

THE EGYPTIAN CONNECTION: EGYPTIAN AND THE SEMITIC LANGUAGES

Helmut Satzinger

The emerging of modern Egyptian grammar

The past hundred years have seen a good deal of progress in studies of Egyptian and also in Comparative Egypto-Semitic Studies. It must be admitted, though, that by the end of the nineteenth century the practical knowledge of Egyptian was already extraordinarily great. The members of the “Berlin school,” Adolf Erman, Georg Steindorff and Kurt Sethe, accomplished the pioneering phase which had begun with François Champollion and continued with Richard Lepsius, Samuel Birch, Heinrich Brugsch and others. At the end of the last century the great lexicographic venture of the Berlin Academy of Sciences was inaugurated (the last of the five main volumes appeared 1931). From 1880 onward, through the twentieth century, various stages and idioms of the Egyptian language were documented in reference grammars and text books.

Middle Egyptian: Erman (1894, ²1902, ³1911, ⁴1928); Gardiner (1927, ²1950, ³1957); Lefebvre (1940); de Buck (1941, ²1944); Westendorf (1962; language of medical texts); Sander-Hansen (1963), and several more textbooks, even in Arabic: Bakir 1954, ²1955; Nur el-Din 1998).

Old Egyptian: Edel (1955/64).

Late Egyptian: Erman (1880, ²1933); Korostovtsev (1973); Černý & Groll (1978); Neveu (1996); Junge (1996).

Demotic: Spiegelberg (1925); Lexa (1940–1951); Bresciani (1969); Johnson (1986, ²1991); Simpson (1996).

Coptic: Steindorff (1894, ²1904; 1951); Mallon (1904, ²1907); Till (1928; 1931; 1955, ²1961); Chaîne (1933); Jelanskaja (1964); Vergote (1973–1983); Polotsky (1987/1990); Shisha-Halevy (1988b) and other text books; a modern and comprehensive grammar by Bentley Layton is in the press.

Some scholars attempted a delineation of the Egyptian language and grammar not so much for Egyptologists as for general linguists and/or Semitists; *e.g.* Callender (1975a; 1975b), Schenkel (1990), Loprieno (1995).

The basis for much of this work was laid in partly large-scale grammatical analyses, starting with Sethe's (1899–1903) monumental work on the verb and his (Sethe 1916) monograph on the nominal sentence, both dealing with the evidence from all periods of the language. In the following the most important additional works on particular topics are listed (especially studies that are still of value and not outdated by later research; with minor exceptions, monographs only).

Dealing with all periods: Polotsky (1944, main focus on Coptic: the *finalis* conjugation; the “second tenses”); Fecht (1960, accent and syllable structure); Osing (1976, derivation of nouns); Schenkel (1983a, transcription; plural formation; 1983b, derivation of nouns).

On particular idioms and topics:

Middle Egyptian: Gunn (1923, negative constructions; prospective tense; etc.); Polotsky (1965, the tenses; 1976, nominal and adverbial “transpositions” of the verb); Doret (1986, verbal system of late Old and early Middle Egyptian), etc.

Old Egyptian: Sander-Hansen (1941; 1956); Allen (1984, Pyramid Texts: verbal morphology)

Late Egyptian: Hintze (1950–1952); Groll (1967; 1970); Frandsen (1974); Satzinger (1976)

Demotic: Johnson (1976); articles by Janet R. Johnson, Richard A. Parker, Ronald J. Williams and others

Coptic: Polotsky (*e.g.*, 1960; 1962); Wilson (1970); Shisha-Halevy (1988a; 1989); articles by Alexander Böhlig, Wolf-Peter Funk, A. I. Jelanskaja, P. V. Jernstedt, L. Th. Lefort, Peter Nagel, Hans Jakob Polotsky, Hans Quecke, Ariel Shisha-Halevy, W. D. Young and others.

Phonetics: Czermak (1931–1934); Albright (1934); Vergote (1945); Rössler (1971); various articles by these authors and many others (*cf.* Beinlich-Seeber 1999: III 510–511 for publications before 1947).

Lexicography: The Berlin *Wörterbuch*; Faulkner (1962); Meeks (1980–1982); Hannig (1995); for Late Egyptian: Lesko (1982–1990); for Hieroglyphic texts of the Ptolemaic period: Wilson (1997); for Demotic: Erichsen (1954); a Demotic Dictionary project is in progress at the Oriental Institute, Chicago University; for Coptic: Crum (1939); Westendorf (1965–1977); Coptic etymological dictionaries: Člěrný (1976); Vycichl (1983). Special fields: v. Deines & Westendorf (1961–1962: medical texts); Hoch (1994: Semitic loans).

Bibliography: Pratt (1925; 1942); the Annual Egyptological Bibliography at Leiden was begun for 1947. The time before 1947 is now covered by Beinlich-Seeber (1998); Coptic bibliography: Kammerer (1950). Later contributions in journals, in particular in *Aegyptus* and in *Archiv für Orientforschung*.

Egyptian and Semitic

Generally speaking, the works mentioned above would indicate correspondences with Semitic, though sporadically, as they occurred in the course of the investigation or presentation. There are, however, also contributions that focus on the (genetic) relationship between Egyptian and Semitic. The first comprehensive study is by Erman (1892) who deals with phonetics, stem formation and morphology of pronouns, nouns and verbs, and syntax, as well as with lexical comparisons and sound correspondences.

Since its initial appearance in the 1870's, the concept of Hamitic languages – as a sister family of Semitic – included Egyptian (for an overview *cf.*, *e.g.*, Jungraithmayr 1983; Satzinger 1999b). Nevertheless, many held that the place of Egyptian was somewhere between Semitic and Hamitic (*cf.*, *e.g.*, Brockelmann 1908: 9). Some scholars claimed – even in more recent times – that it was downright Semitic (*cf.* Vergote 1965; Rössler 1971), though they conceded that it must have separated from the main stream before all other Semitic ramification (*cf.*, *e.g.*, Vycichl 1958: 368; 1959). However, for a considerable time most researchers have accepted Greenberg's concept of Hamitosemitic or Afroasiatic being a macro-phylum that constitutes of several branches or families – among them Semitic and Egyptian – of more or less equal standing. Accordingly, the node of descent that connects Egyptian and Semitic is not – at any rate not essentially – lower than the other nodes.

Even before Greenberg, the African relations were taken into account up to a certain extent. In particular those scholars who were trained by Hermann Junker and Wilhelm Czermak, in the tradition of Leo Reinisch, in the *Institut für Ägyptologie und Afrikanistik* of Vienna University also included Berber (especially Zyhlarz, Vycichl, Rössler), Chadic (especially Vycichl 1934) and Cushitic. Zyhlarz (1932–1933) expressly attempts to counterbalance the predominance of Semitic in comparison with Egyptian by investigating various aspects of Egyptian and “Hamitic” (Berber and Cushitic; Hausa – being what he termed “Niggerhamitisch” – is not included): morphology and stem and theme derivation of the verb, phonetics and lexicon in comparison with Egyptian.

Apart from making numerous suggestions of his own, Calice (1936) presented a critical evaluation of all etymologies that had been proposed – *e.g.*, by Erman (1892), Albright (1917–1918; 1927), Ember (especially 1930), Brockelmann (1932), Littmann (1932). More etymologies are proposed by, *e.g.*, Yeivin (1936), Cohen (1947), Leslau (1962), Conti (1978).

Rössler (1950) analyses verbal stem derivation and conjugations of

Akkadian, Berber, Egyptian (with an excursus on Hausa), Bedauye, Mehri and Ge'ez (in his eyes, the verbal systems of languages like Arabic, Canaanite and Aramaic represent a younger type and are not subjected to the analysis). The suffix conjugation appears as the conjugation of predicative nouns, in particular adjectives, as attested by Akkadian, Kabyle and Bedauye in particular. From these, the perfect forms with *a-i* and *a-u* vocalism of the "younger Semitic languages" are derived. The dynamic perfect (including the Egyptian old perfective of action verbs) developed from suffix-conjugated perfective participles, viz. *qatil-*. This new perfect superseded the old *iprVs* type perfect in Hebrew, Aramaic and Arabic.

Vycichl (1958) seems to assume that all Egyptian words with a Semitic etymology are loans from (Proto-)Semitic. He documents phonetic correspondences with some 160 etymologies that he regards as certain, and he discusses 76 etymologies (partly from those dealt with in the first part, partly new).

Thacker (1954) deals with the *Relationship of the Semitic and Egyptian verbal systems*. He meticulously analyses the vocalisation of the Egyptian verb forms and derives his theory: "The Semitic and Egyptian verbal systems are offshoots of the same parent system. They parted at an early and incomplete stage of development and continued their growth each along its own lines" (p. 335). Semitic and Egyptian developed their verbal systems independently, from the same starting point (three verbal bases: (a) *qVtl*; (b) *qtVl*; (c) *qVttVl*. / (a) *sVdm*; (b) *sḏVm*; (c) *sVḏVmm^{sic}*), but arrived partly at different points. So Semitic developed the prefix conjugation by inversion of the suffix conjugation: *qatl-* + *ta* > *ta-qatil*. The Egyptian suffix pronoun conjugation (i.e., the "suffix conjugation" of Egyptological terminology), on the other hand, is reached by conceiving the subject as genitival. Thacker is not willing to accept that Egyptian has, in contrast to Semitic, many two-radical verbs; he interprets them as hollow verbs, so numerous in Semitic and so rare in Egyptian. It is still worth while to pursue Thacker's crucial idea that all conjugations of Semitic and Egyptian have (the same) verbal nouns as their verbal basis. To be exact: we are dealing in Egyptian with two verbal nouns, an unmarked form *CaCVC*, and a marked form with gemination or reduplication and "pluralic" meaning, as we would say today.

Vergote (1965) presented a study of the Egyptian nominal stems, including infinitives and old perfectives, trying to establish their relation to the corresponding Semitic stems.

Janssens (1972) distinguished three basic verb forms for both Egyptian and Semitic: preterite (perfective *sḏm=f* and *iprus*, etc., respectively); jussive (subjunctive *sḏm=f* and Sem. jussive, respectively); imperfect

(imperfective *sḏm=f* and *iparras*, etc., respectively). His reconstruction of the vocalisation of the Egyptian verb must be considered outdated.

Loprieno (1986) proceeds from a common Egypto-Semitic (“Afroasiatic”) verbal system on the basis of a tripartite aspectual system: *zero*, perfective (marked), imperfective (unmarked). The second co-ordinate is “±realised.” This ambitious work suffers from various theoretic shortcomings (cf. Satzinger 1989).

Of course, there are also Semitists that take Egyptian into consideration. Apart from those already mentioned, there is, e.g., Diakonoff (1965); Aspesi (1977); Belova (1980; 1989); Petráček (1988).

Egyptian has much in common with Semitic, as compared with most Cushitic (including Omotic; cf. Lamberti 1999) and Chadic languages. But when evaluating similarities between individual branches of Afroasiatic it is crucial to take into account (1) the factor of time, (2) the historico-cultural factor, and (3) possible areal effects.

(*The factor of time.*) Egyptian and Akkadian are attested in the third millennium BC, other Semitic languages somewhat later. The other branches of Afroasiatic are attested only recently (with the exception of the rather meagre evidence of ancient Libyan), and often enough not to a satisfactory extent. This means that comparisons must allow for a further development of several thousand years on the side of the other branches.

(*The historico-cultural factor.*) The Afroasiatic relationship dates back to Mesolithic times. Many important cultural achievements, such as agriculture and cattle-breeding, are later. The social structure and the forms of rule have changed drastically. This is of particular importance for lexical comparison. Many terms that appear basic to us cannot be expected to be part of the inherited common vocabulary. (Characteristic examples are terms like *ḥsb* “to reckon” and *ḥtm* “to seal”: the meaning is the same, the transcription is identical for Egyptian and Arabic, there is obviously a close relationship, but it must be other than genetic.)

(*Areal effects.*) The prehistory of the speakers of the individual branches of Afroasiatic is controversial, as is the question of the original Afroasiatic homeland, and consequently the reconstruction of the migrations from there to their present locations. It is usually very hard to say who in the course of time used to be the neighbours of the individual groups.

Historical Egypt is constituted of two populations: that of the Delta, and that of the Nile Valley. Most probably, these groups had different languages, and it is only one of them that is the ancestor of historical Egyptian. At present, many assume that Proto-Egyptian is the language of the Southerners (Naqâda culture; cf. Helck 1984; Helck, 1990). We know nothing at all about the other language.

The Valley population is not indigenous. It has immigrated either from the south or from

the south-west. The implications of this question concern the languages with which Egyptian may have had contact before it entered the light of history. In the south, we may expect Cushitic (including Omotic) languages, and apart from Afroasiatic, various Eastern Sudanic languages (of the Nilo-Saharan macro-phylum), and Kordofanian languages (Niger-Kordofanian macro-phylum). In the south-west, the presumable neighbours would probably have spoken either Chadic languages, or Saharan languages (again, Nilo-Saharan). But these assumptions are, of course, based on the present distribution.

In fact, Egyptian has much in common with Semitic. It has virtually the same principles of word order (leaving out of consideration on the Semitic side the end position of the verb in Akkadian, as also in Amharic). The verbal predicate (and also the nominal predicate, though not the adverbial predicate) comes first, subject and complements follow. Phrases have their nucleus in head position – the modified precedes the modifier: verb—complements, noun—attribute, noun—genitival expansion (regens—rectum), preposition—complement. There are prepositions and no postpositions (a seeming exception is the rare and archaic *js* “like”; it is, however, to be related to the Akkadian “dative” ending *-iš*, cf. below, for “case”). The relation between the preposition and its complement resembles the genitival relation in so far as in both cases the same set of personal pronouns is used, viz. the suffix pronoun. Attributive adjectives come after the substantive. In the earliest phase of the language, attributive demonstrative pronouns also follow on the substantive (*pr pn* “this house”), whereas Middle Egyptian sees the emergence of new sets that precede the substantive (from one of these the definite article develops: *p³-pr* “the house”). Numerals, however, are nuclear: they precede the noun except for number “two.”

There are, on the other hand, more or less conspicuous divergences in vital areas. The Egyptian and Semitic personal pronouns vary both in paradigmatic structure (since Egyptian has also an enclitic pronoun, intermediary between absolute and suffix pronoun) and partly in substance – at least at first glance. The demonstrative pronoun is totally different, both in structure and in substance.

Several features of Egyptian are briefly presented here in order to give an impression of the degree of its relationship to Semitic. (NB. Loprieno 1995 is an excellent exhaustive and up-to-date reference for the Egyptian language in general. As may be expected, there are, however, minor points here and there where the present author would disagree. In the following, this is not always expressly mentioned.)

Lexicon

In comparative works of Afroasiatic lexicon (*e.g.*, Calice 1936; Cohen 1947; Vycichl 1958; Diakonoff 1965; Diakonoff et alii 1993–1997; Orel & Stolbova 1994; Ehret 1995) Egyptian items are not very conspicuous among those of the other branches. We have to consider that Egyptian is a single language whereas the other branches are – with the exception of Berber – groups of numerous languages. On the other hand, the attested Egyptian lexicon with its approximately seventeen thousand entries presents much more material than what is recorded in the average Chadic and Cushitic languages. It has, however, long been noted with astonishment (*cf.* Erman 1892: 105) that Egyptian displays only few Semitic roots in those semantic fields where clear correspondences would be expected, like, *e.g.*, terms of family relationship, the lower numbers, verbs of a basic meaning, like “to do,” “to come,” etc. The “basic word-lists” of one hundred, or two hundred, or two hundred twenty items, which Swadesh has developed for the purpose of mass comparison furnish us with an instrument to objectify the degree of lexical relationship. In the one hundred word list we find a small number of long-established comparisons:

		Semitic	Egyptian
17	to die	* <i>m-w-t</i>	<i>mwt</i> (Copt. infinitive <i>mū'</i> < * <i>māwVt</i>)
39	to hear	* <i>š-m-^ε</i>	<i>sdm</i> (Copt. infinitive <i>sōtm</i> < * <i>sādəm</i> < * <i>sādVm</i> ; metathesis; with Egn. <i>d</i> [i.e. <i>č</i>] as palatalised <i>ε</i> , or <i>g</i> , as in Egn. <i>ndm</i> ~ Sem. <i>na^ε im-</i> “pleasant” and Egn. <i>pVsīd-</i> ~ Sem. <i>tiš^ε-</i> “nine”)
40	heart	* <i>libb-</i>	<i>jb</i> (* <i>jib</i>)
42	I	* <i>'anāku</i>	<i>jnk</i> (* <i>janák</i> ; Copt. <i>anók</i>)
62	not	* <i>lā</i>	<i>nj</i> (Copt. <i>n-</i>)
89	tongue	* <i>lišān-</i>	<i>ns</i> (* <i>nis</i> ; Copt. <i>las</i>)
92	two	* <i>tn-āni</i> (dual)	<i>snw(j)</i> (Copt. <i>snaṯ</i>)
94	warm	* <i>ḥāmm-</i>	<i>šm(m)</i> , var. <i>hm(m)</i> (Copt. infinitive <i>hmom</i> : <i>xmom</i> < * <i>hVmám</i>)
95	water	* <i>mā²-</i>	<i>mw</i> (* <i>maw</i> ; Copt. <i>mou</i>)
97	what	* <i>mā</i>	<i>mj</i>
99	who	* <i>man</i>	<i>mj</i>

Other equations are only possible on the basis of the “new” phonetics by Rössler (1971) (for which see below):

30	fly (noun)	* <i>dub(V)b</i>	<i>čff</i> (Sem. <i>d</i> ~ Egn. <i>ε</i> ; Copt. <i>af</i> , <i>aaf</i> < * <i>í/úffVf</i> [?]); but <i>cf.</i>
----	------------	------------------	--

Sem. *^ʕ-w-f “to fly”!

35 green *w-r-q wʕd (with Egn. *d* [i.e. *č*] as palatalised *k*; Copt. infinitive *uōt*)

37 hand *yad- ^ʕ (Sem. *d* ~ Egn. ^ʕ), var. *d* (Copt. -*tá*=)


Dto., with seemingly irregular sound correspondences:

54 moon *war(i)h- j^ʕ h (*jā^ʕ Vh; Copt. *ooh*, dialectally *joh*; irregular: Sem. *r* ~ Egn. ^ʕ)

71 sand *hāl- (Heb.) š^ʕ j (with Egn. *š* as palatalised *h*; irregular: Sem. *l* ~ Egn. ^ʕ)

64 one *ʔahVd-/wahVd- w^ʕ jw *wí^ʕ jVw (defended by Schenkel 1990: 55, in the assumed form w^ʕ ^ʕ w; however, Sem. *h* ~ Egn. ^ʕ is not regular.)

Indirect evidence (all non-“Rösslerian” phonetics: according to Rössler, Egn. ⟨d⟩ is *t*, not *d/d*):

21 ear *ʔudin- the hieroglyphic ear sign, , has the phonetic value *jd(n)*

37 hand *yad- the hieroglyphic hand sign, , has the phonetic value *d*

Phonology

Consonants: a characteristic of Afroasiatic languages is the existence of “emphatic” consonants in addition to (non-emphatic) voiceless and voiced plosives and fricatives. For a long time it was held that Egyptian is the only branch that does not have them, except for *k* (*q*) (cf. Diakonoff 1965: 19). But Rössler (1971) and Schenkel (1988) were able to show that – at least in principle – “*d*” and “*d̥*” are emphatic, viz. *t* and *č* respectively, at least until the first millennium BC (cf. Satzinger 1997). But still more spectacular is Rössler’s discovery that Egyptian ^ʕ behaves like a dental occlusive in respect to co-occurrence restraints, and not at all like a laryngeal.

On the other hand, comparatists continue to claim that a regular correspondence between Semitic ^ʕ (and *g*) and Egyptian ^ʕ is beyond any doubt. This has inspired further studies that attempt to find more reliable and more detailed evidence (cf. Zeidler 1992; Schenkel 1993; Satzinger 1999a; Satzinger 1999b). Obviously, the Semitic–Egyptian sound correspondences are far more complicated than has been thought before. In particular, there seems to be much alternation between emphatic and voiced occlusives,

both on the Afroasiatic level and in (Proto-)Egyptian. With this *caveat*, the following chart may be set up (it takes some inspiration from Kammerzell 1998 without, however, resuming several hypothetical details).

	voiceless	emphatic (fricative – affricate – plosive)		voiced		varia
1.	\bar{p} [ɸ] “ <i>f</i> ” <i>p</i> (or <i>p</i> ?)			<i>b</i>		<i>m</i> , <i>w</i> ,
2.	<i>s</i>	<i>c</i> “ <i>z</i> ”	<i>t</i>	<i>t</i> “ <i>d</i> ”	<i>d</i> “ <i>c</i> ”	<i>n</i> , <i>r</i> “ <i>ʒ</i> ,” <i>l</i> “ <i>r</i> ,”
3.	<i>š</i>	<i>č</i> “ <i>f</i> ”		<i>č</i> “ <i>d</i> ”	<i>j</i> ?	<i>y</i> “ <i>j</i> ,”
4.	<i>x</i> “ <i>h</i> ”		<i>k</i>	<i>x</i> “ <i>h</i> ”	<i>k</i>	<i>g</i> [ɣ] “ <i>h</i> ”
					<i>g</i>	<i>ç</i> , <i>ʔ</i> “ <i>j</i> ,” <i>h</i>

Note that the phonemes of line 3 have originated in those of line 4 in the course a partial palatalisation of Proto-Egyptian.

Vowels: There is no evidence that Egyptian did not have the same basic set of vowels as Semitic, viz. *a – i – u*. As for vowel length, the “Palaeo-Coptic” (Edgerton 1947) syllable laws caused a drastic change. Vowels cannot be but long in an open stressed syllable, and they must be short in closed stressed syllables and, in addition, in all unstressed syllables. Stress is usually on the penult, in rarer cases on the last syllable. (Some modifications of these syllable laws are assumed by Schenkel 1983a.)

An important source for the investigation of Egyptian phonetics are renderings of Egyptian names and words in cuneiform, and vice versa, renderings of Semitic words and Near Eastern names in Egyptian script. But these transcriptions have also an impact on Semitic phonetics. The original sound value of the Semitic sibilant that is realised in Hebrew as *samekh* has been assumed to be [s]; among the arguments for assuming an original sound value [ts], at least until the second millennium BC, is its correspondence with Egyptian *t* [c] in the transcriptions (cf. Hoch 1994: 408 + n. 34). **Formation of stems**

Analysis of Egyptian roots, stems and forms is hampered by transmission in a medium that does not render vowels and syllable structure. Still, it is clear that the role the consonants play in roots and stems is as important as it is in Semitic (this is ultimately the reason why the Egyptians developed a consonantal script for their language). Egyptian nominal stems are derived in similar ways as in Semitic. Of the external modifications

of Afroasiatic stems (*cf.*, *e.g.*, Diakonoff 1965: 38), Egyptian has the *m*- prefix (with conditioned variants *n*-, *mn*-) for forming nomina loci and instrumenti, nomina agentis and patientis (though participles are not formed with *m*- prefix; for these, *cf.* Osing 1987) as well as collectives (Vergote 1965; *id.*, 1973/1983, Ia: 155 § 89; Osing 1976: 119, 206, 209, 211, 256).

There are two classes of adjectives: those that are derived from verbs of quality (at least some being their participles), and those derived from nouns or prepositions by means of the “nisba” ending *-j* (earlier also *-w* [**-Vwi?*]).

Verbal stems may have two to five radicals (stems with six radicals – formed by total reduplication of three radical roots: ABCABC – are quite exceptional), though verbs with three radicals are by far the most typical. Four-radical verbs are often formed by reduplication of two-radical roots (ABAB); all five-radical stems display a reduplication of the second and third radicals (ABCBC). The forms of two-radical verbs seems to have the vocalisation of the second syllable of the pertinent forms of three-radical verbs; *cf.* **win* “opening” vs. **wānim* “eating” (active participles; see Osing 1987). Verbs whose last radical is *j* (“weak verbs”) behave differently from “strong verbs”; *cf.* *sḏm=f* “that he hears” (aorist, clausal form), with no modification being apparent in the consonantal skeleton, but *ḥzz=f* “that he praises” (of root *ḥzj*), with a reduplication of the second radical and loss of the weak third radical; infinitives **sāḏVm* (Coptic *sōtm*) “to hear,” **ḥiʿz-at* (Coptic *hiʿse*) “to praise.”

There seem to be a few *piʿʿel* forms, though this is doubted by some (*cf.* Coptic *mūʾ* < **māwVt* “to die,” *mout* < **māwwVt* “to kill”). The causative stem prefix **sV-* (*e.g.*, *ʿnh* [inf. **ʿānVh*, Coptic *ōnh*] “to live,” *s-ʿnh* [inf. **sáʿnah*, Coptic *sáʾʾns*] “to make live”) is much more conspicuous. It is, however no longer operative.

Nominal morphology (1): case

In some Semitic languages there is a nominative in *-u*, an accusative in *-a* and a genitive in *-i*, viz. in Akkadian and in Arabic; in Geʿez, the phonetic development has caused the merging of nominative and genitive (Moscatti 1964, 1969: 94). The case in *-a* is used for the objects of transitive verbs, but also as adverbial case (such as Arabic *al-yawm-a* “today,” *barr-an wa-baḥr-an* “on land and on sea,” *gidd-an* “very” – literally, “with zeal or effort” –, *ʾakbaru ʿilm-an* “greater in respect to knowledge”), for the predicative noun after some verbs of *being* or *becoming* (Arabic: *kāna* and its “sisters”, Geʿez: *kōna*), for the predicative

noun in the “absolute negation,” Arabic *lā ’ilāh-a* “there is no god,” and, in Arabic, under certain conditions for the vocative (e.g., *yā ‘abd-a llāhi*). These usages and, in addition, the traces of a case in *-a* in Berber and Cushitic lead to the assumption that it was not originally the case of the object of the verb (accusative), but rather an absolute case. Its realms were the absolute noun, the predicate and the address (vocative). Its later use as an accusative and as an adverbialis can be plausible under the assumption that it marked the predicative phrase as a whole. If the nucleus of the predicate is a verb the predicate phrase may also comprise an object and (or) an adverbial complement which then received the predicate marker *-a*. In this way it became primarily associated with the object (cf. Satzinger, forthcoming (b)). This amounts to the eventual development of an accusative case system (viz., with a nominative as subject case and an accusative as object case). Akkadian, however, seems to have split the Afroasiatic absolute case into an accusative in *-a* (object, adverbs) and an absolute case in *-Ø* (called *absolute state*; in particular for the absolute noun and as vocative). – Apart from the cases mentioned there is a dative/adverbialis in *-iš* (Akkadian; rudiments in **-ah* in Ugaritic and Hebrew, *-s* in Epigraphic South Arabian; *js* in Egyptian, and perhaps *-s* in Central Cushitic and in Omotic / West Cushitic; cf. Diakonoff 1965: 58 note 8) and a locative that is homonymous (and ultimately identical) with the nominative, viz. in *-u*.

Historical Egyptian certainly has no case endings. However, traces of case endings can be seen: absolute case in *-a*, nominative in *-u*, genitive in *-i*, and an adverbialis/dative in **-is* (cf. Zeidler 1992: 210–212; for the absolute case see Satzinger 1991: 130; 1997: 35–36). There is no reason to assume that Proto-Egyptian – as also Berber and Cushitic – ever had the Semitic accusative system, with accusatives in *-a* (pace Callender 1975a; Loprieno 1995: 55), but rather an absolute case system, with an absolute case in *-a* (in a paradigm with the absolute personal pronoun, for which cf. below), and a case in *-u*, agentive (nominative) and locative: as also in some ergative languages it was probably the locative that served as an agentive case. (The corresponding personal pronoun is the suffix pronoun, which also encompasses the genitival function.) The assumption of an ergative system (for which see the following) would imply that there was originally also a case for the subject of intransitive verbs that was identical with the case of the object of transitive verbs. (The corresponding personal pronoun is in Egyptian the enclitic pronoun.)

The characteristic feature of ergativity is that the objects of transitive verbs are in the same case (viz. the absolute) as the subjects of intransitive verbs, whereas the subjects / agents of transitive verbs are in a particular case, the ergative. By way of contrast, an accusative system

implies that the subjects of transitive and intransitive verbs are in the same case, viz. the nominative, whereas the objects of transitive verbs are in the accusative. In Egyptology, the ergative issue has been raised in recent publications (*cf.*, *e.g.*, Zeidler 1992: 210–212; Loprieno 1995: 83–85; Roccati 1997; Reintges 1998: 458; *cf.* for Semitic: Müller 1995; for Berber: Aikhenvald 1995; for Chadic: Frajzyngier 1984). Actually, there is no Afroasiatic language that has an ergative system, whether fully fledged or a “split ergative” (the arguments of Aikhenvald 1995 are not convincing; the evidence of Berber is better accounted for by an absolute case model, *cf.* Sasse 1984). Nevertheless, Egyptian can add some evidence, in addition to Diakonoff’s (1965: 58) arguments, that points to the possibility that originally Afroasiatic did have an ergative system. This concerns the personal pronouns and the stative form of the old perfective (suffix conjugation).

In historical Egyptian the paradigms of the personal pronoun do not correspond to distinct case functions. The absolute pronoun is both used as an absolute case (*e.g.*, for nominal predicates) and (with restrictions) for the subject of the nominal sentence; this is in a measure comparable with Semitic. The enclitic pronoun expresses both the object of transitive verbs and the subject of the adjectival sentence (which also encompasses participles: *jrj sw* “he (is one who) does,” *h^c j sw* “he (is one who) rejoices”). The function of the suffix pronoun is similar to the genitival function of its Semitic counterpart, but in addition it expresses the pronominal subject in what is here called the “suffix pronoun conjugation.” It may be assumed that the pronominal paradigms are a testimony of an older case system: absolute pronoun ~ absolute case (predicates, etc.); enclitic pronoun ~ absolutive case (originally, subject of intransitives [?], patient expression with transitives); suffix pronoun ~ genitive and ergative (originally, agent expression with transitive verbs [?]). *Cf.* Table 1.

The old perfective in its stative form has perhaps developed from an ergative construction: its pronominal element denotes the subject of intransitive verbs and the object of transitive verbs, equalling thus to the absolutive case of the pronoun. A delimitation from the enclitic pronoun just mentioned has yet to be drawn.

Nominal morphology (2): number, gender

Like Semitic, Egyptian originally distinguishes three numbers, viz. singular, plural and dual. The latter tends to be given up rather early, a phenomenon that is familiar from other languages (Semitic, Indo-European).

Like Afroasiatic in general, Egyptian has two genders, masculine and feminine. In the personal and demonstrative pronouns, third person, a further form exists that is used for facts rather than objects, or for quantities (enclitic pronoun *st*; demonstratives with *n*- base, viz. *nn*, *nw*, *nf*, etc.). These forms tend to be used as plurals, thus replacing the original plural forms. Whereas the gender of nouns is distinguished by their endings (see below), the pronouns have particular forms for each gender. The demonstratives, however, use different bases: *p*- (masculine), *t*- (feminine) and *n*-. To these, the deictic elements are attached: *-w* (< *-j*) and *-n* (proximity), *-f* (distance).

Like Afroasiatic in general, Egyptian distinguishes gender not only in the third, but also in the second person of the personal pronoun (in writing, though, in the singular only; the plural forms may either have merged or be distinguished by different vowels: e.g., ***kumu* > **tun*, ***kina* > **fin*).

The morphemes of gender/number discrimination can be compared with some of those of other branches, including Semitic. But Egyptian gender/number formation is – in particular in the traditional view (cf. Satzinger 1997: 36–37; forthcoming (a)) – of a uniformity that stands in marked contrast to the other Afroasiatic branches. All feminine nouns have the ending *-t* (which is mostly **-at*, but cf. monosyllabic words like **pu-t* “sky,” and the nisba adjectives, masc. **jamīniy* “western,” fem. **jamīni-t*). The masculine plural is in *-w*, the dual in *-wj*; the feminine plural is in *-wt*, the dual in *-tj*. It has been shown, however, that the masculine plural may be formed from a base different from the singular. As a kind of broken plural, there is a pattern **CaCúC-*, to which form the plural ending is attached: **nátar* (or **nátir*) “god,” plur. **natúr-uw*; **san* “brother,” plur. **sanúw-uw* (Schenkel 1983 (a): 177–178; Satzinger, forthcoming (a)).

If the Semitic plural endings **-ū*, **-ī* are modifications of case endings (nominative and oblique case, respectively), the same should be true of the Egyptian plural ending *-w*. It is, then, an indirect vestige of the common case ending *-u* (absolute > nominative).

In Egyptian there are no traces of mimation or nunation, neither in the singular nor in the plural.

Verbal morphology (1): tenses, aspects, moods.

A tentative sketch of TAM reconstruction in Proto-Semitic may assume a present perfect category that is expressed by the suffix conjugation. It may originally have been a “pseudo-conjugation” for the predicative adjective (Tropper 1995), though its use with other verbs (both static

and dynamic) cannot be overlooked. The dynamic expression of events is the prefix conjugation which is attested in two basic aspectual forms: an unmarked short form (*cf.* Akk. *iprVs*) and an imperfective fuller form (*cf.* Akk. *iparrVs*). (We may presently disregard assumptions of a third stem.) From this material, the individual languages have developed their tense systems in various ways. The present perfect was preserved in Akkadian. In Hebrew the use of the suffix conjugation was extended to the preterit tense, while in Arabic and Ethiosemitic the category of the present perfect lost even more ground, the suffix conjugation becoming primarily the form of the preterite. The main realm of the unmarked prefix form (i.e., the form of the *iprVs* type) came to be the present (and future) and the subjunctive and (or) modal forms. The marked form (i.e., the form of the *iparrVs* type) was lost, except for Akkadian and South Semitic. To a certain measure the prefix conjugation forms of the *iprVs* type are now in Hebrew, Biblical Aramaic and Arabic an imperfective counterpart to the suffix conjugation, whereas originally the *iparrVs* type forms were the imperfective counterpart to the *iprVs* type forms.

Berber has an amalgam of the prefix and suffix conjugations for forming all tense paradigms, with clear vestiges of the *iparrVs* type, in addition to the *iprVs* type stem. The suffix conjugation, in its true form, is preserved as a present perfect in Kabyle only (Rössler 1950: 478–486). Vestiges of the original suffix conjugation in Cushitic and Chadic are – for different reasons – still controversial issues.

Verbal morphology (2): the old perfective

Recent discoveries in the field of the Egyptian suffix conjugation (that is the *pseudo-participle* (Erman), the *old perfective* (Gardiner), or the *stative* (Polotsky); what Egyptology calls “suffix conjugation” is here called “suffix pronoun conjugation”) may shed new light on the Semitic facts. Functionally, two main uses of the Egyptian suffix conjugation may be discerned (Satzinger, 1998).

1. the “Stative,” a present perfect (static present of verbs of quality, static passive of transitive verbs). Like several other rhematic forms (i.e., forms that are neither clausal nor “contingent”), the old perfective tends early to be restricted to circumstantial status (“he being good,” “he having been clad,” etc.).
2. the “Perfect,” a dynamic preterite. Attested in the Old Kingdom, this use is becoming obsolete in Middle Egyptian. It seems, however, that it survived with intransitive verbs of motion, and perhaps some other action verbs.

Schenkel (1994) has shown in a rather sophisticated way that there is a significant morphological difference between the two “uses” mentioned. Whereas the dynamic forms seem to be conjugated the way it has been imagined up till now (the conjugation ending being directly joined to the verbal base, *e.g.* **sadV̄m-kVw*), the static verbs insert, in the first and second persons (Satzinger, 1999c), a long vowel before the ending (*e.g.* **sadm-Ṽ-kVw*), which is of course reminiscent of the stative forms of Akkadian (*e.g.* *parsāku*). It is not very plausible to assume that the Egyptian stative and perfect developed independently of Semitic in such a similar way. Instead, it may suggest that the stative-perfect dichotomy is not an innovation of (Proto-)Semitic but an old Afroasiatic feature (Satzinger, 1999c). Whereas the Semitic languages generalised one form for both uses (in Akkadian, the old perfective, otherwise the Perfect) Egyptian has preserved both.

An important feature connected with the use of the old perfective is the “suppletive system” (Polotsky 1984: 116) in the perfect of the Egyptian verbal system. In this, the old perfective is used for (most) intransitives and for the passive of the transitives. The active voice of the transitives, however, is conveyed by the *n*-form of the suffix pronoun conjugation:

šm·w “he has gone” *rdj·n=f* “he has given” *rdj·w* “he has been given”

The tense connotations of the two forms, old perfective and *sdm·n=f*, developed in the same way. A present perfect originally, they began to be used as a preterit from the late Old Kingdom onward. The two forms are truly suppletive, just as *il est allé*, *il a donné*, and *er ist gegangen*, *er hat gegeben*, respectively. The suffix conjugation is in this way fully integrated into the tense system.

Verbal morphology (3): the Egyptian suffix pronoun conjugation

Egyptian is the only branch of Afroasiatic that has no vestige whatsoever of the prefix conjugation. In its place, it has its peculiar suffix pronoun conjugation (called “suffix conjugation” in Egyptology). Its structure is the following (*cf.* Satzinger 1997: 38):

1. verbal stem in one of various forms (interior or exterior modification): obviously, several vocalisation and syllabication patterns; reduplication of the second of 3 radicals; reduplication of the last radical; prefixation of *j*-; suffixation of *-y/w* (passive), of *-t* (resultative!?)
2. gender and number markers (with attributive forms only): *-Ø*, *-t*; *-w*, *-wt*

3. external tense markers: $-\emptyset$, $-n$ (present perfect > past tense), $-w/j$ (prospective tense);
 “contingent tenses” $-jn$ (past), $-k^3$ (prospective), $-hr$ (unmarked)
4. external voice markers: $-\emptyset$, $-tw$ (< $-tj$ or $-t$?)
5. subject expression: substantive, demonstrative, numeral, proper name etc.; suffix pronoun; \emptyset
 (expressing an indefinite or impersonal subject)

Some examples:

1.	2.	3.	4.	5.	translation	syntactic status	tense
<i>jjj</i> (root: <i>jwt</i>)	<i>w</i>	—	—	—	“who (plur.) have come”	attribute	perfect
<i>hzjj</i> (root: <i>hzt</i>)	<i>w</i>	—	—	—	“who (plur.) have been praised”	attribute	perfect passive
<i>hpp</i> (root: <i>hpt</i>)	<i>wt</i>	—	—	<i>3hw</i> (<i>hr-sn</i>)	“(the ways [fem. pl.] on) which the blessed use to walk”	attribute	aorist
<i>rdj</i>	<i>t</i>	<i>n</i>	—	<i>f</i>	“what (fem.) he gave”	attribute	perfect
<i>nh</i>	<i>t</i>	<i>j</i>	—	<i>ntr (jm)</i>	“(on which) a god will live”	attribute	prospect.
<i>gmm</i> (root: <i>gmj</i>)	—	—	<i>tw</i>	<i>f</i>	“that it (masc.) is found”	substantival	aorist
<i>gmj</i>	—	<i>n</i>	—	<i>f</i>	“that he was found”	substantival	perfect
<i>gmj</i>	—	<i>n</i>	<i>tw</i>	<i>bw</i>	“that the place was found”	substantival	perfect passive
<i>hzj</i>	—	<i>j/w</i>	—	<i>nswt</i>	“that the king will praise”	substantival	prospect.

<i>prj</i>	—	—	—	<i>f</i>	“(they found him) going out”	rhematic (circumstantial)	aorist
<i>gmjj</i> (root: <i>gmj</i>)	—	—	—	<i>bw</i>	“the place having been found”	rhematic (circumstantial)	perfect passive
<i>nhm</i>	—	—	—	Ø	“they (indef. meaning) took”	rhematic, impersonal	perfect
<i>hpr</i>	—	(w)	—	Ø	“it (indef. meaning) will become”	rhematic, impersonal	prospective
<i>rdj</i>	—	<i>jn</i>	—	Ø	“and they (indef. meaning) gave”	contingent, impersonal	perfect
<i>jrj</i>	—	<i>jn</i>	<i>tw</i>	Ø	“then one acted”	contingent, impersonal passive	perfect

In Gardiner’s view, Egyptian verbs have two aspectual forms, comparable to the *iprVs* and the *iparrVs* types of Akkadian and Ethiosemitic. The discriminating feature is, however, not gemination (or lengthening) of the second of three stem consonants, but rather its reduplication. This aspectual reduplication (wrongly called “gemination” in Egyptology) is, in the main, restricted to some forms of the majority of the ultimae infirmae verbs: *hꜣj* “to praise,” but *hꜣꜣj=f* “that he praises,” the “imperfective participles” *hꜣꜣj(·t/etc.)* “who praise(s)” and *hꜣꜣw(·t/etc.)* “who is/are praised,” and the “imperfective relative form,” *hꜣꜣw(·t/etc.)=f* “whom/whose (etc.) ... he praises.” Note, however, that – according to the Polotskyan scheme – one of the forms claimed by Gardiner for the “perfective” forms must be grouped with the “imperfective” forms. The so-called circumstantial *sdm=f*, *hꜣj=f* “(he) praising,” is – in terms of tense and aspect – probably on a par with the substantival form *hꜣꜣj=f* “that he praises” and the other “imperfective” forms mentioned. It may be imagined that originally the rhematic/circumstantial forms (like *hꜣj=f*) displayed the characteristic reduplication but lost it by syncopation (**hꜣVꜣ ꜣV-*) on account of a different syllable structure.

Verbal morphosyntax and syntax: syntactical status, rhematic vs. clausal

Egyptian not only has participles of all three main tenses, viz. perfect, aorist (in the sense of Turkish) and prospective, in both voices, that serve as predicative nuclei of attribute clauses, but also conjugated forms, called *relative forms*. Whereas this has been recognised for a very long time, it was only Polotsky (1944, etc.) who discovered that there is a series of “that” forms, comparable to the relative forms:

$w^3w \cdot t \text{ } hpp \cdot wt \text{ } \mathfrak{z}h \cdot w \text{ } hr = sn$ “the ways on which the blessed walk” (relative form, aorist)

$hpp \text{ } \mathfrak{z}h \cdot w \text{ } hr \text{ } w^3wt$ “that the blessed walk on the ways” (“that” form, aorist)

w^3t (fem.) “way,” hpy “to walk,” $\mathfrak{z}h$ (masc.) “blessed,” hr “on,” $=sn$, suffix personal pronoun, 3rd plural.

$w^3t \text{ } tw \text{ } dsr \cdot t \text{ } hpj \cdot t \cdot n \text{ } Dhwtj \text{ } hr = s$ “this exalted way on which Thoth walked” (relative form, perfect)

$hpj \cdot n \text{ } Dhwtj \text{ } hr \text{ } w^3t \text{ } tw \text{ } dsr \cdot t$ “it is on this exalted way that Thoth walked” (“that” form, perfect)

tw , demonstrative, fem. sing.; dsr “exalted”

$nn \text{ } mr \text{ } jrjj = k \text{ } r = f$ “this injury which you were going to do against him” (relative form, prospective)

$jrjj = k \text{ } nn \text{ } mr \text{ } r = f$ “that you are going to do this injury against him” (“that” form, prospective)

nn , demonstrative, non-individual; mr “evil”; jrj “to do”; $=k$, suffix personal pronoun, 2nd masc. sing.; r “towards, against”; $=f$, suffix personal pronoun, 3rd masc. sing.

Recognition of the existence of substantival forms, or rather of nominal forms that can function both as substantives and as attributive adjectives, has an impact on the theories on the origin of the suffix pronoun conjugation. The verbal element is most probably a verbal noun (Schenkel 1975), though its category is not equivalent to the verbal nouns preserved in Egyptian and Semitic. On the one hand, it existed in two aspectual variants: one simple form with perfective meaning (hzj), the other one a reduplicated imperfective form ($hzz(j)$). On the other, it was not confined to substantival function but had also that of a verbal adjective, as it could be used as an attribute. Adding an actor expression (noun or suffix pronoun) could yield both “that” forms and relative forms: $hzz = f$ “his praising” = “that he praises”; $hzz \cdot t = f$ “the (female whom) his praising (concerns)” = “whom (fem.) he praises”; $hzj = f$ “his having praised” = “that he (has) praised”; $hzj \cdot t = f$ “the (female whom) his having praised (concerns)” =

“whom (fem.) he (has) praised” (Satzinger, 1997:39). Actually, there is a close parallel to this in a neighbouring, though unrelated language; *cf.* the Proto-Old Nubian conjugation system, as reconstructed by Browne (1982; 1988: 7–12; 1998: 23–26); also *cf.* Satzinger (1995: 157–158; 1997: 40; forthcoming (c)).

Some of the tense markers are probably verbs of saying used as auxiliaries. This feature is widespread in Eastern Africa, both in Afroasiatic and Nilosaharan languages. *sdm·hr=f* “then he hears” may be explained as “he says: listening,” *sdm·jn=f* “then he heard” is **sdm·j·n=f* “he has said: listening.” The auxiliary of *sdm·kʔ=f* “then he will hear” means “to think,” “to plan”; hence “*he plans to listen.” The tense marker *n*, on the other hand, is most probably derived from the homonymous preposition meaning “to,” a most general expression of a possessive relation (akin to Semitic *li-*). Hence, *sdm·n=f* can be compared with Syriac *šmīʿ -leh* “he has heard,” but also with the perfect forms in Western European languages formed with “to have” as an auxiliary.

The adverbial sentence and its role for verbal expression

Like the vast majority of African languages (and some Western European languages; see Satzinger forthcoming (d)) Egyptian conspicuously distinguishes sentences with adverbial predicates (or predicatives) from sentences with nominal predicates.

1. Adverbial sentence:

Unmarked sequence: Subject – Predicate

Very often embedded into the *jw* construction or as subject of *m=k*, *m=t*, *m=tn* (“behold”), *jst* (yields a kind of parenthesis), *nn* (“... is not”; yields a negated adverbial clause), *ntj* (“which is ...”; yields a relative clause); *nt·t* (“that ... is ...”; yields a noun clause); *wnn* (“to be”; allows to transpose an adverbial sentence into various tenses and/or nominal and adjectival statuses etc.).

—	<i>N.</i>	<i>hr=j</i>	“N. is with me” (with nominal subject only; with pronominal subject, the adverbial sentence must be embedded)
<i>jw</i>	<i>=f</i>	<i>hr=j</i>	“he is with me”
<i>m=k</i>	<i>sw</i>	<i>hr=j</i>	“behold, he is with me”
<i>jst</i>	<i>sw</i>	<i>hr=j</i>	“now, he was with me” (when in past context)
<i>nn</i>	<i>sw</i>	<i>hr=j</i>	“he is not with me”

<i>nt·t</i>	=f	<i>hr=s</i>	(1) “(the woman) with whom he is”; (2) “that he is with her”
<i>wn·jn</i>	=f	<i>hr=j</i>	“then he began to be with me”
<i>wn</i>	=f	<i>hr=j</i>	“he was with me”
<i>wn·t</i>	=f	<i>hr=s</i>	“(the woman) with whom he was”
<i>wnn</i>	=f	<i>hr=j</i>	(1) “that he is with me”; (2) “that he shall be with me”
<i>wnn·t</i>	=f	<i>hr=s</i>	“(the woman) with whom he (1) is wont to be, (2) shall be”

2. The nominal sentence (cf. Shisha-Halevy 1984; 1987; Doret 1989/1990/1992):

No embedding in constructions with *jw*, *wnn* etc.

Unmarked sequence: Predicate – Subject

Snbj rn=j “my name is *Snbj*”; usually, however, the nominal sentence with substantival subject is extended to a tripartite construction by using a demonstrative pronoun as a dummy subject; e.g. *zšw pw sn=k* “your brother is a scribe (*zšw*)” (< “he is a scribe, viz. your brother”).

In both the bipartite and the tripartite constructions the subject may be rhematised which yields “naming” constructions (cf. Shisha-Halevy 1984: 181; 1989:89–95), explicative or glossing utterances etc.; e.g., bipartite: *sn·t=f Spd·t, sšmw=f ntr dw?* “his sister is Sothis, his guide is the morning star.”

With pronominal subject, first and second persons, this rhematisation is neutralised. The sequence #absolute pronoun – noun# is here the natural one: *jnk sn=k* “I am your brother”; *jnn sn·w=k* “we are your brothers”; *ntk sn=j* “you are my brother”; *ntt sn·t=j* “you are my sister”; *ntt n sn·w=j* “you (pl.) are my brothers.” (The Coptic writing system allows to see that the absolute pronoun is prosodically weakened in these cases: *ang-pek-són* “I am your brother,” as opposed to *anók-pe* “it is I.”) In the third person, however, the structure is #noun – *pw*#: *sn=j pw* “he is my brother,” *sn·t=k pw* “she is your sister,” *sn·w=sn pw* “they are their brothers.”

Egyptian verbal utterances are not, contrary to what may be surmised from the above, confined to verbal sentences of either kind, viz. the suffix pronoun conjugation and the old perfective. Also in Semitic languages, nominal sentence conjugations may complement the system of the verbal conjugations. An analogous conjugation exists in Egyptian in the so-called adjectival sentence: *nfr sw* “he is good,” *jrj sw* “he (is one who) does.” Whereas this is a marginal feature for verbal expression (probably due to its static meaning), the adverbial sentence conjugations play here a paramount role. Their predicative element (of adverbial function) is

either the old perfective or one of the adverbial forms that are built up of preposition plus infinitive. There are three of these “gerunds”: the progressive gerund, *hr sdm* “(on) listening,” the suppletive form for intransitive verbs of motion, *m jj·t* “(in) coming,” and the future gerund, *r sdm* “to(wards) listen(ing).” They may be freely used, expanding a noun in a verbal phrase, as “he is seen *m jj·t* coming along,” or *hr wn ʿ ʔ* “opening the door-wing.” When, however, they function as predicates in adverbial sentences we have to do with the following Egyptian tenses:

Progressive: *jw=f hr sdm* “he is listening”

Progressive, verbs of motion: *jw=f m jj·t* “he is coming along”

Future: *jw=f r sdm* “he shall/will hear”

It has been mentioned above that the rhematic verb forms tended early to be primarily used as nuclei of clauses of circumstance. In particular, this applies to the following.

Rhematic aoristic *sdm=f*, “(he) listening”

Rhematic *sdm·n=f*, “(he) having heard”

Old perfective, e.g. *nfr·w* “(he) being good,” or *stp·w* “(he) having been chosen”

In this adverbial function the verb forms in question can also fill the predicative slot in the adverbial sentence. The resulting conjugations are the true Middle Egyptian main sentence forms of their respective tenses.

Aorist: *jw=f sdm=f* “he hears (by habit, nature etc.)”

Perfect: *jw sdm·n=f* “he heard” (transitive verbs only)

Static present/present perfect: *jw=f* + old perfective, as *jw=f prj·w* “he has gone out,” or *jw=f stp·w* “he has been chosen”

(At the same time, this latter is the perfect form of the dynamic intransitive verbs and the passive perfect form of the transitive verbs—see above, for this “suppletive system.”)

In this way we arrive at the Polotskyan scheme of Middle Egyptian tenses as represented in the table on p. 248 (cf. Satzinger 1986).

It took Egyptology a long time to accept the results of the Polotskyan revolution. Even then, some made strange use of them (e.g., Junge 1978). By now, a sort of revisionist “counterrevolution” is under way which aims at restraining the “syntactic” (or “parts of speech”) preponderance of what has unluckily been termed the *Standard Theory*, in favour of “pragmatic” issues or whatever. On closer inspection, though, the target is usually less Polotsky’s results than rather what some have made of them (cf. Satzinger & Shisha-Halevy 1999). Some authors are not aware of the fact that basically diverging theoretical paradigms, as transformational or generative grammar or X-bar theory, are not apt to either verify or falsify a structuralistic analysis.

Main sentence	Clause or phrase of circumstance (adverbial)	noun clause (substantival)	attribute clause (adjectival; feminine singular examples)
Perfect: (1) <i>jw sdm·n=f</i> (2) <i>jw=f</i> + ps.-part.	<i>sdm·n=f</i> old perfective	(1+2) <i>sdm·n=f</i>	<i>sdm·t·n=f</i>
Aorist <i>jw=f sdm=f</i>	<i>sdm=f</i> (<i>hzj=f</i>)	<i>sdm=f</i> (<i>hzz=f</i>)	<i>sdm·t=f</i> (<i>hzz·t=f</i>)
Prospective <i>sdm=f</i>	<i>sdm=f</i>	<i>sdm=f</i>	<i>sdm·t·j=f</i>
Progressive <i>jw=f hr sdm</i>	<i>hr sdm</i>	(either constructions with “relative adjective” <i>ntj</i> , as <i>nt·t=f hr sdm</i> , etc., or with auxiliary <i>wnn</i> , as <i>wnn=f hr sdm</i> , <i>wnn·t=f hr sdm</i> , etc.)	
Dto., verbs of motion <i>jw=f m jj·t</i>	<i>m jj·t</i>		
Future <i>jw=f r sdm</i>	<i>r sdm</i>		

A main point of attack is what is conceived as the “non-verbalistic” character of the Polotskian scheme (with no autonomous Middle Egyptian verb forms other than the imperative, the prospective *sdm=f* and the obsolescent perfective *sdm=f*). This appears to be a profound misunderstanding. As soon as the adequate rendering of an utterance “he uses to hear” is *jw=f sdm=f* this has become a paradigmatic verbal form, not less so than, *e.g.*, the prospective *sdm=f*. Still, we have every right to analyse it as consisting of an *jw* construction (#*jw* plus subject# “there/here is...”) into which an adverbial sentence is embedded, viz. #subject plus adverbially used aoristic *sdm=f*#. Although these *jw* forms have become grammaticalised in Middle Egyptian each and every element of which

they are composed of can be found in free adverbial use, with virtually the same tense function as in the respective *jw* form.

Similar arguments, both contra and pro, apply to the concept of the Afroasiatic conjugated verb forms being ultimately based on verbal nouns / verbal adjectives. Feeling discomfort about such a “non-verbalistic” approach attests to an Indo-European (plus Semitic) ethnocentric attitude. The Indo-European and the Semitic language types dispose of person, gender (in Semitic) and number discriminating conjugations as grammatical features that are peculiar to the verb and alien to the noun. Yet there are numerous types of documented languages that do not have these features, the “isolating” language type being the most extreme example. Schenkel (1975: 72–73) has rightly drawn attention to the Altaic languages where the verbal noun generally seems to be the basis of conjugated verb forms (note that “there is a recurrent parallelism between the personal possessive markers and the verbal personal endings” [Campbell 1991: 49]). Hungarian – a Uralic language – has in the “definite conjugation” endings that are near-identical with the possessive endings (*e.g.*, *köszön-ö-m, -ö-d* “I/you thank (for)” vs. *köszönt-ö-m, -ö-d* “my/your thanks”; *nevet-e-m, -e-d* “I/you laugh (at...)” vs. *nevetés-e-m, -e-d* “my/your laughter”).

Conclusion

Egyptian and Semitic are related languages, with astounding resemblances and disturbing dissimilarities. Their high age of attestation brings the two Afroasiatic branches closer together. But they still are separated by a prehistory of several thousand years, and it was only a comparatively short time-span, beginning with the fourth millennium, that brought them together in areal contact. Some points of diversity:

- Unlike all other branches, Egyptian does not dispose of a prefix conjugation. In its place, Egyptian has its peculiar suffix pronoun conjugation. Some Semitic languages have secondarily (*i.e.*, much later than the suffix and prefix conjugations) developed comparable structures. In Ge‘ez, verbal nouns in the adverbial accusative (as *qatīl-a* “while/when killing,” or the like) may be conjugated by means of the suffix pronoun: *qatīlō* (< **qatīl-a-hū*) “when he killed.” A further comparable feature are the circumstantial expressions formed by adjectives that are in concord with their referent: (“you [nominative], or your, or of you [genitive] ...” *tekūz-e-ka* “being sad”; “you [accusative] ...” *tekūz-a-ka* “being sad” (Satzinger 1968; Kapeliuk 1998)). In Syriac, the suffix pronouns are employed in the new perfect *qtīl-leh* which has been compared with the

Egyptian *sdm·n=f* form; note, however, two important differences: first, the passive participle is in concord with the object of the construction (it is only in Neo-Aramaic that this concord may be absent); second, the suffix pronoun functions as a copy pronoun for a substantival subject: *N. qfīlā-leh* “N. has killed (her)” = Egyptian *smʒ·n N.* (this latter argument also applies to the Ethiosemitic constructions mentioned).

- In contrast to Semitic, Egyptian has a particular pattern for the sentence with adverbial predicate. Egyptian is here in concord not only with the other Afroasiatic branches, but rather with the vast majority of African languages (*cf.* Satzinger 1997: 40–41; forthcoming (d)). Many of them also have a progressive construction of the pattern of this sentence with adverbial predicate, like English *he is* (*preposition > *a-*) *listening* (and its Celtic equivalents) and Egyptian *jw=f hr sdm* (*cf.* Shisha-Halevy 1995; 1998).

- Not Semitic, but at least Egyptian and Chadic, have a category of clause conjugations, which are typically employed in rhematising constructions. It can also be found in some Cushitic languages and in non-Afroasiatic languages of Africa, such as Old Nubian, Igbo, Fulani, etc. (*cf.* Jungraithmayr 1994; Satzinger 1997; **2000**; **2001**; forthcoming (a)).

- Unlike all other branches, the Semitic case system has shifted from an absolute – nominative opposition to a nominative – accusative opposition (Sasse 1984).

Bibliography

- Aikhenvald, Alexandra Yu. 1995. Split ergativity in Berber languages. *St. Petersburg Journal of African Studies* 4: 39–68.
- Albright, William Foxwell. 1917–1918. Notes on Egypto-Semitic etymology. *American Journal for Semitic Languages and Literatures* 34: 81–98; 215–255.
- Albright, William Foxwell. 1927. Notes on Egypto-Semitic etymology. *Journal of the American Oriental Society* 47: 198–237.
- Albright, William Foxwell. 1934. *The Vocalization of the Egyptian Syllabic Orthography*. (American Oriental Series, 5.) New Haven: American Oriental Society 47: .
- Allen, James P. 1984. *The Inflection of the Verb in the Pyramid Texts*. (Bibliotheca Aegyptia 2.) Malibu: Undena Publications.
- Aspesi, Francesco. 1977. *La distinzione dei generi nel nome antico-egiziano e semitico*. (Pubblicazioni delle Facoltà di Lettere e Filosofia dell’Università di Milano 80.) Firenze: La Nuova Italia.
- Aspesi, Francesco. 1990. Genre des noms et genre des morphèmes

- personnels en chamito-sémitique. In: Hans G. Mukarovsky (ed.). *Proceedings of the Fifth International Hamito-Semitic Congress I*. (Veröffentlichungen der Institute für Afrikanistik und Ägyptologie der Universität Wien 56. Beiträge zur Afrikanistik Band 40.) Wien: 11–28.
- (Bakir:) ‘Abdu-l-muḥsin Bakīr. 1954, ²1955. *Qawāʿidu l-luġati l-Miṣriyyati fī ʿaṣrihā d-dahabiyy. Miṣr*.
- Beinlich-Seeber, Christine. 1998. *Bibliographie Altägypten 1822–1946*. Teil I– III. (Ägyptologische Abhandlungen, Band 61.) Wiesbaden: Harrassowitz.
- Belova, A. G. 1980. Struktura kornja v drevne-egipetskom i semitskix jazykax. In: *Tezisy dokladov sovetsoj delegacii na 2-oj simpozium učenyx socialističeskix stran na temu “Teoretičeskie problemy jazykov Azii i Afriki.”* Moskva. 5–9
- Belova, A. G. 1989. Refleksy semitskix sibiljantov v drevneegipetskom. *Meroè* 4: 9–21.
- Bresciani, Edda. 1969. *Nozioni elementari di grammatica demotica*. (Testi e documenti per lo studio dell'antichità 29.) Milano-Varese, Istituto Editoriale Cisalpino
- Brockelmann, Carl. 1908. *Kurzgefasste vergleichende Gramatik der semitischen Sprachen*. (Porta Linguarum Orientalium 21.) Berlin: Reuther & Reichard.
- Brockelmann, Carl. 1932. Ägyptisch-semitisch Etymologien. *Zeitschrift für Semitistik und verwandte Gebiete* 8: 97–117.
- Browne, Gerald M. 1982. The Old Nubian Verbal System. *Bulletin of the American Society of Papyrologists* 19: 9–38.
- Browne, Gerald M. 1988. *Studies in Old Nubian*. (Beiträge zur Sudanforschung, Beiheft 3.) Wien – Mödling: Inge Hofmann und Herbert Tomandl.
- Browne, Gerald M. 1989. *Introduction to Old Nubian*. (Meroitica 11.) Berlin: Akademie-Verlag.
- Buccellati, Giorgio. 1968. An interpretation of the Akkadian Stative as a Nominal Sentence. *Journal of Near Eastern Studies* 27: 1–12.
- Buck, Adriaan de. 1941, ²1944. *Egyptische grammatica*. Leiden: Nederlands Instituut voor het Nabije Oosten.
- Calice, Franz †. 1936. *Grundlagen der ägyptisch-semitischen Wortvergleichung; eine kritische Diskussion des bisherigen Vergleichsmaterials*. (Wiener Zeitschrift für die Kunde des Morgenlandes. Beiheft 1.) Herausgegeben von Heinrich Balcz. Wien: Orientalisches Institut der Universität.
- Callender, John B. 1975a. Afroasiatic cases and the formation of ancient Egyptian constructions with possessive suffixes. *Afroasiatic Linguistics* 2.6: 1–18.
- Callender, John B. 1975b. *Middle Egyptian*. (Afroasiatic Dialects 2.) Malibu: Undena.
- Campbell, G. L. 1991. *Compendium of the World's Languages*. London–New York: Routledge.
- Castellino, G. R. 1962. *The Akkadian Personal Pronoun and Verbal System in the Light of Semitic and Hamitic*. Leiden: Brill.

- Černý, Jaroslav† – Sarah Israelit Groll, assisted by Christopher Eyre. 1975, ²1978, ³1984. *A Late Egyptian Grammar*. (Studia Pohl: Series Maior 4.) Rome: Biblical Institute Press.
- Chaîne, Marius. 1933. *Éléments de grammaire dialectale copte; bohairique, sahidique, achmimique, fayoumique*. Paris: Geuthner.
- Cohen, Marcel. 1947. *Essai comparatif sur le vocabulaire et la phonétique du chamito-sémitique*. (Bibliothèque de l'École des Hautes Études. Sciences historiques et philologiques, 291e fascicule.). Paris: Honoré Champion.
- Cohen, Marcel. 1968. Les langues chamito-sémitiques. In: A. Martinet (ed.). *Le Langage*. (Encyclopédie de la Pléiade 25.) Paris: 57–63.
- Cohen, Marcel. 1969. Vue générale du verbe chamito-sémitique. In: *Proceedings of the International Conference on Semitic Studies* held in Jerusalem. Jerusalem: The Israel Academy of Sciences and Humanities. 45–48.
- Collier, Mark A. 1992. Predication and the Circumstantial *sdm(=f)/sdm.n(=f)*. *Lingua Aegyptia* 2: 17–65.
- Collier, Mark. 1994. Grounding, Cognition and Metaphor in the Grammar of Middle Egyptian. *Lingua Aegyptia* 4: 57–87.
- Conti, Giovanni. 1978. *Rapporto fra egiziano e semitico nel lessico egiziano dell'agricoltura*. (Quaderni di Semitistica, 6.) Firenze: Università di Firenze.
- Deines, Hildegard von, & Wolfhart Westendorf. 1961–1962. Wörterbuch der medizinischen Texte. (Grundriss der Medizin der alten Ägypter VII.1–2.) Berlin: Akademie-Verlag.
- Diakonoff, Igor M. 1965. *Semito-Hamitic Languages. An Essay in Classification*. Moscow: «Nauka» Publishing House.
- Diakonov (Head of Team), Igor M., Anna G. Belova, (Alexander S. Chetverukhin,) Alexander Ju. Militarev, Victor Ja. Porkhomovsky (and Olga G. Stolbova). 1993–1997: Historical Comparative Vocabulary of Afrasian. *St. Petersburg Journal of African Studies* 2: 5–28; 3: 5–26; 4: 7–38; 5: 4–32; 6: 12–35.
- Doret, Eric. 1986. *The Narrative Verbal System of Old and Middle Egyptian*. (Cahiers d'Orientalisme 12.) Genève: Patrick Cramer.
- Edel, Elmar. 1955/1964. *Altägyptische Grammatik*. (Analecta Orientalia 34/39.) Roma: Pontificium Institutum Biblicum.
- Edgerton, William F. 1947. Stress, vowel quantity, and syllable division in Egyptian. *Journal of Near Eastern Studies* 6: 1–17.
- Ehret, Christopher. 1995. *Reconstructing Proto-Afroasiatic (Proto-Afrasian)*. (Linguistics 126.). Berkeley – Los Angeles – London: University of California Press.

- Ember, Aaron. 1930. *Egypto-Semitic Studies* (ed. Frida Behnk). (Veröffentlichungen der Alexander Kohout Memorial Foundation: Philologische Reihe 2.) Leipzig: Asia Major.
- Erichsen, Wolja. 1954. *Demotisches Glossar*. Kopenhagen: Ejnar Munksgaard.
- Erman, Adolf. 1880. ²1933. *Neuägyptische Grammatik*. Leipzig: Engelmann.
- Erman, Adolf. 1892. Das Verhältnis des Ägyptischen zu den semitischen Sprachen. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 46: 93–129.
- Erman, Adolf. 1894, ²1902, ³1911, ⁴1928. *Ägyptische Grammatik*. (Porta linguarum orientalium 15.) Berlin: Reuther & Reichard.
- Faulkner, Raymond O. 1962. *A Concise Dictionary of Middle Egyptian*. Oxford: Vivian Ridler.
- Fecht, Gerhard. 1960. *Wortakzent und Silbenstruktur*. Untersuchungen zur Geschichte der ägyptischen Sprache. (Ägyptologische Forschungen 21.) Glückstadt: Augustin.
- Frajzyngier, Zygmunt. 1984. On the Proto-Chadic Syntactic Pattern. In: *Current Progress in Afroasiatic Linguistics. Papers of the Third International Hamito-Semitic Congress*. (Amsterdam Studies in the Theory and History of Linguistic Science. Series IV. Vol. 28.) 139–159.
- Frandsen, Paul John. 1974. *An Outline of the Late Egyptian Verbal System*. Copenhagen: Akademisk Forlag.
- Gardiner, Sir Alan H. 1927, ²1950, ³1957. *Egyptian Grammar*. Oxford: Clarendon Press.
- Groll, Sarah Israelit. 1967. *Non-Verbal Sentence Patterns in Late Egyptian*. London: Oxford University Press.
- Groll, Sarah Israelit. 1970. *The Negative Verbal System of Late Egyptian*. London – New York: Oxford University Press.
- Gunn, Battiscombe. 1924. *Studies in Egyptian Syntax*. Paris: Paul Geuthner.
- Hannig, Rainer. 1995. *Grosses Handwörterbuch Ägyptisch – Deutsch. Die Sprache der Pharaonen (2800-950 v.Chr.)*. (Kulturgeschichte der Antiken Welt, 64.) Mainz: Verlag Philipp von Zabern.
- Helck, Wolfgang. 1984. Der König von Ober- und Unterägypten. In: *Studien zu Sprache und Religion Ägyptens. Zu Ehren von Wolfhart Westendorf*. Vol. I. Göttingen: F. Junge: 251–256.
- Helck, Wolfgang. 1990. Gedanken zur Entstehung des altägyptischen Staates. In: *Festschrift Jürgen von Beckerath*. (Hildesheimer Ägyptologische Beiträge 30.) 97–117.
- Hintze, F. *Untersuchungen zu Stil und Sprache neuägyptischer Erzählungen*. 2 vols. (Insitut für Orientforschung, Veröffentlichung 2/6. Berlin: Akademie-Verlag 1950-1952.
- Hoch, James E.. 1994. *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period*. Princeton: Princeton University Press.

- Huehnergard, John. 1987. "Stative," predicative form, pseudo-verb. In: *Journal of the American Research Center in Egypt* 47: 215–232.
- Janssens, Gerard. 1972. *Contribution to the Verbal System in Old Egyptian*. A new approach to the reconstruction of the Hamito-Semitic Verbal System. (Orientalia Gandensia 6.) Leuven: Peeters.
- Jelanskaja, A. I. 1964. *Koptskij jazyk*. (Jazyki narodov Azii i Afriki.) Moskva: Nauka.
- Johnson, Janet H. 1976. *The Demotic Verbal System*. (Studies in Ancient Oriental Civilization 38.) Chicago: Oriental Institute.
- Johnson, Janet H. 1986, ²1991. *Thus Wrote 'Onchsheshonqy*. An Introductory Grammar of Demotic. (Studies in Ancient Oriental Civilization 45.) Chicago: Oriental Institute.
- Junge, Friedrich. 1978. *Syntax der mittelägyptischen Literatursprache*. Mainz: Philipp v. Zabern.
- Junge, Friedrich. 1996. *Einführung in die Grammatik des Neuägyptischen*. Wiesbaden: Harrassowitz.
- Jungraithmayr, Herrmann. 1983. Hamitosemitisch. In: Herrmann Jungraithmayr & Wilhelm J. G. Möhlig (eds.). *Lexikon der Afrikanistik*. Berlin: D. Reiner: 103–104.
- Jungraithmayr, Herrmann. 1994. "Zweite Tempora" in afrikanischen Sprachen – ägyptisch-tscharadische Gemeinsamkeiten ?. In: M. Bietak et alii (eds.). *Zwischen den beiden Ewigkeiten*. Festschrift Gertrud Thausing. Wien: Institut für Ägyptologie: 102–122
- Kammerer, Winifred. 1950. *A Coptic Bibliography*. Ann Arbor: University of Michigan Press.
- Kammerzell, Frank. 1998. The sounds of a dead language. Reconstructing Egyptian phonology. *Göttinger Beiträge zur Sprachwissenschaft* 1: 21–41.
- Kapeljuk, Olga. 1998. The Ethio-Semitic possessive pronouns as predicalizers in historical perspective. *Aethiopica* 1: 148–163.
- Korostovtsev, M. 1973. *Grammaire du néo-égyptien*. Moscou: Nauka.
- Lamberti, Marcello. 1999. The pronouns of the 1st and 2nd person in Cushitic and their reconstruction. In: Marcello Lamberti & Livia Tonelli (eds.). *Afroasiatica Tergestina*. Papers of the 9th Italian Meeting of Afro-Asiatic (Hamito-Semitic) Linguistics. Trieste, April 23–24, 1998 / Contributi presentati al 9° Incontro di Linguistica Afroasiatica (Camito-Semitica). Trieste, 23–24 Aprile 1998. Padova: unipress, 347–361.
- Layton, Bentley. Forthcoming. *A Coptic Grammar. Sahidic Dialect. With a chrestomathy and glossary*. (Porta Linguarum Orientalium.) Wiesbaden: Harrassowitz.
- Lefebvre, Gustave. 1940. *Grammaire de l'égyptien classique*. (Bibliothèque d'Etudes, 12.) Le Caire: Imprimerie de l'Institut Français d'Archéologie Orientale.
- Leslau, Wolf. 1962. Semitic and Egyptian Comparisons. *Journal of Near Eastern Studies* 21: 44–49.
- Lexa, František. 1940–1951. *Grammaire démotique*. 7 vols. Prague: édition d'auteur.
- Lipiński, Edward: *Semitic Languages – Outline of a Comparative Grammar*. (Orientalia Lovaniensia Analecta 80.) Leuven: Peeters.
- Littmann, Enno. 1932. Bemerkungen zur Ägyptisch-semitische

- Sprachvergleichung. *Zeitschrift für ägyptische Sprache und Altertumskunde* 67: 63–68.
- Loprieno, Antonio. 1986. *Das Verbalsystem im Ägyptischen und im Semitischen*. Zur Grundlegung einer Aspekttheorie. (Göttinger Orientforschungen. IV. Reihe: Ägypten 17.) Wiesbaden: Harrassowitz.
- Loprieno, Antonio. 1995. *Ancient Egyptian*. A Linguistic Introduction. Cambridge: University Press.
- Mallon, Alexis. 1904, ²1907, ⁴1956. *Grammaire copte, avec bibliographie, chrestomathie et vocabulaire*. Beyrouth: Imprimerie Catholique.
- Meeks, Dimitri. 1980–1982 *L'Année Lexicographique* I–III. Paris: Dimitri Meeks.
- Moscatti, Sabatino. 1964, ²1967. *An Introduction to the Comparative Grammar of the Semitic Languages*. (Porta Linguarum Orientalium, Neue Serie 6.) Wiesbaden: Harrassowitz.
- Müller, Hans-Peter. 1995. Ergative Constructions in Early Semitic Languages. *Journal of Near Eastern Studies* 54: 261–271.
- Neveu, François. 1996. *La langue des Ramsès. Grammaire du néo-égyptien*. Paris: Khéops.
- (Nur el-din:) *ʿAbdu-l-ḥalīmi Nūru-d-dīn*. 1998. *Al-luḡatu l-miṣrīyatu l-qadīma*. *Al-Qāhira: maṭbaʿatu Dāru t-Taʿāwun*.
- Orel, Vladimir E. and Olga. V. Stolbova, 1994. *Hamito-Semitic Etymological Dictionary: Materials for a Reconstruction*. (Handbuch der Orientalistik I, 18.) Leiden – New York – Köln: E. J. Brill.
- Osing, Jürgen. 1976. *Die Nominalbildung des Ägyptischen*. 2 vols. Mainz/Rhein: Philipp v. Zabern.
- Osing, Jürgen. 1987. Die Partizipien im Ägyptischen und in den semitischen Sprachen. In: Jürgen Osing & Günter Dreyer (eds.). *Form und Mass*. Festschrift für Gerhard Fecht. (Ägypten und Altes Testament 12.): 337–360.
- Parker, Richard. 1961. The durative tenses in P. Ryland IX. *Journal of Near Eastern Studies* 20: 180–187.
- Petráček, Karel. 1988. *Altägyptisch, Hamitosemitisch und ihre Beziehungen zu einigen Sprachfamilien in Afrika und Asien. Vergleichende Studien*. (Acta Universitatis Carolinae Philologica. Monographica 10). Praha: Universita Karlova.
- Polotsky, Hans Jakob. 1944. *Études de syntaxe copte*. (Publications de la Société d'Archéologie Copte [textes et documents, 9].) Le Caire: Imprimerie de l'Institut Français d'Archéologie Orientale. [= Polotsky 1971: 102–207]
- Polotsky, Hans Jakob. 1965. *Egyptian Tenses*. (The Israel Academy of Sciences and Humanities. Proceedings 2.5.) Jerusalem. [= Polotsky 1971: 71–96]
- Polotsky, Hans Jakob. 1971. *Collected Papers*. Jerusalem: Magnes Press.

- Polotsky, Hans Jakob. 1976. *Les transpositions du verbe en égyptien classique*. Israel Oriental Studies 6: 1–50.
- Polotsky, Hans Jakob. 1984. Randbemerkungen. In: Friedrich Junge (e.). Studien zu Sprache und Religion Ägyptens. Zu Ehren von Wolfhart Westendorf. I: Sprache, 113–123.
- Polotsky, Hans Jakob. 1987/1990. *Grundlagen des koptischen Satzbaus*. (American Studies in Papyrology 28/29.) Decatur/Atlanta, Georgia: Scholars Press.
- Ray, John D. 1999. The vocalisation of adjectives in Egyptian. *Lingua Aegyptia* 6: 119–140.
- Reintges, C. H. 1998. Ancient Egyptian in 3D: Synchrony, Diachrony and Typology of a Dead Language. *Orientalia* 67, 447–476. [Revue of Loprieno 1995.]
- Roccati, Alessandro. 1997. Studi tipologici. I. Sull’ergatività dell’egiziano. In: A. Bausi & M. Tosco (eds.). *Afroasiatica Neapolitana*. Contributi presentati all’ 8° Incontro di Linguistica Afroasiatica (Camito-Semitica) (Studi Africanistici. Serie Etiopica 6.) Napoli: 113–122.
- Rössler, Otto. 1950. Verbalbau und Verbalflexion in den semito-hamitischen Sprachen. Vorstudien zu einer vergleichenden semito-hamitischen Grammatik. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 100: 460–514. *English version*: Rössler, Otto. 1981. The structure and inflection of the verb in the Semito-Hamitic languages. Preliminary studies for a Comparative Semito-Hamitic grammar. Translated by Yoël Arbeitman. In: Yoël Arbeitman & Allard R. Bomhard (eds.). *Bono Homini Donum. Essays in in Historical Linguistics in Memory of J. Alexander Kerns*. (Amsterdam Studies in the Theory and History of Linguistic Science. Series IV – Current Issues in Linguistic Theory 16.) Amsterdam. 679–748
- Rössler, Otto. 1971. *Das Ägyptische als semitische Sprache*. In: Franz Altheim & Ruth Stiehl. Christentum am Roten Meer I. Berlin – New York: Walter de Gruyter: 263–326.
- Ruhlen, Merritt. 1987. *A Guide to the World’s Languages*. Vol. I. Victoria (Australia): Edward Arnold.
- Sander-Hansen, C. E. 1941. *Über die Bildung der Modi im Altägyptischen*. (Det Kongelige Danske Videnskabernes Selskab. Historisk-filosofiske Skrifter 1.3.) København: Ejnar Munksgaard.
- Sander-Hansen, C. E. 1956. *Studien zur Grammatik der Pyramidentexte*. (Analecta Aegyptiaca 6.) København: Ejnar Munksgaard.
- Sander-Hansen, C. E. 1963. *Ägyptische Grammatik*. Wiesbaden: Harrassowitz.
- Sasse, Hans-Jürgen. 1981. Afroasiatisch. In.: Heine, Bernd & Schadeberg, Thilo C. & Wolff, Ekkehard (eds.). *Die Sprachen Afrikas*. Hamburg: Helmut Buske.

- Sasse, Hans-Jürgen. 1984. Case in Cushitic, Semitic and Berber. In: James Bynon (ed.). *Current Progress in Afro-asiatic Linguistics*. Papers of the Third International Hamito-Semitic Congress. Amsterdam/Philadelphia: John Benjamins Publishing Company: 111-126.
- Satzinger, Helmut. 1976. *Neuägyptische Studien*. Die Partikel *ir*. Das Tempussystem. (Wiener Zeitschrift für die Kunde des Morgenlandes. Beiheft 6.) Wien: Wien: Verband der wissenschaftlichen Gesellschaften Österreichs.
- Satzinger, Helmut. 1986. On tense and aspect in Middle Egyptian. In: G. Englund & P. J. Frandsen (eds.). *Crossroads – Chaos or the Beginning of a New Paradigm*. Papers from the conference on Egyptian grammar, Helsingør. København: The Carsten Niebuhr Institute. 297-313.
- Satzinger, Helmut. 1989. Bemerkungen zum ägyptischen Verbalsystem gelegentlich zweier Neuerscheinungen. *Wiener Zeitschrift für die Kunde des Morgenlandes* 79: 197-220.
- Satzinger, Helmut. 1991. Structural analysis of the Egyptian independent personal pronoun. In: Hans G. Mukarovsky (ed.). *Proceedings of the Fifth International Hamito-Semitic Congress 1987*, volume 2. (Veröffentlichungen der Institute für Afrikanistik und Ägyptologie der Universität Wien. Beiträge zur Afrikanistik 41.) 121–135.
- Satzinger, Helmut. 1995. (Review of:) Gerald M. Browne, Introduction to Old Nubian. *Orientalia* 64: 156-158.
- Satzinger, Helmut. 1997. Egyptian in the Afroasiatic frame: recent Egyptological issues with an impact on comparative studies. In: A. Bausi & M. Tosco (eds.). *Afroasiatica Neapolitana*. Contributi presentati all' 8° Incontro di Linguistica Afroasiatica (Camito-Semitica). (Studi Africanistici. Serie Etiopica 6. Napoli 1997.) 27–48.
- Satzinger, Helmut. 1998. Varieties of the Old Perfective in Old Egyptian. In: C. J. Eyre (ed.). *Proceedings of the Seventh International Congress of Egyptologists*, Cambridge, 3–9 September 1995. (Orientalia Lovaniensia Analecta 82.) Leuven: Peeters. 1021-1028
- Satzinger, Helmut. 1999a. Egyptian 'Ayin in variation with *D*. *Lingua Aegyptia* 6: 141–151.
- Satzinger, Helmut. 1999b. Afroasiatischer Sprachvergleich. In: Stefan Grunert & Ingelore Hafemann (eds.), Textcorpus und Wörterbuch. Aspekte zur ägyptischen Lexikographie. (Probleme der Ägyptologie 14.). Brill: Leiden – Boston – Köln, 1999. 367–386.
- Satzinger, Helmut. 1999c. Observations in the field of the Afroasiatic suffix conjugation. In: Marcello Lamberti & Livia Tonelli (eds.). *Afroasiatica Tergestina*. Papers of the 9th Italian Meeting of Afro-Asiatic (Hamito-Semitic) Linguistics. Trieste, April 23–24, 1998 / Contributi presentati al 9° Incontro di Linguistica Afroasiatica (Camito-Semitica). Trieste, 23–24 Aprile 1998. Padova: unipress, 23–33.

- Satzinger, Helmut. 1999d. Koptische Vokalphoneme und ägyptische Pluralformation. In: Ägypten und Nubien in spätantiker und christlicher Zeit. Akten des 6. Internationalen Koptologenkongresses, Münster, 20.–26. Juli 1996. Band 2, 365–374.
- Satzinger, Helmut. 2000. Egyptian as an African Language. In: C. Basile -A. Di Natale (eds.). Atti del IV Convegno Nazionale di Egittologia e Papirologia, Siracusa, 5-7 Dicembre 1997, Quaderni del Museo del Papiro IX, Siracusa 2000, 31–43.
- Atti del IV Convegno Nazionale di Egittologia e Papirologia a cura di "Quaderni del Museo del Papiro" IX, Siracusa 2000
- Satzinger, Helmut. 2001. Ancient Egyptian in the Context of African Languages. In: Josep Cervelló Autuori (ed.). África antigua. El antiguo Egipto, una civilización africana. Actas de la IX Semana de Estudios Africanos del Centre d'Estudis Africans de Barcelona (18–22 Marzo de 1996). Barcelona. (Aula Ægyptiaca – Studia 1.) 257–265
- Satzinger, Helmut. (Forthcoming a). Relativformen, emphatische Formen und Zweite Tempora: Gliedsatzformen im Ägyptischen und im Tschadischen. In: [Festschrift Herrmann Jungraithmayr].
- Satzinger, Helmut. (Forthcoming b). On ergativity in Egyptian. In: [Hetzron memorial volume, ed. Andrzej Zaborski].
- Satzinger, Helmut & Ariel Shisha-Halevy. 1999. The Snark is dead. *Lingua Aegyptia* 6, 1999, 167–176.
- Schenkel, Wolfgang. 1975. *Die altägyptische Suffixkonjugation*. (Ägyptologische Abhandlungen 32.) Wiesbaden: Harrassowitz
- Schenkel, Wolfgang. 1983a. *Aus der Arbeit an einer Konkordanz zu den altägyptischen Sargtexten*. Teil I: Zur Transkription des Hieroglyphisch-Ägyptischen (unter Mitarbeit von Rainer Hannig). Teil II: Zur Pluralbildung des Ägyptischen. (Göttinger Orientforschungen. IV. Reihe: Ägypten 12.) Wiesbaden: Harrassowitz.
- Schenkel, Wolfgang. 1983b. *Zur Rekonstruktion der deverbale Nominalbildung des Ägyptischen*. (Göttinger Orientforschungen. IV. Reihe: Ägypten 13.) Wiesbaden: Harrassowitz
- Schenkel, Wolfgang. 1988. Erkundungen zur Reihenfolge der Zeichen im ägyptologischen Transkriptionsalphabet. *Chronique d'Égypte* 63: 5–35.
- Schenkel, Wolfgang. 1990. *Einführung in die altägyptische Sprachwissenschaft*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Schenkel, Wolfgang. 1993. Zu den Verschluß- und Reibelauten im Ägyptischen und (Hamito)Semitischen. Ein Versuch zur Synthese der Lehrmeinungen. *Lingua Aegyptia* 3: 137–149.

- Schenkel, Wolfgang. 1994. *šm.t*-Perfekt und *šm.t* '-Stativ. Die beiden Pseudopartizipien des Ägyptischen nach dem Zeugnis der Sargtexte. In: H. Behlmer (ed.). ...*Quaerentes scientiam*. Festgabe für Wolfhart Westendorf zu seinem 70. Geburtstag. Göttingen: Seminar für Ägyptologie und Koptologie. 157–182
- Schneider, Thomas. 1997. Beiträge zur sogenannten 'Neueren Komparatistik'. *Lingua Aegyptia* 5: 189–209.
- Sethe, Kurt. 1899/1902. *Das aegyptische Verbum im Altaegyptischen, Neuägyptischen und Koptischen*. Leipzig: J. C. Hinrich'sche Buchhandlung.
- Sethe, Kurt. 1916. *Der Nominalsatz im Ägyptischen und Koptischen*. (Abhandlungen der philosophisch-historischen Klasse der Königlich Sächsischen Gesellschaft der Wissenschaften 33.3.) Leipzig: Teubner.
- Shisha-Halevy, Ariel. 1984. Notes on some Coptic nominal sentence patterns. In: *Studien zu Sprache und Religion Ägyptens. Zu Ehren von Wolfhart Westendorf*. Vol. I. Göttingen: F. Junge: 175–189.
- Shisha-Halevy, Ariel. 1987. Grammatical discovery procedure and the Egyptian-Coptic nominal sentence. *Orientalia*, 56: 147–175.
- Shisha-Halevy, Ariel. 1988a. *Coptic Grammatical Categories*. Structural Studies in the Syntax of Shenoutean Sahidic. (Analecta Orientalia 53.). Roma: Pontificium Institutum Biblicum.
- Shisha-Halevy, Ariel. 1988b. *Coptic Grammatical Chrestomathy*. (Orientalia Lovaniensia Analecta 30.). Leuven: Édition Peeters.
- Shisha-Halevy, Ariel. 1989. *The Proper Name: Structural Prolegomena to its Syntax*. A Case Study in Coptic. (Wiener Zeitschrift für die Kunde des Morgenlandes. Beiheft 15.) Wien: Verband der wissenschaftlichen Gesellschaften Österreichs.
- Shisha-Halevy, Ariel. 1995. Structural sketches of Middle Welsh syntax, I: The Converter Systems. *Studia Celtica* 29: 127–223
- Shisha-Halevy, Ariel. 1998. *Structural studies in modern Welsh syntax: Aspects of the grammar of Kate Roberts*. Münster: Nodus
- Simpson, R.S. 1996. Demotic Grammar in the Ptolemaic Sacerdotal Decrees. (Griffith Institute Monographs.) Oxford: Griffith Institute. Ashmolean Museum
- Spiegelberg, Wilhelm. 1925. *Demotische Grammatik*. Heidelberg: Winter.
- Steindorff, Georg. 1894, ²1904. *Koptische Grammatik mit Chrestomathie, Wörterverzeichnis und Literatur*. (Porta Linguarum Orientalium 14.) Berlin: Reuther & Reichard.
- Steindorff, Georg. 1951. *Lehrbuch der koptischen Grammatik*. Chicago, Illinois: The University of Chicago Press.
- Stern, Ludwig. 1880. *Koptische Grammatik*. Leipzig: T. O. Weigel (reprint Osnabrück: Biblio, 1971)
- Till, Walter. 1928. *Achmîmisch-koptische Grammatik mit Chrestomathie und Wörterbuch*. Leipzig: J. C. Hinrich'sche Buchhandlung.
- Till, Walter. 1931. *Koptische Dialektgrammatik mit Lesestücken und Wörterbuch*. München: C. H. Beck'sche Verlagsbuchhandlung.

- Till, Walter C. 1955, ²1961. *Koptische Grammatik (saïdischer Dialekt) mit Bibliographie, Lesestücken und Wörterverzeichnissen*. (Lehrbücher für das Studium der orientalischen und afrikanischen Sprachen I.) Leipzig: VEB Verlag Enzyklopädie.
- Tropper, Josef. 1995. Die semitische “Suffixkonjugation” im Wandel. Von der Prädikativform zum Perfekt. In: *Vom Alten Orient zum Alten Testament*. Festschrift für Wolfram Freiherrn von Soden zum 85. Geburtstag am 19. Juni 1993: 491–516.
- Vergote, Jozef. 1945. *Phonétique historique de l'Égyptien: les consonnes*. (Bibliothèque du Muséon 19.) Louvain: Bureaux du Muséon.
- Vergote, Jozef. 1965. *De verhouding van het Egyptisch tot de semietische talen*. (With French transl.) Brussel: Paleis der Academiën, 1965.
- Vergote, Jozef. 1973/1983. *Grammaire copte*. Tome Ia & Ib, IIa & IIb. Leuven: Édition Peeters.
- Voigt, Rainer. 1990. The Tense-Aspect System of Biblical Hebrew. In: *Proceedings of the Tenth World Congress of Jewish Studies*. Division D, vol. I: The Hebrew Language, Jewish Languages, Jerusalem 1990: 1–8
- Vycichl, Werner. 1934. Hausa und Ägyptisch. Ein Beitrag zur historischen Hamitistik. *Mitteilungen des Seminars für orientalische Sprachen* 37.3: 36–116.
- Vycichl, Werner. 1958. Grundlagen der ägyptisch-semitischen Wortvergleichen. *Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo* 16: 367–405.
- Vycichl, Werner. 1959. Is Egyptian a Semitic language ? *Kush* 7: 27–44.
- Vycichl, Werner. 1983. *Dictionnaire Étymologique de la Langue Copte*. Leuven: Peeters.
- Vycichl, Werner. 1990. *La vocalisation de la langue égyptienne*. Vol. 1: La phonétique. (Bibliothèque d'Études 16.) Le Caire: Institut Français d'Archéologie Orientale.
- Westendorf, Wolfhart. 1962. *Grammatik der medizinischen Texte*. (Grundriß der Medizin der Alten Ägypter VIII.) Berlin: Akademie-Verlag.
- Westendorf, Wolfhart. 1965–1977. *Koptisches Handwörterbuch*. Heidelberg: Carl Winter.
- Williams, Ronald J. 1948. On certain verbal forms in Demotic. *Journal of Near Eastern Studies* 7: 223–235.
- Wilson, Marvin R. 1970. *Coptic Future Tenses: Syntactical Studies in Sahidic*. (Janua Linguarum. series practica 64.) The Hague – Paris: Mouton.
- Wilson, Penelope. 1997. *A Ptolemaic Lexicon. A Lexicographical Study in the Texts in the Temples of Edfu*. (Orientalia Lovaniensia Analecta 80.) Leuven: Peeters.
- Yeivin, Shmuel. 1936. Studies in comparative Egypto-Semitic. *Kêmi* 6: 63–80.

- Zeidler, Jürgen. 1992. Altägyptisch und Hamitosemitisch. Bemerkungen zu den *Vergleichenden Studien* von Karel Petráček. *Lingua Aegyptia* 2: 189–222.
- Zyhlarz, Ernst. 1932-33. Ursprung und Sprachcharakter des Altägyptischen. *Zeitschrift für Eingeborenen-Sprachen* 23: 25–45; 81–110; 161–194; 241–254.