Zeros in Egyptian

Can nothing mean something?

Jean Winand, Liège

Abstract

This paper deals with the use of zeros in Egyptian linguistics. It is argued that in most cases zeros are superfluous and misleading. Working in a structuralist framework, I suggest that a linguistic zero, in a narrow sense, must stand in a paradigmatic opposition and have a meaning of its own (signifié). To be fully operative, the notion of paradigmatic opposition should be maximally extended across the traditional borders of the word or of the nominal/verbal phrase. This done, the list of acceptable zeros is dramatically reduced.

Introduction

The purpose of this paper is to review how Egyptologists use zeros. A quick look at the Egyptological literature suffices to show that the use of zeros is increasingly common. In doing so, Egyptologists probably are merely trying to conform to a general trend in general linguistics. Although I would not go as far as to say that inserting a zero is in every case unjustified, I have the feeling that zeros are too often an easy way out of what is probably a deeper problem. One of the most attractive virtues of zeros is that they can elegantly mask our ignorance. Instead of pushing the investigation harder, adding a zero presents itself as an easy solution. In this paper, I first give a classification of zeros before examining whether they are what they pretend to be. There are different kinds of zeros in the specialist literature. I first consider a group of very common zeros:

- orthographical Ø,
- historical Ø,
- pedagogical Ø.

1. Orthographical zeros

Orthographical zeros are the zero manifestation on the graphic level of an element one supposes to be present at the linguistic level. Due to the constraints of the hieroglyphic script, such zeros are not exceptional. Of course, the habits of scribes changed constantly over time. A relevant example of this is the graphic omission of the 1st singular suffix pronoun in Old Kingdom texts (Edel 1955-1964: § 160). Actually, the graphic manifestation of the 1st singular pronoun is none other than the determinative,

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which is a trace, so to say, of the pronoun and not the pronoun itself. It has convincingly been suggested that the images of the tomb’s owner that accompany the texts may act suppletively as word determinatives. It is thus better to avoid speaking of a zero in such cases.

2. Historical zeros

A historical zero is sometimes introduced by Egyptologists to signal an element that was etymologically present in the history of a form or a pattern, but had disappeared at the time of the text under consideration. For instance, the preposition $hr$ that is a constitutive part of the Present I pattern in Late Egyptian had completely disappeared by the end of the 20th Dynasty. To put a zero, or to add the preposition $hr$ in brackets, will help the modern reader to understand the intended construction. This of course can be of some use for distinguishing the different patterns hidden, for instance, under the pervasive and ambiguous Late Egyptian $iw.f~sdm$ forms. But one should also remain conscious that adding a zero is misleading, because it seems to suggest that when written the morpheme was still present at the morphophonemic level, which is rather dubious.\(^1\)

3. Pedagogical zero

Finally, there are also instances of what may be labelled a pedagogical zero. For instance, in grammars one finds a lot of zeros in verbal paradigms that are meant to help visualize where the possible slots are. The figure below is taken from my own Études de néo-égyptien.

<table>
<thead>
<tr>
<th>opérateurs syntactiques</th>
<th>convertisseur</th>
<th>négation</th>
<th>sujet</th>
<th>prédicat</th>
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<tbody>
<tr>
<td>$\emptyset$</td>
<td>$\emptyset$</td>
<td>$\emptyset$</td>
<td>$iw + p.~suf.$</td>
<td>$\emptyset$</td>
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<tr>
<td>$iw$</td>
<td>$wn$</td>
<td>$bn$</td>
<td>$ir + SN$</td>
<td>$r$</td>
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<td>(nyy)</td>
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<td>sub.</td>
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Fig. 1. Paradigm of the Future III (from Winand, Études de néo-égyptien, Liège, 1992, p. 489)

In conclusion, the zeros briefly reviewed here are impossible to define in any precise way. In some cases they are difficult to distinguish from one another: a historical zero can very easily become a pedagogical zero. They are not zeros in a linguistic sense.

Other possible zeros

The most interesting zeros are the ones found in morphological or syntactic explanations. Here is a (non-exhaustive) list of such zeros:

\(^1\) The gradual disappearance of the preposition at the graphic level can be traced during the New Kingdom with some precision, see Winand (1992: §§ 635-649, 693-705, 785-793; 1995). The graphemic manifestation is obviously later than the morphological reality.
Zeros in phonology and morphology

- Ø in phonology and morphology
- Ø as part of a paradigm of substitutions
- Ø explained by the factorisation of a preceding element
- Ø in place of a resumptive element
- Ø in the so called ‘omission under relevance’
- Ø showing a reduction of valency
- Ø in place of a syntactic constituent
- Ø thought to be necessary to satisfy the postulates of a syntactic theory.

In what follows, I will review these different types of zeros. All of them raise a number of important issues that deserve close scrutiny. It is unfortunately impossible to go into details here. My ambition will be limited to giving some general orientation by considering a number of prototypical examples. It will soon become obvious to the reader that each type of zero could be studied in its own right.

Ø in phonology and morphology

Zeros in phonology are common when one works in a diachronic perspective. They usually mean the disappearance of a phoneme. For instance, the LEd spelling ꜜ kh b can have the following transcriptions: ḫb, ḫ(ꜜ)b or ḫb. The first one is the standard transcription, the one that is found in dictionaries, the other two try to capture something of the phonological evolution, but they do it in different ways. ḫ(ꜜ)b seems to suggest that the missing aleph should be present, whereas ḫb indicates that the spelling actually reflects the new phonological reality (cf. ꜜxwb: ḫ > Ø. This raises a number of issues that were partly alluded to in the introductory section. All actually come down to a central question: what does a transcription really stand for? Is it a kind of substitute for the hieroglyphic spelling, its more or less trustworthy mirror? In this case, one should transcribe ḫb when the spelling is ꜜkh, but ḫb if the verb is written ꜜkh. The problem is that divergent spellings can occur in the same text. If one prefers to consider that the transcription should be as close as possible to the phonological reality, the number of problems dramatically increases. One would be compelled to adapt the transcriptions to what is believed to be the phonology of, say, the 19th dynasty Late Egyptian without considering what is actually written. To come back to our example, it would mean that we should transcribe all triliteral verbs with an aleph as its second radical, A-ꜜA-C, as A-C. This of course presupposes very precise knowledge of Egyptian phonology, which is still out of reach. For the time being, the best solution seems to be to recognise that transcription is simply a means for identifying a lexeme and that it cannot serve as a substitute for the hieroglyphic spelling but rather only a more or less useful pis-allier.

Another interesting case is offered by the spelling of the definite article. In LEdg, the masculine form is usually written ꜜḥ nb, but ḫ nb is also found. We can infer from Coptic that ḫ nb is the precursor of the reduced form (m-). In some texts, both spellings are found: in P. Brooklyn 47.218.135 the article is always written in full, except when
it is used in conjunction with the relative *nty*, in which case it is written (31 times). But it is very unlikely that the article was realized differently. Now it is not all impossible that the reduced form was the signal of the phonological evolution of the whole syntagm (cf. *nerti*). If this is the case, there is no opposition between *p*³ and *, with > Ø, but there is an opposition between *p*³ NP vs. *p-nty*. The necessity of having a zero disappears completely when the wider picture is taken into account.

In morphology zeros are very often used, but in most cases it is unclear whether such zeros have any value at a synchronic level. The paradigm of the pseudo-participle is a good example. It is common knowledge that the rich set of personal suffixes of the Old Kingdom gradually became reduced to (almost) nothing (with the exception of particular cases). The evolutionary process is well illustrated in LEd. In phase I (18th/19th dyn.), the suffixes can be –k, –t, –yn, –wn, –Ø; in phase II (20th dyn.), the –wn suffix was dropped; in phase III (TIP), the set was reduced to a binary opposition between –t and –Ø (Winand 1992: § 246-249). This morphological evolution can be explained along what can be observed in syntax. In Egyptian I (Old and Middle Egyptian), the suffixes of the pseudo-participle could still to some degree be considered as personal suffixes. In Egyptian II (from LEd onwards), these suffixes become increasingly used only as agreement markers. The pseudo-participle was sometimes used as an independent predicate or as a second predicate in Egyptian I (including in frontal thematic position). From LEd onwards – at least in the non-literary texts – the pseudo-participle is never found outside the general frame Subject + Predicate. It was thus only to be expected that the suffixes would be felt as redundant, a very common typological phenomenon. Now, the question remains whether there is some reason to consider the absence of the suffix as a zero. In my opinion, there can be no question of a zero in this case, because it is impossible to assign it any signifié. The solution, once again, is to be found by considering the whole paradigm. In LEd III, the paradigm of the pseudo-participle is as shown in the figure below:

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<table>
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<tbody>
<tr>
<td>1st SG.</td>
<td>-i ...</td>
<td>VB-t</td>
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<tr>
<td></td>
<td></td>
<td>VB-Ø</td>
</tr>
<tr>
<td>2nd M. SG.</td>
<td>-k ...</td>
<td>VB-t</td>
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<tr>
<td>2nd F. SG.</td>
<td>-t ...</td>
<td>VB-t</td>
</tr>
<tr>
<td>3rd M. SG.</td>
<td>-f ...</td>
<td>VB-Ø</td>
</tr>
<tr>
<td>3rd F. SG.</td>
<td>-s ...</td>
<td>VB-t</td>
</tr>
<tr>
<td>1st PL.</td>
<td>-n ...</td>
<td>VB-t</td>
</tr>
<tr>
<td>2nd PL.</td>
<td>-m ...</td>
<td>VB-t</td>
</tr>
<tr>
<td>3rd PL.</td>
<td>-w ...</td>
<td>VB-Ø</td>
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Fig. 2. The suffixes of the pseudo-participles in LEd III

The expression of the person now rests on the anteposed subject. There is no need to express it again in the inflection of the verb.
Ø as part of a paradigm of substitutions

Zeros are sometimes introduced as parts of a paradigm of substitutions. The best candidate is undoubtedly the system of definition of the nominal syntagm. To the best of my knowledge, this has not been investigated in detail as far as pre-Coptic Egyptian is concerned\(^2\). In Coptic, the meticulous studies by A. Shisha-Halevy for Shenoutian Coptic (1986) and Bohairic Coptic\(^3\) remain a model and a constant source of inspiration.

In LEg, it is well known that a noun can be preceded by a definite article (\(p\dot{i}, t\dot{i}, n\dot{i}\)), a possessive article (\(p\dot{i}y.i, p\dot{i}y.k,\) etc.), an indefinite article (\(w\^\circ\)), a demonstrative (\(p\dot{i}y hrw vs. hrw pn\)), a possessive prefix (\(p\dot{i}t-n niwt\)) or left undefined (Junge 1996: 54). The system of determination in LEg cannot be comprehensively understood en bloc. As was already pointed out by Junge, one has to be very careful not to mix texts from different genres and from different times.

Texts where the indefinite article (\(w\^\circ\)) is only partly used cannot be treated on a par with texts where it has gained full paradigmatization (as in Wenamun). Texts that incorporate ancient, pre-Late Egyptian phraseology cannot be integrated in the same sub-system of LEg as contemporary texts that are grounded in what I have elsewhere called the ‘néo-égyptien complet’, see Winand (1992: § 22). This also applies to the use of \(hn\) as plural indefinite marker, which was not yet common in LEg even at the end of Ramesside period. As a consequence, zero enters different systems of oppositions. The main question I would like to address here is the very status of this alleged zero. Is it a zero in a narrow linguistic sense, or should the absence of a marker be better considered as a nil-mark? The difference between zero and nil might seem a Byzantine question at first sight, but the truth is that it is not (cf. Shisha-Halevy 2007: 371-374). The cardinal criteria seem to be the notion of substitution and the necessary structural interface between a signifié and a signifiant.

The text of Wenamun has been taken to illustrate the different questions that inevitably arise when dealing with the LEg determination system. As already said, the necessarily partial and incomplete conclusions that can be drawn cannot be automatically and blindly applied to other LEg texts. A series of comprehensive, corpus-based studies would be a necessary preliminary step before a more general assessment can be made on the LEg determination system as a whole.

The determination system in Wenamun is built on three elements: the definite article, the singular indefinite article and Ø or absence of a marker. \(hn\) is attested only once in Wenamun, where it retains its etymological value of ‘a certain quantity of’ (LES 63,2). To fully understand the complexity – in fact the richness – of the system, one cannot mechanically sort out nouns according to the presence or absence of a determiner without taking into account their semantic value and their syntactic environment. One can identify six semantic categories of nouns in Wenamun: count nouns, proper nouns (individuals, gods and geographic entities), nouns of function,

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\(^2\) The only notable exception is the pioneering work of Groll for Late Egyptian (1967); see also Groll (1991). See also, for the emergence of the definite article, Loprieno (1980), that should be reviewed against the evidence of the growing Middle Kingdom corpus of non-literary texts.

\(^3\) Shisha-Halevy (2007: esp. on p. 368-376, but see the rich index s.v. Zero for more entries).
mass nouns, collective nouns and abstract nouns.

Only the count nouns make a regular use of the opposition between indefinite and definite article:

1: \textit{mtw.k di.t [ir]y.tw n.k w^c wd CONJ.2MS give\textbackslash INF do\textbackslash SUBJ.PAS to.2MS IND.ART stele “(Why do you not rejoice) and have a stele made for you?”} \textit{(LES 72,12)}

2: \textit{mtw.f ^r]? rn.k hr p^r wd CONJ.3MS shout\textbackslash INF name.2MS on DEF.ART stele “and he will read aloud your name on the stele”} \textit{(LES 73,4)}

When undefined, this category of nouns is used without a determiner, and instead of \textit{w^c}, in the following circumstances:

- in the plural (ex. 3); \textit{hn} appears only one, but with its original meaning of ‘a certain quantity of’ (ex. 4):

3: \textit{iw.w ATp m Ax.t n km.t CIRC.3PL load\textbackslash PSP with goods.F of Egypt.F “being loaded with Egyptian goods”} \textit{(LES 67,15-16)}

4: \textit{i.ir nhy hrw dy (r)-k^r-n.i do\textbackslash IMP some day here near.1S “Spend some days here near me!”} \textit{(LES 63,2)}

- when used with numerals, nouns are headed by a determiner if defined (ex. 5). If undefined, they do not have any determiner; in this case, there is a difference in the word order according to the register which the scribe is following. When enumerating lists of goods, he usually follows what can be called the booking style: in this case, the order is material + measure + number (ex. 6). Otherwise, the order is number (+ ind. gen.) + noun (ex. 7):

5: \textit{hr ptr dl.k iry p\textbackslash y ntr ^r]? p\textbackslash y hrw 29 but look give\textbackslash PF do\textbackslash SUBJ this god great this day 29 “but look, you let this great god pass those 29 days”} \textit{(LES 69,11-12)} \textsuperscript{4}

6: \textit{iw.i gm hd dbn 30 im.s SEQ.1S find\textbackslash INF silver deben 30 in.3FS “and I found 30 deben of silver therein”} \textit{(LES 64,3-4)}

7: \textit{m-dr iry.w 17 n rnp.t m p\textbackslash y t^r] after do\textbackslash SUBJ.3PL 17 of year in this land “after they passed 17 years in this land”} \textit{(LES 72,6)} \textsuperscript{5}

- as object of certain verbs, where it signals a semantically close unit (ex. 8). It is difficult to say how far these units were considered as new lexical units. The

\textsuperscript{4} One actually expects \textit{p\textbackslash y} 29 \textit{n hrw} (cf. also \textit{LES 64,14: iw.i ir hrw 29 m t\textbackslash y.f [mr]}). The scribe here partly followed the manner found in dates (day + number), which is reflected by the spelling of \textit{hrw}, which is written with the sun-sign only. This is in perfect accordance with the writings found in the beginning of the text \textit{(hrw n wd i.ir smsm h\textbackslash y [61,1], hrw n spr i.ir.i r \textbackslash d^n.t [61,4])}, but contrasts with the full spelling of \textit{hrw} found elsewhere in the text \textit{(LES 63,2)}.

\textsuperscript{5} Cf. \textit{r dbH n.i 50 n rnp.t n ”nh m-di inn “to ask for me 50 years of life from Amun”} \textit{(LES 73,1-2); iw.i nw r ll n br “and I noticed 11 ships”} \textit{(LES 73,10)}.
fact that other elements, like a subject, can sometimes appear between the verb and its object might suggest that the lexicalisation is still in progress (ex. 9)\footnote{One can here draw a parallel with the lexicalization process of the causative pattern $rdi + sdm.f$. Here additional phenomena, like the reinterpretation of the subjunctive as an infinitive, as illustrated by numerous L\(E\)g examples, show that the history of the Coptic $\tau$- causatives is much more complex than is usually assumed.}: 

8: \textit{in mntk} $\pi$ nty \textit{i.ir.f} nw iy n.i m-mn.t
\textit{INTER IND.PR.2MS DEF.S REL do\textless \textup{EMPH.3MS time come\textgreater INF} to.1S daily} “Are you not you the one who has spent time coming to me daily?” (\textit{LES} 65,12)\footnote{Cf. \textit{iw.i} $\ast$ $s\textbackslash g b r \pi \pi$ \textit{lbn} (\textit{LES} 68,8-9); \textit{mk i.ir} \textit{lnn} $hrw m t\textbackslash i p.t} (\textit{LES} 68,15-16); \textit{twerk} $\ast$\textit{fw r iry} $\sw n \pi \pi$ \textit{lbn m-dl imn} $psiw.f$ nb (\textit{LES} 69,13-14); \textit{iw.w ir pr.t im} $\#^\textcircled{f}$ (\textit{LES} 71,8).} 

9: \textit{m dy $t\#y$ $\#t\#y.k$ $sr\#r.w$}
\textit{NEG.IMP give\textless \textup{NVC} take\textgreater \textit{SUBJ} heart.2MS trouble.PL} “Do not let your heart worry!” (\textit{LES} 74,8) 

\begin{itemize}
\item as predicate of a nominal predication:
\end{itemize}

10: \textit{in ink} $b\#k$ n $\pi$ ir \textit{wd.k} $m-r\textsuperscript{-}c$ 
\textit{INTER IND.PR.1S servant of DEF.S do\textless \textup{PARTIC} send\textgreater INF.2MS too} “Am I a servant of the one who did send you either?” (\textit{LES} 68,8)\footnote{Cf. \textit{mntk m-r-a}, \textit{mntk b\#k n imn} (\textit{LES} 70,4), on the meaning of $m-r\textsuperscript{-}c$, see Winand (2009a: ex. 6). See also \textit{hn $t\#y lw ns-sw p\#y.t\#i}\pi$ ... (\textit{LES} 62,13); \textit{mk mntk m\#f\textbackslash tw} (\textit{LES} 66,8-9); in $f\#y$-\textit{mlk} $\pi$ \textit{wn.w ir.f n p\#y.i} it (\textit{LES} 68,6-7); \textit{bn m\#f\textbackslash swg\# lw\#n}\#i\textbackslash nty tw.i im.w} (\textit{LES} 69,5-6); \textit{LES} 72,9; 72,10; 73,5.} 

\begin{itemize}
\item when preceded by $ky$ or followed by the quantifier $nb$. When $ky$ is used alone, it behaves like a regular count noun when defined, but $w^c ky$ does not seem to be attested in L\(E\)g.
\end{itemize}

11: \textit{r tm $dt\#t$ ptr $sw k.t$ ir.t} 
\textit{to NEG give\textless \textup{INF} see\textgreater \textit{SUBJ} PR.DEP.3MS other eye} “to not let any eye see it” (\textit{LES} 65,9)\footnote{Cf. \textit{mntk m-r-a}, \textit{mntk b\#k n imn} (\textit{LES} 70,4), on the meaning of $m-r\textsuperscript{-}c$, see Winand (2009a: ex. 6). See also \textit{hn $t\#y lw ns-sw p\#y.t\#i}\pi$ ... (\textit{LES} 62,13); \textit{mk mntk m\#f\textbackslash tw} (\textit{LES} 66,8-9); in $f\#y$-\textit{mlk} $\pi$ \textit{wn.w ir.f n p\#y.i} it (\textit{LES} 68,6-7); \textit{bn m\#f\textbackslash swg\# lw\#n}\#i\textbackslash nty tw.i im.w} (\textit{LES} 69,5-6); \textit{LES} 72,9; 72,10; 73,5.} 

\begin{itemize}
\item when a negation is present (ex. 13)\footnote{Cf. \textit{iw.i} $\ast$ $s\textbackslash g b r \pi \pi$ \textit{lbn} (\textit{LES} 68,8-9); \textit{mk i.ir} \textit{lnn} $hrw m t\textbackslash i p.t} (\textit{LES} 68,15-16); \textit{twerk} $\ast$\textit{fw r iry} $\sw n \pi \pi$ \textit{lbn m-dl imn} $psiw.f$ nb (\textit{LES} 69,13-14); \textit{iw.w ir pr.t im} $\#^\textcircled{f}$ (\textit{LES} 71,8).} Interestingly enough, in ex. 14, the fronted undefined subjects have not left a trace in the subject slot: 
\end{itemize}

12: \textit{p\#l} nb n mn\#$n$ nb 
\textit{ART.DEF lord of boat every} “the lord of every boat” (\textit{LES} 69,9)\footnote{Cf. \textit{mntk m-r-a}, \textit{mntk b\#k n imn} (\textit{LES} 70,4), on the meaning of $m-r\textsuperscript{-}c$, see Winand (2009a: ex. 6). See also \textit{hn $t\#y lw ns-sw p\#y.t\#i}\pi$ ... (\textit{LES} 62,13); \textit{mk mntk m\#f\textbackslash tw} (\textit{LES} 66,8-9); in $f\#y$-\textit{mlk} $\pi$ \textit{wn.w ir.f n p\#y.i} it (\textit{LES} 68,6-7); \textit{bn m\#f\textbackslash swg\# lw\#n}\#i\textbackslash nty tw.i im.w} (\textit{LES} 69,5-6); \textit{LES} 72,9; 72,10; 73,5.} 

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\end{itemize}

13: \textit{in mn} 20 n mn\#$n$ dy m $t\#y.i$ mr 
\textit{INTER NEG.PRED 20 of boat here in ART.POSS.1S harbour} “Are there not 20 ships here in the harbour?” (\textit{LES} 67,4)\footnote{Cf. \textit{mntk m-r-a}, \textit{mntk b\#k n imn} (\textit{LES} 70,4), on the meaning of $m-r\textsuperscript{-}c$, see Winand (2009a: ex. 6). See also \textit{hn $t\#y lw ns-sw p\#y.t\#i}\pi$ ... (\textit{LES} 62,13); \textit{mk mntk m\#f\textbackslash tw} (\textit{LES} 66,8-9); in $f\#y$-\textit{mlk} $\pi$ \textit{wn.w ir.f n p\#y.i} it (\textit{LES} 68,6-7); \textit{bn m\#f\textbackslash swg\# lw\#n}\#i\textbackslash nty tw.i im.w} (\textit{LES} 69,5-6); \textit{LES} 72,9; 72,10; 73,5.} \footnote{Cf. \textit{iw.i} $\ast$ $s\textbackslash g b r \pi \pi$ \textit{lbn} (\textit{LES} 68,8-9); \textit{mk i.ir} \textit{lnn} $hrw m t\textbackslash i p.t} (\textit{LES} 68,15-16); \textit{twerk} $\ast$\textit{fw r iry} $\sw n \pi \pi$ \textit{lbn m-dl imn} $psiw.f$ nb (\textit{LES} 69,13-14); \textit{iw.w ir pr.t im} $\#^\textcircled{f}$ (\textit{LES} 71,8).}
Jean Winand

14: hr mk wḥ3 š5.t mn m dr.t.k
     but look rescript letter.  F  NEG.PRED in hand.  F  2MS
     “So, as it seems, rescript, letter, there is nothing in your hand!”  (LES 66,9)\(^{13}\)

   – when used with the so-called mk letter, probably because of the attributive meaning of the construction:

15: mnš.w  ...  iw.w  m ḫbr  irm  ns-sw-b3-nb-dd
     boat.PL  ...  CIRC.3PL in commerce with Smendes
     “boats ... that are in commercial relations with Smendes”  (LES 67,5)

   – in some lexicalized expressions, in an etymologically direct genitive construction such as the ubiquitous nswt nṯr.w “king of the gods” or nb ns.wt ḫt.wj “lord of the thrones of the Double Land”. These expressions are probably treated synchronically as personal names.

   – in apposition with an adjectival force (ex. 16); this can be contrasted with explanatory apposition, where the indefinite article is regularly found (ex. 17):

16: pḥy.f  wpwty  rmṯ
     ART.Poss.3MS  deputy  man
     “his human deputy”  (LES 72,14)

17: iw.i  spr  r  dyr  w5  dmi  n ḫkr
     SEQ.1S  reach\INF to Dor  IND.ART  city of Tjeker
     “and I reached Dor, a Tjeker city”  (LES 61,11)

   – with some words expressing a division of time:

18: smn  tw  š3  dwḥ3w
     remain\IMP  DEP.PR.2MS  until tomorrow
     “remain (here) until tomorrow”  (LES 65,10)\(^{14}\)

The proper nouns in the text can be divided into two categories: geographical names and personal names, divine and non-divine. Neither category takes the article, but geographical names can take a demonstrative when they are determined, for instance by a relative clause (ex. 19). However, Lḥn is always defined (LES 68,9, 69,8 and 69,13). The lack of an article shows that niwt, in the sense of ‘Thebes,’ was treated as a proper name (LES 75,7). The same conclusion seems to apply to rsw ‘the South,’ but note the presence of the article with mḥw with a genitival extension\(^{15}\):

19: lr  pḥy  d–d–n  pḥ3  ky  i.sn.k  r.f
     TOP  DMS  Sidon  DEF.M  other  REL.pass.2MS to.3MS
     “as for that Sidon, the other one you have passed by”  (LES 67,6)

20: ...  š3-t.ir.t.f  šm  r  rsw
     till-do\TERM.3MS  go\INF to south
     “till I return to the South”  (LES 70,12)

\(^{13}\) For the meaning of mk in this sentence, see Winand (2004: ex. 8).
\(^{14}\) Cf. iw dwḥ lḥpr (LES 66,1).
\(^{15}\) For the nouns related to cardinal directions, this reflects the difference between their uses as the name of a region and as a geographical position.
In Wenamun, nouns denoting functions behave like the count nouns (cf. supra); when undefined, they take an indefinite article (ex. 22), except when they function as the predicate in a nominal predication (ex. 23), in which case they are used with the so-called m of equivalence (ex. 24), or when they are plural (ex. 25):

22: iw p-n-imn ẉ wpw iw mntf sw ...
CIRC Penamun IDF.S butler CIRC IND.PR.3MS DEP.PR.3MS
“when Penamun, a butler that belongs to him, ...” (LES 71,12)16

23: iw ink wpwty n imn
CIRC IND.PR.1MS messenger of Amun
“for I am a messenger of Amun” (LES 75,12)

24: ir ḥ-m-wIs.t rmt n(t) h3b.f n.k m wpwty.w
TOP Khaemwaset men DEF.PL send\REL.3MS to.2MS in messenger.PL
“As for Khaemwaset, they were humans whom he sent to you as messengers.” (LES 72,10)

25: iw.f di.t whm.w r-ḥ.t.w
SEQ.3MS give\INF herald.PL in-front-of.3PL
“and he placed heralds in front of them” (LES 71,7)

But when a noun of function is followed by a proper name and represents part of a title, it does not take an article:

26: ... irm hry-mnš mngbt
... with captain-boat Mengebet
“with captain Mengebet” (LES 61,9)

Mass nouns display binary behaviour: when they are used partitively, they do not take an article (ex. 27), but when they refer to parts of a whole – that is, if they are treated like count nouns – they take an article (ex. 28)17. In the latter case they can take a possessive article:

27: in wn i.ir.f di.t in.tw hd nbw
INTER PAST-CONV do\EMPH.3MS give\INF bring\SUBJ.PASS silver gold
“Would they have brought silver and gold?” (LES 66,13)

28: yš ir pš hd, ns-sw ns-sw-bš-nb-qd
actually TOP DEF.S silver belong-DEP.PR.3MS Smendes
“Actually the silver, it belongs to Smendes.” (LES 62,6-7)

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16 Cfr. mtw hpr ir m-sš ky hrw, mtw ẉ wpwty iy m pš tš n km.t (LES 73,2-3).
17 The use of an indefinite article in this environment is not attested in Wenamun, but see iw.w pš ẉ hd (KRI VI 782,4).
Finally abstract nouns and unicons do not take an article (ex. 30). There are sometimes very subtle variations. The word ‘nh ‘life’ can appear either with a definite article or without any article. In the first case, it seems to mean ‘Life’, as a unique principle (ex. 31), whereas in the second case it is more or less treated like a mass noun, something one can partake in (ex. 32):

30:  i.ir.tw  m dmi  nb,  do\EMPH.NEUTER  falsehood  city every
     i.ir.tw  m\3t. t  m  p\3  t\i  n  ir\3
     do\EMPH.IMPRS  truth.F  in  DEF.M  land of Irsa
     “Everywhere, one does falsehood, but in the land of Irsa, one does justice.”  (LES 75,7-8)

To sum up this rather long discussion, even where linguistic zeros seem highly commendable (e.g. in determination of nouns), it is not at all clear whether one should posit a zero in each case of a bare noun. Actually, in the majority of the cases reviewed above zeros do not enter a paradigmatic opposition. With count nouns there is a predictable opposition between iw p\3 rmt (hr) sdm and iw w\3 rmt (hr) sdm, but iw Ø-rmt (hr) sdm does not exist in Wenamun. In cases where there is a bare count noun, there is an opposition between ink p\3 rmt and ink rmt, but ink w\3 rmt does not seem to be an option. In other words, there is no syntactic pattern where w\3 rmt and Ø-rmt would stand in opposition, but it is hard to avoid a zero in Ø-rmt in opposition to p\3 rmt in the nominal predicate. The other productive class where such an opposition actually exists is that of mass nouns. In this case there is a productive and meaningful...

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18 I cannot discuss here the question of generically used count nouns; usually they take a definite article in LEG: mwtf n p\3 msh, m-r-pw p\3 h\3w, mtt p\3 lw (LES 1,6). In Wenamun the well-known sentence y\3 m\il mr \l\3.t.f (LES 70,8-9), is usually translated “a lion loves his possessions” (e.g., Licht-heim 1976: 227), and m\il is understood as a generic noun. However, given the absence of an article, this should rather be better rendered, considering the absence of an article, as “for he (Amun) is a lion who loves his possessions”, i.e. as a nominal predication of the type A Ø common in pragmatically loaded sentences. One may note in passing that there is a regular opposition in LEG between A p\3y and A Ø, the latter being used to convey some emphasis. As expected, it is always negated by bn ... iwn\3 (cf. °d\2, bn m\3 swg iwn\3 n\3 t\y twi im (LES 69,5-6), while with A p\3y, iwn\3 remains optional, see Winand (1997).

19 Cf. hr i.ir mn\1.t pr im.f r ph r p\3 nty t\y twi im, hr i.ir sb\3 pr nim.f r ph r p\3 nty t\y twi im “for efficiency indeed came from there to reach the place where I am, and wisdom indeed came from there to reach the place where I am” (LES 69,2-4).
opposition between Ø-ḥḥ “wood”, ḫw-ḥḥ ‘a piece of wood’ and ḫw-ḥḥ ‘the wood.’ Zero is a part of a paradigmatic opposition (signifiant) and has a positive meaning (signifié). It is thus acceptable in this case to speak of a linguistic zero, whereas it seems better to consider that in the other cases there is an absence of marking (or nil)\textsuperscript{20}.

Ø explained by the factorisation of a preceding element

Zeros are also sometimes advocated to explain coordinated nominal syntagms. It is obviously impossible to treat this important issue in detail here, but a few remarks might be useful. In what follows, I am only interested in prepositional phrases. In LEg, the following patterns are attested:

1. Prep + PN\textsubscript{1} + PN\textsubscript{2} + ... :

   33: iw.tw di.t.f m-bįh kdn.dnn bįr-mhr pį-ir-swn.t dhwy-t*r-nfr
   SEQ,IMP give\INF.3SMS before K. B. P. D
   “and one placed him in front of Kedjendenen, Balmeher, Pairswnet and Djehuty-rekhefer” \textit{(KRI V 357,8-9)}

2. Prep + PN\textsubscript{1} + PN\textsubscript{2} + Prep + PN\textsubscript{3} :

   34: twi dd n imm-r\textsuperscript{r} nsw.t-ntr.w mw\textit{t} lnsw, n pį-r\textsuperscript{r}-hr-3ḥty (...),
   PR.PR.I.1S say\INF to A. king-god.PL Mut Khonsu to P.
   n imm ns.t tįn.wy (...), n imm-wsr-hį.t hn\textsuperscript{r} psd.t.f;
   to Amun seat land.DUAL to A. with Ennead.F.3MS
   n ntr nb ntr.t nb (...)
   to god every god.F every
   “I say to Amun-Re, king of the gods, Mut and Khonsu, to Prehorakhty (...), to Amun of the seat of the Two Lands (...), to Amunuserhat with his Ennead, to every god and every goddess (…)” \textit{(LRL 14,2-5)}

3. Prep + pį-N\textsubscript{1} + pį-N\textsubscript{2}:

   35: irm pį nbw pį hδ
   with DEF.M gold DEF.M silver
   “with the gold and the silver” \textit{(KRI VI 498,2)}\textsuperscript{21}

4. Prep + pį-N\textsubscript{1} + Prep + pį-N\textsubscript{2}:

   36: irm nį hry.w mnş irm nį šm
   with DEF.PL captain.PL ship with DEF.PL go\PTCP
   “with the ship captains and with those who are going” \textit{(LES 63,5)}

5. Prep + pį-N\textsubscript{1} + Ø-N\textsubscript{2}:

   37: n nį ntr.w ntr.wt nb.w
   to DEF.PL god.PL god.PL.F all.PL
   “to all the gods and goddesses” \textit{(KRI III 230,8-9)}

\textsuperscript{20} As E. Grossman kindly points out to me, the functional load of wň⁄∅Y in Demotic and Coptic expands considerably vis-à-vis LEg. The paradigmatization of hn in latest Demotic and early Coptic is also worth noting. In this respect, the behaviour of wň⁄∅ in P. Vandier seems closer to Demotic than LEg (see Shisha-Halevy 1989: 429-430).

\textsuperscript{21} Cf. \textit{irm pįy šrî tîy šrî.t} (P. Louvre 25365+pAberdeen 171i).
6. Prep + p3-DN₁ + hnᵣ + p3-DN₂:

   38:  m-b₃h nb-r-dr  hnᵣ  t₃  psd.t  r-dr.s

   before Lord-of-All with DEF.F Ennead whole.3FS
   “before the Lord-of-All and the whole Ennead” (LES 40,9)

7. Prep + p3-N₁ + m-mitt + Prep + p3-N₂:

   39:  iw.k  dd.f  n  mhhy  m-mitt  n  p₃-hry-pD.t  m-mitt  m-bi₃.t

   FIII.2MS  say/INF.3MS  to  M.  likewise  to  P.  likewise  to  the  contrary
   “Will you mention it to Mehehy as well, and to Paherypedjet too or not?”
   (KRI III 540,6-8)

8. Prep + suff. pr. + Prep + p3-N₂/PN₂:

   40:  irm.f  irm  n₃  rmt  nb.w

   with.3MS  with  DEF.PL  men  ALL.PL
   “with him and with all the people” (KRI VI 523,4-5)

There is a large array of possibilities: the preposition may be repeated or not, and the second (and subsequent) syntagm(s) may be coordinated to the first one by a special preposition (like Hna) or a lexical expression (m-mitt).

The repetition or the non-repetition of the preposition can be

- a syntactic constraint as in ex. 40, where the first syntagm is pronominal,
- a cohesive device, as in ex. 37 (also note the non-repetition of the definite article before ntr.wt, which reinforces the cohesion),
- a way of grouping nominal syntagms into larger thematic units (as in the enumeration of the gods in ex. 34).

Among these patterns there is only one undisputable case of a linguistic zero, namely the absence of the definite article in pattern # 5. For coordinating nominal syntagms headed by a preposition, asyndesis is the rule in Late Egyptian. The repetition of the preposition or the introduction of specialized connective devices like hnᵣ or m-mitt are exceptions; they should rather be considered as stylistic means.

Ø in place of a resumptive element

This type of zero is sometimes advocated to explain certain syntactic structures. A well-known case is the relative clause. I will deal with this briefly later in this paper when discussing the case of zeros in place of a syntactic constituent (cf. infra).

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22 It should be noted that irm does not seem to function as a coordinator, at least not in the same syntactic environment (but irm is common to avoid the coordination of two subjects: iw A B hr sdm is extremely rare, but iw A hr sdm irm B is very widespread). This perhaps forces us to reconsider the structural relations between hnᵣ and irm. Considering irm as the direct diachronic successor of hnᵣ probably does not do justice to the complexity of the system.

23 The sequencing is also very clear in the following example: [r sip n₃]  ls.w  n  n₃  nswt  tpj.w  ḫ₃  hnᵣ  n₃  m₃ ḫ₃.wt  s.wt  n  htp  n  n₃  hsy.w (KRI VI 468,8-9), where hnᵣ marks the boundary between royal and non-royal, the non-royal tombs (m₃ ḫ₃.wt and s.wt) being closely grouped by the non-repetition of the definite article. This kind of grouping is also found with the possessive article: iw.n  ir.t  pšy  nbw  i.gm.n  m  pšy  ntr  2  m  nty.w  sḥbw  wdḥ.w ḫ₃.pr  wt.w  m  8.t  dni.t (KRI VI 485,7-9).

24 In this context, one should also consider the occasional presence of m-mitt before a conjunctive.
A good illustration here might be the particular case of the causative construction (rdi sdm.f / sdm.tw.f), when the verb rdi is itself conjugated in a relative form. In LEg, the resumptive pronoun is often omitted where it might have been expected\(^\text{25}\). In ex. 41, the omitted element is the subject of a passive, in ex. 42 it is the object of a transitive verb, and in ex. 43 it is the subject of an intransitive:

41: idr kw n iiw.t rdi.n.f in.tw Ø n.nswt-bity
herd numerous of cattle.F give\(\text{REL}.\text{ACC}.3\text{MS} \text{bring}\(\text{SUBJ}.\text{PASS} \text{Ø} \text{to} \text{king} \text{“numerous herds of cattle that he caused to be brought to the King of Upper and Lower Egypt”} \text{(KRI} \text{II} 283,5)\)

42: ir t³ md³.t n p³ ḭd i.di.k sfḥ.i Ø
TOP DEF.F letter.F of DEF.M silver REL.give.2MS liquidate\(\text{SUBJ}.1\text{S} \text{“as for the letter which you caused me to liquidate”} \text{(KRI} \text{III} 252,7-8)\)

43: p³ kr i.di.i ḥn Ø n.f ṭp <m> ḥm³.t
DEF.M boat REL.give.1S go\(\text{SUBJ}.26\) to.3MS load\(\text{PSP}.3\text{MS} <\text{with}> \text{salt} \text{“the boat, I sent it to him laden with salt”} \text{(LRL} 59,10-11)\)

In Late Egyptian the absence of the resumptive pronoun in such syntactic environments, though widespread, is not systematic. There are some rare examples where the resumptive pronoun appears:

44: mi-kd ṅ³y rm³ i.di p³y.i nb ḫw.s in.tw.w
like DEM.PL men REL.give POSS.ART.1S lord lḥ bring\(\text{SUBJ}.\text{PASS}.3\text{PL} \text{“as those men which my lord, l.p.h., caused to be brought”} \text{(RAD} 14,10)\)

45: p³ di.k in.f sw r [ḥr³]
DEF.M give\(\text{REL}.2\text{MS} \text{bring}\(\text{SUBJ}.2\text{MS} \text{DEP.PR}.3\text{MS} \text{to} \text{[above]} \text{“this that you caused him to bring up”} \text{(O. DeM} 554, v° 7)\)

It remains questionable whether a zero is needed to explain this kind of alternation, seeing that the argument structure of the verb provides all the necessary information. In ex. 41 the verb ini presupposes the presence of three arguments: a subject, which is normally the agent, an object, which is the patient, and [‘, very broadly speaking,’] a goal\(^\text{27}\).

\begin{center}
\begin{tikzpicture}
\node (agent) {Agent};
\node (making) [right=of agent] {\textit{ini}};
\node (patient) [right=of making] {Patient};
\node (goal) [right=of patient] {Goal};
\draw[->] (agent) -- (making);
\draw[->] (making) -- (patient);
\draw[<-] (patient) -- (goal);
\end{tikzpicture}
\end{center}

Given that in ex. 41 the verb is a passive form, there is a reduction of the number of arguments. One expects to find a patient and a beneficiary, the agent now being optional and expressed, if needed, by a peripheral adjunct outside the argument structure. The hearer/reader is prompted to find a subject (i.e. a patient) for \textit{in.tw}. The nor-

\(^{25}\) See now Uljas (2009: Earlier Egyptian) and Winand (2009b: Late Egyptian) for a detailed analysis.

\(^{26}\) There also remains the possibility of analyzing ḥn as an infinitive (but this seems to be less convincing according to Peust 2007: 72-77); in this case, there is no need of any kind of zero, because the antecedent plays the role of the first argument of the infinitive (cf. in French “le bateau que j’ai fait partir”).

\(^{27}\) I do not here enter into the detail of the possible subcategorizations of the thematic role of GOAL into a BENEFICIARY and a DESTINATION.
mal step to take if the surface structure does not provide him with a suitable one is to look for it in what precedes (anaphoric move). This is precisely what is happening here. The fact that the main verb (rdi) is conjugated in a relative form indisputably favours such a move.

Ø in so-called ‘omission under relevance’

As I have shown elsewhere, the omission of an argument is not exceptional in Egyptian, at least in case of the second direct argument (Winand 2004). Omission can also be found with the first argument (the subject), the second indirect object (for instance the PrepPhrase with telic movement verbs), and with the third argument, for instance with the verb rdi ‘to give’.

46: 
$sdm.i$ sft $p-n-ns.t-tl\-wy$, $iw$ bwpwy$i$, $ptr$ Ø $m$ ir.ti

hearPF.1S butcher P., CIRC NEG.PF.1S see\INF with eye.1S

“I heard the butcher P., but I did not see (him) with my own eyes.”

(KRI VI 775,16-776,1)

47: 
$hr$ iw bwpw$s$ krs $p\-y.s$ it,

but CIRC NEG.PF.3FS bury\INF ART.POSS.3FS father,

$hr$ bwpw n\-y.s hr\-d$w$ krs Ø

but NEG.PF ART.POSS.3FS child.PL bury

“although she did not bury her father, and although her children did not bury (him)”

(KRI V 450,1-2)

One should stress once more the necessity of drawing a careful distinction between the omission and the deletion of an argument, see Winand (2006: 125). This is especially important as regards the second argument. When the second argument is deleted, it triggers a change in the verbal Aktionsart (see the next section). When an argument is omitted, the verbal Aktionsart is left unchanged. As is evident from my translations, the tolerance for omitting the second argument can vary considerably. For instance, in English and in French one is frequently tempted to add the omitted element in brackets, and this is probably what often prompts us to add a zero in Egyptian, because we feel that something is missing. Now, adding a zero – unless it is a pedagogical one – is once more probably unnecessary. One must assume that the reader/hearer is syntactically sufficiently informed to look for the missing element. When the verbal valency is known from the lexicon, the expected move is to find out how the argumental structure can be best saturated. In the majority of cases, the missing object is cotextually present, as is the case in my examples. So, the first strategy is to look for it anaphorically. If this is not successful, the missing argument will be search-ed cataphorically or in the pragmatic extra-linguistic context (cf. English “give!” [for “give it to me!”] or French “donne!” [for “donne-le moi!”] with an extra-linguistic object that can be pointed at by the finger, and a beneficiary identical to the speaker, a very common situation at speech act).

As shown by the next pair of examples, the omission of the pronoun in such circumstances is not necessary. The choice can be dictated by stylistic or diachronic reasons; it can also be lexically conditioned: all these hypotheses still need to be checked in detail.
In a previous LingAeg paper (Winand 2004a), I suggested the following criteria that often trigger the omission of the second argument in Late Egyptian.

The verbal Aktionsart:
the omission of the object is more frequent with telic verbs.

The definiteness of the referent:
the higher the object is on this scale, the more prone it is to be omitted.

The animacy scale:
the higher the object is on this scale, the less probably it will be omitted.

The grammatical tenses:
a non-specific object – be it generic or non-generic – is much more inclined to be omitted when the verb is conjugated with an inaccompli.

Ø showing a reduction of valency

As already noted above, a missing argument may be a signal of valency reduction. The referent of the missing argument can be semantically generic – examples are quite numerous with consumption verbs like wnm and swr (cf. ex. 50) – or there can be no retrievable referent. In this latter case the verbal Aktionsart can be deeply modified. The best-known effect is a de-telicisation process, see Winand (2006: 127-129):

50: iw.f wnm.f Ø swr.f Ø
ENUNC.AUX.3MS eat\INACC.3MS drink\INACC.3MS
m-bié wsir rença nb
before Osiris day every
“he eats and drinks before Osiris everyday” (Pap. Nu, 23)²⁸

51: 3h n irr Ø
useful to do\PTCP.INACC
“useful for him who acts” (St. Berlin 7311, k 2 = ĀIB I, 180)²⁹

The accomplishment verb iri ‘do’ [+DUR, +DYN, +TEL] undergoes a de-telicizing process when its second argument is deleted; its meaning then shifts from ‘do’ to ‘act’³⁰.

²⁸ See Lapp (1997: pl. 48, 23).
²⁹ Cf. wnm.f hr hdb Ø, iw.i hr sênb Ø “as he slaughters, I give live” (St. Caire JE 49566, l. 11-12, see Černý 1969).
³⁰ Without jumping too quickly to unfounded conclusions, one can observe that, in the translation language, the non-presence of a generic object in ex. 50 does not have the same consequence as the deletion of the second argument in ex. 51.
It is not clear if one may safely posit a zero in this case. Verbs that are statistically more frequently used with one argument (monovalent verbs) can sometimes take an additional argument. Having a second argument usually means a restriction of the activity to a definite goal, which makes the verb telic. In such cases it is highly questionable whether one should insert a zero in the argument structure when the verb is used intransitively. Reduction of valency should thus be treated in the same spirit. If a zero is to be kept after all, it can only be a pedagogical one and its role will be to signal the change of status of the verb.

Ø in place of a syntactic constituent

A zero is sometimes introduced when a syntactic constituent is missing. One should always be particularly cautious before introducing a zero in a paradigm. I will here examine two possible candidates that raise different problems.

The first case deals with the expression of the subject in a relative clause. In Middle Egyptian, the following opposition is standard:

52a: \(\text{hm.t ntt m pr.s}\)
woman.F REL.F in house.3FS
“the woman who is in her home”

52b: \(\text{hm.t ntt wi hmr.s}\)
woman.F REL.F DEP.PR.1S with.3FS
“the woman with whom I am”

If the referent of the subject in the relative clause is identical with that of the antecedent (ex. a), the subject is not overtly expressed. According to the grammatical tradition, the subject is said to be expressed by the relative pronoun, which agrees in number and gender with the antecedent. If the referent of the subject plays another syntactic role (ex. b), the subject is necessarily expressed; the relative pronoun still agrees with the antecedent.

In Late Egyptian, the situation has obviously changed. Consider the following three paradigmatic examples:

53a: \(t^3 \text{hm.t nty m pziy.i pr}\)
DEF.F woman.F REL in POSS.ART.1S house
“the woman who is in my home”

53b: \(p^3 nty iw.f r sdm.i\)
DEF.M REL FIII{.3MS } hear-INF.1S
“the one who will hear me”

53c: \(p^3 nty bwtpw.f sdm.i\)
DEF.M REL NEG.PF.3MS hear-INF.1S
“the one who did not hear me”

Two important features are to be noted: first, the relative pronoun has become invariable (ex. a); second, there are a lot of patterns where the subject is expressed even if its referent is identical with that of the antecedent (ex. b and c). Of course, in the Present I, the subject is not expressed if its referent is identical with the antecedent
(ex. a). In LEg, it is difficult to view the relative pronoun as playing the role of subject in ex. 53a as is assumed for the Middle Egyptian example 52a. It seems to be a mere connector, with more or less the same status as the circumstantial *iw*. In the TIP, a new paradigm began to emerge: the pattern *nty* + pronoun of the present I (*nty twi*, etc.) was gradually replaced by *nty-iw* + suff. pron.\textsuperscript{31} As a consequence, when the subject of the relative clause was co-referential with the antecedent, it became overtly expressed:

\textsuperscript{32}p\textsuperscript{3} *nty* -iw.\textsuperscript{k} \( \vDash \) \( \{ \text{there} \} \) [m]  
DEF.S REL-iw.2MS  
“the (place) where you are”  
\textsuperscript{LES 63,8-9)}

So, in Ramesside LEg there seems to be a paradigmatic opposition between *p\textsuperscript{3} nty* \( \emptyset \) \( im \) ‘the one who is there’ and *p\textsuperscript{3} nty sw im.f* ‘the one\textsubscript{2} that he\textsubscript{2} is in it\textsubscript{1}’, which might suggest that a zero would not be out of place. Now, if one takes into account the relative clause as a whole, the validity of this zero becomes more questionable. There is no case in LEg where *p\textsuperscript{3} nty* \( \emptyset \) and *p\textsuperscript{3} nty sw* are in a paradigmatic opposition. In a relative clause, the presence or absence of a resumptive pronoun plays a pivotal role in analyzing the argumental structure of the predication. If none is found and the subject slot has been left empty, there is a good chance that the referent of the subject is identical to the antecedent\textsuperscript{33}. Thus a more correct analysis, in terms of a substitution paradigm, would be:

\begin{align*}
\text{no subject} & \quad \text{no resumptive pron.} & \text{ex. } p\textsuperscript{3} \text{ nty irm.i} \\
\text{no subject} & \quad \text{no resumptive pron.} & \text{ex. } p\textsuperscript{3} \text{ nty twi irm.f} \\
\text{+ subject} & \quad \text{+ resumptive pron.} & \text{ex. } p\textsuperscript{3} \text{ nty irm.f} \\
\text{+ subject} & \quad \text{+ resumptive pron.} & \text{ex. } p\textsuperscript{3} \text{ nty twi irm.f} \\
\end{align*}

Only the first two patterns are attested. As is evident from the figure above, a comprehensive paradigm of substitutions must include both the subject and the resumptive pronoun.

My second case is the expression of the partitive in the object slot. In Egyptian, one can observe the following contrastive pair, coming from the same document:

\begin{align*}
\text{iw.}\text{i} & \quad \text{r} & \quad \text{di} & \quad \text{n.f} & \quad \text{3h.t.i} \\
\text{FIII}.1\text{S} & \quad \text{give\textsuperscript{INF}} & \text{to.3MS} & \text{goods.F.1S} \\
\text{“I will give him my goods”} \\
\end{align*}

\textsuperscript{31} For this evolution, see Winand (1992: § 664-680).
\textsuperscript{32} Cf. m *p\textsuperscript{3} hpr* *p\textsuperscript{3} nty-iw.f nfr n.s p\textsuperscript{\textit{ly}}* ‘because it happens that it is what is good for her’ (P. CGC 58032,110-111, see Golénischeff 1927: 192).
\textsuperscript{33} One exception is im in bw nty twi im “the place where I am” (in parallel with bw nty twi im.f). im is probably better analysed as an adverb, in which case no zero is needed; but there remains the possibility to analyse it as the pronominal state of m, which prompts the reader to look for a pronoun.
In the first part of the ex., $\text{\textit{h.t.i}}$ is the direct object of $\text{\textit{rdi}}$, whereas in the second part $\text{\textit{h.t.i}}$ is introduced by the preposition $\text{\textit{m}}$. Although the object is totally affected by the action in a), the meaning is clearly partitive in b)\textsuperscript{34}. In the literature, the indirect expression of the object is known as Direct Object Marking or DOM. The use of DOM with partitive object is not at all consistent in pre-Coptic Egyptian. The issue here is whether there is some ground for considering the possibility of having a zero in the object slot in sentences like the following:

56: $\text{\textit{iw \ swr.f \ Ø \ m \ mw \ šn$} \ CIRC \ drink\:PF.3MS \ in \ water \ putrid}$

“after having drunk some putrid water” (\textit{LEM 26,12})

At first sight, analyzing such a sentence as having a direct object expressed by zero seems to be a futile complication. Now, Late Egyptian has a special strategy when a partitive could be in the subject slot in a passivized sentence. In such cases, nkt regularly shows up, so that its presence could be accounted for as the lexical materialization of an element missing elsewhere (ex. 57). In ex. 58, the presence of nkt is required as the pivot of the circumstantial sentence that follows.

57 $\text{\textit{ir \ di.k \ in.tw \ nkt \ im.sn}}$

if give\:SUBJ.2MS bring\:SUBJ.PASS something in.3PL

“if you let something of them be brought” (\textit{KRI III 545,10})

58: $\text{\textit{ir \ iry.tw \ nkt \ iw.f \ imn,}}$

if do\:SUBJ.PASS something CIRC.3MS hide\:PSP,

wnn $\text{\textit{ir.t.k \ hr \ ptr.f}}$

be\:PROSP eye.2MS on see\:INF.3MS

“If something hidden is done, your eye will keep seeing it.” (\textit{LEM 15,16})\textsuperscript{35}

\textit{Nkt} can also be used in DOM (ex. 59). In this case, m nkt contrasts with the omission of the direct object (ex. 60):

59: $\text{\textit{bwpw.i \ hìp \ m \ nkt \ r.t \ m \ hrw.t \ n \ 5nḫ}}$

NEG.PF.1S conceal\:INF in something to.2FS in day.2FS of life

“I did not conceal anything from you in your days of life.”

(P. Leyde I 371,17-18)\textsuperscript{36}

60: $\text{\textit{qd.f: \ bwpw.i \ ptr \ Ø \ gr}}$

say\:PF.3MS NEG.PF.1S see\:INF at all

“He said: I did not see (anything) at all” (\textit{KRI VI 775,13}; cf. \textit{KRI VI 777,6})

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\textsuperscript{34} In this particular ex. one should also note that the presence of negation favours the use of an indirect construction (Winand in press: ex. 13, 19, 32, 33).

\textsuperscript{35} Cf. in a different environment $\textit{ist bw \ ir.k \ sḫy \ w-n \ nfr \ m-r-pw \ w-n \ nkt \ iw \ iry.i \ sw \ n.k} \ “\text{Can you not remember a good thing or something that I did for you?}” (\textit{LES 17,7-8}).

\textsuperscript{36} See Gardiner & Sethe (1928: pl. 7-8).
But even in negative sentences, *nkt* can quite frequently appear in the object slot (ex. 61):  

61:  

| **iw.w** | **hr dd:** | **bwpw.n** | **sdm** | **nkt** |
|SEQ.3PL|say|NEG.PF.1PL|hear-INF|something|

“They said: we did not hear anything” (KRI IV 303,5)

Despite a vague similarity, the two constructions (verb + *m* + NP vs. verb + *nkt* + *m* NP) are different. As far as I can see, *nkt* seems to emerge in LÉg with a fully lexical meaning. This seems particularly evident in the negative constructions, where *nkt* seems to act as a focussing device. Compare in this respect ex. 60 and 61, where *nkt* appears to stand in opposition to *gr(w)*, a particle that is frequently found in the negative pattern but never underwent a process of grammaticalization similar to *iwn†*. Thus, the primary paradigmatic opposition in LÉg is not between verb + *nkt* + *m* NP and a questionable verb + Ø + *m* + NP, but between verb + NP vs. verb + *m* + NP. If this is correct, there is no more need of a zero.

Ø thought to be necessary to satisfy the postulates of a syntactic theory

It should be clear from the outset that we all work within a theoretical frame. The perspective from which I have been considering the potential existence of zeros is roughly speaking a structuralist one.

There is a particular type of zero I would like to briefly discuss before concluding this paper, namely the zero that has been postulated in constructions like *iw/mk sdm.n.f* in the general frame of the Standard Theory. According to Polotsky, the suffix-conjugation forms that appear in complex patterns like *iw sdm.f* or *h*n *sdm.n.f* are identical to the forms used in clauses of circumstance. Polotsky (1965: 20-21) himself was a bit elusive in his analysis of the constituents of those complex patterns, but he seemed to admit that such forms were morphologically circumstantial forms. In the Standard Theory, constructions like *mk/iw sdm.f/sdm.n.f* are analyzed as adverbial predicates; *iw sdm.n.f* is thus interpreted, strictly speaking, as “it is after having heard”. In other words, circumstantial forms need a subject because they are embedded in the adverbial predicate frame. Junge (1989), in his Syntax der Literatursprache, considered *iw* as the subject of the adverbial predication where the *sdm.f/sdm.n.f* was the predicate. In Emphasis, the role of subject resurfaced; Junge was not very explicit about it, but from his analysis of a simple sentence like *mk*
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$sps.wt \ hr \ sdw$, it can be deduced that he analyzed $mk \ sdm.n.f$ as $mk [S [\emptyset]_{\text{noun subj.}} [sdm.n.i \ st]_{\text{adv.pred.}}]^{42}$. This, however, led to more problems than solutions, as was recognized later, see e.g., Collier (1990: 78 note 26; 1992).

Conclusion

After this brief review, which does not pretend to be exhaustive, the number of serious candidates to be accepted as linguistic zeros has dramatically shrunk to almost nothing. Two basic requirements must be satisfied: the potential zero must be part of a paradigmatic substitution table, and it must be assigned a meaning (signifié). *Prima facie*, several candidates seem to pass the first test. But if one expands the paradigm to encompass the whole syntactic construction under consideration, one is usually forced to recognize that the would-be zero does not stand in opposition to anything\textsuperscript{43}. As already suggested, one should strictly contrast zero as a linguistic sign and *nil*, the absence of a mark. Of course, zero as a typographical mark can be used to underline a special construction (pedagogical zero), or to signal a historical evolution, especially in phonology and morphology.

Bibliography


Collier, Mark. 1990. The Circumstantial $sdm.(f)/sdm.n.(f)$ as verbal verb-forms in Middle Egyptian, in: *Journal of Egyptian Archaeology* 76, 73-85.


\textsuperscript{42} For Polotsky (1965: 21), the most obvious explanation of the constitutive elements of the construction was that Egyptian avoided after $iw$ the repetition of the subject already appended to the $sdm.f$-form.

\textsuperscript{43} On a more general, cross-linguistic and typological perspective, see Lemaréchal (1998). There are obviously also other zeros at every stage of Egyptian that should be shot down. The hunting season is on all year!
Zeros in Egyptian


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