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Documentary texts from the 19th and 20th dynasties: the administration of the Tomb

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Abstract

The paper presents part of the work on the corpus module on administrative hieratic from the 19th and 20th dynasties of the project *Altägyptische Kursivschriften* (AKU). This module includes a more comprehensive study also on palaeographical habits and particularities seen in the texts within the corpus. That comprehensive study will be published elsewhere. The current paper focusses on the so-called ‘necropolis journal’ texts and especially on their form and content. It contains three analyses: the categories of text within the ‘necropolis journal’ corpus, different layouts found within that corpus and the question whether specific categories of text show specific characteristics of layout or even preferred formats.

Introduction: corpus, research questions and methodology

Since the project *Altägyptische Kursivschriften* (AKU)¹ started in 2015, one of its corpus modules concerned the palaeographic study of administrative hieratic script from dynasties 19 and 20. Work on this module took place from 2015 to 2021 and concerned the selection and collection of sources, palaeographic work and analysis of the hieratic signs (hieratograms) in their co- and contexts. The selection and collection of sources happened based on an orientational study for relevant text sources that would meet four criteria prescribed by the AKU project. The sources must be securely dated, well-preserved, accessible, and published or otherwise well-prepared, for AKU documents the hieratograms, their forms and metadata, but no transliterations, translations, lexical or grammatical discussions of the texts.² AKU is a palaeographic project that offers palaeographic data to be used in further studies, but for other information about the texts we refer to publications or other projects.

For administrative hieratic from the 19th and 20th dynasties, this led to a focus on sources from the Westbank of Thebes, which are many and accessible. A total of

¹ A project of the Akademie der Wissenschaften und der Literatur Mainz, carried out at the Johannes-Gutenberg Universität Mainz in cooperation with the Technische Universität Darmstadt.

² Gülden 2016, 6; Gülden in preparation.

342 texts on 325 ostraca was selected and collected from four institutions: the British Museum in London, the Museo Egizio in Turin, the Institut Français d'Archéologie Orientale in Cairo and the Ägyptisches Museum in Berlin.³ They are all ostraca. At first, this was coincidence: ostraca were simply more readily available than papyri. After a while, it was decided to leave papyri out completely for two reasons: the ostraca-corpus was rapidly growing and it was considered more useful to focus on writing practices and scribal habits on ostraca rather than to include one or two papyri, which would hardly be enough for a thorough comparison of writing practices on different materials. Moreover, some cooperation partners have already worked on or are planning to work on papyri that are relevant to the corpus module. Hieratic sign material resulting from some of this research will be uploaded in the AKU database.⁴

The 342 texts are of various genres: so-called 'necropolis journal' texts; letters; court cases; inventories; (private) transactions; miscellaneous; even a small group of literary and religious texts.⁵ Since this is a large and much varied group, only one theme could be selected for analytical focus: those texts that have received the label 'necropolis journal', which relates to 189 texts on 184 ostraca (fig. 1). This does not mean that the other ostraca were not at all worked on or were not included in the AKU database, only that the analytical focus came to lie on the 189 texts with a 'necropolis journal' topic.

The reason for typing 'necropolis journal' between quotation marks is that this term is much debated. It was first coined in the first half of the 20th century by Botti and Peet in their publication *Il giornale della necropoli di Tebe* (1928).⁶ In the context of this publication, the term referred to a group of papyri that records dates, events and activities related to the work on tombs in the Valley of the Kings and the Valley of the Queens. Since then, many texts – papyri and ostraca – have been declared to

3 Many thanks go to Ilona Regulski (London), Susanne Töpfer (Turin), Cédric Larcher (Cairo) and Jan Moje and Ms. Schorneck (Berlin) for allowing me to either come and study the ostraca myself, or for providing me with photos of the sources. The ostraca are published in Demarée 2002 (London), López 1978-1984 (Turin), Černý 1935, 1937, 1970 and Grandet 2000, 2003, 2017 and Sauneron 1957 (Cairo) and *Deir el-Medine Online* (Berlin).

4 Currently we have received sign material from Maren Goecke-Bauer, who works on a palaeography of Deir el-Medina scribes and has included a large number of ostraca and several papyri. There is also contact with the project *Crossing Boundaries – Understanding complex scribal practices in Ancient Egypt* (based in Basel, Turin and Liège), in which the Turin papyrus collection is digitally documented. Cooperation is possible in case they have palaeographic outcome.

5 The latter do not belong to the theme of administrative hieratic. They were, however, collected in view of a future corpus module of the AKU project.

6 Botti and Peet 1928.

Documentary texts from the 19th and 20th dynasties: the administration of the Tomb

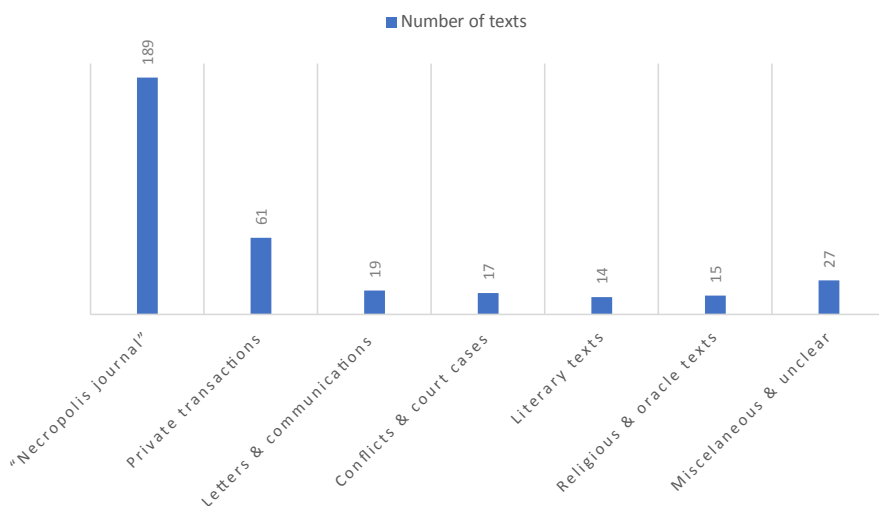


Fig. 1: The numbers and genres of the texts collected (the analytical focus lies on the texts with the label 'Necropolis journal')

belong to this 'necropolis journal', which now generally indicates texts that record all sorts of notes, activities and events related to the workmen and their work in, and the administration of, the tombs in both Valleys. The term has served alright in setting apart these texts from the thousands of texts from the Theban region of different nature: literary, religious, juridical, private, etc. Yet it certainly does not function well in actually *defining* the texts that are being shoved under this heading. The term 'necropolis journal' does not clarify further the sorts of texts and what their purpose was, or how we must picture their role, meaning and function within the administration of the Theban area. What actually is a 'necropolis journal', what does it imply? Can we truly speak of a 'journal'? Nowadays there is more resistance to the term. In fact, the term 'necropolis journal' seems to be an empty designation that we use merely out of convenience to refer to a group of texts that has the administration of the tombs in the Valleys as topic. The term is without meaning, or rather with deceptive meaning, yet still it remains in use, for in the opinion of the author we do seem to be in need of some term to refer to texts on the administration and progress of the work on the tombs in the Valleys. So, what would be an alternative? A designation such as documentary texts may be too broad and unspecific and may include the documentation of private transactions and inventories, not directly connected to the crew's work, as well. Obvious would then be the designation administrative texts, but in order to delineate the generality that is inherent in this term as well I consider, a combined description such as documentary texts related to the adminis-

tration of the work on the tombs in the Kings' and Queens' Valleys by the crew from Deir el-Medina – short: documentary texts on the administration of the Tomb – to best indicate the group of texts that at least in this paper is the analytical focus.

Within this large group of documentary administrative texts, patterns, similarities and differences between texts can be seen, e. g. texts recording similar content, or showing similar style and setup. A study was thus conducted to see which categories and which forms of layout were found within the corpus, and whether there was a relation between specific categories and specific forms of layout. The categorization of texts offered below is not meant to define the group we are dealing with (let alone it is meant to define something like the 'necropolis journal'!). This paper does not want to argue that the ancient Egyptians generated and organized the texts in such a systematic way. Offered is simply a categorical list of texts, showing which topics dealing with work on the tombs were encountered in the current corpus. It shows the dimension of the administration of the Tomb in the corpus, so that we know with what we are dealing.

Of course, the 'necropolis journal' question has been noted before by others.⁷ The consensus is that we cannot speak of an actual journal, at least not in the modern sense of the word. But how this group of texts should then be seen, remains only vaguely described. Several have looked at topics and categories of text before, but most stop there, whereas it would also be interesting to carefully look at setup and layout. From there on, further comparisons can be made and further questions be asked.

From the above, the research questions in this paper will have become clear. They form three paragraphs:

1. Which categories of text do we find within the current eclectic corpus of texts with 'necropolis journal' topic?
2. Which types of layout do we find?
3. What results from a comparison between categories and layouts: do the categories show specific features of layout? In other words, can specific categories be linked to specific forms of layout?

Further questions would then be: do *individuals* (rather than text categories) show preference for a specific type of layout? For this a study of scribes must be undertaken. And even: could we, based on a comparison of layouts and categories, discover

7 A small selection of works that have focused on the classification of texts belonging to this journal and as such on defining this journal: Morfini 2019; McClain 2018; Donker van Heel and Haring 2003; Akiyama 1998, 30–47; Valbelle 1985; *Deir el-Medina Database* (field: classification).

systematicity in the workflow of the organization of scribes, or were the administrative reports simply written in the sense of anything goes?

The results described in the paragraphs are bound to the limits of the corpus of 189 texts on ostraca. This means that a diachronic dimension cannot be fully covered. Yet, this was also not a goal of the analysis. The goal was rather to analyze what we have in the AKU database regarding the topic ‘necropolis journal’ to offer this as a point of departure for expansion and further study. We do look at the chronological spread of categories and layouts, yet this would only be the start of a thorough diachronic analysis looking further at the development of categories and layouts, which should be based on a much larger corpus. This would then be a good spot to repeat AKU’s request for cooperation partners, who can complement and use our data in further studies. For the methodology followed to create the digital facsimiles I refer to other publications by AKU.⁸

Analysis 1: classification of the texts

A first thing that needs clarification are the criteria on the basis of which the selection of documentary texts on the administration of the Tomb happened: when was a text included, when not? Of course, publications that label a text as being ‘necropolis journal’ were included. Otherwise, all texts with administration of the crew and their work were included, as well as all texts with administration of events that explicitly influenced the crew’s work (e. g. a visit by the vizier, commotion concerning the lack of rations, the arrival of the enemy). Finally, all texts with administration on (the use of) materials and equipment were included, as well as all texts that concern rations given to the crew for their work.⁹ Texts were excluded from the current corpus when they concern workmen or other inhabitants of the village, who speak about themselves in the first person singular, with some exceptions when content clearly links them to the administration of the work.¹⁰ Also excluded were lists with large numbers of rarely mentioned foods or objects (e. g. shawls, bed linen), especially when they are without context. When such lists do have a clear context, they often record private transactions or inventories. Lists of food and/or objects for feasts were also left out. Feasts are sometimes mentioned in our texts as events inter-

8 Gülden 2018, 95–96; Gülden in preparation.

9 Texts recording the delivery of water by water-carriers were, however, excluded, since this category mingles much with private transactions between workmen and water-carriers concerning the hire of donkeys. The workmen and water-carriers took care of this privately. Moezel 2014, pp. 154–174.

10 E. g. in Ostrakon Turin N. 57035 the author in first person clearly is a scribe working for the administration, noting himself sick for a couple of days.

rupting the crew's work, but those texts that primarily concern food and products particularly for such feasts are here considered not related to the administration of the Tomb. Finally, with some initial doubt, letters that mention the administration or work done in the tombs were left out as well. There are few such letters in the corpus, but as for layout, style and terminology they differ much from the other texts recording work progress and administration.¹¹ As such, the focus lies purely on the work carried out by the crew and how it was administered.

This led to the total of 189 texts on 184 ostraca that was already mentioned above.¹² However, as soon as the actual palaeographic work on this corpus began, it became clear that 11 texts were in such a bad state, which was even worsened by the mediocre quality of some of the photographs, that they were not usable for AKU goals. One further text appeared to date to the 18th dynasty instead of the 19th or 20th dynasty (O. Berlin P. 10666). This means that 177 texts were left for digital processing. The hieratograms were digitally drawn and imported into the database. Based on the terminology and topics the contents of the texts were assigned to one of the categories in tables 1 and 2.

Corrigendum: In these tables and elsewhere in the paper the citation of Turin ostraca should read O./ostrakon/ostraca Turin CGT [number]. That is the citation method nowadays requested by the *Museo Egizio*.

11 See also Haring 2003, 125, who comes to the same conclusion. The letters are, however, included in the secondary corpus (those texts without a 'necropolis journal' theme) and they are therefore documented in the AKU Database.

12 Five ostraca contain different texts, yet both concerning the administration of the Tomb, on the *recto* and *verso*.

Table 1: Single categories of text

No.	Categorical description	Texts
1	Deliveries and/or deficits of products	O. Berlin P. 1122; O. Berlin P. 9897; O. Berlin P. 10632; O. Berlin P. 10654 <i>verso</i> ; O. Berlin P. 10839; O. Berlin P. 10840; O. Berlin P. 11249; O. Berlin P. 11272; O. Berlin P. 12632 + O. DeM 150; O. Berlin P. 14149; O. Berlin P. 14156; O. Berlin P. 14210; O. Berlin P. 14213; O. Berlin P. 14218 <i>recto</i> ; O. Berlin P. 14218 <i>verso</i> ; O. Berlin P. 14264; O. Berlin P. 14302; O. Berlin P. 14614; O. Berlin P. 14657; O. Berlin P. 14666; O. BM EA 50728; O. BM EA 66412; O. DeM 1; O. DeM 3; O. DeM 4; O. DeM 10; O. DeM 15; O. DeM 20; O. DeM 26; O. DeM 48; O. DeM 52; O. DeM 75; O. DeM 76; O. DeM 91; O. DeM 94; O. DeM 137; O. DeM 138; O. DeM 142; O. DeM 143; O. DeM 144; O. DeM 145; O. DeM 147; O. DeM 346; O. DeM 577; O. DeM 591; O. DeM 611; O. DeM 621 + O. DeM 829 <i>recto</i> ; O. DeM 707; O. DeM 718; O. DeM 726; O. DeM 837; O. DeM 842; O. DeM 843; O. DeM 844; O. DeM 846; O. DeM 851; O. DeM 852; O. DeM 854; O. DeM 855; O. DeM 859 <i>recto</i> ; O. DeM 859 <i>verso</i> ; O. DeM 863; O. DeM 869; O. DeM 10299; O. DeM 10324; O. DeM 10339 <i>recto</i> ; O. DeM 10339 <i>verso</i> ; O. Turin N. 57072; O. Turin N. 57080; O. Turin N. 57085 <i>recto</i> ; O. Turin N. 57085 <i>verso</i> ; O. Turin N. 57157; O. Turin N. 57167; O. Turin N. 57189; O. Turin N. 57469 = O. DeM 7; O. Turin N. 57470
2	Accounts of absence or presence	O. Berlin P. 11248; O. BM EA 5634; O. DeM 594; O. DeM 617; O. DeM 763; O. DeM 889; O. DeM 908; O. DeM 910; O. DeM 912 <i>recto</i> ; O. DeM 913 <i>recto</i> ; O. Turin N. 57020; O. Turin N. 57026; O. Turin N. 57028; O. Turin N. 57029; O. Turin N. 57030; O. Turin N. 57035; O. Turin N. 57039; O. Turin N. 57056; O. Turin N. 57283; O. Turin N. 57432
3	Events	O. Berlin P. 10633; O. Berlin P. 12654; O. Berlin P. 14286; O. BM EA 50734 + O. BM EA 50742 + O. Ashmolean Museum 99 + O. CGC 25673; O. DeM 571; O. DeM 890; O. Turin N. 57204
4	Progress reports	O. Berlin P. 9906; O. Berlin P. 10622; O. Berlin P. 10663; O. Turin N. 57036
5	Accounts of materials and equipment	O. DeM 882; O. DeM 932; O. Turin N. 57007 <i>recto</i>

continued on next page

No.	Categorical description	Texts
6	Name lists	O. Berlin P. 9901; O. Berlin P. 11289; O. Berlin P. 15292; O. DeM 262; O. DeM 565; O. DeM 598; O. DeM 612; O. DeM 706; O. DeM 914 <i>recto</i> ; O. Turin N. 57015; O. Turin N. 57206; O. Turin N. 57256; O. Turin N. 57257; O. Turin N. 57382; O. Turin N. 57479

The texts with deliveries and/or deficits of products concern a variety of usually one or two products, which are: grain rations, wood, fish, bread and cakes, pottery, fat, dates, various (a combination of two or maximal three of the aforementioned), or other or unclear¹³. Accounts of absence or presence can be simple texts in which individual workmen are marked as being off work without reason. Or they can be more elaborate accounts in which reasons of absence and further information on the return to work are given. Texts recording events may relate to the lack of rations, the accession of a new king, a court case concerning the crew, the arrival of the vizier or the enemy, or a number of other eventful happenings. Progress reports may concern ongoing work or the start of a new project or assignment for which part of the crew was selected. Accounts of materials and equipment concern, for instance, lamps, rope or tools handed out to the crew for use during work and a calculation of the numbers of tools handed out or returned. Name lists are simple listings of personal names of workmen, with or without further marks such as dots or strokes, which presumably represent a counting or control system.

The combined categories consist of a mix of two or more of the single categories. Clearly, most documentary administrative texts in the current corpus concern a single category: a total of 125 texts (categories 1 to 6) against a total of 45 texts (categories 7 to 19). Table 2 shows that duty rosters are – logically – always combined with deliveries and deficits, but hardly ever with other categories, except for the mention of some absences and events. These absences and events are not given as list enumerations (which for absences at least is the case in single category 4 as well as in several of the combined texts). Rather, they are given as sporadic mentions in between the deliveries or deficits. Categories 18 and 19 represent the most complete reports but leave out duty rosters. Whereas deliveries and deficits of products can be combined with all other single categories, the combination with duty rosters (categories 10 to 12) appears as a separate subgroup with most texts within the current corpus assigned to it. Name lists as a category are in the current corpus not combined with other categories of text.

¹³ E.g. O. Berlin P. 9897: *Deir el Medine Online* suggests *ḳd* “Mörtel”, but adds “Die Lesung ist allerdings fraglich”. See https://dem-online.gwi.uni-muenchen.de/show_anmerkung.php?id=184&inventar_nr=Berlin+P+09897#u4 [29 July 2020].

Table 2: Combined categories of text

No.	Deliveries and/or deficits of products	Duty roster	Acc. of absence or presence	Events	Progress reports	Acc. of materials and equipment
7 ¹⁴	✓		✓			
8 ¹⁵	✓			✓		
9 ¹⁶	✓		✓	✓		
10 ¹⁷	✓	✓				
11 ¹⁸	✓	✓		✓		
12 ¹⁹	✓	✓	✓			
13 ²⁰				✓		✓
14 ²¹			✓	✓		
15 ²²			✓	✓		✓
16 ²³					✓	✓
17 ²⁴			✓		✓	
18 ²⁵			✓	✓	✓	✓
19 ²⁶	✓		✓	✓	✓	✓

One further group is category 20, which contains seven texts of which the contents cannot be allocated to a specific category due to their fragmentary or faded state or due to discussion concerning their contents. These texts are O. Berlin P. 10842;

14 O. DeM 604; O. DeM 895.

15 O. BM EA 50722 + O. CGC 25726 + O. BTdK 660; O. BM EA 50744; O. DeM 35; O. DeM 595.

16 O. DeM 55; O. DeM 900; O. Turin N. 57007 *verso*; O. Turin N. 57153.

17 O. Berlin P. 12625 + O. IFAO ONL 300; O. Berlin P. 12627; O. Berlin P. 12628 + 12641; O. Berlin P. 12639 + 14696 + O. DeM 33; O. Berlin P. 12642 + O. DeM 160; O. BM EA 5635; O. DeM 578; O. DeM 876; O. Turin N. 57393.

18 O. Berlin P. 12626 + O. DeM 41; O. Berlin P. 12629; O. Berlin P. 12631 a + b; O. Berlin P. 12633 a + b; O. Berlin P. 12640 + O. DeM 161 + O. Strasbourg H82; O. Berlin P. 12651 + O. DeM 45 + O. Vienna H. 4; O. DeM 32; O. DeM 40 + Strasbourg H42; O. DeM 42; O. DeM 44; O. DeM 46; O. DeM 148.

19 O. Berlin P. 12384.

20 O. Turin N. 57034.

21 O. Turin N. 57156 *recto*.

22 O. Turin N. 57033; O. Turin N. 57044; O. Turin N. 57047; O. Turin N. 57055.

23 O. Berlin P. 14255; O. Turin N. 57006; O. Turin N. 57366.

24 O. BM EA 50730 + 50745; O. DeM 899.

25 O. Turin N. 57031.

26 O. BM EA 5672 + O. CGC 25649.

O. Berlin P. 14233; O. DeM 759; O. DeM 776; O. DeM 893; O. Turin N. 57025; and O. Turin N. 57282. Table 3 shows the chronological spread of all categories.

Table 3: Chronological spread of the categories of text²⁷

No.	Category description	Chronological spread
1	Deliveries and/or deficits of products	Seti I–Ramesses XI
2	Accounts of absence or presence	Seti II–Ramesses IV
3	Events	yr. 27 Ramesses III–Ramesses IX/XI
4	Progress reports	Ramesses III
5	Accounts of materials and equipment	Siptah/Tausret–Ramesses III
6	Name lists	Ramesses II–Ramesses IV
7	Deliveries and/or deficits of products Accounts of absence or presence	Ramesses III–Ramesses IV or V
8	Deliveries and/or deficits of products Events	Seti II–Ramesses IV
9	Deliveries and/or deficits of products Accounts of absence or presence Events	Seti II/Siptah–Ramesses III
10	Deliveries and/or deficits of products Duty roster	Seti II/Siptah–Ramesses IV
11	Deliveries and/or deficits of products Duty roster Events	yr. 25 Ramesses III–yr. 2 Ramesses IV
12	Deliveries and/or deficits of products Duty roster Accounts of absence or presence	yr. 2 Ramesses IV
13	Events Accounts of materials and equipment	yr. 2 Ramesses III
14	Accounts of absence or presence Events	Ramesses III
15	Accounts of absence or presence Events Accounts of materials and equipment	yrs. 22–26 Ramesses III
16	Progress reports Accounts of materials and equipment	Ramesses III–Ramesses IV or VII

continued on next page

²⁷ Only secure dates or those mentioning a king's name are taken into account. Dates such as *dynasty 19 or 20 or early dynasty 19?* were left out. For dating the ostraca, I followed the information and references in the *Deir el-Medina Database* and *Deir el Medine Online*.

No.	Category description	Chronological spread
17	Accounts of absence or presence Progress reports	Siptah(?)–Ramesses VI
18	Accounts of absence or presence Events Progress reports Accounts of material and equipment	yr. 25 Ramesses III
19	Deliveries and/or deficits of products Accounts of absence or presence Events Progress reports Accounts of materials and equipment	yr. 14 Ramesses IX
20	Unclear	Dynasty 19–Ramesses IV or V

Although we must keep in mind that the material is biased due to the fact that much more material from the reigns of Ramesses III and IV than before that time has been found, the table shows that the combined categories are generally dated somewhat later than the single categories, notably less often in the 19th dynasty. Where a date such as Seti II or Siptah has been given, it concerns only one text from the category, the remaining texts having been dated to mainly the reigns of Ramesses III and IV.²⁸ For the single categories, the number of texts from the reigns of Seti I to Tausret is much higher (40²⁹, against 73 from the 20th dynasty and 12 with an unsecure date in 19th or 20th dynasty). Notably for the categories 1, 2 and 5 we see that the administration started in 19th dynasty with single categories of text that were later combined into more elaborate forms.

Analysis 2: setup and layout of the texts

Of interest is now the question for layouts. A systematic description of layout was needed to be able to allocate types of layout to the texts in order to later compare

28 They are O. BM EA 5635 (10, Amenmesse-Siptah), O. DeM 595 (8, Seti II), O. DeM 899 (17, Siptah(?)) and O. DeM 900 (9, Seti II, Amenmesse or Siptah).

29 O. Berlin P. 10622 (4), O. Berlin P. 10840 (1), O. Berlin P. 14213 (1), O. Berlin P. 14218 *recto* (1), O. Berlin P. 14218 *verso* (1), O. Berlin P. 14614 (1), O. Berlin P. 15292 (6), O. BM EA 50728 (1), O. Turin N. 57080 (1), O. Turin N. 57469 = O. DeM 7 (1), O. DeM 1 (1), O. DeM 3 (1), O. DeM 4 (1), O. DeM 10 (1), O. DeM 15 (1), O. DeM 20 (1), O. DeM 26 (1), O. DeM 48 (1), O. DeM 75 (1), O. DeM 91 (1), O. DeM 346 (1), O. DeM 591 (1), O. DeM 594 (2), O. DeM 598 (6), O. DeM 611 (1), O. DeM 612 (6), O. DeM 621+829 *recto* (1), O. DeM 706 (6), O. DeM 837 (1), O. DeM 843 (1), O. DeM 846 (1), O. DeM 859 *recto* (1), O. DeM 859 *verso* (1), O. DeM 882 (5), O. DeM 889 (2), O. DeM 908 (2), O. DeM 910 (2), O. DeM 912 *recto* (2), O. DeM 913 *recto* (2), O. DeM 914 *recto* (6).

them to the categories of text. Several aspects of text-setup that caught attention were selected to come to a classification of layouts:

- First, the distinction between texts with horizontal lines, texts with columns and texts with a mix of horizontal lines and columns.
- Second, the presence of a year date, a month and/or day date or the absence of any date *at the start* of the text: was the text deliberately dated when the scribe started writing, or not? When a timeframe is mentioned later in the text, but no date occurs at the beginning, the text is considered undated from the point of view of layout.
- Third, the placement of keywords and dates. Here, dates within the text are meant, which can be day dates or only the phrase *hrw pn*, month dates, or a full regnal year date. Keywords can be:
 - *wnmy* and *smhy*: words for the right and left sides of the crew. In several texts, deliveries or information concerning the right side of the crew follow the date directly, whereas the word *smhy* followed by deliveries or information concerning the left side of the crew is explicitly written in a new line, even when there is ample space left for writing in the previous line (e.g. O. Turin N. 57026, O. Turin N. 57029). In other texts, the right and left sides follow each other directly in running lines of text (e.g. O. Turin N. 57007 *verso*, O. Turin 57056).
 - Words indicating totals, such as *dmd* and *jr(j).n*. These words can be deliberately written in a new line to put focus on the balance (e.g. O. Berlin P. 14614); in other cases, they simply follow directly in the middle or at the end of a running line of text (e.g. O. DeM 91).
 - Personal names. Especially in name lists and accounts of absence or presence, personal names can be placed as keywords at the start of a new line (e.g. O. BM EA 5634, O. Turin N. 57020, O. DeM 94), but there are also examples where they follow each other in running lines of text (e.g. O. Turin N. 57028).
 - Groups of persons, such as men, servants or chiefs. Especially in grain accounts, these groups are placed as keywords at the start of new entries (e.g. O. Berlin P. 11249, O. DeM 577).
 - Deliverers, sometimes including the introduction *m dr.t* or *jn.w m dr.t*, are in a few cases deliberately placed at the start of a new line (e.g. O. Berlin P. 14666).
 - Words for products that have been delivered can, especially in the deliveries and/or deficits of products, act as keywords at the start of new entries. In these cases, the deliveries and/or deficits rather have the character of inventories of what has (not) been delivered (e.g. O. DeM 1, O. DeM 3, O. DeM 15).

The role such keywords or dates play in the way the text is built up was studied. Were they placed at the start of a new line to put them into focus or are they simply enumerated in running lines of text? Here, the surface of the ostracon is taken into consideration, for the choice to start a new line or entry depends of course as well on the space available for writing.³⁰ These aspects of text-setup led to a classification of layouts with codes that consist of three components (table 4).

Table 4: Components in the codes of the layouts

A	Horizontal lines
B	Columns
C	Mix of horizontal lines and columns
1	Texts with a full year date
2	Texts with a full year date followed by the phrase <i>hrw pn</i>
3	Texts with only a month and/or day date
4	Texts with only a month and/or day date followed by the phrase <i>hrw pn</i>
5	Texts without date
6	Damaged: uncertain whether there originally was a date
a	No consideration for keywords and/or dates: running lines of text cover the entire surface of the ostracon
b	Inconsistent consideration for keywords and/or dates: These texts occasionally place keywords or dates at the start of a new line, even when there is space left to continue writing at the end of the previous line, but this is not consistently done.
c	Full consideration for keywords and/or dates: These texts show list entries in which each keyword or date is a new entry.
d	Mix: This occurs when a number of lines and/or a number of columns consistently show different degrees of consideration for keywords and/or dates then other lines and/or columns in the text.
e	Unclear: When the text is fragmentary and the beginnings and ends of all or most lines are gone.
f	Oneliner: When the text has one line or entry only.

³⁰ Less than a week after the conference we learned about *ARU-Net*: a neural pixel labeler for layout analysis of historical documents by T. Grüning (Grüning 2020). It is a text line detection method, which represents each detected text line by its baseline. A deep neural network labels pixels to belong to one of three classes: baseline, separator or other. The separator class marks beginning and end of each text line. Further study is needed and will be reported upon in the publication of the module, for this could be a way to visualize the focus on keywords and/or dates also in our texts. See also Grüning et al. 2019.

The following types of layout were then identified (table 5 and figs. 2a–c):

Table 5: Types of layout found in the corpus and the texts allocated to them

A: Horizontal lines	
Code	Texts
A1a	O. Berlin P. 14213; O. BM EA 05672 + O. CGC 25649; O. BM EA 50730 + O. BM EA 50745; O. DeM 32; O. DeM 44; O. DeM 594; O. DeM 718; O. DeM 726; O. DeM 759; O. DeM 763; O. DeM 855; O. DeM 882; O. DeM 889; O. Turin N. 57007 <i>verso</i> ; O. Turin N. 57028
A1b	O. Berlin P. 10840; O. Berlin P. 12626 + O. DeM 41; O. Berlin P. 12628 + O. Berlin P. 12641; O. Berlin P. 12631 a + b; O. Berlin P. 12639 + O. Berlin P. 14696 + O. DeM 33; O. Berlin P. 12651 + O. DeM 45 + O. Vienna H.4; O. Berlin P. 14302; O. Berlin P. 14666; O. DeM 40 + O. Str. H42; O. DeM 42; O. DeM 46; O. DeM 55; O. DeM 138; O. DeM 145; O. DeM 10299; O. DeM 10339 <i>recto</i> ; O. Turin N. 57007 <i>recto</i> ; O. Turin N. 57026; O. Turin N. 57034; O. Turin N. 57039; O. Turin N. 57044; O. Turin N. 57153
A1c	O. Berlin P. 12627; O. BM EA 5634; O. BM EA 5635; O. DeM 137; O. DeM 262; O. DeM 621 + O. DeM 829 <i>recto</i> ; O. DeM 707; O. DeM 837; O. DeM 854; O. DeM 859 <i>recto</i> ; O. Turin N. 57029; O. Turin N. 57031; O. Turin N. 57035; O. Turin N. 57047; O. Turin N. 57055; O. Turin N. 57469 = O. DeM 7
A1d	O. DeM 932
A1e	O. Berlin P. 9897; O. Berlin P. 14156; O. DeM 776; O. DeM 842; O. DeM 893; O. Turin N. 57204
A2a	O. Berlin P. 9906; O. Berlin P. 10633; O. Berlin P. 10663; O. Berlin P. 12654; O. BM EA 50722 + O. CGC 25726 + BTdK 660; O. BM EA 50744; O. DeM 578; O. DeM 10324; O. Turin N. 57366
A2b	O. DeM 899
A2c	O. DeM 76
A2e	O. Berlin P. 14657
A3a	O. Berlin P. 11272; O. Berlin P. 12633 a + b; O. DeM 595; O. DeM 604; O. DeM 890; O. Turin N. 57432
A3b	O. DeM 35; O. DeM 346; O. DeM 900; O. Turin N. 57025
A3c	O. Berlin P. 10654 <i>verso</i> ; O. DeM 1; O. DeM 3; O. DeM 4; O. DeM 10; O. DeM 15; O. DeM 20; O. DeM 26; O. DeM 75; O. DeM 94; O. Turin N. 57393
A3d	O. DeM 617
A3e	O. Turin N. 57085 <i>recto</i>
A4d	O. Berlin P. 14255

continued on next page

A: Horizontal lines

Code	Texts
A5a	O. Berlin P. 10622; O. Berlin P. 10632; O. Berlin P. 10839; O. Berlin P. 10842; O. DeM 598; O. Turin N. 57157; O. Turin N. 57479
A5b	O. Turin N. 57080
A5c	O. Berlin P. 11249; O. Berlin P. 14149; O. Berlin P. 14210; O. Berlin P. 14614; O. DeM 91; O. DeM 565; O. DeM 844; O. DeM 859 <i>verso</i> ; O. Turin N. 57167
A5e	O. Turin N. 57036
A5f	O. Turin N. 57015; O. Turin N. 57206; O. Turin N. 57256; O. Turin N. 57257
A6a	O. Berlin P. 12629; O. Berlin P. 12640 + O. DeM 161 + O. Str. H82; O. Berlin P. 14286; O. BM EA 50734 + O. BM EA 50742 + O. Ashmolean Museum 99 + O. CGC 25673; O. DeM 571; O. DeM 851; O. DeM 876; O. DeM 10339 <i>verso</i> ; O. Turin N. 57030; O. Turin N. 57056
A6b	O. Berlin P. 14264; O. DeM 148
A6c	O. Berlin P. 9901; O. DeM 869
A6e	O. Berlin P. 11248; O. Berlin P. 12384; O. Berlin P. 14218 <i>recto</i> ; O. Berlin P. 14218 <i>verso</i> ; O. Berlin P. 14233; O. Berlin P. 15292; O. BM EA 66412; O. DeM 591; O. DeM 846; O. DeM 908; O. DeM 910; O. Turin N. 57085 <i>verso</i> ; O. Turin N. 57189; O. Turin N. 57282; O. Turin N. 57283; O. Turin N. 57470

B: Columns

Code	Texts
B1c	O. Berlin P. 12632 + O. DeM 150; O. DeM 147; O. Turin N. 57033
B1d	O. Turin N. 57020
B3c	O. Berlin P. 1122; O. DeM 852
B5c	O. DeM 612; O. DeM 706; O. DeM 843; O. DeM 912 <i>recto</i> ; O. DeM 914 <i>recto</i> ; O. Turin N. 57382
B6c	O. Berlin P. 11289; O. DeM 913 <i>recto</i>
B6e	O. DeM 895

C: Mix of lines and columns

Code	Texts
C1b	O. DeM 142
C1d	O. BM EA 50728; O. Turin N. 57006
C2c	O. DeM 611; O. Turin N. 57072
C5b	O. DeM 143; O. DeM 144

continued on next page

C: Mix of lines and columns

Code Texts

C5c	O. Berlin P. 12625 + O. IFAO ONL 300; O. DeM 48; O. DeM 577; O. DeM 863
C5d	O. DeM 52
C6a	O. Turin N. 57156 <i>recto</i>
C6b	O. Berlin P. 12642 + O. DeM 160

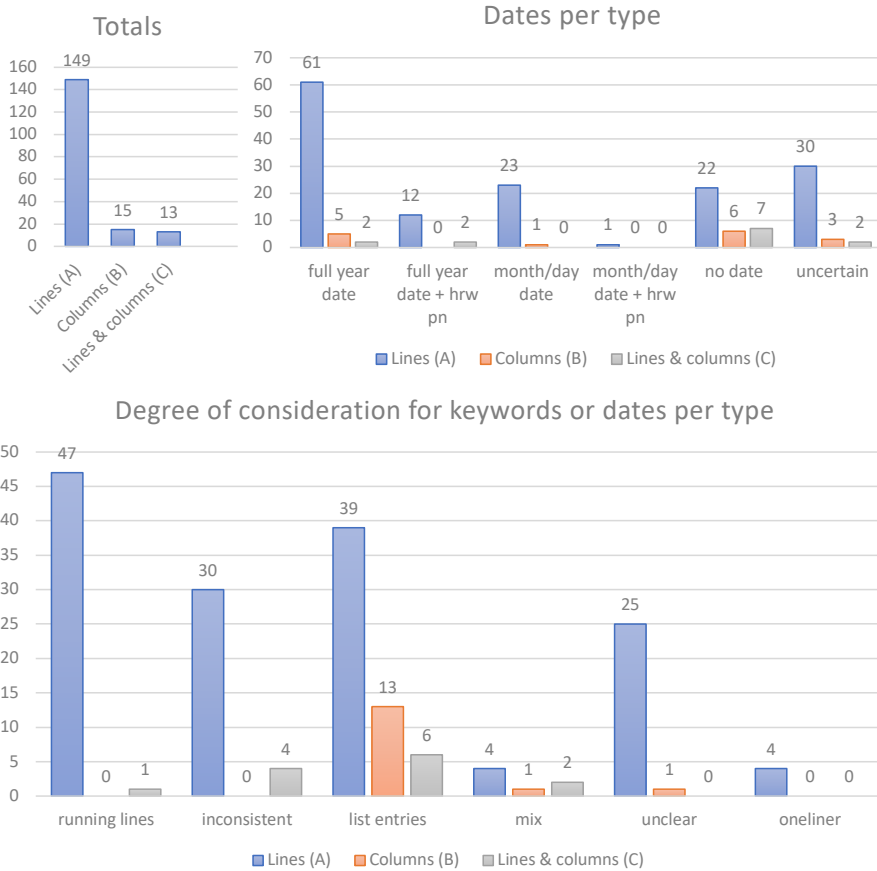


Fig. 2: Charts showing a) the totals per type of layout, b) the presence of a date per type of layout, and c) the degree of consideration for keywords and/or dates per type of layout

Examples are given in figs. 3 to 8. Fig. 3 shows O. BM EA 5634, a long text recording dates of, and reasons for, absence for a number of workmen (text category 2). The

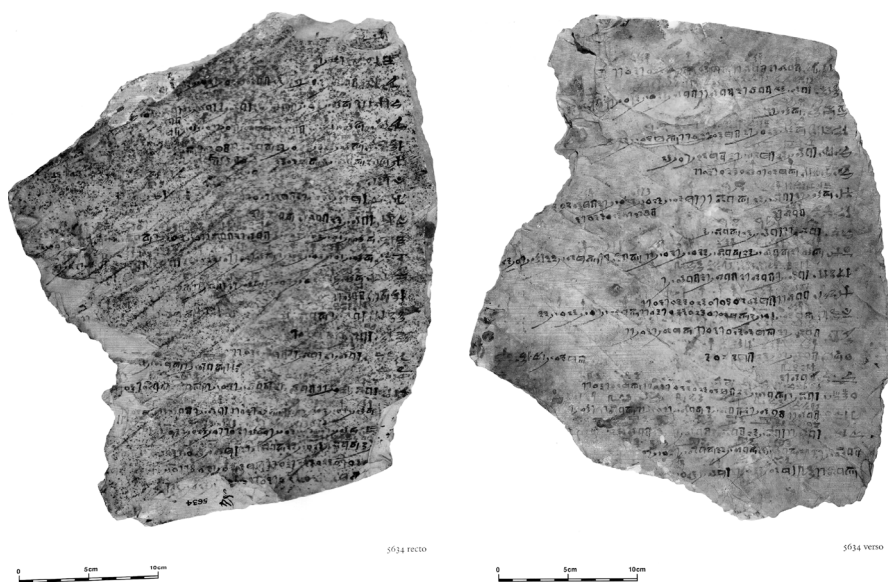


Fig. 3: O. BM EA 5634 *recto* (left) and *verso* (right) (Démaree 2002, pls. 25, 27; recent and detailed colour photos for study purposes are in the hands of the author)

text has been given the layout code A1c: it is written in horizontal lines (A), it has a full year date (1), and it is an enumeration with each personal name being a new list entry (c).

Fig. 4 shows O. Turin N. 57479, which has received the layout code A4a: the text is written in horizontal lines (A), it is undated (4), and the lines are running text (a), which is best seen when looking at the personal names Nakhu, Inherkhau and Horsheri, which are all broken off and spread over two lines due to lack of writing space. The text belongs to text category 6.

Fig. 5 shows O. Turin N. 57033, a text with an account of materials, absences and mention of events (text category 15), which has received the layout code B1c: the text is written in columns (B), it has a full year date (1), and its columns are list entries with each day being a new entry (c).

Fig. 6 shows O. Turin N. 57020, which recounts days of inactivity for three carpenters (text category 2). At first sight, the text seems to have been written in horizontal lines, yet it has been given the layout code B1d. When reading the text, one sees that in fact it has two columns (B), of which the first one starts with a full year date (1). This first column has regular entries with a note of absence for each carpenter in a new entry, followed by a note of going back to work in again a new entry. The second column on the left has extra information on the carpenter Kasa in

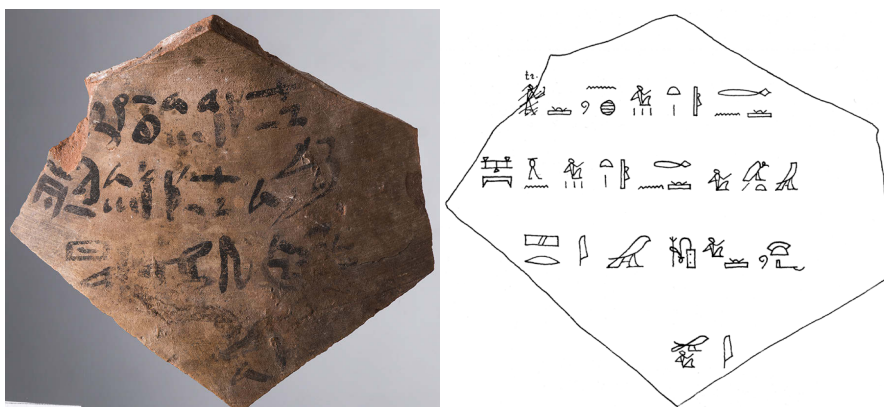


Fig. 4: O. Turin N. 57479 (photo: N. Dell'Acquila & F. Taverni; transcription: López 1984, pl. 163a)

four lines of running text, obviously a squeezed-in note for which there was hardly space. The two columns therefore both show different degrees of consideration for a list-like layout (d).

Fig. 7 shows O. DeM 6II, which is an account of grain distributions (text category 1). It has received the layout code C2c: it is a mix of two horizontal lines above three columns (C), a full year date with *hrw pn* starts off the text in the first line (2), and it has list entries in both the lines and the columns (c). The first line contains a full year date, the second line the subject, acting as a title for the ostrakon, after which the contents are summed up in the two columns, which are built around the personal names of workmen who receive grain.

Fig. 8 shows O. Turin N. 57006, a text with a progress report and an account of materials (text category 16). Its layout code is C1d: the text consists of four horizontal lines above two columns (C), with a full year date in the first line (1). The horizontal lines are running text, whereas the column entries are built around the personal name of a workman or a team of workmen. The lines and columns thus show different degrees of consideration for a list-like layout.

Table 5 and figs. 2a-c clearly show that most documentary texts concerning the administration of the Tomb were written in horizontal lines (149). Only few are in columns (15) or show a combination of lines and columns (13). For those texts written in horizontal lines, the majority has a full year date. The number of texts with a month and/or day date and texts without date is rather similar (23 and 22 respectively). Thirty texts are damaged or incomplete, which means that we cannot with certainty say whether they were dated or not. For those texts written in columns, there is an equal amount of texts with a (year or month/day) date and texts

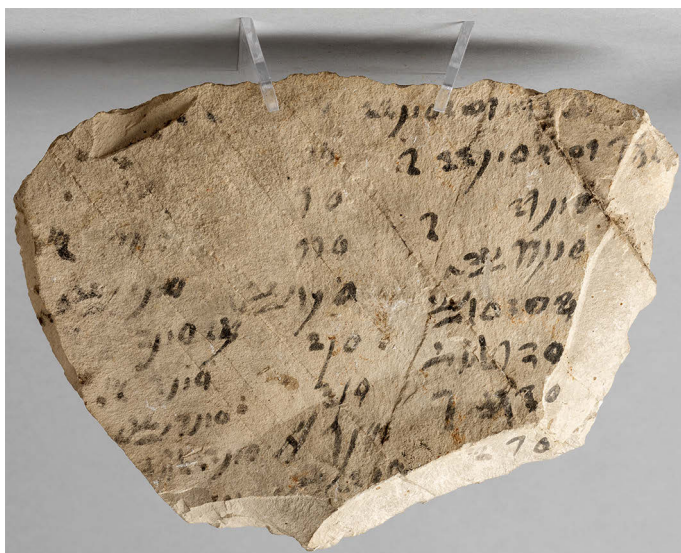


Fig. 5: O. Turin N. 57033 (photo: N. Dell'Acquila & F. Taverni)

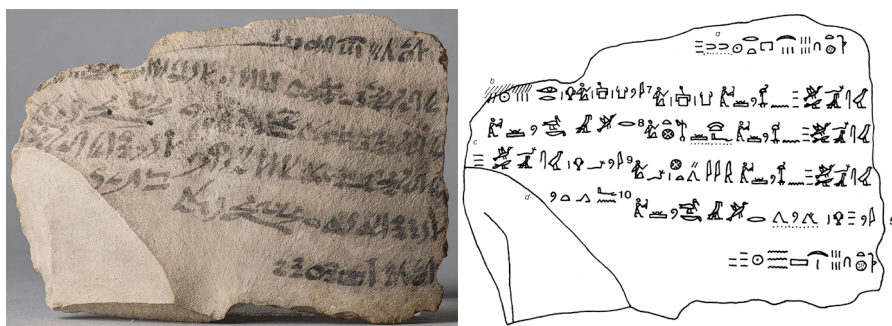
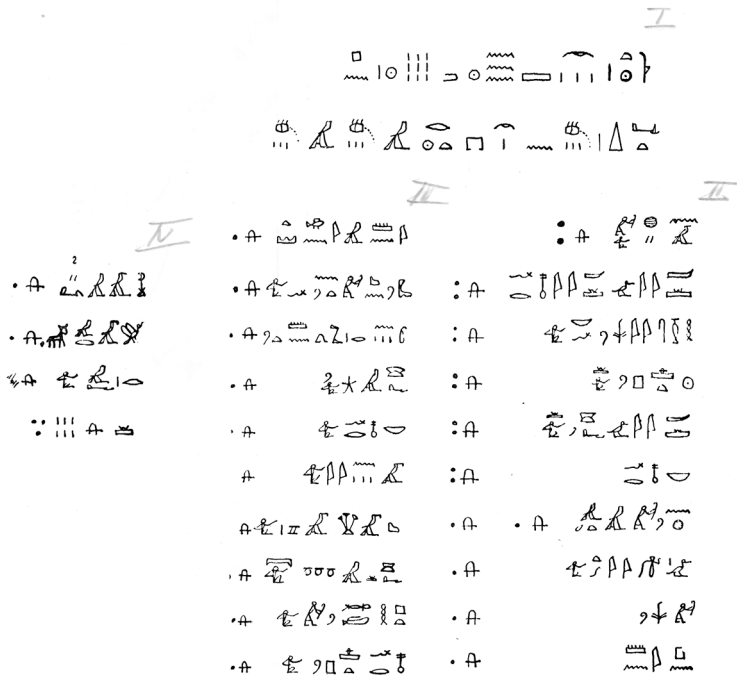


Fig. 6: O. Turin N. 57020 (photo: N. Dell'Acquila & F. Taverni; transcription: López 1978, pl. 12a)

without a date at the start. For those texts written in a mix of lines and columns there is even a slight preference for texts without a date (seven to four). The phrase *hrw pn* appears only in horizontal lines in types A and C. We cannot, however, draw conclusions from the above, since the presence of a year or month/day date was a prerequisite during the selection of sources. The data should be replenished with many more data to see what the presence of a date means regarding the topic of the 'necropolis journal'.



611

Fig. 7: O. DeM 611 (transcription by S. Sauneron in Sauneron 1959, pl. 28; column numbers in pencil by the hand of J. F. Borghouts; a photograph for study purposes is in possession of the author)

For those texts written in horizontal lines, the focus lies on running lines, that is, no consideration for keywords and/or dates (47 texts), but a close runner up are texts with list entries (39 texts). Third come texts with an inconsistent consideration for keywords and/or dates (30 texts). In 25 cases the texts are damaged at crucial points (the ends and beginnings of lines), and the degree of consideration remains unclear. Four texts are one-liners and as such do not show keywords or dates in focus. It will be no surprise that texts written in columns or in a mix of lines and columns have their focus on list entries. The columns mainly list persons, products or dates in tabular form. For those texts written in a combination of lines and columns, one has running lines and four show inconsistent consideration for keywords and/or dates. This occurs mainly in the lines, but also in the columns where lack of space does not allow consistency and the entries do not fit (e.g. O. DeM 142, O. DeM 143, O. DeM 144, O. Turin N. 57156 *recto*, O. Berlin P. 12642 + O. DeM

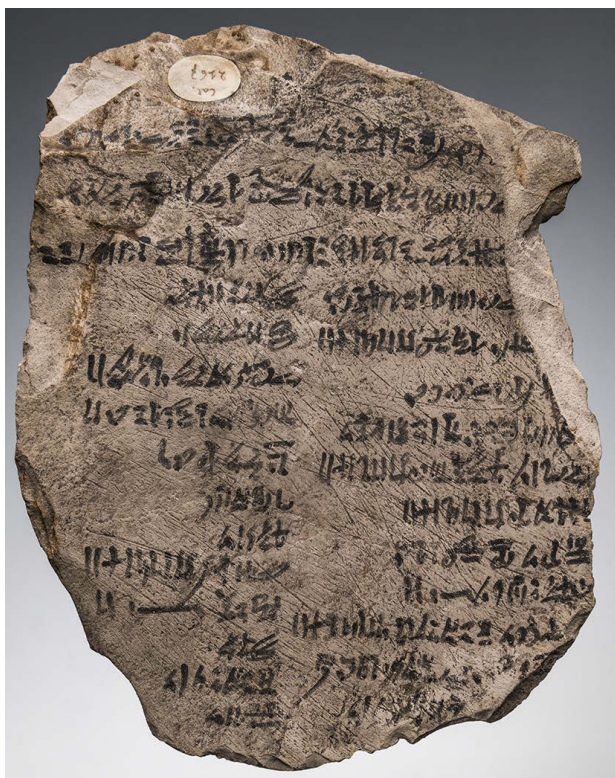


Fig. 8: O. Turin N. 57006 (photo: N. Dell'Acquila & F. Taverni)

160). Texts written in columns or in a combination of lines and columns showing a mix in the degree of consideration have one or more columns with consistent entries and one column with lines, hence the designation *mix* rather than *inconsistent consideration*. Not consistently documented at this point was the presence of dividing lines between columns or even a raster. In some cases, only one quick line was drawn only at the point where confusion might arise, in other cases dividing lines were quite consciously drawn. This factor will be included in the final study of the corpus.

The main conclusions from this classification of layouts are not surprising, but for the sake of being complete, they are:

- First, that most of the 'necropolis journal' texts in the corpus were written in horizontal lines, with only a small part including or consisting of columns.

- Second, horizontal lines are predominantly running text. Where columns are included, these mainly consist of list entries built around persons, products or dates.

As was done for the categories of text, we looked at the chronological spread of the types of layout (table 6):

Table 6: Chronological spread of the types of layout

A: Horizontal lines	
Layout	Chronological spread
A1a	Seti I–Ramesses IX or XI
A1b	Seti I–Ramesses IX or XI
A1c	yr. 3 Seti I–Ramesses IV or VI
A1d	Seti I or Ramesses II–Ramesses III
A1e	Ramesses III–Ramesses IV
A2a	Ramesses III–Ramesses VI or VII
A2b	Siptah (?)
A2c	yr. 4 Ramesses IV
A2e	yr. 1 Ramesses IV
A3a	Seti II–Ramesses III
A3b	Ramesses II–Ramesses III
A3c	Seti I–Ramesses IX
A3d	Ramesses IV
A3e	uncertain, dynasty 19 or 20
A4d	Ramesses III
A5a	Siptah–Tausret–Ramesses IV or V
A5b	Ramesses II
A5c	Seti I/Merenptah–Ramesses III/IV
A5e	yr. 24 Ramesses III
A5f	uncertain, dynasty 19 to 20
A6a	Seti II/Siptah–Ramesses IX or XI
A6b	Ramesses III
A6c	Ramesses IV
A6e	Ramesses II/Seti II–Ramesses IV

continued on next page

B: Columns	
Layout	Chronological spread
B1c	Ramesses III
B1d	yr. 16 Ramesses III
B3c	before year 39 Ramesses III
B5c	Ramesses II–mid-20 th dynasty
B6c	Siptah–mid-20 th dynasty
B6e	yr. 2 Ramesses IV or V
C: Horizontal lines & columns	
Layout	Chronological spread
C1b	yr. 26 Ramesses III
C1d	Ramesses III or IV
C2c	Siptah–Ramesses III
C5b	first half of dynasty 20
C5c	Seti I–Ramesses III
C5d	dynasty 19
C6a	Ramesses III
C6b	yr. 1 Ramesses IV

Table 6 shows that layouts with horizontal lines, with columns and with a combination of lines and columns all occur throughout dynasties 19 and 20. To type A belong 35 texts that have been securely dated to dynasty 19. For type B this number is six, and for type C it is two. In dynasty 20 the numbers are 104 for type A, seven for type B, and ten for type C. This means that 18,6% of the texts from dynasty 19 include columns, whereas the percentage is 14% for the 20th dynasty. These numbers based on the present corpus are so close that they do not allow to conclude on a preference for columns in either one of the dynasties. They do show a clear preference for horizontal lines in both dynasties.

As to keywords and dates within the texts, those texts with running lines occur throughout the 19th and 20th dynasties. If we compare all types of layout with *a*, they occur from Seti II to Ramesses IX or XI, but there clearly is a focus on the 20th dynasty, due, of course, to the bias of finds from that period: six texts date to dynasty 19, two texts possibly date to dynasty 19, 36 date to 20th dynasty from the reign of Ramesses III onwards. Texts with an inconsistent degree of consideration for keywords and/or dates also occur throughout the 19th and 20th dynasties, from Ramesses II to Ramesses IX or XI, and their distribution is similar with four texts dated to dynasty 19 and a clear focus on the reign of Ramesses III onwards. Texts with list

entries occur from Seti I to Ramesses IX, but in contrast to the texts with running lines and inconsistent consideration, texts from the current corpus with list entries occur much more often in the 19th dynasty: 24 texts have been dated to dynasty 19, three to the 19th or 20th dynasty, and the remaining 29 texts date to the 20th dynasty.

Of all 43 texts dated to dynasty 19 with certainty, 11 have a full year date, of which ten belong to type A and one to type C. Ten have a month and/or day date (all type A), and 12 have no date (six belong to type A, five to type B and one to type C). The remaining ten texts are damaged, which makes it uncertain whether a date was present. Of all 121 texts dated with certainty to the 20th dynasty, 68 have a full year date (61 belong to type A, four to type B, three to type C). Fifteen have a month and/or day date (14 belong to type A, one to type B), and 16 have no date (11 belong to type A, five to type C). These numbers suggest that it was more usual to date a text with a full year date in the 20th dynasty than it was in the 19th dynasty. The presence of the phrase *hrw pn* is mainly found in the 20th dynasty: 13 texts with *hrw pn* date dynasty 20 (12 texts with a full year date, one with only a month/day date), whereas two texts with *hrw pn* have been dated to the 19th dynasty. The latter concern O. DeM 899, which was tentatively dated to the reign of Siptah by Grandet³¹, and O. DeM 611, which has been securely dated to year 1 of Siptah.

Analysis 3: A relation between categories and layouts?

The question is now: do specific categories of text show specific characteristics of layout, or do they show consistent formats? Table 7 lists the data on the basis of which we can state the following:

- Category 1 (deliveries and/or deficits of products) shows much variation in layout. The texts come in all formats: lines or columns, with date, without date, with running lines, list entries, etc. Yet, there seem to be two preferences: first a preference for the inclusion of a full year date (26 texts) against only a month/day date (14 texts) or no date (19 texts); second a preference for a focus on keywords and/or dates, either in the form of inconsistent consideration (13 texts) or list entries (37 texts). Only ten texts show no consideration for keywords or dates at all. On the whole, however, the variation is such that there is not one clear format, which – given the fact that it is the category of the ‘necropolis journal’ with most texts in it – does not speak for the existence of an actual journal. The variation is perhaps due to personal preferences; for this we must look at the scribes.³²

³¹ Grandet 2003, 3, 71–73, 314–315.

³² The author hopes to do so in cooperation with Maren Goecke-Bauer, who works on a palaeography of scribes from Deir el-Medina.

- Accounts of absence or presence are predominantly written in horizontal lines (17 texts). Only three texts are in columns. Of those texts in horizontal lines, most show running lines (seven texts), with two texts showing an inconsistent degree of consideration for keywords and/or dates, and three texts showing list entries. In ten out of 20 cases the text has a year date, against two texts with a month/day date and one without date. The focus thus seems to lie on horizontal, running lines with a full year date.
- Events in the current corpus are exclusively written in horizontal lines and except for one unclear case always in running lines. There is a slight preference for the inclusion of a full year date (three out of seven cases), whereas one text has a month/day date and for three texts it remains unclear.
- A similar picture is seen with the progress reports: they are written in horizontal, running lines (except for one unclear case). Yet here, although the numbers are small, only 50% of the texts are dated, the other 50% are without date.
- The accounts of materials and equipment in the current corpus exclusively show horizontal lines as well, but there is no predominance for running lines. The number of texts is in fact too small to conclude on anything, but at least running lines, inconsistent consideration and list entries are all encountered. All three texts include a full year date. Also, when combined with other categories of text, accounts of materials and equipment are predominantly dated with a full year date (except for one case, which has a month/day date only). This is perhaps understandable in the context of keeping track of government materials.
- Name lists are predominantly written in horizontal lines, with five out of 15 texts written in columns. Most texts are without date (11 out of 15 texts), which leads to the idea that these lists were short-lived *aides mémoires* or checklists to see who were present/absent, after which they were discarded.³³ At least they do not speak for a “journal”. In eight out of 15 texts the names are given as list entries, in two cases they are written in running lines, and in four cases we are dealing with one line or name only, which are name stones rather than lists.

For the combined categories, the number of texts is often too small to draw conclusions, but we can say a couple of things:

- The texts in category 10 (duty rosters including deliveries and/or deficits of products) are predominantly written in horizontal lines. Two texts are a combination of lines and columns. There does not, however, seem to be a preference for either running lines or list entries. Four out of nine texts show list entries, two texts show running lines, and three texts show lines with inconsistent con-

³³ For the lack of information in documents within a village context where oral practice is the norm, see also Moezel 2014, 154–174.

sideration for keywords and/or dates. A date (year or month/day date) is in most cases present, except for two texts that are damaged and one text that is without date. The latter is O. Berlin 12625 + O. IFAO ONL 300, which is written in identity marks with pseudo-hieratic numerals, which would at least not be part of an official necropolis journal meant for officials outside of Deir el-Medina.

- Category II (deliveries and/or deficits of products, duty roster and events) also includes a larger number of texts (12 in total). They are exclusively written in horizontal lines and preferably include a date: a year date in eight cases, a month/day date in one case. In three cases the texts are damaged. Five texts show running lines, against seven texts showing some degree of consideration for keywords and/or dates, but list entries are thus far not encountered.
- Events, just as progress reports, were exclusively written in horizontal lines as single categories, but when combined with accounts of absence or presence and/or accounts of materials and equipment, columns do occur, albeit sparingly (see categories 14 to 16).
- In general, the fuller reports with combined categories make up 45 texts, of which 29 have a full year date (with or without the phrase *hrw pn*). Seven have a month and/or day date (with or without *hrw pn*). One text is without date (the marks' ostrakon Berlin P. 12625 + IFAO ONL 300) and in eight cases there is damage and we cannot be certain about a date. Sixteen texts show running lines, 17 show an inconsistent degree of consideration, eight show list entries and two show a mix in the degree of consideration (with two texts remaining unclear). If these fuller reports were a journal, one would expect them to show more consistency in date and format.

As for the chronological spread of the layouts per category:

- Within category I (deliveries and/or deficits of products), texts with consideration for keywords or dates (either in the form of inconsistent consideration or list entries) seem to start a bit earlier, whereas the running lines date predominantly to the mid and later 20th dynasty. Yet the mixed texts (layouts A1d and C5d) occur again a bit earlier. Running lines do certainly not date only to later periods, which is also seen in several of the following categories.
- In category 2 (accounts of absence or presence), running lines and list entries both start in the 19th dynasty (Merenptah/Tausret and Siptah(?) respectively).
- In category 3 (events), we only have running lines, and all are dated to the reign of Ramesses III or later.

- In category 4 (progress reports) we also only have running lines. One text is dated to the early 19th dynasty (if not earlier³⁴).
- In category 5 (accounts of materials and equipment) we have consideration for keywords and/or dates either already under Siptah or Tausret, or from Ramesses III on.
- Name lists (category 6) include mostly list entries from the reign of Ramesses II onwards, but also two texts in running lines from the reign of Siptah or Tausret onwards.
- The combined categories are generally dated somewhat later, to the reign of Ramesses III and onwards, although four of the 45 texts have a 19th-dynasty date. Of those four, three have an inconsistent degree of consideration for keywords and/or dates (one text of category 9, one of category 10, and one of category 17). One text with running lines dates to the 19th dynasty (O. DeM 595, category 8), and all texts with list entries date to year 22 of Ramesses III and onwards.
- Based on the current corpus, no relations can be seen between categories, layouts and their chronological development, except perhaps for a preference for consideration for keywords and/or dates in the earlier texts of category 1 and running lines in the later texts of that category.

Table 7: Types of layout per category, showing the texts and the chronological spread per type of layout

No.	Category	Layouts	Texts	Chronological spread
1	Deliveries and/or deficits of products	A1a	O. Berlin P. 14213; O. DeM 718; O. DeM 726; O. DeM 855	Seti I–yr. 3 Ramesses XI ³⁵
		A1b	O. Berlin P. 10840; O. Berlin P. 14302; O. Berlin P. 14666; O. DeM 138; O. DeM 145; O. DeM 10299; O. DeM 10339 <i>recto</i>	yr. 9 Seti I/Ramesses II–yr. 17 Ramesses IX or XI

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34 https://dem-online.gwi.uni-muenchen.de/show_beschreibung.php?id=187&beschreibung=%2Fproj%2FHODFG%2FOstrakaBerlinBeschr2%2Fb10622-beschr.jpg&inventar_nr=Berlin+P+10622 [29 July 2020].

35 Grandet 2000, 5, 21, 120.

No.	Category	Layouts	Texts	Chronological spread
	A1c		O. DeM 137; O. DeM 621 + O. DeM 829 <i>recto</i> ; O. DeM 707; O. DeM 837; O. DeM 854; O. DeM 859 <i>recto</i> ; O. Turin N. 57469 = O. DeM 7	yr. 3 Seti I–yr. 6 Ramesses IV or VI
	A1d		O. BM EA 50728	yr. 2 Seti I or Ramesses II
	A1e		O. Berlin P. 9897; O. Berlin P. 14156; O. DeM 842	yr. 24 Ramesses III(?)–yr. 5 Ramesses IV
	A2a		O. DeM 10324	yr. 25 Ramesses III
	A2c		O. DeM 76	yr. 4 Ramesses IV
	A2e		O. Berlin P. 14657	yr. 1 Ramesses IV
	A3a		O. Berlin P. 11272	Ramesses III
	A3b		O. DeM 346	Ramesses II
	A3c		O. Berlin P. 10654 <i>verso</i> ; O. DeM 1; O. DeM 3; O. DeM 4; O. DeM 10; O. DeM 15; O. DeM 20; O. DeM 26; O. DeM 75; O. DeM 94	yr. 3 Seti I–Ramesses IX
	A3e		O. Turin N. 57085 <i>recto</i>	dynasty 19 or 20
	A5a		O. Berlin P. 10632; O. Berlin P. 10839; O. Turin N. 57157	Ramesses III
	A5b		O. Turin N. 57080	Ramesses II
	A5c		O. Berlin P. 11249; O. Berlin P. 14149; O. Berlin P. 14210; O. Berlin P. 14614; O. DeM 91; O. DeM 844; O. DeM 859 <i>verso</i> ; O. Turin N. 57167	yr. 7 Seti I or Merenptah–yr. 7 Ramesses IV
	A6a		O. DeM 851; O. DeM 10339 <i>verso</i>	before yr. 39 Ramesses III–20 th dynasty
	A6b		O. Berlin P. 14264	mid 20 th dynasty
	A6c		O. DeM 869	yr. 6 Ramesses IV

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No.	Category	Layouts	Texts	Chronological spread
		A6e	O. Berlin P. 14218 <i>recto</i> ; O. Berlin P. 14218 <i>verso</i> ; O. BM EA 66412; O. DeM 591; O. DeM 846; O. Turin N. 57085 <i>verso</i> ; O. Turin N. 57189; O. Turin N. 57470	yr. 40 Ramesses II to yr. 2 Seti II–Ramesses IV
		B1c	O. Berlin P. 1122; O. Ber- lin P. 12632 + O. DeM 150; O. DeM 147	19 th /20 th dynasty–yr. 29 Ramesses III
		B3c	O. DeM 852	before yr. 39 Ramesses III
		B5c	O. DeM 843	early Ramesses II
		C1b	O. DeM 142	yr. 26 Ramesses III
		C2c	O. DeM 611; O. Turin N. 57072	yr. 1 Siptah–yr. 29 Ramesses III
		C5b	O. DeM 143; O. DeM 144	first half of 20 th dynasty
		C5c	O. DeM 48; O. DeM 577; O. DeM 863	yr. 3 Seti I–end Ramesses III
		C5d	O. DeM 52	end of 19 th dynasty/beginning of 20 th dynasty
2	Acc. of absence or presence	A1a	O. DeM 594; O. DeM 763; O. DeM 889; O. Tu- rin N. 57028	yr. 8 Merenptah or Tausret– yr. 24 Ramesses III
		A1b	O. Turin N. 57026; O. Tu- rin N. 57039	yrs. 23–24 Ramesses III
		A1c	O. BM EA 5634; O. Turin N. 57029; O. Turin N. 57035	Ramesses III
		A3a	O. Turin N. 57432	Ramesses III
		A3d	O. DeM 617	Ramesses IV
		A6a	O. Turin N. 57030; O. Tu- rin N. 57056	Ramesses III
		A6e	O. Berlin P. 11248; O. DeM 908; O. DeM 910; O. Turin N. 57283	yr. 1 Siptah–Ramesses III
		B1d	O. Turin N. 57020	yr. 16 Ramesses III

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No.	Category	Layouts	Texts	Chronological spread
		B5c	O. DeM 912 <i>recto</i>	yr. 1 or 2 Siptah(?) ³⁶
		B6c	O. DeM 913 <i>recto</i>	yr. 1 or 2 Siptah(?) ³⁷
3	Events	A1e	O. Turin N. 57204	yr. 27 Ramesses III
		A2a	O. Berlin P. 10633; O. Berlin P. 12654	yr. 29 Ramesses III–yr. 2 Ramesses V or VI
		A3a	O. DeM 890	yr. 29 Ramesses III
		A6a	O. Berlin P. 14286; O. BM EA 50734 + O. BM EA 50742 + O. Ashmolean Museum 99 + O. CGC 25673; O. DeM 571	Ramesses III–Ramesses IX or XI
4	Progress reports	A2a	O. Berlin P. 9906; O. Berlin P. 10663	20 th dynasty/Ramesses III
		A5a	O. Berlin P. 10622	early 19 th dynasty? ³⁸
		A5e	O. Turin N. 57036	yr. 24 Ramesses III
5	Acc. of materials and equipment	A1a	O. DeM 882	yr. 7 Siptah/Tausret ³⁹ yr. 5 Ramesses IV or later ⁴⁰
		A1b	O. Turin N. 57007 <i>recto</i>	yr. 28 Ramesses III
		A1d	O. DeM 932	yr. 29 Ramesses III(?)
6	Name lists	A1c	O. DeM 262	yr. 2 Ramesses IV
		A5a	O. DeM 598; O. Turin N. 57479	Siptah/Tausret–Ramesses III
		A5c	O. DeM 565	Ramesses III
		A5f	O. Turin N. 57015; O. Turin N. 57206; O. Turin N. 57256; O. Turin N. 57257	19 th or 20 th dynasty
		A6c	O. Berlin P. 9901	20 th dynasty
		A6e	O. Berlin P. 15292	late 19 th dynasty

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36 Grandet 2003, xvii, 4, 88–89, 340–343.

37 Grandet 2003, 4, 90, 344.

38 https://dem-online.gwi.uni-muenchen.de/show_beschreibung.php?id=187&beschreibung=%2Fproj%2FHODFG%2FOstrakaBerlinBeschr2%2Fb10622-beschr.jpg&inventar_nr=Berlin+P+10622 [29 July 2020].

39 Helck 2002, 192.

40 Grandet 2003, 3, 57, 281.

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No.	Category	Layouts	Texts	Chronological spread
		B5c	O. DeM 612; O. DeM 706; O. DeM 914 <i>recto</i> ; O. Turin N. 57382	Ramesses II–Siptah/Tausret
		B6c	O. Berlin P. 11289	mid 20 th dynasty
7	Deliveries and/or deficits of products; Acc. of absence or presence	A3a	O. DeM 604	yr. 29 Ramesses III
		B6e	O. DeM 895	yr. 2 Ramesses IV or V
8	Deliveries and/or deficits of products; Events	A2a	O. BM EA 50722 + O. CGC 25726 + O. BTdK 660; O. BM EA 50744	yr. 5 Ramesses IV–yr. 1 Ramesses VI
		A3a	O. DeM 595	Seti II
		A3b	O. DeM 35	Ramesses III
9	Deliveries and/or deficits of products; Acc. of absence or presence; Events	A1a	O. Turin N. 57007 <i>verso</i>	yr. 29 Ramesses III
		A1b	O. DeM 55; O. Turin N. 57153	yr. 26–yr. 31 Ramesses III
		A3b	O. DeM 900	Seti II, Amenmesse or Siptah
10	Deliveries and/or deficits of products; Duty roster	A1b	O. Berlin P. 12628 + O. Berlin P. 12641; O. Berlin P. 12639 + O. Berlin P. 14696 + O. DeM 33	yr. 27 Ramesses III–year 1 Ramesses IV
		A1c	O. Berlin P. 12627; O. BM EA 5635	yr. 27 Ramesses III
		A2a	O. DeM 578	yr. 31 Ramesses III
		A3c	O. Turin N. 57393	yr. 2 Ramesses IV
		A6a	O. DeM 876	yr. 4 or 5 Seti II ⁴¹ yr. 3 or 4 Siptah ⁴²
		C5c	O. Berlin P. 12625 + O. IFAO ONL 300	yr. 31 Ramesses III

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41 Grandet 2003, 2, 51–53, 272–273.

42 Collier 2004, 104–105, 158.

No.	Category	Layouts	Texts	Chronological spread
		C6b	O. Berlin P. 12642 + O. DeM 160	yr. 1 Ramesses IV
11	Deliveries and/or deficits of products; Duty roster; Events	A1a	O. DeM 32; O. DeM 44	yr. 25 Ramesses III–yrs. 1–2 Ramesses IV
		A1b	O. Berlin P. 12626 + O. DeM 41; O. Berlin P. 12631 a + b; O. Berlin P. 12651 + O. DeM 45 + O. Vienna H. 4; O. DeM 40 + Strasbourg H42; O. DeM 42; O. DeM 46	yr. 1–2 Ramesses IV
		A3a	O. Berlin P. 12633 a + b	yr. 25 Ramesses III
		A6a	O. Berlin P. 12629; O. Ber- lin P. 12640 + O. DeM 161 + O. Strasbourg H82	yr. 26 Ramesses III–yr. 1 Ramesses IV
		A6b	O. DeM 148	Ramesses III
12	Deliveries and/or deficits of products; Duty roster; Acc. of absence or presence	A6e	O. Berlin P. 12384	yr. 2 Ramesses IV
13	Events; Acc. of materials and equipment	A1b	O. Turin N. 57034	yr. 2 Ramesses III
14	Acc. of absence or presence; Events	C6a	O. Turin N. 57156 <i>recto</i>	Ramesses III
15	Acc. of absence or presence; Events; Acc. of materials and equipment	A1b	O. Turin N. 57044	yr. 26 Ramesses III
		A1c	O. Turin N. 57047; O. Tu- rin N. 57055	yr. 22–24 Ramesses III
		B1c	O. Turin N. 57033	yrs. 24–25 Ramesses III

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No.	Category	Layouts	Texts	Chronological spread
16	Progress reports; Acc. of materials and equipment	A2a	O. Turin N. 57366	yr. 1 Ramesses IV or later ⁴³ , or yr. 1 Ramesses VII ⁴⁴
		A4d	O. Berlin P. 14255	Ramesses III
		C1d	O. Turin N. 57006	Ramesses III ⁴⁵ or yr. 2 Ramesses IV ⁴⁶
17	Acc. of absence or presence; Progress reports	A1a	O. BM EA 50730 + O. BM EA 50745	yr. 1 Ramesses VI
		A2b	O. DeM 899	Siptah(?) ⁴⁷
18	Acc. of absence or presence; Events; Progress reports; Acc. of material and equipment	A1c	O. Turin N. 57031	yr. 25 Ramesses III
19	Deliveries and/or deficits of products; Acc. of absence or presence; Events; Progress reports; Acc. of materials and equipment	A1a	O. BM EA 5672 + O. CGC 25649	yr. 14 Ramesses IX

Final remarks

Based on the current corpus there is no clear relation between category of text and type of layout. There are slight preferences, such as texts with events and progress re-

43 Janssen 1992, 107–122.

44 Helck 2002, 455.

45 López 1978, 18–19.

46 Helck 2002, 376–377.

47 Grandet 2003, 3, 71–73, 314–315.

ports predominantly showing running lines, or name lists often showing list entries (here obviously related to the nature of the texts). Notable are the accounts of absence or presence, which mainly occur as running lines or with some consideration for keywords and/or dates. Only few are actual lists of absence or presence. The layouts of these accounts show them to be reports rather than quick checklists used in the field of who was there and who was not; that would rather be a function fit for the name lists of category 6. Also conspicuous are the texts with deliveries and/or deficits of products. They prefer a horizontal layout, but otherwise show no clear preference for running lines, consideration for keywords and/or dates, or list entries. Such variation does not agree with the term 'journal'. Here it would still be interesting to conduct a study of scribes and look at handwriting to see whether individual scribes preferred one layout or the other. The observation that these delivery texts with a layout that shows some consideration for keywords and/or dates seem to date slightly earlier than delivery texts with running lines is most probably coincidence due to the composition of the relatively small corpus. A further observation is that the combined categories also focus on horizontal layouts and running lines. There is some consideration for keywords and/or dates, but only few are list entries, perhaps because list entries take up much more space and the combined accounts were already rather elaborate, often showing lack of space and squeezed lines.

The results from this study must not be understood as definitive conclusions or an endpoint. Of course, the author is well aware of the fact that 177 ostraca for both the 19th and 20th dynasties is a small corpus. It is a starting point, one which we hope will be complemented by our colleagues by uploading more sources in the AKU database. The AKU project is meant first of all to be a starting point, but a collective effort in the end. The author personally hopes that the data on administrative hieratic from the 19th and 20th dynasties will be complemented and the study on categories and layouts of documentary texts on the administration of the Tomb can be expanded. Only then, further questions can be asked, such as whether the text categories, types of layout and factors such as authorship, scribal habits and diachronic development can say something about the purposes of the texts and perhaps even the organization of the scribes.

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