeological findings provide proof about military footwear with geometrical ornamentation in relief placed on the tip; see J. R. Morales *et al.*, Los *clavi caligarii* o tachuelas de cáliga. Elementos identificadores de las calzaradas romanas, *Lucentum* 31 (2012), 147–64, esp. 159–60. The Greek attestations of the loan-word καλίγιον are collected and analyzed by S. Russo, *Le calzature nei papiri di età greco-romana* (Firenze 2004), 9–21.

³² The sum of 3 *denarii* can be inferred by 12 drachmae in *P.Gen*. inv. Lat. 1 *recto* I (col. II 5.18.28; col. III 6.17.27), while the cost of 5 *denarii* is provided by *P.Masada* 722.8.

³³ See M. C. Bishop and J. C. N. Coulston, *Roman Military Equipment from the Punic Wars to the Fall of Rome* (London 1993), 185, who tentatively interpret the adjective *levisatares* and the following word *lamnae* as 'light strips'.

9: *tuni*[*ca*: Along with the cloak, the tunic is the everyday garment of the soldiers³⁴. According to Tacitus (*ann*. 1.17), the clothing deduction was among the greatest financial burdens of soldiers and the sums provided by the Geneva papyri confirm that this deduction was as large as the one devoted to food³⁵. However, a soldier could plainly supplement the basic uniform with clothing from home, as is well shown by *P.Mich*. VII 467 (= *ChLA* XLII 1218; AD 115), where Claudius Terentianus asks Claudius Tiberianus for a girdled tunic (l. 21). A comparable letter from the Eastern desert is *O.Claud*. I 135 (AD 107), in which Agathon informs Successus that he had received *tunicas duas et palliolum* | *et tunicam albam* (l. 2–3)³⁶. But the best evidence for the supply of clothing is from Vindolanda, that provides a broad range of items³⁷. This same entry occurs also in *P.Masada* 722, in which there is, however, a great detail in itemizing the clothes, and, along with the *tunica linia* (l. 10), the stoppages for *pallium opertorium* and *tunica alba* are recorded as well (l. 15.16). In the present document no other items of clothing seem to be mentioned.

9bis: One cannot exclude that, in view of the broad space between lines 9 and 10, this line contains an entry arranged in the middle of the column, in a similar way to the entry *ex eis* in line 3. Also the strong similaries between pay-records support this possibility. See, for instance, the place of *expensas* in *P.Gen*. inv. Lat. 1 *recto* I (col. I 10.20.30; II 9.19), at the end of the list of stoppages.

10:] . . . [: Here too little remains to allow any restoration.

11:] po . [: The squared shape of the letter fits more with P than C (see the form of both letters in l. 2: accepit). O is then followed by a portion of a letter that is hard to decipher. The two letters might suggest the word depositum or the verb depono, and in the Geneva papyrus the entry reliquas deposuit occupies the same place (see col. I 11).

12: *e]t hab[uit ex pri(ore)*: The restoration of this line is based on the *P.Gen*. inv. Lat. 1 *recto* I (col. II 12.22; III 21) Nevertheless, since we cannot know the exact pay period to which the document refers, this restoration remains just a possibility. Otherwise, also the formula *habet in deposito*, attestated to in the same papyrus (col. II 31; III 29), might be supplied. However, *hab*[is clearly legible and we can assume as a certainty the presence of the verb *habeo*.

V. P. Harr. inv. 183e recto and the military paperwork

In spite of its dimension, this papyrus is of great relevance for military history. Firstly, it enriches the scanty evidence of pay-records, confirming that some stoppages were standard in all provinces. Secondly, but not less importantly, since such a document could be drawn up by the *librarius* or the clerk in charge³⁸, it gives us a glimpse into the practice of military paperwork.

Some scholars have pointed out that, although Rome did not have the bureaucracy and the power structures of a modern state, the official documents were thoroughly standardized³⁹. In particular, documentation relating to rates of pay and prices is surely one of the categories in which one expects to find a good

³⁴ For form and details of the soldiers' tunics see J. A. Sheridan, *Columbia Papyri IX. The vestis militaris Codex* (Atlanta 1998), 73–80, with broad papyrological evidence. On requisitions for *vestis militaris* see also A. C. Johnson and L. C. West, *Byzantine Egypt: Economic Studies* (Amsterdam 1949), 223–4.

³⁵ R. Alston, Soldier and Society in Roman Egypt. A Social History (London–New York 1995), 105.

³⁶ For other occurrences in military contexts see also *T.Vindol*. II 195.1; 196.16.18; II 207.8.10.13; 255.10.

³⁷ A. K. Bowman, *Life and Letters on the Roman Frontiers*. *Vindolanda and its People* (London 1994), 66–8.

³⁸ In *P.Gen.* inv. Lat. 1 *recto*, at the bottom of the first column and in capitals, we find the name of Rennius Innocens who, according to Mommsen (n. 28), 452 (= 127) was the *librarius depositorum*. Nicole and Morel (n. 16), 19 believed that he was instead the *signifer* or an *adiutor* who checked the accounts. However, the precise connection between the two documents remains unclear.

³⁹ See J. F. Gilliam, The *deposita* of an Auxiliary Soldier (P. Columbia inv. 325), *BJ* 167 (1967), 233–43, at 233 = *Roman Army Papers* (Mavors Roman Army Researches II) (Amsterdam 1986), 317–27, at 317: 'we may assume that military clerks prepared precisely the same kind of documents each day in posts along the Rhine as in those along the Nile.' See also Watson (n. 4), 507, and more recently Phang (n. 4), 286, 289–90, who, in view of the nature of the evidence, has shown understandable cautions in estimating the modernity of the Roman bureaucracy. Also Le Bohec (n. 4), 205–7, agrees with this view. Lastly, on the extent and meticulouness of the Roman army paperwork see the useful remarks of N. J. E. Austin and N. B. Rankov, Exploratio. *Military and Political Intelligence in the Roman World from the Second Punic War to the Battle of Adrianople* (London–New York 1995), 142–69, esp. 155–61.

degree of uniformity. This impression is reinforced by the present papyrus. The comparison with similar texts shows that *P.Harr*. inv. 183e *recto* conforms to the same pattern, while just a few signs of variations, concerned with specific details or with the order of the entries, appear. In light of several affinities, a comparison with *P.Gen*. inv. Lat. 1 *recto* I, appears the more appropriate.

Like the Geneva papyrus, the document contains two columns of writing that are constituted of two identical-looking paragraphs. After the heading with the consular date of record or of enlistment, the name and the origin of the soldier follow, and then the list of stoppages is written. The same stoppages concern foodstuffs, hay, boots, the camp banquet, and clothing. In the same way, it seems that also in *P.Harr.* inv. 183e *recto* the cost of weaponry is missing⁴⁰. The entry concerning the previous balance (*habuit ex priore ratione*) is perhaps mentioned. Moreover, the most important coincidence between these two papyri lies in the *stipen-dium* and the identical amount of 247½ drachmae as pay rate. This sum, whether it was credited to legionaries or auxiliaries, is still a matter of dispute⁴¹. Unfortunately, like in *P.Gen.* inv. Lat. 1 *recto* I, also in *P.Harr.* inv. 183e *recto* there is no evidence for the unit or the rank of the soldiers. Consequently, it does not provide any new argument to solve the problem of whether the 247½ drachmae was the pay for a legionary or an auxiliary. However, this sum must clearly belong to the same period as the Geneva papyrus, that is before AD 84, the year of Domitian's pay-rise. And this data allows us to establish a narrower chronological time frame.

Furthermore, from the format of these documents it is possible to deduce some details concerning some of the missing lines: first, the deduction for the standards (ad signa) seems to be absent; second, it is uncertain whether it containes the deposit account (reliquas deposuit). Lastly, as far as we can see, the new total amount (fit summa omnis) is missing.

In conclusion, it seems a reasonable assumption that in their essential elements this kind of documents followed the same and standard form. Obviously, a few degrees of flexibility were permitted. The evidence, indeed, shows that some details could vary or be omitted and the list of entries was not followed strictly. This supports the view that the military clerks had no exemplar to be copied⁴². But we do find a greater number of similarities than of differences. The clerks, therefore, were requested to draw up these documents according to their specific and standard features. This general uniformity was clearly functional to the readability of the record itself. Lastly, also the formal layout was of help for this purpose: although the mixture of capital and cursive script within the same text is highly common in military documentation⁴³, this style can be regarded as a further peculiarity of pay-records⁴⁴.

Ornella Salati, Università degli Studi di Napoli 'Federico II' - ornella.salati@unina.it

⁴⁰ Until at least the III AD the procedure prescribed that the soldier was charged for weapons, but he could acquire pieces of armour or equipment privately. See, for instance, *P.Fouad I* 45 (= *ChLA* XLII 1207; AD 153), in which a cavalryman privately borrowed 50 *denarii* for the purchase of weapons (1. 4: *in pretium armorum*).

⁴¹ See Fink (n. 2), 243–5, with an overview of related literature and earlier bibliography. The scholar, however, agrees that the amount was credited to legionaries. On the contrary, M. Speidel, The Pay of *auxilia*, *JRS* 63 (1973), 141–7 (cf. id., n. 2, 89), is among the scholars who believe that the sum refers to auxiliary forces. Only R. Marichal, La solde des armées romaines d'Auguste à Septime-Sévère d'après les P. Gen. lat. 1 et 4 e le P. Berlin 6.866, *Annuaire de l'Institut de philologie et d'histoire orientales et slaves* 13 (1953) = *Mélanges I. Lévy* (Bruxelles 1955), 399–421, has drawn attention to the papyrus as a whole and has discussed the other four documents of the *recto* and of the *verso*. At least two of the four are certainly related to legionaries of III *Cyrenaica* and the others cannot be shown to refer to auxiliaries. Also any attempts to find a mathematical solution to the problem of 247½ drachmae, instead of the expected 250 or 300 drachmae, have failed. On this, see in particular J. Jahn, Zur Entwicklung römischer Soldzahlungen von Augustus bis auf Diokletian, *Studien zu den Fundmünzen der Antike* 2 (1984), 53–74. Lastly, the pay of the legions and its relation to the pay of the auxiliary forces is a vexed topic as well; for bibliography see Alston (n. 1), 113 n. 2, and id. (n. 35), 115–16, who suggests, however, the possibility that there was no a great difference between auxiliary and legionary pay rates.

⁴² Phang (n. 4), 289.

⁴³ Watson (n. 4), 507.

⁴⁴ Fioretti (n. 13), 33, emphasizes the presence of 'scritture di rispetto con funzione distintiva' within military evidence. Such scripts were learned by the scribes through *exercitationes scribendi*, as *PSI* XIII 1307 *recto* (mid-I AD) shows. On this papyrus see G. Cavallo and P. Fioretti, Note sulle scritture di PSI XIII 1307, in M. Capasso and M. De Nonno (eds.), *Studi paleografici e papirologici in ricordo di Paolo Radiciotti* (Lecce–Brescia 2015), 105–17.