A Bilingual Account from the Aswan Quarries (O.Brookl.Dem. 180 / P.Brookl. 81)\(^1\)

Rachel Mairs

The long-awaited catalogue of the Demotic texts from the Brooklyn Museum (P.Brookl.Dem.)\(^2\) contains many items of interest, among them a curious bilingual Demotic-Greek ostrakon with a long list of personal names (No. 180). The Greek portion of the text was published separately by Shelton in his catalogue of the same institution's Greek and Latin papyri (P.Brookl. 81). The question of whether and in what way the two languages of the ostrakon relate to each other has not been explicitly considered in either of the original publications, but the implication has been that they are separate.\(^3\) Holistic consideration of the Greek and the Demotic, however, makes it all but certain that they represent two portions of a single account, originating from a quarry somewhere in the neighborhood of Aswan and relating to a relatively brief quarrying or transportation project, taking place over just two days, but involving more than 60 laborers.

I do not provide here a full transcription and translation of the unpublished Demotic text, in part because of the difficulties presented by it, but for the most part simply because other commitments have not permitted me to work on it for any sustained period of time. This is, of course, a deeply unsatisfactory situation, but hasty publication of an incomplete or ill-considered transcription would, I feel, be still less satisfactory. Several points of interest, however, make publication of a briefer preliminary report a worthwhile exercise. These include the text's combination of two separate, Demotic and Greek, itemised lists into a single account; mention of groups such as "cataract-dwellers," "people from Syene" and "stone-carriers," which I argue represent professional categories; and the possible presence of a large number of Nubian names.

The Text and its Contents

**Physical description:** 13.3 cm (w) x 19.3 cm (h); thickness 0.5–0.8 cm. "Light tan ware with dark reddish brown slip, fine texture, and heavily ribbed on the interior of the pot" (P.Brookl.Dem. 180, intro.). The text is almost intact, with a small amount of loss at the left hand side, and slight surface fading or rubbing in one or two places, especially towards the end of line 1 of the heading.

**Provenance:** Hughes gives the provenance as "Aswan(?)," Shelton, a more cautious "Upper Egypt." On circumstantial evidence, the probability that the text comes from around Aswan, more specifically from one of the quarries, is high. Although we have no details on this particular ostrakon, the vast majority of the papyri and ostraka in the collection of the Brooklyn Museum were acquired by Charles Edwin

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1 I would like to thank Dr. Edward Bleiberg (Brooklyn Museum) for his assistance and for providing a photograph of the ostrakon, and Dr. Elizabeth Bloxam (University College London) for her advice on quarrying and Nubians at Aswan. The text is published with the permission of the Brooklyn Museum.


3 Hughes and Shelton were, unfortunately, working without access to each other's transcriptions.
Wilbour (1833–1896) in Egypt in the late nineteenth century. Wilbour's collection was especially rich in ostraka from Elephantine. The connections with the Aswan-region quarries will be discussed at greater length below.

*Date/palaeography:* first century AD; the (Demotic) hand is early Roman and fairly clear, although not without difficulties. Letter height: c. 0.4–0.8 cm.

Text appears on the ostrakon in two languages, Demotic and Greek. The Demotic text is the longer one, comprising the heading, a list of names in three columns and some further annotations of numbers relating to the list. The Greek text is limited to two lines of figures which interrupt the Demotic of the third column, and a further brief account in the space below the Demotic text. (See schematic diagram, below.)

The Demotic heading takes up the first line (unfortunately lacunose towards the end) and a smaller segment in the second line. Hughes reads the latter part of this as: ḫsb.t-sp 9 n ... (l. 2) n Swn(?), "year 9 of ... (l. 2) in Aswan(?)." Although I cannot improve upon this reading, there are places where it requires a little flexibility. The remainder of the heading has yet to yield a satisfactory reading, but I take the first few characters as wp.t nfr.t.q.t, "very fine work-project" – which, as we shall see, is a suitable title. The Demotic text then lists ca. 62 personal names in three columns, with the scribe keeping a running count at several points. Each of these names is followed by one or two larger cross marks, occasionally with a sign to be read, following Hughes, as "day 2." At the bottom of the first column the sign šḥ is written, and included in the tally for that column (see further below). After the first seven or eight names of the third column, two lines of figures are written in Greek, before the Demotic list resumes. In the unused bottom left hand portion of the ostrakon, a further eight lines of Greek follow, giving the date (3rd Hathyr of an unknown year), noting sums of money associated with several groups of people or items and reaching a grand total.

I provide below a schematic diagram of the layout of the ostrakon, followed by Shelton's text of the Greek portion:

**Demotic = bold italics; Greek = italics.**

| ![Schematic Diagram](image) |

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<td>26</td>
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3. Hathyr 3rd

4. residents of Syene, 8 dr. 1 ob.  

5. people from the Cataracts, 16  

6. for a boat  

7. stone-carriers, 4 dr. 1 ob.  

8. total 29 dr. 3 ob  

9. Grand total, 84 dr. [1 ob.]  

10. Of which 27 dr. 2 ob. for Dion().

5 Shelton translates this as "hoe."
The figure 5 (6) was written in the left margin slightly below line 3 of the Greek, and 8= (4 dr. 2 ob.) in the left margin under line 5. Like Shelton, I have been unable to find a way of fitting these sums into the account.

**Function**

Consideration of the Demotic and Greek portions of the ostrakon in conjunction allows us to set forth some hypotheses about its original purpose, and the "very fine work-project" to which it relates. It also enables us to establish with a reasonable degree of certainty that the text was produced either by a single bilingual scribe, or by two scribes working in close collaboration.

The text appears to enumerate the expenditure involved in a single project. The briefer Greek portion notes wages or costs for a number of specialised groups and pieces of equipment (Syenitai, Kataraktitai, a boat, stone-carriers). These are added to the unannotated Greek total of 54 drachmas 4 obols from the middle of the third column of Demotic names, to make a grand total of 84 drachmas, 1 obol. An obvious solution to the problem of the Greek figures in the third column is to suggest that they represent labor costs, associated with the individuals listed in Demotic. This much may be confirmed by some simple arithmetic. If we add the Demotic totals of 26 and 24 from the first two columns to the first 7 names legible in the third column (omitting the 5 names listed after the Greek figures), we reach a total of 57 individuals. Following Hughes' suggestion that the additional sign sw 2 "day 2" may be read after some of the names, we may take the "X"s to indicate days of work. The purpose of noting each day worked would of course be a "human resources" one, whether to do with budgeting for the project, or more probably recording attendance or pay. The surface of the ostrakon does not always permit these check-marks to be seen clearly, and the left hand side has been damaged; but a conservative total, presuming that each questionable case worked only 1 day, would be in the region of 78 days-worked, with a more generous total possibly as high as 90. 79 days worked, at a daily wage of 4 obols, would bring us exactly to our first Greek sum of 52 drachmas, 4 obols; no other plausible combination of days-worked and daily wage can be fitted precisely into the sum. The figure of 2 drachmas is problematic. If it also relates to labor costs, then at our 4 obol daily wage it would only amount to 3 days-worked. It may be a separate total for workers paid at a lower daily rate. In this case, the obvious candidate group is the list of 5 names which follows it in the third column. A number of combinations of days-worked and daily wages are possible, such as 6 days at 2 obols, 8 days at 1½ obols, and so forth. Here, however, we would have to assume that the scribe had deliberately left space above these names to record their wages. Alternatively, the 2 drachmas may relate to a higher sum paid to one or more individuals. The question remains to be satisfactorily resolved.

Our hypothetical daily wage of 4 obols is a plausible one for an unskilled laborer in the first century AD, although our comparanda are primarily agricultural. An account-book from a large estate in Hermopolis (P.Lond I 131, AD 78/79), for example, gives daily wages for farm laborers of 3, 4 and 5 obols; donkey-boys receive 2½ obols per diem. P.Fay. 102, from AD 105, has slightly higher wages, with adult laborers paid at a rate of 5–6 obols, and boys at 1–4 obols. These comparisons provide only the very broadest of contexts for our ostrakon, and do not enable us to date it more precisely: further research remains to be done on working conditions and levels of pay among the Aswan quarry-workers.
The relationship between the text's two languages, and the functions each serves, reveals some incidental information about the structure of managerial hierarchies in the Aswan quarries. Very specific kinds of information are recorded in each language. The Demotic portion is for more immediate use "on-site," or is transcribed from such records. It lists the names of the laborers, keeping a running total to assist in counting them. The number of days worked by each laborer is recorded by check marks next to his name, with the exception of one name at the beginning of the list, perhaps an overseer. The word šḥ at the bottom of the first column is also problematic: this should simply mean "written," but appears to be included in the total "26" recorded at the end of this column. Either the scribe has included it by mistake, counting lines of writing without paying attention to the actual names, or perhaps it refers to the scribe himself, included in the personnel for the project, but not recorded by name. The check marks by each laborer's name are presumably made as he arrives for work, or receives his pay, rather than recorded from memory. (An alternative possibility is considered below.) Where Greek is used, it is for information which needs to be extracted from this account and used at a higher – or simply different – level of the administration. Days-worked from the Demotic section are added up and a total figure for labor costs is reached. This is the figure recorded in Greek, without any additional (and now superfluous) information on the names of the workers and how many days each worked. A number of further items of expenditure are recorded in Greek below this, with the costs involved. Perhaps other accounts provided more detailed information on the activities of the cataract-dwellers or the stone-carriers, but the present account merely itemises an area of expenditure, before reaching a total figure for the project.

How many scribes were involved in the production of this text? There seems to me no *a priori* reason for assuming that we are not dealing here with a single, bilingual scribe, who multi-tasks by running a human resources operation in Demotic, while summarising and extracting financial data for an accounts or budgetary department which operates in Greek. On the other hand, it would not be impossible for the Greek portions of the text to have been written by a second scribe, illiterate in Demotic: the large, clear checks next to each laborer's name may have aided in totting up a total of days-worked, before using this to reach a figure of expenditure on labor. My own preference is for the single scribe theory. Although the Greek text towards the bottom of the ostrakon is a little more irregular, the two lines of Greek figures in the middle of the third column are indistinguishable in character-height and orientation from the Demotic text which surrounds them. Nor does the scribe appear to have switched ink or writing implement between the two languages.

**The Names**

The most intriguing feature of the present text is the fact that the names of many of the workforce listed in Demotic are neither Egyptian nor Greek. Columns 1 and 3, with a very few exceptions, consist of solidly Egyptian names: Column 3, for example, has at least three men named Ps-dît-Wṣr. Column 2, on the other hand, is almost entirely made up of non-Egyptian names, marked with the "foreigner" determinative. That these are not Greek is relatively easy to establish. "Nor," Hughes adds, "do they appear to be Semitic [an assertion I take on trust, for now] but may be Nubian." The suggestion that we have here a rare, unprecedentedly rich source of evidence on contemporary Nubian onomastics, and the Nubian community at Aswan in this period, is an attractive one. It is also plausible: the First Cataract only ever
represented the most porous of boundaries between Lower Nubia and Upper Egypt, and the presence of people of Nubian origin in the region to the north of Aswan is well attested, over a very long period of time. What is more, Nubians appear to have had a particular connection to the quarrying industry on the West Bank. This hypothetical Nubian contingent in the workforce in our Brooklyn ostrakon therefore have the potential to tell us much about the Nubian community in early Roman Aswan, and confirm their professional association with the quarries.

Although I have as yet undertaken only a very preliminary study, two problems are immediately apparent in approaching the "Nubian" names in this text: 1) even if these people are from Lower Nubia, we do not know what language they spoke; and 2) whichever language they spoke, we have an extremely limited range of onomastic comparanda. The linguistic situation in Lower Nubia at this period is rather difficult to disentangle, in large part because we have very little evidence. Throughout the first millennium BC, there had been widespread depopulation of the region, although the Kushite empire maintained garrisons and thereby de facto control. In the course of the first and second centuries AD, much of the region was reoccupied. According to the analysis of Adams, "government remained in the hands of a small, elite cadre of Meroitic nobles and officials, and Meroitic remained the language of written communication. On the other hand, the mass of the immigrant population … spoke the Nobatian [Nubian] language which they had brought with them from their previous home." The individuals in the Brooklyn ostrakon could be representatives of this first wave of Nubian repopulation of the region to the south of the First Cataract, speakers of a Nubian language. Our first Old Nubian texts, however, date from the eighth century AD: we would expect the onomastic repertoire to have been altered considerably by both the passage of time and the influence of Christianity. The position with regard to Meroitic, our other candidate language, in the region around Aswan is only marginally more satisfactory. The number of Meroitic names listed in the Demotisches Namenbuch remains in single figures. The Ptolemaic period Demotic papyri from Elephantine yield two probable Meroitic names. Graffiti from the Dodecaschoenus are a little more helpful, but the range of material remains limited. This is clearly an area which will require much further research. Aside from the many cultural and historical questions raised by the possible presence of names from Lower Nubia among a workforce at Aswan, another important issue is that of transcription. Did the scribe of our present text transcribe foreign names – which his use of the "foreigner" determinative shows he perceived as such – on an ad hoc, aural, basis? (A Nubian worker perhaps made to repeat his name slowly and clearly, while the scribe ponders how to spell it.) Or should we envisage a

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7 Elizabeth Bloxam, pers. comm.
more coherent, systematic approach, along the lines of that employed for many frequently written Greek names in Demotic?12

Professional Groups

What, then, of the groups listed separately from the bulk of the workforce, in the Greek portion of the text. The first two terms, "people from Syene" and "cataract-dwellers," apparently refer to localities around Aswan, and of these the cataract-dwellers are of particular interest. At the time of the publication of Shelton's edition, the present text represented the only known occurrence of the term as an ethnic, rather than simply in the form of a toponym. Since then, several more instances have come to light, all on Greek ostraka of the first or second centuries AD. The most secure occurrences are on an ostrakon from the Luxor Temple, where a "Petorzmethis Kataraktites" appears in a list of names, and in a letter mentioning two Roman officials known from early second century Syene, where the term may be used as a patronymic, "son of the man from the cataract."13 Other possible occurrences in published and unpublished material are more fragmentary, and dependent upon restorations.14 The majority of appearances of the term – as also of the term "cataract" – come from the region around the First Cataract, whether Elephantine, Syene, or further up-river at Philae and El Sehel; it would seem, therefore, to refer in a precise sense to the inhabitants of the First Cataract and its islands.15 I would suggest that, in the present text, the demarcation of the Syenitai and Kataraktitai as separate categories, apart from the bulk of the workforce, indicates not simply their place of origin, but that they formed professional groups, either possessing some particular skill, or functioning as a guild-like organisation which enabled them to collectively mobilise their labor. Although we have no direct evidence that this particular skill was in the area of quarrying or stone-working (see further below), this would go some way towards explaining the lone occurrence of a kataraktites at the Luxor Temple: if Petorzmethis’ presence there is not simply a random turn of events, he may have been employed as a mason at the site.

Our remaining terms are a little more generic. Boats and boatmen figure prominently in the papyri from Elephantine from all periods.16 The relatively small sum of 1 drachma, 1 obol "for a boat" in the present ostrakon more probably relates to hiring a boat or boatmen, rather than outright purchase. I have been unable to find the term "stone-carriers" in other texts from the region, but the implications are straightforward enough. If, as I will argue, this account relates to the transportation of stone to the river, then we would expect these to be people with some technical expertise in this area. They probably did not literally carry the stone themselves: at our daily laborer’s rate of 4 obols, the sum of 4 drachmas, 1 obol would pay only 6 stone-carriers (with a 1 obol remainder). Most likely, they are a small group of technicians directing the workforce, paid at a higher rate. Finally, Dion( )’s role (l. 10) in the operation remains

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12 See e.g. W. Clarysse et al., The Eponymous Priests of Ptolemaic Egypt (Leiden 1983) on eponymous priests.
14 Ibid., 199–200; P.Eleph.Wagner, nos. 22 and 54.
15 Wagner and Gratien, op.cit. (above, n. 13) 199–201.
16 Porten, op.cit. (above, n. 10) 14–15; P.Eleph.Wagner, nos. 42, 92, 268; Roman-period lists of boatmen: O.Wilck. 1197.1, 1198.1; Strabo 17.1.49 describes the boatmen of Elephantine "white-water-rafting" over the cataract for the entertainment of Roman Prefects.
obscure: the sum assigned to him (or supplied by him?) amounts to almost one third of the total expenditure on the project.

**Preliminary Conclusions**

Although previous discussions have been more cautious, consideration of the Greek and Demotic portions of *O.Brookl.Dem. 180/P.Brookl. 81* enable us to argue with some confidence that it comes from a quarry somewhere in the neighborhood of Aswan. In addition, we may suggest that it relates to a very specific point in the quarrying process: the transportation of a large piece of worked or semi-worked stone to the river. The mention of Syene in the Demotic title and groups of "people from Syene" and "cataract-dwellers" in the Greek section of the account, as well as the fact that many of the texts collected by Wilbour are known to have come from Elephantine, all speak in favor of a provenance in the area around Aswan and the First Cataract. If and when it is confirmed that the workforce listed in Demotic contain a large number of people from Lower Nubia, this may be used to support our argument. The project with which the text is concerned required the mobilisation of a sizeable workforce, the expenditure of a not inconsiderable sum of money, and a managerial structure which used two languages at different levels of the administration. Quarrying was the major industry in the region around Aswan, with quarries on both banks of the Nile as well as on Elephantine island, and is therefore an obvious area in which such a project might have been undertaken; the "stone-carriers" of the Greek text support our proposed connection with this industry.

My suggestion that the ostrakon relates to the transportation of stone to the river is based upon a number of factors – not least the simple mention of "stone-carriers" and a boat. The employment of a sizeable workforce over a period of only two days (according to the maximum number of check-marks against each laborer's name) would indicate that this was not an on-going quarrying project. The most visible part of the quarrying process at Aswan – the cutting and removal of stone – was only one part of a wider operation, which required careful management. A sophisticated network of roads and causeways were constructed to move the cut stone to the river, and although man-made harbor structures have yet to be discovered in the area, shipping of the product was evidently also a major operation. As noted in the introduction, this study represents only the most preliminary of reports, not a full edition and commentary on the text concerned. The importance of this text lies not just in the historical and philological questions discussed above, but in the potential it offers to meaningfully relate a document long-removed from its original provenance to an archaeological landscape.

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17 P.Brookl. 180; Wagner and Gratien, *op.cit.* (above, n. 13) 197.