

Hieratic Paleography: Written Egyptian

How it developed from the 5th Dynasty to Roman Times

V. 1 – to the beginning of the 18th Dynasty

Foreword

In the present work an attempt has been made, for the first time, to present the full development of hieratic script over three thousand years.


Hitherto this has been done only in single and very limited areas. In 1880 a small work by S. Levi, entitled *Racolta dei segni ieratici egizi nelle diverse epoche con i corrispondenti geroglifici ed i loro differenti valori fonetici*, was published. New and late hieratic forms were primarily used. The compiler did not intend to provide more than an aid for beginners who wanted to get into the Papyrus d'Orbiney and similar texts. This modest little book will attempt to do full justice to that aim.

In 1890 in his two-volume *Stories from Papyrus Westcar* Adolf Erdman provided a brief sketch with a selection of 70 samples from hieratic texts of the 12/13 – 22 Dynasties. The debt owed to it by the present work will be obvious to the user on every page.

I have called my book *An Account of Egyptian Hieratic*. It should be pointed out at this stage that the cursive script of swiftly made records, like Papyrus Abbott, p. 8, or a quickly scribbled letter is excluded from this presentation. It was not prudent to take this form of the script, from whose latest phase Demotic evolved, into consideration, because it was first a matter of determining the regular and characteristic written forms for each epoch, and furthermore because from the possible scripts the most important, especially the Papyrus Reinhardt in the Berlin Museum, still await publication. With such a difficult kind of script however it must be possible for the user to check the reading for each sign. I do regret that so many of the texts I have used could not be published before.

The tables, which make up most of my work, are set out, with occasional re-ordering, according to Theinhardt's hieroglyph list¹. Every user of the list knows how many signs are incorrect and out of order, and of the need for a new list. Perhaps he will suggest someone competent to undertake this worthwhile task.

The models for our hieroglyphic types are borrowed from the tomb of *bk n rn.f*², whose stock of signs has been replenished from many New Kingdom and Late Period sources. These forms seemed to me inappropriate for tackling Old Hieratic signs, so I am proposing a new collection of hieroglyphic signs, admittedly based on the currently oldest accessible original, photographic or badly copied models: for volume

I the Berlin tomb of  (No.1105. LD II 3-7), complemented with material from other tombs of the 4th Dynasty and Pyramid texts, has been used. Owing to lack of space I have not provided a full citation in the lists, but only a date. I intend to

¹ His first list *Liste der hieroglyphischen Typen aus der Schriftgießerei* was published in 1875, the last in *Verzeichnis der hieroglyphischen Typen der Reichsdruckerei in 25 Klassen geordnet* in 1937.

² The Saite period, publ. LD III 259-269.

provide fuller information of some signs in volume four. I have not been able to substantiate hieroglyphs whose date was missing from the list. They are copied from Theinhardt's list. I have provided the signs with continuous numbering, proposing to quote these numbers (in the left-hand margin). In this way each sign can have the same number in all three volumes. In the first volume, places for forms found only in new or late sources have been left blank.

The appendix contains ligatured groups where two or more signs have influenced each other in combination. In this case the numbering (in Roman numerals) in each volume is independent of the others: a New Kingdom scribe used completely different ligatures from those of the Middle Kingdom, and in texts of the Late Period they are not recorded at all.

Finally, I would like to thank all those who have supported this work: the Royal Prussian Academy of Sciences, which enabled me to take up the highly important Hatnub alabaster texts again, next to Messrs Borchardt, Daressy, Gardiner, Maspero Spiegelberg for their willingness to put materials at my disposal, and finally the chairman of the German Oriental Society; but above all, for advice of all kinds, the two men to whom this book is dedicated.

Gr. Lichterfelde bei Berlin
5 November 1908

Introduction

Definition of Hieratic

By 'hieratic' we mean the script which, developing from abbreviations of hieroglyphs, was used up to the end of the New Kingdom exclusively for non-religious texts, and later also for religious ones.


As is clear from the definition, the choice of this term, borrowed from the Greek γράμματα ἱερατικά³, for Egyptian book and business texts, at least in its oldest form, is inept, but its replacement by a more suitable term is now no longer feasible.

The Origin of Hieratic and its Development up to the Beginning of the New Kingdom

Even among the oldest written records in the Abydos royal graves there are some which have not been carved by chisel, but written in colour with a brush or reed stem. Hand in hand with this so much more manageable recording method went a regular abbreviation of signs. For the contemporary of King Djed, who wrote down the accounts published by Petrie (*Royal Tombs I*, 19, 11), it was simply a matter of depicting recognisable signs at the lowest cost in time and effort, thereby making a decisive step in the development of hieratic⁴. Unfortunately palaeographic material from the earliest dynasties is exceptionally meagre.

Somewhat more of 3rd dynasty cursive has survived. During his excavations of dated tombs of this period Garstang⁵ found a number of inscribed pot shards near Bait






















































³ Clemens Alex. *Stromata*, 5:4.

⁴ v., for example, the shape of  which is no different from those of the 5th and later dynasties.

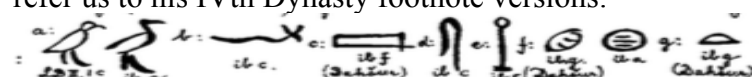
⁵ *Mahāsna and Bēt Khallāf*, John Garstang, London, 1903. Pl. 28.

Khallāf, which have enabled us to draw up the list below of Archaic Hieratic signs from the time of Kings Sanakhte and Djoser.

As can be seen, the 3rd Dynasty scribe is still partly obliged to portray recognisable living creatures, e.g., to draw the feet of No. 200 with one pen stroke, or make its head and beak indistinguishable, seems to have been still unacceptable in the 3rd and 4th Dynasties (from which few examples survive)⁶.

Hierogl.	Dyn. 3.	Dyn. 5.	Hierogl.	Dyn. 3.	Dyn. 5.	Hierogl.	Dyn. 3.	Dyn. 5.	Hierogl.	Dyn. 3.	Dyn. 5.
			124			340			497		
34			198			358			525		
61			200			363			547		
79			268			389			561		
82			282			432			569		
91			287			438			574		
111			331			447			575		
115			335			470			588		
119			339			474					

⁶ Möller's Note 2 points out that the numerals below the hieratic forms are Garstang's; his Note 3 points out that the numerals to the left of the hieroglyphs are from Theinhardt's list; Möller's Notes 4a-g in 200, 263, 335, 432, 447, 574 and 575 refer us to his IVth Dynasty footnote versions:



Herein lies the characteristic difference between Archaic Hieratic⁷ and Old Hieratic⁸, of which we have sufficient examples from the end of the Vth Dynasty onwards. The documents from the scriptorium of the pyramid temple of King Neferirkare already show all the characteristic strokes of an official script, where the ligature is already fully formed and shows striking abbreviations⁹. The forms are delicate and elegant. In the following centuries up to the end of the 11th Dynasty the script changes little, although some forms become coarser and cruder, as we see in monuments of the same period.

Within a few generations the script makes a great leap forward in its development. The newest Old Hieratic texts¹⁰, which were written down about 30 years before the beginning of the 12th Dynasty and some 150 before the Il-Lahun temple records, are considerably further on than the estimated 450-500-year older fragments from the time of King Isesi. The oldest dated hieratic text¹¹ of the 12th Dynasty from the 31st year of Senusret I shows essentially the same forms as the roughly 70 years later papyrus documents from the time of Senusret III and his successors. Thus the metamorphosis of the script takes place in the short space of 80 years – a generation before the fall of the 11th and 50 years after the beginning of the 12th Dynasties.

We shall call the script of the whole period from the beginning of the 12th to the end of the 13th Dynasties Middle Hieratic. Later on comes the script of the Hyksos Period and the beginning of the 18th Dynasty inclusive, the latter of which are much closer to the documents of the Middle Kingdom proper than those from the middle of the 18th Dynasty, which we shall call New Hieratic¹².

III Sources




Old Hieratic



a. Abusir (Plate 1)

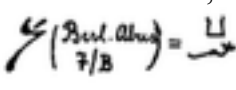

Origin

⁷ Its further development can be seen in the abbreviated hieroglyphs used in the Coffin Texts from the end of the Old Kingdom, to which the Books of the Dead hark back.

⁸ The hieroglyphic script, from which Old Hieratic originated, as already pointed out by Erman (q.v. supra), must have had multiple signs, but there is insufficient evidence

to demonstrate this, e.g.,  goes back to an old ; the model for 

is  = p3 (No. 221 in the table), must, like No. 222, , have had both wings raised. For further information, v. vol. 4.

⁹ E.g.,  = 

¹⁰ Hatnub 31 and 32.

¹¹ Hatnub No. 49.

¹² Erman was the first to point this out (*Die Märchen des Papyrus Westcar*, II, p. 38 et seq.)

In 1893 a considerable number of papyrus fragments turned up in a Cairo antique shop, the largest number of which were acquired by Edouard Naville and are now to be found in Geneva; other fragments became part of the private collections of Gaston Maspero and W. M. Flinders-Petrie, and some, in poor condition, went to the Cairo Museum¹³. Their content showed that the papyri, supposedly originating from a ‘necropolis in Memphis’, came from the funerary temple of Neferirkare at Abusir, which was confirmed by the systematic excavations of the whole site by the Deutsche Orientalgesellschaft.

Dating

In his *Festschrift* for Ebers (p. 12-13) Borchardt concluded from the Cairo fragments, in which the royal name Isesi appears, along with those of certain priests and officials, whose names are known to us¹⁴, that they belong to the 5th Dynasty. Plate I, 2 (q.v.) provides proof of this, as it was written down during the lifetime of the above-mentioned king.

Content

Apart from the above-mentioned papyrus, which appears to contain a letter, all the other fragments known to me are accounts dealing with detailed offerings and the allocation of benefices, c.f. the content of Borchardt’s contribution to the *Festschrift*, wherein the largest of the Cairo fragments is described and discussed.

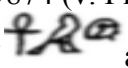
Orientation

The lines are almost exclusively vertical, except, unavoidably, in headings (v. Borchardt, op. cit., p. 10 et seq.)

Treatment

For the list of forms I have used the fragments stored in the Cairo¹⁵ and Berlin¹⁶ Museums. Most of the fund, as mentioned above, remains unpublished in private collections and so could not be used here.

In addition the following have been used:

1. Berlin P9874 (v. Plate I, 1), a note containing workers’ names (?) from a wall of the mastaba of  at Abusir (v. Borchardt *Das Grabdenkmal des Königs Neferirkare*, p. 156).
2. Abu Gorāb, Inv. 3784. A list of names on a limestone block from king Niuserre’s shrine to the sun at Abusir (Abu Gorāb). Unpublished.

b. Elephantine (Plate II)

¹³ These are discussed by Ludwig Borchardt in his *Aegyptica: Festschrift für G. Ebers zum 1. März 1897*, p. 8 ff.


¹⁴ e.g.,  (Gizeh, grave 95, LD II 43-44)

¹⁵ Unnumbered. *Cairo* provisionally represents the fragments in the list with continuous Greek and Latin letters. It also represents the pieces from the DOG’s excavations, numbered by year (03, etc.)

¹⁶ Unnumbered. *Berlin* and *Berl. Abus.*, with abbreviated dates (03, 04, 07), represent the results of the last excavations 07/A-G.

Date, Content and Origin

Fragments of commercial content, dateable by the occurrence of the 6th Dynasty royal names Neferkare, Merenre and Pepi, along with the names of Nomarchs and officials such as

, whose graves are preserved on the west bank opposite the island of Elephantine¹⁷. The fragments, which represent an integrated find acquired in 1896 in Aswan and Luxor, apparently belong to the family archive of the Nomarchs of Elephantine. They are now in the Berlin Museum (P8869, P9010, and tiny fragments collected under the catalogue number P10523) and the University of Strasbourg¹⁸. Some fragments were taken to England by Archibald Sayce.

Orientation

With a few exceptions¹⁹ vertical.

Treatment

No. 9 (= v. III, 1) of *die hieratischen Papyrus aus den Kgl. Museen zu Berlin*, Leipzig 1906²⁰.

To complete the lists I have added

1. Hatnub No. 1 and 2²¹ from the time of Teti.
2. Berlin 13536-8, 13653-74: vessels bought in Thebes, containing grave offerings (e.g. honey) with ink inscriptions. Under the proper names which occur in the

inscriptions,  (No. 13538) by which they are dated. Unpublished.

3. *Les papyrus égyptiens du Musée de Boulaq* (Auguste Mariette), No. 8, which bears the name of Pepi I²². Unpublished.

4. Hatnub No. 3-7, from the time of King Pepi II, Neferkare (2278-2184).

5. Cairo No. 25575, a longer text on linen from Saqqara. Although not dated, it is in every way concurrent with the Elephantine fragments. Unpublished.

c. Hatnub (Plate III)

The hieratic visitors' inscriptions in the great alabaster quarry at Hatnub (south-east of Tel Amarna), discovered by P.E. Newberry in 1891, were first partially published by Blackden and Fraser²³ and redone completely by me in June and July 1907, c.f. my article on text-dating in the 25 June 1908 Minutes of the Royal Prussian Academy of Sciences in Berlin.

¹⁷ v. Morgan, Jacques de: *Catalogue des monuments et inscriptions de l'Égypte antique*, t. I, p. 143 et seq.

¹⁸ Referred to as *Str.*

¹⁹ P8869 (a letter); P10523 (Cm) 71 (Date), *Str. Ce* (Account).

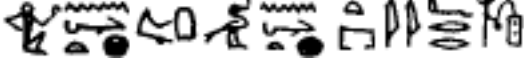
²⁰ My lists come from this work.

²¹ Based on my own photographs, the enumeration from a forthcoming publication of mine.

²² C.f. My *Miscelle* in *Zeitschrift*, Bd. 44, p. 129; Sethe's *Pyramidentexte* I, p. XII.

²³ *Collection of Hieratic Graffiti from the Alabaster Quarry of Hatnub, situated near Tell Amarna* (1892?).

I have chosen texts No. 23-25²⁴, which were written in the seventh year of Prince *Nhrj*

I by . The number of signs in these texts is completed by another fourteen graffiti from the time of the same Nomarch.

Nhrj lived two generations before the enthronement of the first king of the XIIth Dynasty and was the great-grandfather of a man²⁵ who visited the alabaster quarry in Sesostri's 31st year, i.e., the 51st year of the Dynasty.

Middle Hieratic Sources




I have already stressed (q.v. supra) that at about the same time as the rise of the 12th Dynasty, hieratic script underwent a drastic re-shaping of forms, influenced by a change of orientation from vertical to horizontal.

The starting point for the dating of Middle Kingdom sources are the Il-Lahun ('Kahun') texts from the second half of the 12th Dynasty and the Accounts Book (Boulaq 18), which belongs to the end of the 13th Dynasty. As for the rest, I have used Papyrus Prisse from the Il-Lahun fragments and the great Berlin Sinuhe text (and the like), which come before the Accounts Book.

d. 'Prisse' (Plate IV, 1)

Named after Prisse d'Avennes, this manuscript, in the Bibliothèque Nationale in Paris, contains the Sayings of Kagemni and of Ptahotep²⁶.

The date of the manuscript is not entirely certain; nevertheless I did believe that this palaeographically unusual papyrus should not be ignored.

For the moment, it is fairly certain that the papyrus can be dated to the Middle Kingdom. By shapes and format it belongs to the same group as the Berlin manuscripts of Sinuhe, the Eloquent Peasant, the Herdsman's Tales, the Debate between a Man and his Soul, etc., which, as will be explained later, belong to the end of the 12th or beginning of the 13th Dynasties, but it is older than the Il-Lahun Papyrus (mid-12th) or the Boulaq Accounts Book (end of the 13th). The Prisse papyrus cannot be dated between the aforementioned and the styles of the Hyksos Period. Various archaic traits such as, e.g., No. 125 , No. 229 , No. 294 , point to the manuscript as belonging to an early Middle Kingdom group, thus older than the Il-Lahun fragments, but later than the Hatnub texts, therefore to the beginning of the 12th dynasty²⁷.

Orientation

Exclusively horizontal.

Format and Size

Height 15 cm. Column width 17-36 cm, p. 7 is 58 cm [sic!]. The MS lacks a beginning, but now comprises 18 pages. Writing recto only.

²⁴ No. 23 = Graffito 1, 24 = Graffito 8 in Blackden and Fraser (op.cit.). No. 25 remains unpublished.

²⁵ No. 49 of my *Minutes* (=Blackden and Frazer Graffito No. 10)

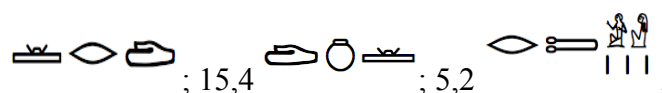
²⁶ Published as *Facsimile d'un Papyrus égyptien en caractères hiératiques, trouvé à Thèbes, donné à la Bibliothèque Royale de Paris et publié par E. Prisse d'Avennes*, Paris 1847.

²⁷ Not the XI-XIIth, as in the ?

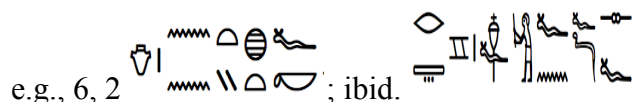
Paleographic characteristics

With *Sinuhe* and *The Eloquent Peasant* (in their horizontal parts) it shares the following:

1. The horizontal signs are primarily put next to or on top of one another, e.g., 11,4



2. On the other hand, for reasons of space, words are broken up in an unusual fashion,



3. In Papyrus Prisse, where space permits, a horizontal line is drawn inside horizontal signs, e.g.,



e. Il-Lahun (Plates IV, 2 and V)

From no other period in written Egyptian has so much paleographic material been preserved as in the second half of the 12th Dynasty. In the period 1889-1899 two great discoveries of papyrus fragments were made in the ruins of Senusret II's pyramid complex not far from modern Il-Lahun ('Kahun').

The first was published by Griffith²⁸, the second, seven or eight times longer, is still unpublished. Most of it is in the Berlin Museum, the rest in Cairo or private collections.

Dates

The oldest dated materials belong to reigns of Senusret III, when the majority of the fragments from the second discovery and a considerable number of texts from the first were written²⁹. Earlier documents definitely from the reigns of Amenemhat II and IV are much fewer in number, while there are none from that of Sobeknefru. Of kings of the 13th Dynasty only Sobekhotep II and III are mentioned in Griffith (Plates 9 and 10), where princes of this royal house are generally not mentioned.

Contents

From the first find several literary fragments are worthy of mention, especially the *Hymn to Senwosret III* (Gr. Kah. Pl. I-III), a coeval (according to Griffith) fragment with mythological contents (Horus and Seth, ib. Pl. III), a larger fragment from a medical (gynecological) papyrus³⁰, a mathematical fragment (Plate VIII) and a will from year 2 of Amenemhet IV's reign (ib. Pl. XII-XIII).


The second find (c.f. Borchardt's article in *ÄZ*, v. 37, p. 89 et seq.) contains only temple files, viz., a diary from the reign of Senwosret III, written between years 5-9 by the same, very characteristic hand³¹, together with matching files, like work records with tabled and labelled inventories, extracts from a calendar, offering lists,

²⁸ *Hieratic papyri from Kahun and Gurob*, London, 1898.

²⁹ The age of older documents in both finds cannot be ascertained. Where earlier kings are mentioned, they are shown to be dead by the *mꜣꜥ-hrw* formula.

³⁰ Written before the 29th year of Amenemhet's reign, acc. to notes verso.

³¹ v. Pl. V, 1.

balance sheets, a variety of business correspondence³² in the original and copy from a superior about the submission of the diary to a short order-form³³. Finally, loosely connected with the temple materials is a collection of prescriptions (.

Orientation

The *Hymn to Senwosret* and the letters are written partly vertical, partly horizontal³⁴, while the accounts and diary are horizontal. The statutes are vertical only.

The script of the Il-Lahun papyrus is, apart from the scientific and literary pieces, richer in ligatures and abbreviations than the other Middle Hieratic hands mentioned here, which is in the nature of things with texts principally made up of accounts and letters.

f. Sinuhe (Plate VI)

The well-known Papyrus No.3022 of the Berlin Museum contains the experiences of the refugee Sinuhe in Palestine. The MS, along with others to be discussed later, was acquired from the Athanasi collection in London in 1843, but where it was found is unknown. The papyrus was published inadequately by Lepsius in his memorial volume VI, p. 104-107; a new edition has been prepared by Gardiner (volume V of *Hieratische Papyrus aus den Königlichen Museum zu Berlin*).

Date

I have put the Sinuhe MS P3022 between 'Il-Lahun'³⁵ and 'Bulaq 18'³⁶. A comparison of the signs definitely shows that it is older than the Cairo accounts fragments. The text relates events from the reign of Senwosret I. The origin of the tale must be set several generations later, because the narrator assumes that events which preceded the enthronement of this ruler are well known and he also distorts his name (Z 179/180³⁷; Borchardt was the first to point this out in ÄZ v. 28, p. 102). Thus our version must be allocated to the second half of the 12th or the beginning of the 13th dynasty.

Direction

Part vertical³⁸, part horizontal³⁹. The writing is rich in irregularities and ligatures, which seems to point to its not being the work of a professional scribe.

Format and Size

Height 16 cm. In the sections written horizontally there are 13-15 lines on one page, the width of the column being 16-19.5 cm; at present the whole MS comprises 311 lines⁴⁰. Recto only.


³² Primarily with interlinear remarks, and a draft reply, in red, v. Plate V, 2. Most of the letters are precisely dated, but without reference to the reigning king, who can however generally be ascertained; the sender and recipient are mentioned in the diary.

³³ V. Plate IV.

³⁴ In the tables I have marked the horizontal signs with the letter *h*, whereas the vertical ones remain unmarked.

³⁵ q.v. supra.

³⁶ From the end of the 13th Dynasty.

³⁷ 

³⁸ Not shown in the plates.

³⁹ Indicated by the letter *h* in the plates.

⁴⁰ The beginning is missing, although there are a few fragments from it in the Amherst collection.

Completion (?)

The text taken from the great Sinuhe papyrus has been augmented by Berlin Papyrus 3023, the most complete MS of the *Tale of the Eloquent Peasant* (B1)⁴¹, which, as a sign-by-sign comparison shows, comes from the same scribe. These taken together with MS P3025 (the second *Eloquent Peasant* – B(2))⁴², P3024 Z1-155 (*The Debate between a Man and His Soul*)⁴³, P3024, Z. 156-180 (*The Herdsman's Tale*) were drawn up by very different scribes⁴⁴, yet the equally good and coeval Papyrus Butler⁴⁵, the fragments of the Berlin Sinuhe MS, and the *Eloquent Peasant* MS owned by Lord Amherst,⁴⁶ have also been co-opted to fill in lacunae. Finally, a few additional signs have been borrowed from the Ramesseum papyri⁴⁷, which are somewhat later.

g. Boulaq 18

Origin and date

Fragments of two MS, stored in the Cairo Museum as No. 6139 and published by Mariette as No. 18 in 'Papyrus de Boulaq', vol. 2, pl. 14-56⁴⁸. Originally found in the grave of Neferhotep (mentioned several times in the text) at Dra Abu-l- Naga. The fragments are dated, according to Borchardt (Festschrift für G. Ebers, p. 8, note), to regnal year 3 of Sobekhotep II (13th Dynasty). The name also occurs in a text from the beginning of the Hyksos Period⁴⁹ as that of an official.

Content

The Cairo fragments stem, as Borchardt (ÄZ, Bd 28, p. 66) has proposed, from two MS, which, incidentally, were prepared by different scribes. Both contain accounts, the larger from the administration of the royal harem, the smaller from a provisions department. Borchardt (ibid. p. 66/7) has allocated the fragments to each MS.

Script

Horizontal only and written on both sides, both MS are rich in ligatures, the smaller – to a lesser extent cursive – shows a marked preference for rounded forms with flourishes, prefiguring the Hyksos period (q.v. infra).

Format

Height about 26 cm – the border is in no instance fully preserved – thus originally of normal format.

Usage

⁴¹ Published in volume IV of the Hieratic Papyri of the Royal Berlin Museum, pl. 5-17.

⁴² Pub. Ibid, pl. 18-24.

⁴³ Pub. By A. Erman in die Abhandlungen der Kgl. Preuss. Akad. d. Wiss. zu Berlin, 1896.

⁴⁴ v. the corrections to the remarks in the introduction to Hieratische Pap. d. Berl. Mus., Band IV, p. 6

⁴⁵ Published by Griffith, PSBA, XIV, p. 458 ff.

⁴⁶ The Amherst Papyri, by P. Newberry, London, 1900, plate 1.

⁴⁷ Hieratische Papyrus des Berl. Mus., Band IV (*Eloquent Peasant*), p. 7.

⁴⁸ Worked on by Borchardt in ÄZ, Band 28, p. 65 ff. ('Ein Rechnungsbuch ges Kgl. Hofes aus dem Ende des Mittleren Reichs' and Griffith in id., Band 29, p. 102 ff.

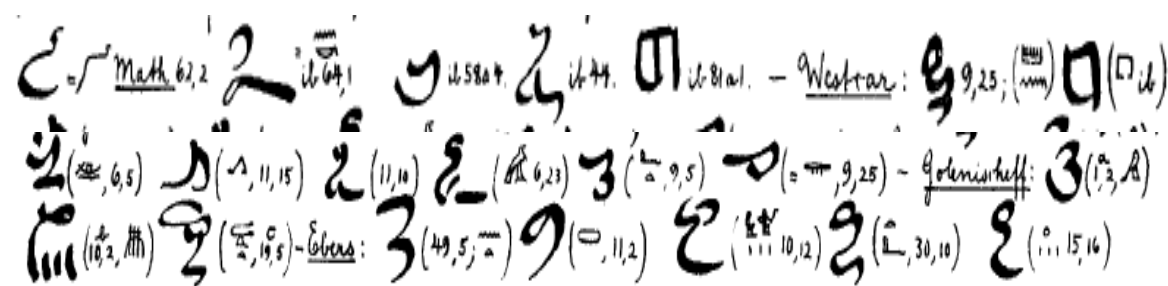
⁴⁹ S. Griffith ÄZ, Band 29, p. 106, Pieper 'Die Könige Ägyptens zwischen dem Mittleren und Neuen Reich' (Berliner Inauguraldissertation, 1904), p. 31.

In the examples, plates 14-17 are from the original, while 18-30 and 51 are from photographs taken by the Royal German Egyptological Institute in Cairo. The smaller MS is only now approaching completion, which should have been done with greater caution, because hitherto I have had only an inadequate publication at my disposal.

3. The MS of the Hyksos Period

As Eduard Meyer⁵⁰ seems to have shown, the period between the end of the 12th Dynasty and the overthrow of the Hyksos amounts to little more than 200 years. This assumption is supported by paleographic work: the MS that can be assigned to the Hyksos period are extraordinarily close in time to those from the middle and end of the 12th Dynasty. Papyrus Westcar, for example, which was written in the first half of the Hyksos Period, is close to the medical papyrus from Il-Lahun (Gr. Kah., pl.V/VI, from the time of Amenhotep III or slightly earlier, p. 14) and Gr. Kah. Pl 12, dating from the second year of Amenemhet IV's reign, is relatively so near⁵¹ that an age difference of about six generations seems to clear up the differences.

What is characteristic of signs of the Hyksos Period is a penchant for rounded, and sometimes somewhat flourished forms, yet different according to texts, e.g.,



and is already demonstrable in the earliest documents of the 13th Dynasty, the second

account papyrus of Boulaq 18, e.g.,

In order to fill up available space the Hyksos Period writer allowed himself an arbitrary stretching or shortening of certain signs, such as

, which were retained in the following period of neo-hieratic.

Only the Mathematical Papyrus Rhind and Ebers can be dated by kings' names, as will be seen below.

h. The Mathematical Papyrus (Pl. VII)

⁵⁰ 'Aegyptische Chronologie' (Abhandlungen d. Kgl. Preuss. Akad. D. Wiss. Zu Berlin, 1905), p. 62.

⁵¹ It is typical, for example, that all examples of /n/ are similar (No.332 – c.f., Erman, *die Sprache des Papyrus Westcar* §§ 5, 143 ff. – 267)

The MS of the great Mathematical Papyrus Rhind⁵², supposedly found to the west of Thebes, not far from the Ramesseum, was bought in 1858 and has been in the British Museum since 1865 (No. 10057/8).

Dating comes from the title (column 1), according to which the text is a copy of an MS from the time of Amenemhet, drawn up in the 33rd year King Apepi I.

Concerning content it should be noted that it is intended for the practical use of someone like a land taxation officer. That it was drawn up by a clerk and not a professional scribe is probably shown by the fact that our papyrus is richer in cursive forms and ligatures than the other MS of the same group.

The external structure of the papyrus has been discussed in detail by Griffith (*PSBA*, XII, p. 164 ff.). It is written on both sides and the lines, apart from the title, are all horizontal.

Later additions: some very cursive additions, probably by a single hand, of a somewhat later time have been published on Pl. 20 of the official publication (2, 3. Eisenlohr No. 86 and 87). No. 87 was written in year 11 of Apepi II.

Its height is 32 cm, but the column width fluctuates according to the number of signs.

i. Westcar (Plate 8)

Papyrus 3033 of the Berlin Museum, known as *Papyrus Westcar*, was published by Erman in 1890 in the *Mitteilungen aus den Orientalischen Sammlungen*, v. 5 and 6, under the title *Die Märchen des Papyrus Westcar* ('Tales from Papyrus Westcar').

Its origin is unknown.

Date

As Erman has shown (v. II, p. 38 ff.), in paleographic terms Papyrus Westcar belongs with the Mathematical Papyrus and Papyrus Ebers. This is undoubtedly correct; moreover, I see nothing to prevent one considering Westcar, which of all the MS of the Hyksos Period, shows the greatest similarity with Middle Kingdom documents⁵³, as at least coeval with the Mathematical Papyrus. The differences in the writing of both MS are to be traced back to Papyrus Rhind being prepared by a clerk, whereas Papyrus Westcar was obviously by a competent scribe.

Script

Of all the MS of the Hyksos period Westcar shows the period's characteristic preference for rounded forms (q.v. supra) at its most distinctive (v. Erman, v. II, p. 56). Direction exclusively horizontal. The MS is a palimpsest, verso being used for the last three pages.

Format: height 28-29 cm (q.v. supra); column width 13-19 cm.

Size: at present⁵⁴ it comprises 12 pages of 25-27 lines.

Preparation: the text has been prepared from the original and a collotype, and apart from a few slightly damaged signs, is the first of the Weidenbach tracings⁵⁵.

Amendment: some signs are taken from 'Spells for a mother and child', No. 127 from Hatnub graffito 52, about which c.f. my report in *Sitzungsberichte der Kgl. Preuss. Akad. d. Wiss.*, 25 June 1908, p. 689.


⁵² First published by Eisenlohr, *Ein mathematisches Handbuch der alten Aegypter* (Leipzig 1877)

⁵³ A note on verso of a sheet of the Illahun temple diary (q.v. supra), which is close in time to Westcar, requires special emphasis.

⁵⁴ The beginning is lost.

⁵⁵ V. Erman, *Tales from Papyrus Westcar*, I, 2.

k. Golenishchev

The papyrus is owned by V. Golenishchev and contains as yet unpublished Hymns to the crowns of the Egyptian kings, apparently written for the Temple of  in Fayum.

Date

Information on the age of the MS cannot be taken from the text, but a sign by sign comparison shows that the papyrus belongs somewhere between Westcar and Ebers.

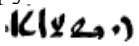
The actual text, which comprises 20 horizontal pages (except 18 which is vertical), recto only, was written by three hands:

- a) 1 – 7,1
- b) 7,1 – 15, 1
- c) 15, 2-20.

On page 21, written by a fourth hand, is a list of non-Egyptian personal names. All the writers have a fine, clearly written hand with few ligatures. The MS is 7 cm high (roughly A8) and 5-6 lines 17-18 cm wide.

l. Ebers (Pl. IX)

The great medical MS, kept in the Leipzig University Library, was acquired in Luxor by G. Ebers, after whom it is named⁵⁶.

On p. 1 verso the papyrus has a calendar, written by a not much earlier hand, from the ninth year of King . Erman (Westc. II, p. 56 ff.) has shown, beyond all criticism,⁵⁷ that this is to be read as *ḏsr-k3-rʿ*, i.e., Amenhotep I. The text may thus come from the reign of Ahmose or the beginning of Amenhotep's.

The writing of the whole, extensive roll comes from one hand, evidently a professional scribe, who has bequeathed us a calligraphic masterpiece. The signs are overall regular and clear, with few ligatures, written horizontally⁵⁸.

Its height is 30 cm, width 15-19 cm⁵⁹. With the exception of 28 and 29, the roll comprises 110 paginated 20-22-line sheets, of which the last 17 are verso.

The MS was used for the tables only after its publication and photographing, for which I thank H. Schäfer. A few signs have been taken from the medical Papyrus Hearst⁶⁰, which is of equal quality and content and perhaps later.

⁵⁶ 'Papyrus Ebers, the hermetic book in the hieratic script about the medical treatment methods of the Ancient Egyptians'. Leipzig 1875.

⁵⁷ v. Griffiths *Bemerkung PSBA*, xiv, 42 ff.

⁵⁸ Only one appendix in the margin of p. 104 has been written vertically, owing to lack of room.

⁵⁹ Except p. 3-21, which are only 6-11 cm broad.

⁶⁰ Published by Reisner under the title *The Hearst medical Papyrus*, Leipzig 1905.