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# ON EGYPTIAN PARTICIPLES AND NOMINA AGENTIS

In its oldest attested stages, Egyptian is extremely rich in participles. They are found in all three basic tenses: perfect (Gardiner's "perfective"), aorist (Gardiner's "imperfective"), and prospective. Apart from the active forms, there is also a true passive form in the perfect tense, and a pseudo-passive<sup>1</sup> in the aorist and prospective tenses. Further, there are "conjugated" forms, the so-called relative forms, like *sdmt·n* of "whom he (has) heard."

This ideal situation did not, however, last long. The prospective participle had become obsolete already in the Middle Kingdom, having been supplanted by  $s\underline{d}m \cdot tj \sim f(j)$  "who will/shall/may hear," a form somewhat mysterious in respect to its origin. The aorist form is not found anymore in Late Egyptian, having been supplanted by the analytic construction nty (hr)  $s\underline{d}m$  "who hears/ is hearing." The perfect participle, however, persisted into Demotic; it is only in Coptic that it is replaced by the analytic NT&Q-CWTM "who heard."

Scholars have taken pains, over much more than a century, to find morphological features that characterise the individual forms, and in this way, these forms have become a grammatical reality. Two divergent lines of thinking can be observed. There is the intelligent, "abstracting" attitude: they transfer features observed in one subset to the rest, unless there is evidence to the contrary; and there is the primitive "positivist" attitude (nowadays often sugarcoated with the epithet "pragmatist") that acknowledges features only for the set or form(s) it is attested with. Whether in this or the other attitude, it is nevertheless a fiction:

<sup>&</sup>lt;sup>1</sup> I. e., impersonal constructions: aorist,  $\delta ddw$  nb sw  $hr \circ f$  "Anyone over whom it (= the magic spell) is read"; structurally, "anyone (nb) who: (they) read  $(\delta ddw)$  it (sw), object form!) over him  $(hr \circ f)$ " (Urk. V, 96); prospective,  $\delta \circ f \circ f \circ w$   $f \circ f \circ f \circ w$  "who assigns ships to whom they are to be assigned to"; structurally, "who assigns ships to anyone who: (they) assign  $(\delta \circ w)$ ) it (sw), object form!) to him  $(n \circ f)$ " (Urk. IV, 116, 6); Polotsky 1976: 8 with note 14; Satzinger 1984: 139).

what scholars can see are the consonantal skeletons of these forms, or rather, what the writing systems deigns worth to be expressed. It is truly like Plato's Cave<sup>2</sup>: we see the shadows, the consonants, and take them for the reality, though "in reality" they are just some kind of abstraction or reflexion of what is the essence of these forms. Very few are the scholars that search for the true reality: the vocalisation und syllabification of the individual forms, in all their morphological varieties (gender, number, etc.) and extensions (suffixation of pronouns, etc.). Leading in this field, for their thoroughness, and their rigorosity of thinking, as well as for he breadth of their research: Gerhard Fecht, and his pupil Jürgen Osing. It is true, their method seems to be somewhat straightforward; yet it was luckily counterbalanced by the methodical scrutiny and sophistication of Wolfgang Schenkel. It is, in fact, not only this triplet to whom we owe he bulk of data relevant to the topic of vocalisation and syllabification; the list of other authors with high merits in this field includes, e.g., Werner Vycichl, and Jozef Vergote. These two scholars sought again and again to emancipate from the strict fetters of the rigid German system (Sethe, Steindorff, etc.); yet, none of them arrived at a system of equal coherence: there is no way past them.

In his seminal work on *Nominalbildung*, J. Osing (1976) reconstructed the vocalisation patterns of all kinds of nouns that are derived from verbal roots. His work is based on a great wealth of etymologies of Coptic words and of Egyptian personal names in Greek rendering, etc., of which not so few were established by the author himself. Among the nouns, the group of *Nomina agentis*, *Nomina instrumenti*, *Adjektive und aktive Partizipien* that are obviously derived from verbs, plays an important role.

A few years later Schenkel (1983) undertook it to subject Osing's work to a critical analysis and he eliminated some or other flaw, be it methodical, or be it material. So he questioned Osing's claim that 2lit. verbs have the vocalism of the second syllable of 3lit. verbs (obviously not in all cases, anyway), whereas it seemed more plausible that they have the vowel of the stressed first syllable of a 3lit. verb.

Osing discerns thirteen patterns for agent nouns, including active participles, of which we will take into account only those ten with internal modification and/or endings -w or -j, but not those with a prefix \*mV- as these are already clearly identifyable in the consonantal script (on Afroasiatic participles with a \*m- prefix see Zaborski 1999). There are, by the way, very few cases of them, among which, moreover, the majority are rather *nomina loci* or *nomina instrumenti*, than *nomina agentis*.

The intriguing issue is that these ten to thirteen patterns of verbal adjectives, with hardly any tense differentiation discernable in the meaning, stand against just three grammatically recognised participial forms, of three

<sup>&</sup>lt;sup>2</sup> Cf. http://en.wikipedia.org/wiki/Allegory\_of\_the\_Cave.

different tenses: perfect ("perfective"), aorist ("imperfective"), and prospective active participles.

Among the active verbal adjective patterns, there are some that can obviously be formed of each and every verb, and which are truly "verbal" in meaning: these are traditionally called *participles*. Others are agent nouns, like the Latin nouns in  $-(t)\bar{o}r$ , -trix; some express a permanent attachment to activities, and are therefore apt to yield words for professions; cf. in Arabic fa " $\bar{a}l^{un}$ , or in Egn. \* $C\alpha CVw$ ; in Latin, nouns in -arius, and its numerous derivatives in various languages (outside Romance, e.g.: Basque -ari, English, German, etc. -er, Dutch -aare (-aere), Scandinavian -are, Slavic: Polish -arz, Czech  $-\alpha r$ , Slovak  $-\alpha r$ , others,  $-\alpha r$ ; etc.).

Egyptian adjectives are often thought to be participles of quality verbs; it will become clear in the following that some adjectives follow the participial vocalisation, whereas others are formed after a particular adjectival pattern (Pattern no. 5), alien to the verbal nouns of action verbs. As for the verbs, we will in the following distinguish transitive action verbs, unergative and unaccusative intransitive verbs (the first group nearer to the transitives, the second to the quality verbs), and eventually the verbs of quality.

## Active participles, including adjectives:

1. sádim / sádmVt (< \*sadimVt) (Osing 1976: 120; Schenkel 1983: 92; for the second vowel of sádim cf. Schenkel 1983: 55).

Osing adduces evidence of some sixty words, without counting those derived from 2lit. verbs, which are probably not to be correlated to this pattern (Schenkel 1983: 4-7), but rather to Pattern no. 2: 10 transitive verbs (10), 3 unergative verbs, 1 unaccusative verb, 30 quality verbs (note that some verbs yield more than one derivative).

2. stdam / stdmat (< \*sidamVt) (Osing 1976: 138; Schenkel 1983: 93).

Osing adduces evidence of some fourty words, without counting those derived from 2lit. verbs, which are probably not to be attributed to this pattern (Schenkel 1983: 4-7), but rather to Pattern no. 1: 11 transitive verbs, 3 (?) unergative verbs, 2 unaccusative verbs, 16 quality verbs.

3. sūdVm / sudmVt (Osing 1976: 147; Schenkel 1983: 92).

Osing adduces evidence of 25 words: 4 transitive verbs, 3 unergative verbs, 10 quality verbs.

5. sắdmij / sadmijVt (Osing 1976: 161; Osing 1983: 94; accent variant sadmij /sadmijVt.

Osing adduces evidence of ten words (of which three are "accent variants"): 7 quality verbs.

7. sắdmuw / sudmūwVt Osing 1976: 176; Osing 1983: 95; accent variant sudmuw / sadmūwVt.

Osing adduces evidence of fourty words (of which nine are "accent variants"): 13 transitive verbs, 6 unergative verbs, 2 unaccusative verbs, 11 quality verbs.

8. sadámuw / sadámwVt (Osing 1976: 184; Schenkel 1983: 95).

Osing adduces evidence of 33 words, without counting those derived from 2lit. verbs, which are probably not to be attributed to this pattern (Schenkel 1983: 4-7), but rather to pattern 1: 14 transitive verbs, 4 unergative verbs, 2 unaccusative verbs, 4 quality verbs.

9. sadimij / sadimwVt (Osing 1976: 193; Schenkel 1983: 96).

Osing adduces evidence of 23 words, without counting those derived from 2lit. verbs, which are probably not to be attributed to this pattern (Schenkel 1983: 4-7), but rather to pattern no. 2, sidam, fem. sidmat: 13 transitive verbs, 6 unaccusative verbs, 5 quality verbs.

Neither adjectives nor participles:

4. sidam /sidamVt (Osing 1976: 156; Schenkel 1983: 94).

Osing adduces evidence of 27 words, without counting those derived from 2lit. verbs, which are probably not to be attributed to this pattern (Schenkel 1983: 4-7): 16 transitive verbs, 2 unergative verbs, 1 unaccusative verbs, 4 quality verbs.

6. sådmaw / sadmåwVt (Osing 1976: 166; Schenkel 1983: 94).

Osing adduces evidence of 60 words, without counting those derived from 2lit. verbs, which are probably not to be attributed to this pattern (Schenkel 1983: 4-7): 38 transitive verbs, 9 unergative verbs, 3 unaccusative verbs, 3 quality verbs.

10. sadūmew / sadūmVt (Osing 1976: 201; Schenkel 96).

Osing adduces evidence of 18 words, without counting those derived from 2lit. verbs, which are probably not to be attributed to this pattern (Schenkel 1983: 4-7): 8 transitive verbs, 3 unaccusative verbs, 3 quality verbs.

Overview — the verbs:

	transitive	e:	unergativ	/e:	unaccusa	tive:	quality:	
1. sắdim	10	22,7%	3	6,8%	1	2,3%	30	68,2%
2. sídam	11	34,4%	3	9,4%	2	6,2%	16	50,0%
3. <i>sū́dVm</i>	4	23,5%	3	17,4%	0	0%	10	58,8%
5. sắdmij	0	0%	0	0%	0	0%	7	100%
7. sắdmuw	13	40,6%	6	18,8%	2	6,2%	11	34,4%
8. sadámuw	14	58,3%	4	16,7%	2	8,3%	4	16,7%
9. sadímij	13	54,2%	0	0%	6	25%	5	20,8%
4. sidắm	16	69,6%	2	8,7%	1	4,3%	4	17,4%
6. sắdmaw	38	71,7%	9	17,0%	3	5,7%	3	5,7%
10. sadúmew	8	57,2%	0	0%	3	21,4%	3	21,4%

### **Commentary**

1. sádim / sádmVt (< \*sadimVt)

This is obviously the pattern of the perfective active participle of Egyptian. From verbs of quality, it has the value of a static present: "who has become poweful" = "who is poweful," "the powerful." The *sādim* pattern can be correlated with the Sem. active participle, \*AāBiC- (on which cf. Osing 1987; Zaborski 1999), or the verbal adjective, Akk. *paris* (which latter tends, however, to have passive meaning with transitive verbs): both forms would coincide in Egyptian.

2. sídam / sídmat (< \*sidamVt)

This pattern is less frequent, but otherwise behaves similar to pattern no. 1, sådim.

3. sū́dVm / sǘdmVt.

This pattern is still less frequent, but again behaves similar to pattern no. 1, sådim.

Till here, the patterns were built of three consonants for the masculine, with an open and a closed syllable. The feminine form added one more syllable, which led to syncopation of the second syllable and to a structure of two closed syllables: C'VCCVt. The two following patterns, nos. 5 and 7, add an ending for the masculine form which leads to syncopation already here, yielding a structure of two closed syllables: CV'CCVw/j. In the feminine form, syncopation is not possible; the accent must shift to the now penultimate syllable. This yields a structure of an unaccented closed syllable ( $sV\underline{d}$ -), an accented open syllable (with long vowel: mt/u-), and a closed final syllable (-w/jVt):  $CVCV^2Cw/jVt$ .

- 5. sắdmij / sadmijVt; accent variant sadmij /sadmijVt.
- 7. sůdmuw / sudmůwVt; accent variant, sudmůw / sadmůwVt.

The following two patterns also display an ending w/j already at the masc. form. Here, however, the stress falls on the vowel between the second and the third consonant, even in the masculine singular form: obviously they go back to

<sup>&</sup>lt;sup>3</sup> Cf. the vernacular pronunciation of German words like *Autor* as *Autór*, triggered by forms like *Autóren*, *Autórin(nen)*, etc.

a proto form (Phase A and/or B, for which see below) with a long vowel after the second consonant: *CVCVV*... The second syllable (with this stress-bearing vowel) is open, the vowel therefore long. In the feminine form, however, the syllable is closed, the vowel therefore short.

8. sadámuw / sadámwVt.

Although no participles of this pattern are attested in Coptic, its other attestations give the impression that *sadámuw* is just another participial pattern, in addition to no. 1, *sádim*. It is particularly often attested with transitive verbs.

Although this is some evidence of a form saddamuw, with a geminated (lengthened) second consonant, we have to reckon with the possibility that there is also a non-geminating saddamuw besides geminating saddamuw, with no original relation to the near-homonymous geminating form. Note, however, that the latest phases of the language (Phase D, for which see below) do obviously not know anymore consonant lengthening, or gemination (Osing 1976: II 343). But obviously there remained some reflexes of an older gemination, like the a vowel in the cases mentioned above.

If there is an original pattern <code>saddamuw</code>, it is a good candidate for the pattern of an aorist ("imperfective") participle. The reduplicating forms of the majority of the weak verbs, as <code>hzzw</code>, of a root <code>hzj</code>, must have had a stress-bearing vowel between the two identical consonants, otherwise these would appear as just one in writing: <code>CVCV'C...</code> Now, the only verbal adjective patterns that have the stress between the second and third root consonant are nos. 8, \*<code>sadamaw</code>, 9, \*<code>sadamij/w</code>, and 10, \*<code>sadamew</code>; so far the strong verbs. The weak verbs in Osing's material have, accordingly, \*<code>hazajaw</code>, \*<code>hazijij/w</code>, and \*<code>hazujew</code>, respectively: the "imperfective forms" with the reduplicated second consonant (like <code>hzzw</code>) are found no later than Middle Egyptian (early 2nd millennium), and already Late Egyptian does not know them any more. Nowhere in Osing's material there is no trace of the reduplication. However, the very same author could find vestiges of the reduplication (Osing 1998: 51):

jdd [\* $at\delta t[i?]$ ] < \* $jad\dot{a}dV(w)$  "zur Ruhe bringend (?)" hdd(y).w [\* $h(V)t\dot{a}ti < h(...)d\dot{a}d(y).Vw$  "die 'Fliegenden', Vögel"

Is it reduplication,  $jad\tilde{a}dVw$  and  $*had\tilde{a}dVw$ , as Osing has it, or reduplication with gemination, hence  $jad\tilde{a}ddVw$  and  $*had\tilde{a}ddVw$ , as Vycichl (1952; 1991) supposed? If Osing's interpretation and reading of the two verb forms is correct, there is no gemination: the stressed long vowel o of the text forms goes back to an original  $\tilde{a}$  (of Phase D, for which see below), as in  $jad\tilde{a}dVw$  and  $*had\tilde{a}dVw$ . The short vowel of Phase D,  $\tilde{a}$ , was to remain  $\tilde{a}$  in the originally southern dialects (Coptic FMLA, in the main), rendered by Greek  $\alpha$ , and was to become  $\tilde{o}$  in the originally northern dialects<sup>4</sup> (Coptic BKS, in the main), rendered by Greek  $\alpha$ .

The question is: are the aorist forms of strong and weak 3lit. verbs originally built after the same scheme, or not. Strong verbs forms are modelled after the pattern  $AaBB\acute{a}CVw$ . Weak 3lit. verbs loose their third root consonant (the weak one), and its second root consonant is reduplicated, as it might seem, in compensation for the loss of the weak one:  $AaBB\acute{a}BVw$  (instead of \* $AaBB\acute{a}jVw$ ). Such situations may be encountered in languages: different derivation patterns for different formal classes. However, it would be preferable if a common origin for both forms could be found — amat enim unitatem intellectus.

In a state of the language that antedates the Palaeo-Coptic situation by far there were open syllables predominating, if not general; accent was free. We are here following the system elaborated by G. Fecht (1960), and applied by Satzinger (2001).

- A. The first phase: free accent, open syllables.
- B. The second phase: free accent, drop of word-final vowels. Here marked by  $\mathbf{b}$ ; accent and quantity are not indicated (e.g.,  $\mathbf{b}_a$ ).
- D. The fourth phase: "law of two syllables" (the accent is not further in front than on the penultimate syllable; as a rule, this is effectuated by syncope of the last vowel but one). Here marked by  $\mathbf{d}$ ; both the accent and the vowel quantity are indicated (e.g.,  $\mathbf{d}\hat{a}$ ). This phase corresponds to what is otherwise called "Palaeo-Coptic"; it has not been able till now to give a date for its beginning.

The said form of Phase A,  ${}^{\mathbf{a}}AaBaBaCVjV$ , would yield  ${}^{\mathbf{b}}AaBaBaCVj$  in Phase B, and  ${}^{\mathbf{c}}AaB\acute{a}BaCVj$  in Phase C. In Phase D, the accent had to be on the penultimate. For some reason or other, syncopation of  ${}^{\mathbf{c}}-BaC$ - was not effectuated (to yield  ${}^{\mathbf{d}}*AaB\acute{a}BCVj$ ); rather, the accent shifted from the antepenultimate to the penultimate, causing elision of the unaccented vowel of the antepenultimate:  ${}^{\mathbf{c}}AaB\acute{a}BaCVj > {}^{\mathbf{d}}AaBVB\acute{a}CVj > AaBB\acute{a}CVj > AaB\acute{a}CVj$ . This means that reduplication (-BaC-) became gemination (-BBA-) and was, therefore, not visible in writing.

<sup>&</sup>lt;sup>4</sup> Satzinger (1985; 1990).

With those weak verbs that have preserved reduplication (until the 2<sup>nd</sup> millennium), the development was different. In many cases, two vowels that were separated by j underwent a contraction and eventually developed to a single vowel (Satzinger 2001). The essence of this contraction is a merging of a sequence -ViV- into -V-. Such a case of contraction are the feminine singular forms of the nisba adjectives: normally, the attachment of the feminine ending -Vt will increase the number of syllables by one: CON  $d_{san}$  "brother," but CONE dsán-at "sister"; kame dkamméj "black," but fem. kamh dkamméj-at. This is not the case, e.g., with many *nisba* adjectives: here the feminine forms have the same syllable structure as the masculine forms. On the surface it seems as if it was a feminine nisba form in -it that corresponded to the masculine form, in -ii. In reality, the -it of the feminine nisba forms is the result of a contraction of -ijat. This obviously occurred at the end of Phase C: cjamíntij "western," fem. cjamíntij-at > AMNTE djamíntit; churíj "what is under ...," fem. churíj-at > 2PE  $\mathbf{d}_{hur'it}$ . Another case in question are the infinitives of weak verbs,  $A\bar{\imath}BVt$  (ms.t "engender," "give birth," of a stem msj), which in their majority do not show any trace of the weak third consonant, j:  $\mathbf{c}_{misVjat} > \text{MICE } \mathbf{d}_{misVt}$ . It is, in the main, with these same verbs that contraction occurred in the reduplicated agrist forms:  $\mathbf{a}_{masasajVjV} > \mathbf{b}_{masasajVj} > \mathbf{c}_{mas\acute{a}sVjVj} > \mathbf{d}_{mas\acute{a}sVj}$  (by contraction of -VjV-, yielding -V-), spelt mss(i).

We may postulate, for the original syllabic and vocalic scheme of the aorist ("imperfective") participle, a form *AVBVBVCVw* for the strong 3lit. verbs, and *AVBVBVjVw* for those weak 3lit. verbs that would preserve the reduplication.

Active	Strong verb		3ae- <i>j</i> verb		
participle					
Phase	Perfect	Aorist	Perfect	Aorist	
A.	AaBiCV	AaBaBaCVjV	AaBijV	AaBaBVjVjV	
B.	AaBiC	AaBaBaCVj	AaBij	AaBaBVjVj	
C.	AáBiC	AaBáBaCVj	AáBij	<i>AaBáBVjVj</i>	
D.	ΑάΒiC	AaBBáCVj	ΑάΒij	AaBáBVj (by contraction	
				- <i>VjV</i> ->- <i>V</i> -)	
	s <u>d</u> m	$s\underline{d}m(j)$	hz(j)	hzz(j)	

At a given moment, the aorist forms ceased to exist: Late Egyptian has neither the active nor the passive aorist ("imperfective") participle, neither the aorist relative form nor the aorist "that" form. It uses relative clauses with ntj instead of participles and relative form, and the "possessed infinitive"  $p^3y \sim f - sdm$ , lit. "his hearing," instead of  $sdm \sim f$  "that he hears." Some petrified forms may have survived (see above for jdd and hdd(y).w), but obviously the reduplicated forms of weak verbs were assimilated to the aorist forms of strong verbs, hereby giving up the reduplication:  $*mah\acute{a}hVw$  became  $mah\acute{a}yVw$  (Middle Babylonian

cuneiform *ma-ḥa-a*, Osing 1976: 185), "refugee"; \*kadådwat became kadåyyat (Coptic KATO, Osing 1976: 187), "boat," lit. "what goes around"; these new forms being in agreement with the sadámVw (from saddámVw) of the strong verbs. 9. sadímij / sadímwVt (Osing 1976: 193; Schenkel 1083: 96).

For the 3ae inf., Osing (1976: 198) gives the form AaBij/wij/w, fem. AaBij/wj/wat, adding his assumption, "und bei imperfektischen Partizipien mit Gemination [= Reduplication, HS] des 2. Radikals sicher ... AaBiBij/w, f. AaBiBj/wat," without, however, being able to give any evidence: there are just no reduplicating forms preserved after Middle Egyptian (except in the rare tradition of Classical Egyptian, as are the forms jdd and hddw mentioned above). In Pattern 9 we do not have, as we did in Pattern 8, indirect evidence for an original gemination of the second consonant: there are no Coptic or Greek forms with vowel a in the initial syllable, except where triggered by initial Egn. of a. Following the argument given above, it must remain doubtful that the aorist ("imperfective") active participle could also follow pattern 9, with stressed vowel a.

### Results

As was to be expected, Pattern no. 1 ( $s\acute{a}dim$ , fem.  $s\check{a}dmVt$ ) is the vocalisation of the perfect active participle. It cannot be excluded that also Pattern no. 2 ( $s\acute{a}dam$ ) has this function, although languages usually have a uniform pattern for participle forms. Patterns no.3 ( $s\acute{a}dVm$ ) and no. 5 ( $s\acute{a}dmij$ ) seem to be specialised for adjectives.

Arguments were forwarded that the imperfective participle was  $sa\underline{d}\underline{d}\underline{a}mVw$ , fem.  $sa\underline{d}\underline{d}\underline{a}mwVt$ , a form that had to merge with Pattern no. 8,  $sa\underline{d}\underline{a}mVw$ , after geminated consonants were reduced in a pre-Palaeo-Coptic stage of the language (approximately Stage C). Note that the form of the 3ae inf. verbs had developed to  $sa\underline{d}\underline{a}dVw$ , fem.  $sa\underline{d}\underline{a}dwVt$ , forms that preserved the original reduplication of the second consonant.

What then with all the other patterns? Well, apart from the participles proper (which can be formed of each verb), there are nomina agentis of various shapes. For Arabic, the *Grammar* by Wright (reprint 1976: I 133 § 231) mentions, apart from the *ism al-fā 'il* (the active participle), "other verbal adjectives derived from the frist form of the verb, and called *sifāt mušabbaha' bi-l-'asmā' al-fā 'il* ... adjectives which are made like, or assimilated to, the participles ..."; he lists sixteen of them as "the principal."

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