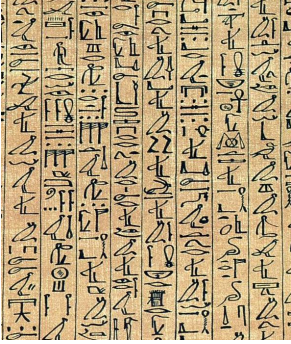


# Egyptian hieroglyphs

| Egyptian hieroglyphs  |   |
|---|---|
|  |   |
| A section of the Papyrus of Ani showing cursive hieroglyphs.                      |   |
| <b>Type</b>   | logography usable as an abjad   |
| <b>Languages</b>  | Egyptian language   |
| <b>Time period</b>  | 3200 BC – AD 400  |
| <b>Parent systems</b>   | (Cuneiform script) <ul style="list-style-type: none"> <li>Egyptian hieroglyphs</li> </ul> |
| <b>Child systems</b>  | Hieratic, Demotic, Meroitic, Middle Bronze Age alphabets                                  |
| <b>ISO 15924</b>  | Egyp, 050   |
| <b>Direction</b>  | Left-to-right   |
| <b>Unicode alias</b>  | Egyptian Hieroglyphs  |
| <b>Unicode range</b>  | U+13000–U+1342F <sup>[1]</sup>  |
| <b>Note:</b> This page may contain IPA phonetic symbols.                          |   |

**Egyptian hieroglyphs** (𐎛 /ˈhaɪərəɡlɪf/) were a formal writing system used by the ancient Egyptians that combined logographic and alphabetic elements. Egyptians used cursive hieroglyphs for religious literature on papyrus and wood. Less formal variations of the script, called hieratic and demotic, are technically not hieroglyphs.

Scholars generally believe that Egyptian hieroglyphs came into existence a little after Sumerian script, and were possibly invented under the influence of the latter.<sup>[2]</sup>

## Etymology

The word *hieroglyph* comes from the Greek adjective ἱερογλυφικός (*hieroglyphikos*),<sup>[3]</sup> a compound of ἱερός (*hierós* 'sacred')<sup>[4]</sup> and γλύφω (*glýphō* 'I carve, engrave'; see *glyph*).<sup>[5]</sup> The glyphs themselves were called τὰ ἱερογλυφικὰ γράμματα (*tà hieroglyphikà grámmata*, 'the sacred engraved letters'). The word *hieroglyph* has become a noun in English, standing for an individual hieroglyphic character. As used in the previous sentence, the word "hieroglyphic" is an adjective, but is often erroneously used as a noun in place of "hieroglyph".

## History and evolution

Hieroglyphs emerged from the preliterate artistic traditions of Egypt. For example, symbols on Gerzean pottery from ca. 4000 BCE resemble hieroglyphic writing. For many years the earliest known hieroglyphic inscription was the Narmer Palette, found during excavations at Hierakonpolis (modern Kawm al-Ahmar) in the 1890s, which has been dated to ca. 3200 BCE. However, in 1998, a German archaeological team under Günter Dreyer excavating at Abydos (modern Umm el-Qa'ab) uncovered tomb U-j of a Predynastic ruler, and recovered three hundred clay labels inscribed with proto-hieroglyphs, dating to the Naqada IIIA period of the 33rd century BCE.<sup>[6] [7]</sup> The first full sentence written in hieroglyphs so far discovered was found on a seal impression found in the tomb of Seth-Peribsen at Umm el-Qa'ab, which dates from the Second Dynasty. In the era of the Old Kingdom, the Middle Kingdom and the New Kingdom, about 800 hieroglyphs existed. By the Greco-Roman period, they numbered more than 5,000.<sup>[8]</sup>

Scholars generally believe that Egyptian hieroglyphs “came into existence a little after Sumerian script, and, probably [were], invented under the influence of the latter ...”<sup>[9]</sup> For example, it has been stated that it is “probable that the general idea of expressing words of a language in writing was brought to Egypt from Sumerian Mesopotamia.”<sup>[10] [11]</sup> On the other hand, it has been stated that “the evidence for such direct influence remains flimsy” and that “a very credible argument can also be made for the independent development of writing in Egypt...”<sup>[12]</sup> Given the lack of direct evidence, “no definitive determination has been made as to the origin of hieroglyphics in ancient Egypt.”<sup>[13]</sup>

Hieroglyphs consist of three kinds of glyphs: phonetic glyphs, including single-consonant characters that function like an alphabet; logographs, representing morphemes; and determinatives, which narrow down the meaning of logographic or phonetic words.



Hieroglyphs on an Egyptian funerary stela

As writing developed and became more widespread among the Egyptian people, simplified glyph forms developed, resulting in the hieratic (priestly) and demotic (popular) scripts. These variants were also more suited than hieroglyphs for use on papyrus. Hieroglyphic writing was not, however, eclipsed, but existed alongside the other forms, especially in monumental and other formal writing. The Rosetta Stone contains three parallel scripts – hieroglyphic, demotic, and Greek.

Hieroglyphs continued to be used under Persian rule (intermittent in the 6th and 5th centuries BCE), and after Alexander the Great's conquest of Egypt, during the ensuing Macedonian and Roman periods. It appears that the misleading quality of comments from Greek and Roman writers about hieroglyphs came about, at least in part, as a response to the changed political situation. Some believe that hieroglyphs may have functioned as a way to distinguish 'true Egyptians' from some of the foreign conquerors. Another reason may be the refusal to tackle a foreign culture on its own terms which characterized Greco-Roman approaches to Egyptian culture generally. Having learned that hieroglyphs were sacred writing, Greco-Roman authors imagined the complex but rational system as an allegorical, even magical, system

transmitting secret, mystical knowledge.

By the 4th century, few Egyptians were capable of reading hieroglyphs, and the myth of allegorical hieroglyphs was ascendant. Monumental use of hieroglyphs ceased after the closing of all non-Christian temples in 391 CE by the Roman Emperor Theodosius I; the last known inscription is from Philae, known as The Graffito of Esmet-Akhom,

from 396 CE.<sup>[14]</sup>

## Decipherment of Egyptian hieroglyphic writing

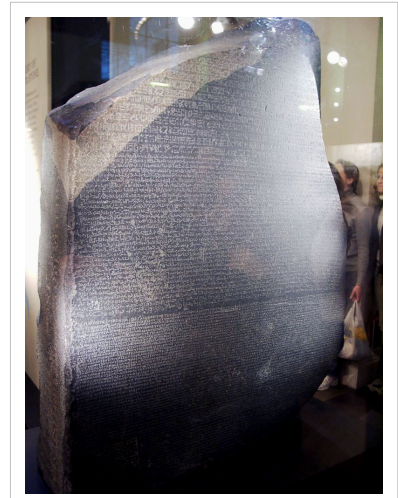
As active knowledge of the hieroglyphs and the related scripts disappeared, numerous attempts were made to decipher the hidden meaning of the ubiquitous inscriptions. The best known examples from Antiquity are the *Hieroglyphica* (dating to about the 5th century) by Horapollo, which offer an explanation of almost 200 glyphs. Horapollo seems to have had access to some genuine knowledge about the hieroglyphs as some words are identified correctly, although the explanations given are invariably wrong (the goose character used to write the word for 'son', z3, for example, is identified correctly, but explained wrongly to have been chosen because the goose loves his offspring the most while the real reason seems to have been purely phonetic). The *Hieroglyphica* thus represent the start of more than a millennium of (mis)interpreting the hieroglyphs as symbolic rather than phonetic writing.

In the 9th and 10th century CE, Arab historians Dhul-Nun al-Misri and Ibn Wahshiyya offered their interpretation of the hieroglyphs. In his 1806 English translation of Ibn Wahshiyya's work,<sup>[15]</sup> Joseph Hammer points out that Athanasius Kircher used this along with several other Arabic works in his 17th century attempts at decipherment.

Kircher's interpretation of the hieroglyphs is probably the best known early modern European attempt at 'decipherment', not least for the fantastic nature of his claims. Another early attempt at translation was made by Johannes Goropius Becanus in the 16th century.

Like other interpretations before it, Kircher's 'translations' were hampered by the fundamental notion that hieroglyphs recorded ideas and not the sounds of the language. As no bilingual texts were available, any such symbolic 'translation' could be proposed without the possibility of verification. Kircher further developed the notion that the last stage of Egyptian could be related to the earlier Egyptian stages.

The real breakthrough in decipherment began with the discovery of the Rosetta Stone by Napoleon's troops in 1799 (during Napoleon's Egyptian invasion). As the stone presented a hieroglyphic and a demotic version of the same text in parallel with a Greek translation, plenty of material for falsifiable studies in translation was suddenly available. In the early 19th century, scholars such as Silvestre de Sacy, Johan David Åkerblad, and Thomas Young studied the inscriptions on the stone, and were able to make some headway. Finally, Jean-François Champollion made the complete decipherment by the 1820s:



The Rosetta Stone in the British Museum

“It is a complex system, writing figurative, symbolic, and phonetic all at once, in the same text, the same phrase, I would almost say in the same word.”<sup>[16]</sup>

This was a major triumph for the young discipline of Egyptology.

Hieroglyphs survive today in two forms: directly, through half a dozen Demotic glyphs added to the Greek alphabet when writing Coptic; and indirectly, as the inspiration for the original alphabet that was ancestral to nearly every other alphabet ever used, including the Roman alphabet.

## Writing system

Visually hieroglyphs are all more or less figurative: they represent real or illusional elements, sometimes stylized and simplified, but all generally perfectly recognizable in form. However, the same sign can, according to context, be interpreted in diverse ways: as a phonogram (phonetic reading), as a logogram, or as an ideogram (semagram; "determinative") (semantic reading). The determinative was not read as a phonetic constituent, but facilitated understanding by differentiating the word from its homophones.

## Phonetic reading

Most non-determinative hieroglyphic signs are phonetic in nature, meaning the sign is read independent of its visual characteristics (according to the rebus principle where, for example, the picture of an eye could stand for the English words *eye* and *I* [the first person pronoun]). This picture of an eye is called a phonogram of word, 'I'.

Phonograms formed with one consonant are called *mono-* or *unilateral* signs; with two consonants, *biliteral* signs; with three *trilateral* signs.

Twenty-four unilateral signs make up the so-called hieroglyphic alphabet. Egyptian hieroglyphic writing does not normally indicate vowels, unlike cuneiform, and for that reason has been labelled by some an *abjad* alphabet, i.e., an alphabet without vowels.

Thus, hieroglyphic writing representing a Pintail Duck is read in Egyptian as *sꜥ*, derived from the main consonants of the Egyptian word for this duck: 's', 'ꜥ' and 't'. (Note that ꜥ ( 𐩣 , two half-rings opening to the left), sometimes substituted with the numeral '3', is the Egyptian *Aeyn*).

It is also possible to use the hieroglyph of the Pintail Duck without a link to its meaning in order to represent the two phonemes *s* and ꜥ, independently of any vowels which could accompany these consonants, and in this way write the word: *sꜥ*, "son," or when complemented by the context other signs detailed further in the text, *sꜥ*, "keep, watch"; and *sꜥt.w*, "hard ground". For example:

- the characters *sꜥ*;
- the same character used only in order to signify, according to the context, "Pintail Duck" or, with the appropriate determinative, "son", two words having the same or similar consonants; the meaning of the little vertical stroke will be explained further on:
- the character *sꜥ* as used in the word *sꜥw*, "keep, watch"

As in the Arabic script, not all vowels were written in Egyptian hieroglyphs; it is debatable whether vowels were written at all. Possibly, as with Arabic, the semivowels /w/ and /j/ (as in English W and Y) could double as the vowels /u/ and /i/. In modern transcriptions, an *e* is added between consonants to aid in their pronunciation. For example, *nfr* "good" is typically written *nefer*. This does not reflect Egyptian vowels, which are obscure, but is merely a modern convention. Likewise, the ꜥ and ' are commonly transliterated as *a*, as in Ra.

Hieroglyphs are written from right to left, from left to right, or from top to bottom, the usual direction being from right to left<sup>[17]</sup> (although for convenience modern texts are often normalized into left-to-right order). The reader must



Hieroglyphs typical of the Graeco-Roman period

consider the direction in which the asymmetrical hieroglyphs are turned in order to determine the proper reading order. For example, when human and animal hieroglyphs face to the left (i.e., they look left), they must be read from left to right, and vice versa, the idea being that the hieroglyphs face the beginning of the line.

As in many ancient writing systems, words are not separated by blanks or by punctuation marks. However, certain hieroglyphs appear particularly common only at the end of words making it possible to readily distinguish words.

### Unilateral signs

The Egyptian hieroglyphic script contained 24 unilaterals (symbols that stood for single consonants, much like letters in English). It would have been possible to write all Egyptian words in the manner of these signs, but the Egyptians never did so and never simplified their complex writing into a true alphabet.<sup>[18]</sup>

Each unilateral glyph once had a unique reading, but several of these fell together as Old Egyptian developed into Middle Egyptian. For example, the folded-cloth glyph seems to have been originally an /s/ and the door-bolt glyph a /θ/ sound, but these both came to be pronounced /s/, as the /θ/ sound was lost. A few unilaterals first appear in Middle Egyptian texts.

Besides the unilateral glyphs, there are also the biliteral and trilateral signs, to represent a specific sequence of two or three consonants, consonants and vowels, and a few as vowel combinations only, in the language.

### Phonetic complements

Egyptian writing is often redundant: in fact, it happens very frequently that a word might follow several characters writing the same sounds, in order to guide the reader. For example, the word *nfr*, "beautiful, good, perfect", was written with a unique trilateral which was read as *nfr*:

However, it is considerably more common to add, to that trilateral, the unilaterals for *f* and *r*. The word can thus be written as *nfr+f+r* but one reads it merely as *nfr*. The two alphabetic characters are adding clarity to the spelling of the preceding trilateral hieroglyph.

Redundant characters accompanying biliteral or trilateral signs are called *phonetic complements* (or complementaries). They can be placed in front of the sign (rarely), after the sign (as a general rule), or even framing it (appearing both before and after). Ancient Egyptian scribes consistently avoided leaving large areas of blank space in their writing, and might add additional phonetic complements or sometimes even invert the order of signs if this would result in a more aesthetically pleasing appearance (good scribes attended to the artistic (and even religious) aspects of the hieroglyphs, and would not simply view them as a communication tool). Various examples of the use of phonetic complements can be seen below:

- *md + d + w* (the complementary *d* is placed after the sign) → it reads *mdw*, meaning "tongue".
- *h + p + hpr + r + j* (the 4 complementaries frame the trilateral sign of the scarab beetle) → it reads *hpr.j*, meaning the name "Khepri", with the final glyph being the determinative for 'ruler or god'.

Notably, phonetic complements were also used to allow the reader to differentiate between signs which are homophones, or which do not always have a unique reading. For example, the symbol of "the seat" (or chair):

- This can be read *st*, *ws* and *htm*, according to the word in which it is found. The presence of phonetic complements—and of the suitable determinative—allows the reader to know which reading to choose, of the 3 readings:

- 1st Reading: **st** — *st*, written *st+t*; the last character is the determinative of "the house" or that which is found there, meaning "seat, throne, place";
  - *st* (written *st+t*; the "egg" determinative is used for female personal names in some periods), meaning "Isis";
- 2nd Reading: **ws** — *wsjr* (written *ws+jr*, with, as a phonetic complement, "the eye", which is read *jr*, following the determinative of "god"), meaning "Osiris";

- 3rd Reading: **h̄tm** — *h̄tm.t* (written *h̄+h̄tm+m+t*, with the determinative of "Anubis" or "the jackal"), meaning a kind of wild animal,
  - *h̄tm* (written *h̄+h̄tm+t*, with the determinative of the flying bird), meaning "to disappear".

Finally, it sometimes happens that the pronunciation of words might be changed because of their connection to Ancient Egyptian: in this case, it is not rare for writing to adopt a compromise in notation, the two readings being indicated jointly. For example, the adjective *bnj*, "sweet" became *bnr*. In Middle Egyptian, one can write:

– *bnrj* (written *b+n+r+i*, with determinative)

which is fully read as *bnr*, the *j* not being pronounced but retained in order to keep a written connection with the ancient word (in the same fashion as the English language words *through*, *knife*, or *victuals*, which are no longer pronounced the way they are written.)

## Semantic reading

Besides a phonetic interpretation, characters can also be read for their meaning: in this instance logograms are being spoken (or ideograms) and *semagrams* (the latter are also called determinative).<sup>[19]</sup>

### Logograms

A hieroglyph used as a logogram defines the object of which it is an image. Logograms are therefore the most frequently used common nouns; they are always accompanied by a mute vertical stroke indicating their status as a logogram (the usage of a vertical stroke is further explained below); in theory, all hieroglyphs would have the ability to be used as logograms. Logograms can be accompanied by phonetic complements. Here are some examples:

- – *r̄*, meaning "sun";
- – *pr*, meaning "house";
- – *swt* (*sw+t*), meaning "reed";
- – *ḏw*, meaning "mountain".

In some cases, the semantic connection is indirect (metonymic or metaphoric):

- – *ntr*, meaning "god"; the character in fact represents a temple flag (standard);
- – *b̄*, meaning "Bâ" (soul); the character is the traditional representation of a "bâ" (a bird with a human head);
- – *ḏsr*, meaning "flamingo"; the corresponding phonogram means "red" and the bird is associated by metonymy with this colour.

Those are just a few examples from the nearly 5000 hieroglyphic symbols.

### Determinatives

Determinatives or semagrams (semantic symbols specifying meaning) are placed at the end of a word. These mute characters serve to clarify what the word is about, as homophonic glyphs are common. If a similar procedure existed in English, words with the same spelling would be followed by an indicator which would not be read but which would fine-tune the meaning: "retort [chemistry]" and "retort [rhetoric]" would thus be distinguished.

A number of determinatives exist: divinities, humans, parts of the human body, animals, plants, etc. Certain determinatives possess a literal and a figurative meaning. For example, a roll of papyrus, is used to define "books" but also abstract ideas. The determinative of the plural is a shortcut to signal three occurrences of the word, that is to say, its plural (since the Egyptian language had a dual, sometimes indicated by two strokes). This special character is explained below.

Here are several examples of the use of determinatives borrowed from the book, *Je lis les hiéroglyphes* ("I am reading hieroglyphics") by Jean Capart, which illustrate their importance:

- – *nfrw* (*w* and the three strokes are the marks of the plural: [literally] "the beautiful young people", that is to say, the young military recruits. The word has a young-person determinative symbol: – which is the determinative indicating babies and children;
- – *nfr.t* (*.t* is here the suffix which forms the feminine): meaning "the nubile young woman", with as the determinative indicating a woman;
- – *nfrw* (the tripling of the character serving to express the plural, flexional ending *w*) : meaning "foundations (of a house)", with the house as a determinative, ;
- – *nfr* : meaning "clothing" with as the determinative for lengths of cloth;
- – *nfr* : meaning "wine" or "beer"; with a jug as the determinative.

All these words have a meliorative connotation: "good, beautiful, perfect." A recent dictionary, the *Concise Dictionary of Middle Egyptian* by Raymond A. Faulkner, gives some twenty words which are read *nfr* or which are formed from this word.

## Additional signs

### Cartouche

Rarely, the names of gods are placed within a cartouche; the two last names of the sitting king are always placed within a cartouche:

jm-n-r, "Amon-Ra " ;

qljw-pdr.t, "Cleopatra " ;

lj-k.t, "Lioka."

### Filling stroke

A filling stroke is a character indicating the end of a quadrat which would otherwise be incomplete.

## Signs joined together

Some signs are the contraction of several others. These signs have, however, a function and existence of their own: for example, a forearm where the hand holds a scepter is used as a determinative for words meaning "to direct, to drive" and their derivatives.

### Doubling

The doubling of a sign indicates its dual; the tripling of a sign indicates its plural.

## Grammatical signs

- The vertical stroke, indicating the sign is an ideogram;
- The two strokes of the "dual" and the three strokes of the "plural";
- The direct notation of flexional endings, for example:

## Spelling

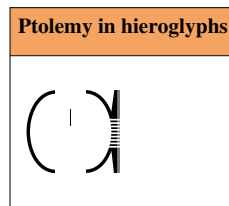
Standard orthography—"correct" spelling—in Egyptian is much looser than in modern languages. In fact, one or several variants exist for almost every word. One finds:

- Redundancies;
- Omission of graphemes, which are ignored whether or not they are intentional;
- Substitutions of one grapheme for another, such that it is impossible to distinguish a "mistake" from an "alternate spelling";

- Errors of omission in the drawing of signs, which are much more problematic when the writing is cursive (hieratic) writing, but especially demotic, where the schematization of the signs is extreme.

However, many of these apparent spelling errors constitute an issue of chronology. Spelling and standards have varied over time, so the writing of a word during the Old Kingdom might be considerably different during the New Kingdom. Furthermore, the Egyptians were perfectly content to include older orthography ("historical spelling") alongside newer practices, as though it were acceptable in English to use archaic spellings in modern texts. Most often, ancient "spelling errors" are simply misinterpretations of context. Today, hieroglyphicists use numerous cataloguing systems (notably the *Manuel de Codage* and *Gardiner's Sign List*) to clarify the presence of determinatives, ideograms, and other ambiguous signs in transliteration.

## Simple examples



The glyphs in this cartouche are transliterated as:

$$\begin{matrix} p & "ua" & l \\ t & m & y \text{ (ii) } s \end{matrix} \text{ Ptolmys}$$

though *ii* is considered a single letter and transliterated *y*.

Another way in which hieroglyphs work is illustrated by the two Egyptian words pronounced *pr* (usually vocalised as *per*). One word is 'house', and its hieroglyphic representation is straightforward: Here the 'house' hieroglyph works as a logogram: it represents the word with a single sign. The vertical stroke below the hieroglyph is a common way of indicating that a glyph is working as a logogram.

Another word *pr* is the verb 'to go out, leave'. When this word is written, the 'house' hieroglyph is used as a phonetic symbol: Here the 'house' glyph stands for the consonants *pr*. The 'mouth' glyph below it is a *phonetic complement*: it is read as *r*, reinforcing the phonetic reading of *pr*. The third hieroglyph is a *determinative*: it is an ideogram for verbs of motion that gives the reader an idea of the meaning of the word.

## Unicode

Egyptian Hieroglyphs were added to the Unicode Standard in October, 2009 with the release of version 5.2.

## Block

The Unicode block for Egyptian Hieroglyphs is U+13000–U+1342F:



| Egyptian Hieroglyphs <sup>[1]</sup><br>Unicode.org chart <sup>[1]</sup> (PDF) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
| U+1300x   | 𐀀 | 𐀁 | 𐀂 | 𐀃 | 𐀄 | 𐀅 | 𐀆 | 𐀇 | 𐀈 | 𐀉 | 𐀊 | 𐀋 | 𐀌 | 𐀍 | 𐀎 | 𐀏 |
| U+1301x   | 𐀐 | 𐀑 | 𐀒 | 𐀓 | 𐀔 | 𐀕 | 𐀖 | 𐀗 | 𐀘 | 𐀙 | 𐀚 | 𐀛 | 𐀜 | 𐀝 | 𐀞 | 𐀟 |
| U+1302x   | 𐀠 | 𐀡 | 𐀢 | 𐀣 | 𐀤 | 𐀥 | 𐀦 | 𐀧 | 𐀨 | 𐀩 | 𐀪 | 𐀫 | 𐀬 | 𐀭 | 𐀮 | 𐀯 |
| U+1303x   | 𐀰 | 𐀱 | 𐀲 | 𐀳 | 𐀴 | 𐀵 | 𐀶 | 𐀷 | 𐀸 | 𐀹 | 𐀺 | 𐀻 | 𐀼 | 𐀽 | 𐀾 | 𐀿 |
| U+1304x   | 𐁀 | 𐁁 | 𐁂 | 𐁃 | 𐁄 | 𐁅 | 𐁆 | 𐁇 | 𐁈 | 𐁉 | 𐁊 | 𐁋 | 𐁌 | 𐁍 | 𐁎 | 𐁏 |
| U+1305x   | 𐁐 | 𐁑 | 𐁒 | 𐁓 | 𐁔 | 𐁕 | 𐁖 | 𐁗 | 𐁘 | 𐁙 | 𐁚 | 𐁛 | 𐁜 | 𐁝 | 𐁞 | 𐁟 |
| U+1306x   | 𐁠 | 𐁡 | 𐁢 | 𐁣 | 𐁤 | 𐁥 | 𐁦 | 𐁧 | 𐁨 | 𐁩 | 𐁪 | 𐁫 | 𐁬 | 𐁭 | 𐁮 | 𐁯 |
| U+1307x   | 𐁰 | 𐁱 | 𐁲 | 𐁳 | 𐁴 | 𐁵 | 𐁶 | 𐁷 | 𐁸 | 𐁹 | 𐁺 | 𐁻 | 𐁼 | 𐁽 | 𐁾 | 𐁿 |
| U+1308x   | 𐂀 | 𐂁 | 𐂂 | 𐂃 | 𐂄 | 𐂅 | 𐂆 | 𐂇 | 𐂈 | 𐂉 | 𐂊 | 𐂋 | 𐂌 | 𐂍 | 𐂎 | 𐂏 |
| U+1309x   | 𐂐 | 𐂑 | 𐂒 | 𐂓 | 𐂔 | 𐂕 | 𐂖 | 𐂗 | 𐂘 | 𐂙 | 𐂚 | 𐂛 | 𐂜 | 𐂝 | 𐂞 | 𐂟 |
| U+130Ax   | 𐂠 | 𐂡 | 𐂢 | 𐂣 | 𐂤 | 𐂥 | 𐂦 | 𐂧 | 𐂨 | 𐂩 | 𐂪 | 𐂫 | 𐂬 | 𐂭 | 𐂮 | 𐂯 |
| U+130Bx   | 𐂰 | 𐂱 | 𐂲 | 𐂳 | 𐂴 | 𐂵 | 𐂶 | 𐂷 | 𐂸 | 𐂹 | 𐂺 | 𐂻 | 𐂼 | 𐂽 | 𐂾 | 𐂿 |
| U+130Cx   | 𐂀 | 𐂁 | 𐂂 | 𐂃 | 𐂄 | 𐂅 | 𐂆 | 𐂇 | 𐂈 | 𐂉 | 𐂊 | 𐂋 | 𐂌 | 𐂍 | 𐂎 | 𐂏 |
| U+130Dx   | 𐂐 | 𐂑 | 𐂒 | 𐂓 | 𐂔 | 𐂕 | 𐂖 | 𐂗 | 𐂘 | 𐂙 | 𐂚 | 𐂛 | 𐂜 | 𐂝 | 𐂞 | 𐂟 |
| U+130Ex   | 𐂠 | 𐂡 | 𐂢 | 𐂣 | 𐂤 | 𐂥 | 𐂦 | 𐂧 | 𐂨 | 𐂩 | 𐂪 | 𐂫 | 𐂬 | 𐂭 | 𐂮 | 𐂯 |
| U+130Fx   | 𐂰 | 𐂱 | 𐂲 | 𐂳 | 𐂴 | 𐂵 | 𐂶 | 𐂷 | 𐂸 | 𐂹 | 𐂺 | 𐂻 | 𐂼 | 𐂽 | 𐂾 | 𐂿 |
| U+1310x   | 𐂀 | 𐂁 | 𐂂 | 𐂃 | 𐂄 | 𐂅 | 𐂆 | 𐂇 | 𐂈 | 𐂉 | 𐂊 | 𐂋 | 𐂌 | 𐂍 | 𐂎 | 𐂏 |
| U+1311x   | 𐂐 | 𐂑 | 𐂒 | 𐂓 | 𐂔 | 𐂕 | 𐂖 | 𐂗 | 𐂘 | 𐂙 | 𐂚 | 𐂛 | 𐂜 | 𐂝 | 𐂞 | 𐂟 |
| U+1312x   | 𐂠 | 𐂡 | 𐂢 | 𐂣 | 𐂤 | 𐂥 | 𐂦 | 𐂧 | 𐂨 | 𐂩 | 𐂪 | 𐂫 | 𐂬 | 𐂭 | 𐂮 | 𐂯 |
| U+1313x   | 𐂰 | 𐂱 | 𐂲 | 𐂳 | 𐂴 | 𐂵 | 𐂶 | 𐂷 | 𐂸 | 𐂹 | 𐂺 | 𐂻 | 𐂼 | 𐂽 | 𐂾 | 𐂿 |
| U+1314x   | 𐂀 | 𐂁 | 𐂂 | 𐂃 | 𐂄 | 𐂅 | 𐂆 | 𐂇 | 𐂈 | 𐂉 | 𐂊 | 𐂋 | 𐂌 | 𐂍 | 𐂎 | 𐂏 |
| U+1315x   | 𐂐 | 𐂑 | 𐂒 | 𐂓 | 𐂔 | 𐂕 | 𐂖 | 𐂗 | 𐂘 | 𐂙 | 𐂚 | 𐂛 | 𐂜 | 𐂝 | 𐂞 | 𐂟 |
| U+1316x   | 𐂠 | 𐂡 | 𐂢 | 𐂣 | 𐂤 | 𐂥 | 𐂦 | 𐂧 | 𐂨 | 𐂩 | 𐂪 | 𐂫 | 𐂬 | 𐂭 | 𐂮 | 𐂯 |
| U+1317x   | 𐂰 | 𐂱 | 𐂲 | 𐂳 | 𐂴 | 𐂵 | 𐂶 | 𐂷 | 𐂸 | 𐂹 | 𐂺 | 𐂻 | 𐂼 | 𐂽 | 𐂾 | 𐂿 |
| U+1318x   | 𐂀 | 𐂁 | 𐂂 | 𐂃 | 𐂄 | 𐂅 | 𐂆 | 𐂇 | 𐂈 | 𐂉 | 𐂊 | 𐂋 | 𐂌 | 𐂍 | 𐂎 | 𐂏 |
| U+1319x   | 𐂐 | 𐂑 | 𐂒 | 𐂓 | 𐂔 | 𐂕 | 𐂖 | 𐂗 | 𐂘 | 𐂙 | 𐂚 | 𐂛 | 𐂜 | 𐂝 | 𐂞 | 𐂟 |
| U+131Ax   | 𐂠 | 𐂡 | 𐂢 | 𐂣 | 𐂤 | 𐂥 | 𐂦 | 𐂧 | 𐂨 | 𐂩 | 𐂪 | 𐂫 | 𐂬 | 𐂭 | 𐂮 | 𐂯 |
| U+131Bx   | 𐂰 | 𐂱 | 𐂲 | 𐂳 | 𐂴 | 𐂵 | 𐂶 | 𐂷 | 𐂸 | 𐂹 | 𐂺 | 𐂻 | 𐂼 | 𐂽 | 𐂾 | 𐂿 |



|                              |     |     |     |     |     |    |    |    |     |    |    |    |    |    |    |    |
|------------------------------|-----|-----|-----|-----|-----|----|----|----|-----|----|----|----|----|----|----|----|
| U+1338x                      | Ḥ   | Ḥ̀  | Ḥ   | Ḥà  | ḤĜ  | ḤŠ | ḤO | ḤĀ | ḤḤ  | Ḥḡ | Ḥḑ | Ḥʸ | Ḥ  | Ḥ̃ | ḤΠ | ḤΔ |
| U+1339x                      | ḤP  | ḤĜ  | ḤK  | Ḥ3  | ḤḤ  | Ḥ  | Ḥ  | Ḥ  | Ḥ•  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  |
| U+133Ax                      | Ḥ   | Ḥ̀  | Ḥ   | Ḥà  | ḤĜ  | ḤŠ | ḤO | ḤĀ | ḤḤ  | Ḥḡ | Ḥḑ | Ḥʸ | Ḥ  | Ḥ̃ | ḤΠ | ḤΔ |
| U+133Bx                      | ḤP  | ḤĜ  | ḤK  | Ḥ3  | ḤḤ  | Ḥ  | Ḥ  | Ḥ  | Ḥ•  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  |
| U+133Cx                      | Ḥ   | Ḥ̀  | Ḥ   | Ḥà  | ḤĜ  | ḤŠ | ḤO | ḤĀ | ḤḤ  | Ḥḡ | Ḥḑ | Ḥʸ | Ḥ  | Ḥ̃ | ḤΠ | ḤΔ |
| U+133Dx                      | ḤP  | ḤĜ  | ḤK  | Ḥ3  | ḤḤ  | Ḥ  | Ḥ  | Ḥ  | Ḥ•  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  |
| U+133Ex                      | Ḥ   | Ḥ̀  | Ḥ   | Ḥà  | ḤĜ  | ḤŠ | ḤO | ḤĀ | ḤḤ  | Ḥḡ | Ḥḑ | Ḥʸ | Ḥ  | Ḥ̃ | ḤΠ | ḤΔ |
| U+133Fx                      | ḤP  | ḤĜ  | ḤK  | Ḥ3  | ḤḤ  | Ḥ  | Ḥ  | Ḥ  | Ḥ•  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  | Ḥ  |
| U+1340x                      | Ḥ̃  | Ḥ̀  | Ḥ   | Ḥà  | ḤĜ  | ḤŠ | ḤO | ḤĀ | ḤḤ  | Ḥḡ | Ḥḑ | Ḥʸ | Ḥ  | Ḥ̃ | ḤΠ | ḤΔ |
| U+1341x                      | Ḥ̃P | Ḥ̃Ĝ | Ḥ̃K | Ḥ̃3 | Ḥ̃Ḥ | Ḥ̃ | Ḥ̃ | Ḥ̃ | Ḥ̃• | Ḥ̃ | Ḥ̃ | Ḥ̃ | Ḥ̃ | Ḥ̃ | Ḥ̃ | Ḥ̃ |
| U+1342x                      | Ḥ̃  | Ḥ̀  | Ḥ   | Ḥà  | ḤĜ  | ḤŠ | ḤO | ḤĀ | ḤḤ  | Ḥḡ | Ḥḑ | Ḥʸ | Ḥ  | Ḥ̃ | ḤΠ |    |
| <b>Notes</b>                 |     |     |     |     |     |    |    |    |     |    |    |    |    |    |    |    |
| 1. As of Unicode version 6.0 |     |     |     |     |     |    |    |    |     |    |    |    |    |    |    |    |

## Fonts

As of December 2009, only two fonts, "Aegyptus<sup>[20]</sup>", and NewGardiner.ttf<sup>[21]</sup> support this range.

## Notes and references

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## External links

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