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Glossing Ancient Egyptian

Suggestions for adapting the Leipzig Glossing Rules*

Camilla Di Biase-Dyson, Frank Kammerzell & Daniel A. Werning, Berlin

1 Looking back

As in other linguistic disciplines, which have a strong philological tradition and predominantly aim at individual language studies, interlinear morphemic glossing (IMG) has, for a long time, not been particularly popular amongst Egyptologists. This might seem a bit surprising if one bears in mind that forerunners of IMG¹ were employed quite regularly in the early days of Egyptian language studies. Devices for making a foreign language text accessible to persons not acquainted with the underlying idiom had been developed centuries before² and were extensively used by scholars who dealt with languages that were then considered as belonging to the more exotic ones. The implicit categorization of languages in accordance with their assumed accessibility to the audience is mirrored by a distinct treatment in investigations dealing with multilingual sources: A scholar like Athanasius Kircher (*1602, †1680) felt no urge to support the readers of his Latin tracts with any hints for understanding sections in Greek³ but usually added translations to passages in Arabic, Hebrew, Syriac, German⁴ and Italian⁵ – and provided transcriptions as well as word-to-word glossings in cases where he used much rarer quotations from texts in Early Semitic letters or in Chinese characters.⁶ Figure 1 depicts a copy of what Kircher presented in his *Œdipus Ægyptiacus* (1652) as an inscription from Sinai with five levels of additional analytic information – a rendering in “normalized” letters, “transliterations” into Hebrew and Syriac, a Latin transcription (of the latter) and a word-to-word translation.

* See bibliography *The Leipzig Glossing Rules: Conventions for Interlinear Morpheme-by-Morpheme Glosses*.

1 For a short sketch of the history and prehistory of IMG see Lehmann (2004: 1835-1836).

2 The method of identifying meaningful elements in the foreign text by means of numerical indexes and matching numbers in the translation, which has been considered an invention of Wilhelm von Humboldt (cf. Lehmann 2004: 1835), had already been used by Athanasius Kircher (1652: II 263-265; 1667: 13-28), who also presented interlinear word-by-word renderings (e.g., Kircher 1652: II 94-95).

3 Cf., e.g., Kircher (1652: II 22).

4 Cf., e.g., Kircher (1652: II 32).

5 Cf., e.g., Kircher (1652: II 111-112).

6 Cf., e.g., Kircher (1652: II 94-95 and 263-265), Kircher (1667: 13-28).

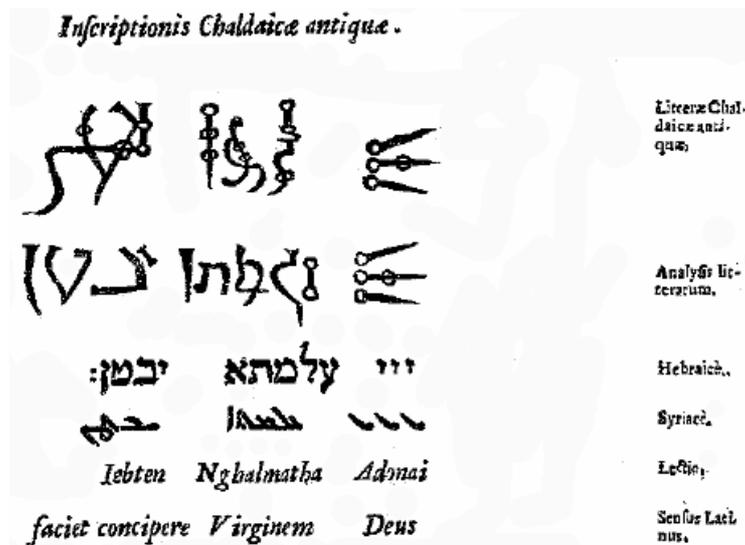


Figure 1: 17th century interlinear analysis of an obscure inscription (Kircher 1652: II 113)

It is almost self-evident that Jean François Champollion (*1790, †1832) as well as his contemporaries and immediate successors, be they his followers or opponents, used the by then well-known device of glossing in their works on Hieroglyphic Egyptian: The efforts for deciphering the indigenous writing systems of the Nile Valley and the studies following the breakthrough attracted enormous attention within the scientific world. As a consequence, the early Egyptologists could reckon with a widespread audience keen to learn about their work's progress but without a previous knowledge other than that which the few specialists themselves would have provided. To win the recognition of peers and public was obviously an appealing objective and it seems that some (by far not all) Egyptologists strived to make their concepts accessible even to readers outside the small circles of Orientalists. A masterpiece of lucidity in presenting Egyptian language data is Champollion's posthumously published *Grammaire* (1836-1841). Figure 2 exemplifies his usual manner of data display: the hieroglyphic text is divided into smaller meaningful units, which are then converted either into their Coptic equivalents or into transcriptions by means of Coptic letters. The third line comprises semantic information in form of word-by-word translations. Finally, a running translation is given.

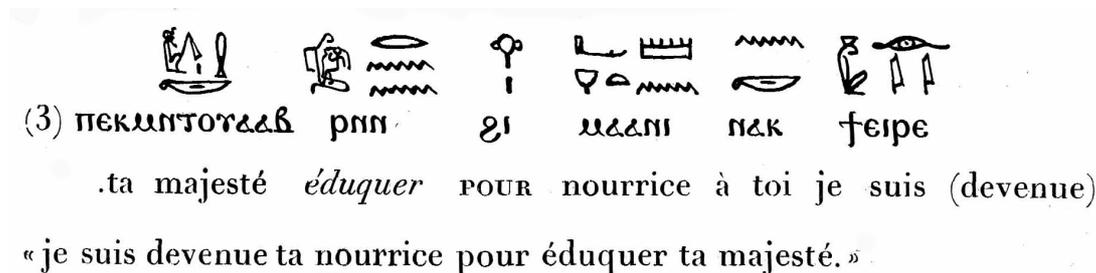


Figure 2: An early example of interlinear glossing in Egyptology (Champollion 1836-1841: 458)

The same method was employed quite regularly by Heinrich Brugsch (*1827, †1894), not only in his *Grammaire démotique* (1855) but also in many of his smaller works. That Brugsch's word-for-word renderings were not meant to be read as a (retrograde)

running translation but rather as more abstract tags for the respective morphemes is obvious from the dividers as well as from the fact that elements of more than one language could occur within the same line. For instance, since Latin lacks elements unmistakably matching the definite article and the possessive prefix, these Demotic morphemes were rendered by means of Greek articles (cf. Figure 3).

ⲬⲚⲙⲓⲛⲟⲩ	ⲛ	ⲛⲗⲧ	ⲛ	ⲧⲛⲧⲛⲧⲟⲩ	ⲛⲓ	ⲛ
HeRMIS	TA	AA.T	TA	TA SIN ToT	HiM	TI
² Hermiae	ἡ του	major (natu)	ἡ	Tsenthot	femina	Dicit

Figure 3: Demotic phrase with transcription and glossing in Latin and Greek (Brugsch 1855: 54)

The first stage of Egyptian philology has been characterized by Wolfgang Schenkel (1990: 17-19) as the phase of deciphering and early exploration of the sources, and the then widespread use of interlinear glossing fits well to this state of affairs.

Later on, the practice of displaying Egyptian language data drastically changed: The quantity of contributions in the *Zeitschrift für ägyptische Sprache und Altertumskunde* that used one sort or other of interlinear glossing (besides plain transcription) went down from over 90 between 1863 and 1872 to little more than 40 in the years 1873-1882. It further declined to a number of 6 in the period 1883-1892 and reached a minimum of 1 for 1893-1902. The question of whether or not to employ interlinear glossing was significantly related to the respective author's affiliation to a particular generation: Whereas most scholars representing the "first phase" – notably Samuel Birch (*1813, †1885), Heinrich Brugsch, François Joseph Chabas (*1817, †1882), and Charles Wycliffe Goodwin (*1817, †1878) – usually presented their data with glossing, one can hardly find examples of this practice in the works of Adolf Erman (*1854, †1937), Kurt Sethe (*1869, †1934), Georg Steindorff (*1861, †1951), whose names stand for the second period of Egyptological linguistics (cf. Schenkel 1990: 19-21). The case of Erman, the initiator of the "second phase", is especially instructive: Although he started publishing as a student in the 1870s, at a time when his teachers' generation still made use of interlinear glossing, he went without this device from the very beginning. Neither his influential description of Late Egyptian⁷ nor the comprehensive or abridged grammars of Earlier Egyptian⁸ – and not even the booklet on Egyptian published in the popular "Sammlung Göschen"⁹ – provided grammatical information by means of interlinear glosses. Even though we cannot refer to an explicit statement by Erman, one gets the impression that his practice of dispensing with a well established device of facilitating access to Egyptian texts was deliberate and reflected a change of attitude towards Hieroglyphic Egyptian: For Erman this was no longer an exotic language that could only be dealt with by relying on the intuitive knowledge of a small circle of autodidacts, but – not the least thanks to his own works – had become a linguistic system that was to be learnt methodically with the help of grammars and dictionaries like the better known ancient languages. With Egyptology

7 See Erman (1880, ²1933).

8 See Erman (1894, ²1902, ³1911, ⁴1928), Erman (1919, 1931).

9 See Erman (1917).

being a well-established academic discipline, it was no longer considered necessary to justify every detail of a translation. Professionals and serious students were expected to be acquainted with the basics of the grammar.

Thus, although exceptions remain, one of the more remarkable being Lesquier (1914: 144-171), who presented not only interlinear transcriptions and glosses but also a transliteration for every single hieroglyph including the classifiers, Erman's dominance in this field set in stone the *modus operandi* for the description of the Egyptian language utilized by generations of scholars to follow. None of what might be called the standard grammars of any Egyptian chronolect makes use of IMG on a regular basis.¹⁰ With E.A. Wallis Budge's notorious *Easy lessons in Egyptian hieroglyphs* (1901) being for almost a hundred years the most widely distributed publication that contains glossed Egyptian texts, it seems that specialists in the field of Egyptian language studies might have even considered any regular use of IMG an indicator of a lack of professionalism. At any rate, it is difficult to find another explanation for the circumstance that even the authors of works explicitly aiming at a wider readership, like Schenkel's (1990) and Loprieno's (1995) introductions to Egyptological linguistics,¹¹ have not felt the need to facilitate understanding by means of adding IMG to the text examples. Against this background, it is not surprising that not a single example of Hieroglyphic Egyptian is amongst the 127,306 entries taken from 1,226 languages in *ODIN – The Online Database of Interlinear Text*, the “repository of Interlinear Glossed Text (IGT) extracted mainly from scholarly linguistic papers.”

This situation began to change only slowly when Egyptologists writing for an audience of linguists¹² or a wider public¹³ began to feel the necessity of making their analyses of Egyptian texts more comprehensible – or were coerced into it by linguist editors.

As this volume makes evident, however, it is not only the wish of contemporary scholars of the Egyptian language to make their studies accessible to the broader linguistic community that has turned the tide again. There is also a strong belief amongst many Egyptologists that our discipline will gain a significant amount if the grammatical analyses of Egyptian texts are presented in a more transparent manner than what can be achieved by transcription and translation only.¹⁴ Given this new interest in describing the language through the use of interlinear morphemic glossing, the issue then arises as to the most accurate or faithful means of representing features, in this case, of Earlier and Late Egyptian.

10 See Edel (1955/64) for Old Egyptian, Gardiner (1957), Borghouts (1993), Malaise & Winand (1999), Allen (2000) for Middle Egyptian, Černý & Groll (³1983, ⁴1993), Junge (2001) for Late Egyptian, Simpson (1996) for Demotic, Steindorff (1951), Layton (2000) for Coptic.

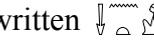
11 For the target audiences of these books cf. Schenkel (1990: 4), Loprieno (1995: XI).

12 See especially the numerous works of Chris Reintges, e.g. (1994, 1997).

13 See Peust (1997).

14 Another foreseeable benefit of adopting IMG would be the improvement of the notoriously low quality of many Egyptological translations, which frequently results from the fatal notion that a translation should reflect at any cost the grammatical constructions of the source text. If text examples are accompanied by IMG there is no need to mould the translation to fit the original.

2 Theoretical prelude

One decision the user who wants to create a meticulous analysis has to make is whether the morphemes present in the written utterance or the reconstructed elements of spoken language shall form the basis of the glossing. In the case of Hieroglyphic Egyptian, the systemic differences between these two modes of representation are considerable, sometimes amounting to a scale commensurate with two typologically rather distinct languages.¹⁵ The classical hieroglyphic writing system on the one hand rendered explicitly only those morphemes of an utterance of which the spoken counterparts exhibited consonantal elements and on the other hand provided, in the form of the classifiers, graphic morphemes that did not correspond to segmental units of the spoken language. Due to this circumstance, Written Egyptian and Spoken Egyptian are not equivalent on the morphological level and both deviate from the conventional Egyptological transcription. Figure 4 illustrates the situation: Both written  ‘sister’ and (Old Egyptian) spoken /'ʂa:nat/ ‘sister’ consist of three morphs each. The respective sets, however, not only differ with respect to their substance and form but also in terms of their meaning. The vocalic tier $\{/_'a: a_/\}^m$, characterizing a substantive of a particular inflectional class (feminine biradicals in /'a:/ of the consonantal declension), is without correspondent – or corresponds to a zero morph – in Written Egyptian. On the other hand, the classifier  $\{\langle \text{HUMAN, FEMALE} \rangle\}^{cl}$ has no counterpart in Spoken Egyptian. Neither are taken into account when rendering a hieroglyphic utterance by means of the traditional Egyptological transcription system.

Written Old Egyptian	Spoken Old Egyptian	Transcription
 {‘sibling’} ^l	ʂ__n {‘sibling’} ^l	<i>sn-</i> {‘sibling’} ^l
 ‘sister’	'ʂ a: n a t ‘sister’	<i>sn.t</i> ‘sister’
	_ 'a: _ a _ {SBST, ...} ^m	
 {F} ^m	_ t {F} ^m	<i>-t</i> {F} ^m
 {HUMAN, FEMALE} ^{cl}		

Figure 4: Morphemes in Written Old Egyptian, Spoken Old Egyptian, and conventional Egyptological transcription compared

Glossing written  *sn-t*^{WOMAN} ‘sister’ would result in something like **sister-F-CL** or, more precisely, **sibling-F-CL**, whereas spoken /'ʂa:nat/ should be **sibling:SBST:...-F**. Both differ from the glossing on the basis of the transcription – in the case of *sn.t* ‘sister’: **sibling-F** or **sister-F** – that is mostly employed by those Egyptologists who use this device at all (– compare the practical suggestions below).

15 Cf. Kammerzell (1993).

The effort required to steadily observe the systemic distinctions between written language and spoken language will probably not meet with the approval of many Egyptologists, and it is true that in practice it will be often sufficient to take as a departure simply the transcriptions. However, this holds true only in the instance that the IMG aims at nothing more than giving the reader some general hints about the structure of an Egyptian utterance. Whenever one has reason to suppose that the audience might draw conclusions about the morphological structure of Ancient Egyptian or one of its chronolects from the material, one should exercise caution and clarify what is represented in the IMG. Figure 5 demonstrates how crucial this is when dealing with Late Egyptian texts. Due to the conventional practice of transcribing Hieroglyphic Egyptian utterances of all periods in more or less the same (pseudo-) historical way, the discrepancy between our transcriptions and the linguistic reality is often extremely wide.

Written Late Egyptian	Spoken Late Egyptian	Transcription
 {‘sibling’} ^l	s _ n {‘sibling’} ^l	<i>sn-</i> {‘sibling’} ^l
  {‘sister’}	ʼs a: n ə {‘sister’}	<i>sn.t</i> {‘sister’}
	_ ʼa: _ ə _ {SBST, ..., F} ^m	
 {F} ^m		<i>-t</i> {F} ^m
 {HUMAN, FEMALE} ^{cl}		

Figure 5: Morphemes in Written Late Egyptian, Spoken Late Egyptian, and conventional Egyptological transcription compared

The spoken correspondent of Late Egyptian   *sn-t*^{WOMAN} ‘sister’, /ʼsa:nə/ consists of only two morphemes. These are either the lexical root {/s_n/, ‘sibling’}^l and the vocalic tier {/_ʼa:_ə_/, ‘SBST, ..., F’}^m, marking part of speech and gender, as in Figure 5 or, alternatively, a lexeme {/ʼsan/, ‘sibling’}^l plus a feminine ending {/ə/}^m. Irrespective of which analysis one prefers it is quite obvious that the IMG based on the standard Egyptological transcription must not be taken as an indicator of the morphological conditions in Late Egyptian.

A similar caveat is appropriate with respect to the phonological form of Egyptian lexical and grammatical elements. It is by now well established that the symbols of the transcription alphabet do not match the sound shape of Earlier Egyptian but rather reflect the inventory of consonantal phonemes in Late Egyptian.¹⁶ In addition, historical sound changes have resulted in changes to grapho-phonemic correspondence rules so that a particular (group of) hieroglyph(s) in Later Egyptian may have a different function than in earlier times. Thus, the usual transcriptions of several frequent grammatical morphemes of Late Egyptian – e.g., *pʼ*, *tʼ*, *ɰw*, *tw*, *sw* – do not imply that the respective spoken morphs comprised two consonants each. For this reason,

16 See Kammerzell (1998a, 2005: 172-182).

transcriptions of Later Egyptian cannot mechanically be “translated” into their spoken correspondents by simply providing a list of the younger equivalents of the letters of the transcription alphabet. Instead, every single written form has to be interpreted. This is of minor importance for philological studies focussing on nothing but the content of a text but becomes more virulent if matters of poetic form, language change, language contact and etymology are within the scope of interest.

Consequently, it may be appropriate, on a case by case basis, not to base IMG simply on transcriptions but to choose another level of representation. Especially when texts tagged by means of IMG are made searchable, one should take into consideration from the very beginning that information that is standard in databases of modern languages will be untraceable if only conventional Egyptological transcriptions are being used. Figure 6 illustrates the situation – but also points out the amount of effort necessary to build a sophisticated database of Egyptian text (and we have not even begun to discuss linguistic units beyond the level of morphemes and words!).

Normalized hieroglyphs:				
Transliteration:	MD- ^d	st-jr	p-w	wn- ⁿ -j-s-
Conventional transcription:	<i>mwḏw</i>	<i>(W)sr(.w)</i> ¹⁷	<i>-pw</i>	<i>Wnjs</i>
Phonological interpretation:	mwcʼw	wsrw	pw	wnjʃ
Vocalisation:	mawcʼaw	wuʼʃi:luw	?	ʼwanjaʃ
Written language morphemes:	recite:INF	be_strong[-PTCP]	DEM	PROP-BASIL
Spoken language morphemes:	recite^INF	be_strong:PTCP	DEM	PROP
Written language parts of speech:	VB	VB (PROP)	DEM	PROP-CL
Spoken language parts of speech:	VB	VB (PROP)	DEM	PROP
Lemmata:	<i>mwḏw</i>	<i>Wsjr / (W)sr(w)</i>	<i>pw</i>	<i>Wnjs</i>
Inflectional class:	IV. inf., ult. w	3-rad.	DEM	?
Interlinear translation:	recite	Wushiiluw	that	Wanjash

Figure 6: Different levels of representation for a Hieroglyphic Egyptian utterance (Pyr. 308b^W)

Given this complicated state of affairs, the system of IMG to be used for Ancient Egyptian should not force its users to stick to one particular level of representation only, but rather be flexible enough to cope with a variety of purposes.

3 Practical suggestions

3.1 The approach we suggest in this paper is based on the *Leipzig Glossing Rules* but differs from them in two main particulars. It attempts firstly to represent certain morphophonological features of the language (see, for instance, the use of the backwards slash rather than hyphen in connection with verb forms) and secondly to represent meaning as occurring across a verbal complex rather than in a specific unit, as we see particularly with the representation of the Future III. We have also suggested some additions to the terminology, which appear here in the glossing abbreviations.

17 For this interpretation of the name of the god Osiris cf. Zeidler (2000).

3.2 Glossing abbreviations relevant to Ancient Egyptian

Additions to *Leipzig Glossing Rules* are marked in bold; glosses defined in the *LGR* not immediately relevant to Ancient Egyptian are given in brackets.

1	first person	D	(abbreviation after number:) DU
1S/1P/1D	(abbreviation:) 1SG/1PL/1DU	(DAT	dative)
2	second person	DECL	declarative
2S/2P/2D	(abbreviation:) 2SG/2PL/2DU	DEF	definite
3	third person	DEM	demonstrative
3S/3P/3D	(abbreviation:) 3SG/3PL/3DU	DET	determiner
(A	agent-like argument of a canonical transitive verb)	DIST	distal
(ABL	ablative)	DISTR	distributive
(ABS	absolute)	DO	direct object; Shopen (2007: xviii)
ABSTR	abstract	DU	dual
(ACC	accusative)	(DUR	durative)
APLI	<i>accompli</i> ; Winand (2006a: ch.4-5; 2006b: 458-460): ‘accompli’ (form)/‘perfective’ (semantics)	(ERG	ergative)
ACT	active	(EXCL	exclusive)
ADJ	adjective	EXLM	exclamative
ADJZ	(adjectivizer)/adjectivization; Shopen (2007: xvii): ADJ	F	feminine
ADV	adverb(ial)	FOC	focus
ADVZ	(adverbializer)/adverbialization	FOCZ	focalizer(/focalization)
AGR	agreement	FUT	future; Dahl (1985: 103-108)
AGT	agent marker	(GEN	genitive)
ALL	allative	GRND	ground; Shopen (2007: xix): G
ANT	anterior; Binnick (2001: 559); Bybee et al. (1994: xxi, 54, 61, 78); Shopen (2007: xviii)	IAPLI	<i>inaccompli</i> ; Winand (2006a: ch.6)
ANTIP	antipassive	IMP	imperative
(APPL	applicative)	IMPRS	impersonal; Shopen (2007: xix):
ART	article	(INCL	inclusive)
ATTN	attention marker	INCHO	inchoative; Bybee et al. (1994: xxi)
AUX	auxiliary	IND	indicative
(BEN	benefactive)	INDF	indefinite
BS	base	INF	infinitive
CAUS	causative	INS	instrumental
CJVB	conjunctive verb; Kammerzell (in preparation)	INTR	intransitive
CLF	classifier (phonological)	IPFV	imperfective; Comrie (1976: 25, 39); compare also: Werning (2008: 275); Bybee et al. (1994: xxi):
CNSV	consecutive	IRR	irrealis
CNJ	conjunction; Bybee et al. (1994: xxi)	(LOC	locative)
COLL	collective	M	masculine
(COM	comitative)	MELL	mellic; compare PROS
COMP	complementizer (used here in the narrow sense as object clause marker)	MCM	main clause marker
COMPL	completive; Bybee et al. (1994: xxi, 57): COMP; compare also: Boland (2006: 48)	MOD	modal; Bybee et al. (1994: xxii)
COND	conditional	MODP	modal particle
(COP	copula)	(N	neuter)
CORD	coordinating particle	N...	non- (e.g. NPST non-past)
CVB	converb	NEG	negation, negative
		NMLZ	(nominalizer)/nominalization; Shopen (2007: xx): NOMIN
		(NOM	nominative)
		OBJ	object
		(OBL	oblique)
		OBLV	obligative; Bybee et al. (1994: xxii): OBL[igation]
		ORD	ordinal number

(P	patient-like argument of canonical transitive verb)	PSUP	(abbreviation:) superior preposition
P	(abbreviation after number:) PL	PTCP	participle
PA	(abbreviation:) PTCP.ACT	PTCL	particle; Shopen (2007: xx): PART, PCL; Bybee et al. (1994: xxii): PARTCL
PALL	(abbreviation:) allative preposition	(PURP	purposive)
PASS	passive	Q	question particle/marker
PATT	(abbreviation:) attachment prepos.	QUOT	quotative
PCOM	(abbreviation:) comitative prepos.	(RECP	reciprocal)
PDA	(abbreviation:) PTCP.DISTR.ACT	REFL	reflexive
PDAT	(abbreviation:) dative preposition	REL	relative
PDP	(abbreviation:) PTCP.DISTR.PASS	RES	resultative; Nedjalkov (2001: 928, 930); Bybee et al. (1994: 54, 63).
PF	(abbreviation:) PTCP.FUT	(S	single argument of canonical intransitive verb)
PFV	perfective; Bybee et al. (1994: 54-55, 83); PERF; Dahl (1985: 78); Timberlake (2007: 304)	S	(abbreviation after number:) SG
PGEN	(abbreviation:) genitive preposition	SBJ	subject
PIA	(abbreviation:) PTCP.IPFV.ACT	SBJV	subjunctive
PINF	(abbreviation:) inferior preposition	SBRD	subordinating particle; Shopen (2007: xxi): SUBORD; Bybee et al. (1994: xxii): SUB
PINS	(abbreviation:) instrumental prepos.	SIM	simultaneous; Relative tense; Shopen (2007: xxi); Bybee et al. (1994: xxii)
PINT	(abbreviation:) interior preposition	SP	sentence particle; Bybee et al. (1994: xxii)
PIP	(abbreviation:) PTCP.IPFV.PASS	SG	singular
PL	plural	STABS	<i>status absolutus</i> (Schenkel 2005: 109/110, ch. 5.1.1.4)
POST	posterior; Binnick (2001: 559).	STAT	stative; Nedjalkov (2001: 928); Bybee et al. (1994: xxii); Shopen (2007: xxi): STV
POSS	possessive	STC	<i>status constructus</i> (Schenkel 2005: 109/110)
POT	potential; Shopen (2007: xxi); Bybee et al. (1994: xxi)	STPR	<i>status pronominalis</i> (Schenkel 2005: 109/110)
PP	(abbreviation:) PTCP.PASS	THMZ	thematizer/thematization
PPO	(abbreviation:) PTCP.POST	TOP	topic
PRED	predicative	TOPZ	topicalizer(/topicalization)
PREP	preposition; Bybee et al. (1994: xxii)	TR	transitive
PRF	perfect; Dahl (1985: ch.5): PFCT; Timberlake (2007: 304): PF	(VOC	vocative)
PROG	progressive	VCJT	vocative adjunct; Halliday & Matthiessen (2004: 133-134)
PROH	prohibitive		
PROS	prospective; Binnick (2001: 564); Comrie (1976: 64-65); Dahl (1985: 111-112): PROSP [„be going to“]. Synonymously to MELL: Boland (2006: 46), Klein (1994: 108)		
PROX	proximal/proximate		
PRS	present; Bybee et al. (1994: xxi): PRES		
PST	past, preterite; Bybee et al. (1994: 55, 82); Dahl (1985: 116-117): PAST; Timberlake (2007: 315)		

3.3 Punctuation according to the Leipzig Glossing Rules (with some additions)

... used **in the transcription and the gloss** (number and type must be exactly the same in the transliteration and the gloss!):

- connects segmentable morphemes
- = marks clitic boundary
- ~ indicates reduplication morpheme

... used **in the gloss only**:

- _ is used instead of space in translations, e.g. “come_out”
- . separates several metalanguage elements rendered by a single object-language element (used

- with this meaning in the gloss only; compare the different definition in Egyptological transliteration below)
- : means “segmentable, but the author does not want to show the formal segmentation”
 - \ marks a grammatical property in the object-language signaled by a morphophonological change (*ablaut*, mutation, tone alternation, etc.)
 - () marks inherent, non-overt categories, such as gender in e.g. engl. brother(M)
 - [] means “gloss contains an element that does not correspond to an overt element in the example”
 - { } marks grammatical or lexical elements that consist of two parts (our addition) which are treated as distinct morphological entities,

e.g. fr. *Je ne le sais pas.*
 1SG NEG{ 3SG.M know:1SG }

 Alternatively one might want to use ‘:’ with a repetition of the gloss, e.g.

1SG NEG: 3SG.M know:1SG :NEG

3.4 Traditional Egyptological transliteration transcription punctuation used in the transliteration only (compare: Schenkel 2005: 39)

- . separates several successive object-language elements rendered by a single metalanguage element; can be left out without effect on the gloss (used with this meaning in the transliteration only; compare the different definition in glosses above)
- () encloses non-overt phonemes, scholarly reconstruction
- [] encloses a lacuna, potentially with reconstructed content
- { } encloses the emendation of a scribal error (deletion), or certain orthographical conventions
- <> encloses the emendation of a scribal error (addition)

3.5 Punctuation employed to indicate the substance of linguistic elements (not used in glosses)

- { } encloses morphological units
- { }^{cl} encloses a classifier
- { }^l encloses a lexeme
- { }^m encloses a (grammatical) morpheme
- / / encloses strings of spoken language, phonological units
- [] encloses phonetic units
- < > encloses strings of written language

3.6 ‘Weak consonants’

Morphological forms with ‘weak consonants’ (that is glides) as a distinct morphological feature must be glossed differently depending on whether they are spelled with or without the glides:

<i>sdm</i>	(specific form signaled by transfix only)	hear:SBJV
<i>gm.y</i> or <i>gmy</i>	(specific form signaled by transfix and glide)	fīnd:SBJV
<i>gm(.y)</i> or <i>gm(y)</i>	(specific form signaled by transfix and non-overt glide)	fīnd:SBJV

One can choose to indicate the glide as separate morpheme (‘-’). However, in cases where the glide is not spelled out, the ‘non-overt’ maker (‘[]’) needs to be used. Consequently, the gloss makes it appear as if the semantic category is actually missing:

<i>sdm</i>	hear:SBJV
<i>gm-y</i>	fīnd-SBJV
<i>gm(-y)</i>	fīnd[-SBJV]

3.7 Morphology of Earlier and Late Egyptian

Opinions differ amongst scholars of Ancient Egyptian as to how certain morphemes should be (typologically) classified. Therefore, where many such cases occur, list the different analyses proposed thus far and demonstrate how these analyses manifest themselves in a glossing format. Of course it is impossible to cover all of them, just as it is impossible to cite all the scholars who have expressed their opinion. Naturally, it goes without saying that with such a choice of representations comes also the necessity to maintain consistency within each scholarly contribution.

Form/morpheme *Suggestion for gloss* (with a few Egyptological references)

Suffix pronouns

<i>-j</i>	<i>or =j</i>	-1SG	<i>or =1SG</i>	(abbreviation: -1s)
<i>-k</i>	<i>or =k</i>	-2SG.M	<i>or =2SG.M</i>	(abbreviation: -2S.M)
<i>-t</i>	<i>or =t</i>	-2SG.F	<i>or =2SG.F</i>	(abbreviation: -2S.F)
<i>-f</i>	<i>or =f</i>	-3SG.M	<i>or =3SG.M</i>	(abbreviation: -3S.M)
<i>-s</i>	<i>or =s</i>	-3SG.F	<i>or =3SG.F</i>	(abbreviation: -3S.F)
<i>-n</i>	<i>or =n</i>	-1PL	<i>or =1PL</i>	(abbreviation: -1P)
<i>-tn</i>	<i>or =tn</i>	-2PL	<i>or =2PL</i>	(abbreviation: -2P)
<i>-sn</i>	<i>or =sn</i>	-3PL	<i>or =3PL</i>	(abbreviation: -3P) [Earlier Egyptian]
<i>-nj</i>	<i>or =nj</i>	-1DU	<i>or =1DU</i>	(abbreviation: -1D) [Old Egyptian]
<i>-tnj</i>	<i>or =tnj</i>	-2DU	<i>or =2DU</i>	(abbreviation: -2D) [Old Egyptian]
<i>-snj</i>	<i>or =snj</i>	-3DU	<i>or =3DU</i>	(abbreviation: -3D) [Old Egyptian]
<i>-w</i>	<i>or =w</i>	-3PL	<i>or =3PL</i>	(abbreviation: -3P) [Late Egyptian]

On account of the fact that suffix pronouns can affect the syllabic pattern of a stem (e.g. with the infinitive), one could mark these pronouns as bound morphemes (with ‘-’) rather than as clitics (‘=’). On the other hand, the possibility to attach to verbal forms as well as prepositions and nouns speaks in favor of marking them as clitics (‘=’).

Instead of PL or P ‘plural’, NSG (or NS) ‘non-singular’ may be used for earlier chronolects that still exhibit the category of dual on nouns but do not discriminate between plural and dual on pronouns.

<i>-tw</i>	-3SG.C	<i>or =3SG.C</i>	(abbreviation: -3S.C)
	-IMPRS	<i>or =IMPRS</i>	

Enclitic/Dependent pronouns

<i>=wj</i>	=1SG
<i>=tw</i>	=2SG.M
<i>=tn</i>	=2SG.F
<i>=sw</i>	=3SG.M
<i>=sj</i>	=3SG.F
<i>=n</i>	=1PL
<i>=tn</i>	=2PL
<i>=sn</i>	=3PL
<i>=st</i>	=3SG.C
<i>=tw</i> , <i>=tj</i>	=2SG [Late Egyptian]
<i>=st</i>	=3SG ; =3PL

Independent pronouns

<i>jnk</i>	1SG	
<i>nt.k</i> → <i>mnt.k</i>	2SG.M	[Earlier Egyptian → Late Egyptian]
<i>nt.t</i> → <i>mnt.t</i>	2SG.F	
<i>nt.f</i> → <i>mnt.f</i>	3SG.M	
<i>nt.s</i> → <i>mnt.s</i>	3SG.F	
<i>nt.n</i> , <i>jnn</i>	1PL	(for <i>nt.n</i> see: Quack 2002)
<i>nt.tn</i> → <i>mnt.tn</i>	2PL	
<i>nt.sn</i> → <i>mnt.w</i>	3PL	

<i>tw</i>	2SG.M	[Old Egyptian] → 2SG [Middle Egyptian]
<i>tm</i>	2SG.F	[Old Egyptian]
<i>sw</i>	3SG.M	[Old Egyptian] → 3SG [Middle Egyptian]
<i>st</i>	3SG.F	[Old Egyptian]

Object pronouns [Late Egyptian]

= <i>tw.j</i>	=1SG
= <i>tw.k</i>	=2SG.M
= <i>tw.t</i>	=2SG.F
= <i>tw.f</i>	=3SG.M
= <i>tw.s</i>	=3SG.F
= <i>tw.n</i>	=1PL
= <i>tw.tn</i>	=2PL
= <i>tw.w</i>	=3PL

Proclitic pronouns [Late Egyptian]

<i>tw-j</i>	PRS-1SG
<i>tw-k</i>	PRS-2SG.M
<i>tw-t</i>	PRS-2SG.F
<i>sw</i>	3SG.M(PRS)
<i>st</i>	3SG.F(PRS)
<i>tw-n</i>	PRS-1PL
<i>tw-tn</i>	PRS-2PL
<i>st</i>	3PL(PRS)
<i>tw-tw</i>	PRS-3SG.C
	PRS-IMPRS

Demonstrative pronouns [Earlier Egyptian]

<i>pn</i>	DEM:M.SG
<i>tn</i>	DEM:F.SG
<i>nn</i>	DEM:C
<i>jpn</i>	DEM:M.PL
<i>jptn</i>	DEM:F.PL
<i>pw</i>	DEM:M.SG
<i>tw</i>	DEM:F.SG
<i>nw</i>	DEM:C
<i>jpw</i>	DEM:M.PL
<i>jptw</i>	DEM:F.PL

<i>pf</i>	DEM.DIST:M.SG
<i>tf</i>	DEM.DIST:F.SG
<i>nf</i>	DEM.DIST:C
<i>jpf</i>	DEM.DIST:M.PL
<i>jptf</i>	DEM.DIST:F.PL
<i>p³</i>	DEM:M.SG
<i>t³</i>	DEM:F.SG
<i>n³</i>	DEM:C

Articles [Late Egyptian]

<i>p³</i>	ART:M.SG	(long: DEF.ART:M.SG)
<i>t³</i>	ART:F.SG	(long: DEF.ART:F.SG)
<i>n³</i>	ART:PL	(long: DEF.ART:PL)
Alternatively, one can gloss the article as a preclitic (<i>p³=, t³=, n³=</i>).		
<i>w^c</i>	INDF.ART.SG	
<i>nhⁱ</i>	INDF.ART.PL	[Later Egyptian II]

Demonstrative pronouns [Late Egyptian]

<i>p³i</i>	DEM:M.SG
<i>t³i</i>	DEM:F.SG
<i>n³i</i>	DEM:PL

Possessive article [Late Egyptian]

<i>p³y</i>	POSS:M.SG	(long: ART.POSS:M.SG)
<i>t³y</i>	POSS:F.SG	(long: ART.POSS:F.SG)
<i>n³y</i>	POSS:PL	(long: ART.POSS:PL)

Possessive prefix

<i>p(3).n=</i>	M.SG:POSS=
<i>t³.nt=, tj.nt=</i>	F.SG:POSS=
<i>n³y=</i>	PL[:POSS]=

Nouns

<i>sn</i>	brother(M.SG)	(short: brother)
<i>sn-w</i>	brother-M.PL	
<i>sn-wi</i>	brother-M:DU	
<i>sn-t</i>	sister-F	
<i>sn-ut</i>	sister-F.PL	
<i>sn-ti (sn-uti)</i>	sister-F:DU	
F.PL forms with <i>w</i> are uncommon in Earlier Egyptian. We therefore recommend transcribing the plural form with a 'virtual' <i>w</i> , i.e. with <i>u</i> as in the case of <i>ultimaef infirmaef</i> verbs.		
<i>sn.w</i>	circumference:M(SG)	(short: circumference)
<i>sn-wt</i>	royal entourage-COLL:F	(short: royal entourage-F)
<i>hz-wt</i>	favour-ABSTR:F	(short: favour-F)

Adjectives

<i>nfr</i>	good(M.SG)	(short: good)
<i>nfr-w</i>	good-M.PL	
<i>nfr-wi</i>	good-M:DU	
<i>nfr-t</i>	good-F	
<i>nfr-ti</i>	good-F:DU	

Adverbs		
<i>jm</i>	there(ADV)	
<i>ꜥ</i> → <i>di</i>	here(ADV)	[Earlier Egyptian → Late Egyptian]
<i>wr-t</i>	very-ADVZ	
Ordinal number affix		
<i>-nw</i> (e.g. <i>4-nw</i>)	-ORD (e.g. <i>4-ORD</i>)	[Earlier Egyptian]
<i>mḥ-</i>	completing- ORD-	[Late Egyptian]
Existential adjectives		
<i>wn</i>	existant	
<i>nn</i>	not existant	[Earlier Egyptian]
<i>nn.wn</i> → <i>mn</i>	not existant	[Late Egyptian]
Auxiliary verbs (used in different verbal forms)		
<i>tm</i>	not do	(long: not do(AUX))
<i>wn</i>	was	(long: was(AUX)) [Late Egyptian]
<i>jr</i>	do	(long: do(AUX)) [Late Egyptian]
'Nisbes' / Secondary adjectives		
<i>jmnt-ī</i>	west-ADJZ.M.SG	
<i>jmnt-w</i>	west-[ADJZ:]M.PL	
<i>jmnt-t</i>	west-[ADJZ:]F	
'Genitival <i>n</i> ' / Attributive nisbe / Determinative pronoun [Earlier Egyptian]		
<i>n(-ī)</i>	of[-M.SG]	(long: of[-ADJZ:M.SG])
<i>n-w</i>	of-M.PL	(long: of-[ADJZ:]M.PL)
<i>n-t</i>	of-F	(long: of-[ADJZ:]F)
<i>n</i>	of	[Earlier Egyptian]
	of <i>or</i> PGEN	[Late Egyptian]
Relative pronoun/'nisbe' [Earlier Egyptian]		
<i>nt-ī</i> (<i>nt(-ī)</i>)	REL-M.SG (REL[-M.SG])	
<i>nt-w</i>	REL-M.PL	
<i>nt-t</i>	REL-F	
<i>jwnt-ī</i> (<i>jwnt(-ī)</i>)	NEG.REL-M.SG (NEG.REL[-M.SG])	
<i>jwnt-w</i>	NEG.REL-M.PL	
<i>jwnt-t</i>	NEG.REL-F	
Infinitive		
<i>sḏm</i>	hear:INF	
<i>s-ḥnh</i>	CAUS-live:INF	
<i>gm-t</i> (<i>gm.t</i>)	find-INF (find: INF)	[Earlier Egyptian]
<i>gm.t</i> , <i>gm(.t)</i>	find:INF	[Late Egyptian]
<i>gm-tw</i>	find-INF	[Late Egyptian]
'Complement infinitive'		
<i>sḏm-t</i>	find-ADV.INF	
'Negative complement'		
<i>gm.w</i>	find:ADVZ	

Imperative [Earlier Egyptian]		
<i>gm</i>	find:IMP	
<i>gm-w</i>	find:IMP-PL	
<i>m</i>	PROH	
	do_not(IMP)	
Imperative [Late Egyptian]		
<i>sdm</i>	hear:IMP	
<i>j.gm</i>	find:REL.IMP	
<i>m-jr</i>	PROH-do	
<i>m.jr</i>	PROH	
<i>m-dy</i>	PROH-give	
<i>m.dy</i>	PROH:CAUS	
'Pseudoparticiple' / 'Parfait ancien' / Stative / Resultative		
<i>gm-k</i>	find:PRF-1SG	[Old Egyptian] (Kammerzell 1991: 166)
<i>gm-kw</i>	find:RES-1SG	
<i>gm-tj</i>	find:RES-2SG	[Earlier Egyptian]
<i>gm-tw</i> , <i>gm-tj</i>	find:RES-2SG	[Late Egyptian I]
<i>gm-ø</i> , <i>gm-w</i>	find:RES[-3SG.M] ; find:RES-3SG.M	
<i>gm-tj</i>	find:RES-3SG.F	[Earlier Egyptian]
<i>gm-tw</i> , <i>gm-tj</i>	find:RES-3SG.F	[Late Egyptian I]
<i>gm-wīn</i> , <i>gm-n</i>	find:RES-1PL	
<i>gm-twnī</i> , <i>gm-tn</i>	find:RES-2PL	
<i>gm-ø</i> , <i>gm-w</i>	find:RES[-3PL] ; find:RES-3PL	[Middle Egyptian]
	find:RES[-3PL.M] ; find:RES-3PL.M	[Old Egyptian]
<i>gm-tj</i>	find:RES-3PL.F	[Old Egyptian]
<i>mn-kw</i>	remain:STAT-1SG	
<i>mn-tj</i>	remain:STAT-2SG	
...	...	
	Note that STAT – unlike RES – does not imply earlier action. One might prefer not to distinguish RES and STAT and to gloss all Pseudoparticiple forms with RES.	
<i>gm-tw</i> , <i>gm-tj</i>	find:RES	[Late Egyptian II]
<i>gm</i>	find:RES	[Late Egyptian II]
'Predicative' verb forms / Adverbial verb forms [Earlier Egyptian]		
	! Different analyses have been put forward for most of the verbal forms:	
<i>gm</i>	find:IPFV	(Werning 2008: 275; Allen 2000: ch.20)
	find:IAPLI	(Winand 2006a: ch.6)
	find:PRS	(Schenkel 2005: 192)
	find:SIM	(Zonhoven 1997: 69)
<i>gm.y</i>	find:SBJV	
<i>jn.t</i>	fetch:SBJV	

<i>gm.w</i>	find:POST find:FUT find:PROS	(Werning 2008: p.288-289) (Schenkel 2005: 196, 1990: 102)
	Note that in recent linguistic publications, the label ‘prospective’ is often taken to refer to mellic aspect proper (“to be just about to go”). Earlier studies took it as a kind of counterpart to PRF, i.e. a form – often paraphrased by “to be going to do” – that can have both mellic or (non epistemic) posterior meaning. (Compare the bibliography in the list of glossing abbreviations.)	
<i>gm-n</i>	find-ANT find-APLI find-PRF find-PST find-PFV	(Werning 2008: ch.5-6 ‘(perfective) Anterior’; Zonhoven 1997: 69) (Winand 2006a: ch.4-5; 2006b: 458-460) (Allen 2000: ch.18; Loprieno 1995: 80-81; Schenkel 1990: 102 “präsentisches Perfekt”) (Kammerzell 1998b) (Hannig 1991: 280)
	For the different conceptions and general terminological issues compare: Werning (2008: ch.1-4).	
<i>gm</i>	find:ANT find:RES find:PFV find:PRF	(Werning 2008: ch.6.2, 8 ‘Old Anterior’) (Winand 2006a: 199, 250 “résultatif disjoint”) (Allen 2000: ch.20; Loprieno 1995: 77) (Schenkel 1990: 102 “historisches Perfekt”)
<i>gm.w</i>	find:ANT.PASS	(for alternatives for ANT here and below compare <i>gm-n</i> above)
<i>sdm-t</i>	hear-COMPL hear-RES hear-POST hear-PFV	(D.W.; compare <i>sdm-tw</i> below) (Winand 2006a: 255-259, 373) (Zonhoven 1997: 133-136) (Loprieno 1995: 76)
<i>gm.w</i>	find:POST.PASS	(for alternatives to POST here and below compare the ‘prospective’ <i>gm.w</i> above)
<i>sdm~m</i>	hear~POST.PASS	
‘Predicative’ verb forms [Late Egyptian]		
<i>gm.y</i>	find:PRV find:PST	(Werning 2008: 286-287) (Junge 2001: 153; Loprieno 1995: 92-94; compare: Černý & Groll, ⁴ 1993: 154, 156)
<i>gm.y</i>	find:SBJV find:FUT	Compare the remarks of Junge 2001: 139.
<i>gm.w</i>	find:PRV.PASS find:PST.PASS	
<i>sdm-tw</i> (<i>jr.tw</i>)	find-COMPL (do:COMPL)	(compare Schenkel 1990: 100, 186)
Passive suffix <i>-tw</i>	-PASS -IMPRS	

Nominal verb forms [Earlier Egyptian]		
<i>gm-n</i>	find:NMLZ-ANT	
<i>gm~m</i>	find:NMLZ~IPFV	
<i>sdm</i>	hear:NMLZ.IPFV	
<i>gm.y</i>	find:NMLZ	
Nominal verb forms [Late Egyptian]		
<i>sdm</i>	hear:THMZ	
<i>j.gm</i>	find:THMZ	
'Contingent verb forms' / Modal forms		
<i>gm-jn</i>	find-CNSV	
<i>gm-jn</i>	find:ANT-CNSV	
<i>gm-jn</i>	find:IPFV-CNSV	(compare: Zeidler 1999: 136-138)
<i>gm.w-jn</i>	find:POST-CNSV	(compare: Westendorf 1962: §280)
<i>gm-kʒ</i>	find-CNSV.POST	
	find-CNSV.POT	(Kammerzell 1998b)
<i>gm.w-kʒ</i>	find:POST-CNSV.POST ; find:POST-CNSV.POT	
<i>gm.y-kʒ</i>	find:SBJV-CNSV.POST ; find:SBJV-CNSV.POT	
<i>gm-hr</i>	find-OBLV	(Malaise & Winand 1999: §624)
<i>gm-hr</i>	find:IPFV-OBLV	
<i>gm.y-hr</i>	find:SBJV-OBLV	
Relative forms [Earlier Egyptian]		
<i>gm-n</i>	find:REL(M)-ANT	(short: find:REL-ANT)
<i>gm-t-n</i>	find:REL-F-ANT	
<i>gm~m</i>	find:REL~IPFV(M)	(short: find:REL~IPFV)
<i>sdm</i>	hear:REL.IPFV(M)	(short: hear:REL.IPFV)
<i>gm~m-t</i>	find:REL~IPFV-F	
<i>sdm-t</i>	hear:REL.IPFV-F	
<i>gm.y</i>	find:REL(M)	(short: find:REL)
<i>gm.y-t</i>	find:REL-F	
Relative forms [Late Egyptian]		
<i>sdm</i>	hear:REL	
	hear:REL.PFV	
<i>j.gm</i>	find:REL	
	find:REL.PFV	
<i>j.jr ... gm.t</i>	do:REL ... find:INF	
Participles [Earlier Egyptian]		
<i>gm</i>	find:PTCP(M.SG)	(abbreviation: find:PA)
<i>gm-w</i>	find:PTCP-M.PL	(abbreviation: find:PA-M.PL)
<i>gm-t</i>	find:PTCP-F	(abbreviation: find:PA-F)
<i>gm.y</i>	find:PTCP.PASS(M.SG)	(abbreviation: find:PP)
<i>gm.y-w</i>	find:PTCP.PASS-M.PL	(abbreviation: find:PP-M.PL)
<i>gm.y-t</i>	find:PTCP.PASS-F	(abbreviation: find:PP-F)

<i>gm~m-ï</i>	find:PTCP~DISTR-M.SG	(abbreviation: find~PDA-M.SG)
<i>gm~m-yw</i>	find:PTCP~DISTR-M.PL	(abbreviation: find~PDA-M.PL)
<i>gm~m-t</i>	find:PTCP~DISTR-F	(abbreviation: find~PDA-F)
<i>s_dm-ï</i>	hear:PTCP.DISTR-M.SG	(abbreviation: hear.PDA-M.SG)
<i>s_dm-yw</i>	hear:PTCP.DISTR-M.PL	(abbreviation: hear.PDA-M.PL)
<i>s_dm-t</i>	hear:PTCP.DISTR-F	(abbreviation: hear.PDA-F)
	Alternatively one can gloss PTCP~IPFV (abbreviation: PIA) instead of PTCP~DISTR.	
<i>gm~m-w</i>	find:PTCP~DISTR-PASS.M(SG)	(abbreviation: find~PDP-M)
<i>gm~m-w</i>	find:PTCP~DISTR-PASS.M[-PL]	(abbreviation: find~PDP-M[-PL])
<i>gm~m-t</i>	find:PTCP~DISTR[-PASS]-F	(abbreviation: find~PDP-F)
<i>s_dm-w</i>	hear:PTCP.DISTR-PASS.M(SG)	(abbreviation: hear.PDP-M)
<i>s_dm-w</i>	hear:PTCP.DISTR-PASS.M[-PL]	(abbreviation: hear.PDP-M[-PL])
<i>s_dm-t</i>	hear:PTCP.DISTR[-PASS]-F	(abbreviation: hear.PDP-F)
	Alternatively one can gloss PTCP~IPFV-PASS (abbreviation: PIP) instead of PTCP~DISTR-PASS.	
<i>gm-tï-f</i>	find-PTCP.POST-M.SG	(abbreviation: find-PPO-M.SG)
<i>gm-tï-s</i>	find-PTCP.POST-F.SG	(abbreviation: find-PPO-F.SG)
<i>gm-tï-sn</i>	find-PTCP.POST-PL	(abbreviation: find-PPO-PL)
	Alternatively one can gloss PTCP.FUT (abbreviation: PF) instead of PTCP.POST.	
<i>gm-y</i>	find-PTCP.POST.M	(abbreviation: find-PPO.M)
<i>gm-tj</i>	find-PTCP.POST.F	(abbreviation: find-PPO.F)

Participles [Late Egyptian]

<i>s_dm</i>	find:PTCP ; find:PTCP.ANT
<i>j.g_m</i>	find:PTCP ; find:PTCP.ANT
<i>j.j_r gm.t</i>	do:PTCP find:INF

Selected particles and function words [Earlier Egyptian]

<i>jw</i>	MCM	
	GRND	(Collier 1994: 81)
	BS	(Loprieno 1995: 167-168 [“void <i>jw</i> ”])
<i>jwt</i>	COMP.NEG	
<i>=js</i>	=FOCZ	(Oreal 2009: ch.3)
	=SBRD	(Gilula 1972: 55, 59)
<i>wnt</i>	COMP	
<i>pw</i>	DEM	
<i>m-k (m-t, m-tn)</i>	ATTN-2SG.M (ATTN-2SG.F , ATTN-2PL)	
	VCJT-2SG.M (VCJT-2SG.F , VCJT-2PL)	
<i>nj-</i>	NEG-	
<i>nj- ... =js</i>	NEG{ ... } <i>or</i> NEG-... =NEG	
<i>nj-zp</i>	NEG-happened	
<i>ntt</i>	COMP	
<i>hr</i>	OBLV	
<i>k³</i>	CNSV.POST	

Selected particles and function words [Earlier → Late Egyptian]

<i>j , y³</i>	EXLM
<i>jn → m</i>	AGT
<i>jn → (j)n</i>	Q

<i>jr</i>	TOPZ <i>or</i> COND
<i>ḥ^ε.n</i>	CJVB:ANT
<i>-wī</i> → <i>-wsī</i>	-EXLM
<i>wn.jn</i>	CJVB:CNSV
<i>hwī</i>	MODP
<i>ḥ³</i> → <i>hl</i> , <i>hn</i>	MODP
<i>sk</i> , <i>jst</i> , ...	SBRD
<i>tj</i>	SBRD

Selected particles and function words [Late Egyptian]

<i>j.jr</i>	THMZ
<i>jw</i>	SBRD
<i>jw</i> [in NIMS]	CORD
<i>jw-... r</i>	FUT{ ... } <i>or</i> FUT-... :FUT
<i>jw-... (r)</i>	Given this syntagm's Coptic successor ϵ -... ϵ , we suggest taking the two morphemes as already being two parts of a single discontinuous morpheme FUT in Late Egyptian.
<i>jnn</i>	COND
<i>bw-</i>	NEG-
<i>bw.pwy</i>	NEG:did
<i>mk</i> , <i>ptr</i>	ATTN VCJT
<i>mtw-</i>	CORD.MOD-
<i>nn</i> → <i>bn</i>	NEG
<i>bn ... jwn³</i>	NEG{ ... } <i>or</i> NEG: ... :NEG
<i>ntī</i>	REL
<i>r.ntt</i> , <i>r.ntī</i>	QUOT
<i>r.dd</i>	COMP
<i>hn</i>	COND
<i>hr</i>	CORD

Selected clause patterns [Earlier Egyptian]

<i>nj- sdm-n-f</i>	NEG- hear-ANT-3SG.M
	Note that despite the fact that the meaning is 'imperfective' the form is still to be glossed according to its morphology (compare e.g. Miestamo 2005: 127), i.e. as ANT (Werning 2008: ch.6.2), APLI (Winand 2006a: 350-352), PRV (Hannig 1984; 1991: 281-283), or otherwise.
<i>sn-t ḥr=gm-t</i>	sister-F on= find-INF
<i>jw sn-t ḥr=gm-t</i>	MCM sister-F on= find-INF
	GRND sister-F on= find-INF
	GRND can be used instead of MCM in any of the examples below.
<i>jw-f ḥr=gm-t</i>	MCM-3SG.M on= find-INF
	BS-3SG.M on= find-INF
	BS can be used instead of MCM (or GRND) before a suffix pronoun in any of the examples below.
<i>sn-t m= qd</i>	sister-F in= build:INF
<i>sn-t m= jy-t</i>	(sister-F in= come-INF)
<i>sn-t r= gm-t</i>	sister-F to= find-INF
<i>jw sn-t r= gm-t</i>	MCM sister-F to= find-INF
<i>jw-f r= gm-t</i>	MCM-3SG.M to= find-INF

Selected clause patterns [Late Egyptian]

<i>tw-j hr= gm.t</i>	PRS-1SG	on=	find:INF
<i>sw (hr=) gm.t</i>	3SG.M(PRS)	[on=]	find:INF
<i>p³ sn (hr=) gm.t</i>	the brother	[on=]	find:INF
<i>tw-j gm-kw</i>	PRS-1SG		find:RES-1SG
<i>sw gm-ø</i>	3SG.M(PRS)		find:RES[-3SG.M]
<i>p³ sn gm-ø</i>	the brother		find:RES[-3SG.M]

This first style of glossing is based on taking the proclitic pronoun as the sole marker of the present tense. The preposition *hr*, when used, is then a marker of the infinitive, as one observes above in the unetymological syntagm *mtw-f hr- gm-t* (compare Junge 2001: 104).

<i>tw-j hr= gm.t</i>	PRS-1SG	PRS=	find:INF
<i>tw-j (hr=) gm.t</i>	PRS-1SG	[PRS=]	find:INF
<i>sw hr= gm.t</i>	3SG.M(PRS)	PRS=	find:INF
<i>sw (hr=) gm.t</i>	3SG.M(PRS)	[PRS=]	find:INF
<i>p³ sn hr= gm.t</i>	the brother	PRS=	find:INF
<i>p³ sn (hr=) gm.t</i>	the brother	[PRS=]	find:INF
<i>tw-j gm-kw</i>	PRS-1SG		find:RES-1SG
<i>sw gm-ø</i>	3SG.M(PRS)		find:RES[-3SG.M]
<i>p³ sn gm-ø</i>	the brother		find:RES[-3SG.M]

This second style of glossing sees the preposition *hr* not as an infinitive marker but as a part of a present tense complex.

<i>jw-f hr= gm.t</i>	SBRD-3SG	on=	find:INF [circumstantial present]
<i>jw sn-t hr= gm.t</i>	CORD sister-F	on=	find:INF [NIMS]
<i>jw-f r gm.t</i>	FUT{ 3SG.M }		find:INF
	FUT-3SG.M :FUT		find:INF
<i>jr sn gm.t</i>	do:FUT brother		find:INF
<i>jw.jw-f (r) gm.t</i>	SBRD FUT{ 3SG.M }		find:INF
	SBRD-3SG.M [:FUT]		find:INF
<i>mtw-k gm.t</i>	CORD.MOD		find:INF
<i>bw-jr-j gm.t</i>	NEG-do:PFV-1SG		find:INF
<i>j.jr-n gm.t</i>	THMZ-1PL		find:INF
<i>r-jr.tw-f gm.t</i>	to-do:COMPL-3SG.M		find:INF
<i>j.jr.tw-f gm.t</i>	to:do:COMPL-3SG.M		find:INF
<i>š^{3c} j.jr.tw-f gm.t</i>	until to:do:COMPL-3SG.M		find:INF
<i>š^{3c}.tw-f gm.t</i>	until:COMPL-3SG.M		find:INF
<i>bw-jr.tw-f gm.t</i>	NEG-do:COMPL-3SG.M		find:INF

NB: The sequence of glossed categories in personal pronouns (person-number-gender) is different from that in other nominal morphemes (gender-number). This *usus* is due to the fact that in the case of personal pronouns the markedness for gender is not obligatory – so here gender comes last in sequence – while with other nominal forms gender is often implicit, but number is optional and often marked by an additional morpheme – so here gender comes first.

Examples

The following examples shall exemplify the suggestions above. Personal preferences of the authors may show the variety of adaptations.

New Kingdom Middle Egyptian (Daniel Werning)

² m=tn =wj c̣q(=j) m= tʃ= jmn-t
 ATTN=2PL =1SG go_in:IPFV[=1SG] in= land(M.SG).STC= west-F.SG
I am entering the land of the west.

šzp =wj c̣u-wj=tn r=j
 recieve:IMP =1SG arm-M:DU=2PL to=1SG
Receive me! (Give) me your hands!

m=tn =wj <r>h{r}-kw s-t=tn hnt-(i)t dwʒ-t
 ATTN=2PL =1SG get_to_know:RES-1SG seat-F.SG=2PL in_front-ADJZ.F underworld-F.SG
I know your place in the underworld.

...

³ ṣdm=tl⁴n mdw-w= (W)sr(w)
 hear:NMLZ.IPFV=2PL word-M.PL.STC= Osiris(M.SG)
You will hear the words of Osiris,

m=ht =js c̣p̣i-n=j dwʒ-t
 in=following =FOCZ pass:NMLZ-ANT=1SG underworld-F.SG
even after I have passed the underworld.

Book of Caverns, 1st Cav.; 13th cent. BCE [tomb of Ramesses VII; approx. 1130 BCE]
 (Piankoff 1946: pl. III)

Late Egyptian (Camilla Di Biase-Dyson)

hr (i)n bn iw=w (r) di.t=s n=k
 CORD Q NEG FUT=3PL [:FUT] give:INF=3SG.F PDAT=2SG.M
But will they not give it to you?

m.ir iyi r= ptl tʃ hr-yt n= pʃ ym
 PROH come:INF PALL= see:INF ART:F.SG terror-F PGEN= ART:M.SG sea
Don't come in order to see the terror of the sea.

wnn iw=k (hr=) ptl tʃ hr-yt n= pʃ ym
 when BS=2SG.M [PSUP=] see:INF ART:F.SG terror-F PGEN= ART:M.SG sea
Whenever you see the terror of the sea,

iw=k (r) ptl tʃy=i hc-t=i
 FUT=2SG.M [:FUT] see:INF POSS:F.SG=1SG body-F=1SG
you shall see my own.

yʃ bw.pw=i iry n=k
 EXLM NEG:did=1SG do:INF PDAT=2SG.M
Indeed, I have not done to you

pʃ iri=w (n=) nʃ wp.wty-w n= H^ci.m.wʃs.t
 ART:M.SG do:REL.PFV [PDAT=] ART:PL envoy-M.PL PGEN= Khaemwaset
that which they did (to) the envoys of Khaemwaset.

The Misfortunes of Wenamun; pMoscow 120, 2, 49; approx. 10th cent. BCE (LES 72, 2)

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