

## Contexts and inferences

### The grammaticalization of the Later Egyptian Allative Future\*

Eitan Grossman, Guillaume Lescuyer\* & Stéphane Polis\*,

Jerusalem & Liège (Hebrew University – \*F.R.S.-FNRS & ULg)

#### Abstract

The goal of this paper is to describe the gradual emergence of an innovative future construction in the extant Late Egyptian and Demotic textual material and to discuss the grammaticalization of this construction down to Coptic, where it became a regular future form known as the “First Future” or “Future I”. We propose that, during the grammaticalization process, the selectional restrictions of the construction are relaxed due to the spread of speaker-oriented inferences. As a consequence, new types of subject and predicates can appear and innovative grammatical meanings associated with future time reference, e.g., prediction, become increasingly entrenched. In a final section, we briefly comment on the future cycles in Ancient Egyptian and propose that the comparative notion of *allative future* is not only useful for comparing specific patterns across languages, but also within a single language with a lengthy attested history.

#### 0 Introduction

This paper explores the ways in which types of context and inferential mechanisms interact in the course of grammaticalization. Specifically, we focus on the ways in which contexts that allow multiple interpretations of a single utterance interact with the changes in selectional restrictions on constructions undergoing grammaticalization. We examine these questions on the basis of a single case study, which deals with the grammaticalization of future tense constructions in the later phases of the Ancient Egyptian language, i.e, Late Egyptian, Demotic, and Coptic.<sup>1</sup>

The lengthy diachronic attestation of the Ancient Egyptian language — documented continuously for around four thousand years — allows us to observe extremely long-term changes. Among these long-term changes are a number of linguistic cycles, involving nearly every functional domain, including negation, modality, tense and aspect, valency and transitivity, possession, and more. A particularly striking

---

\* We are grateful to our friends and colleagues Lieselotte Brems, Joachim Friedrich Quack and Jean Winand for insightful comments on earlier drafts of this paper.

1 Ancient Egyptian is traditionally divided into five diachronic macro-stages: Old Egyptian (3000-2000 BCE), Middle Egyptian (2000-1300 BCE), Late Egyptian (1300-700 BCE), Demotic (700 BCE-450 CE) and Coptic (400-1400 CE), see Loprieno (1995: 5-8).

linguistic cycle involves the domain of future reference: over the course of Ancient Egyptian's linguistic history, numerous future tenses are grammaticalized, undergo further changes, and are eventually refunctionalized, replaced, or lost. Even more interesting for the study of language change is the fact that in some cases, similar grammaticalization pathways recur several times. One such cycle involves the repeated emergence and grammaticalization of *allative futures*, constructions involving allative expressions that come to express future reference.<sup>2</sup> In a previous paper (Grossman & Polis 2014), we traced the development of an allative future in Early Egyptian, first attested around 2400 BCE. In the present paper, we turn to a second allative future, whose origins are found in Late Egyptian towards the end of the Ramesside period, around 1050 BCE.<sup>3</sup>

The structure of the paper is as follows. In §1, we briefly sketch the system of future reference in Late Egyptian. We then discuss in §2 the first examples of the source construction that would later grammaticalize into the Later Egyptian Allative Future. In §3 and §4, we trace the evolution of the new future construction in Demotic and Coptic.<sup>4</sup> In these descriptive sections, we focus on the contexts in which the Allative Future occurs, both in terms of syntagmatic and paradigmatic constructional properties and in terms of broader discourse context. Of special interest are changes in the selectional restrictions — essentially, the compatibility of the construction with lexical items with various semantic properties — and the ways in which they change over time. In §5, we explore the consequences of this study for theories of grammaticalization, especially those that invoke inferential mechanisms as part of their explanatory accounts.

---

2 The label ‘allative future’ (Grossman & Polis 2014) is defined as *any future tense that is grammaticalized from an allative source construction, and in which the element that marks the future also synchronically marks at least some typical allative meanings, especially spatial destination or purpose*. This comparative concept covers both venitive (“to come to”) and andative (“to go to”) constructions, and includes allative futures that contain an allative expression without a verb a motion. See Reintges (2011: 67-69, 79-83) for a recent description of andative and venitive futures in Ancient Egyptian.

3 These constructions are, somewhat confusingly, referred to respectively as the ‘Third Future’ (or ‘Future III’) and the ‘First Future’ (or ‘Future I’) even though the former is attested millennia earlier than the latter. Rather than the traditional terms, we will call them, respectively, the Earlier Egyptian Allative Future (EEAF) and the Later Egyptian Allative Future (LEAF). However, we occasionally use the traditional terminology when we refer to earlier literature.

4 The Egyptian examples are transliterated and glossed in accordance with the Leipzig Glossing Rules (<http://www.eva.mpg.de/lingua/resources/glossing-rules.php>) and with most of the suggestions proposed in Di Biase, Kammerzell & Werning (2009), an abridged form of which is found on [http://wikis.hu-berlin.de/interlinear\\_glossing/Ancient\\_Egyptian:Glossing\\_recommendations](http://wikis.hu-berlin.de/interlinear_glossing/Ancient_Egyptian:Glossing_recommendations).

The main thing that may be unfamiliar to readers is the presence of two lines of Egyptian text preceding the glosses. This is because traditional Egyptological transliteration uses punctuation that creates conflicts with punctuation used in morphosyntactic glosses. For example, an equal sign (=) is used in the transliteration of Egyptian for some bound elements, while in the Leipzig Glossing Rules it marks a boundary between a clitic and its host. The second line of text is that which is glossed. As for the Coptic text, it is transliterated in accordance with the Leipzig-Jerusalem proposal (Grossman & Haspelmath 2014+) and glossed according to the Leipzig Glossing Rules. A list of abbreviations used is found at the end of the paper.

# 1 The Two Allative Futures of Later Egyptian

## 1.1 The Earlier Egyptian Allative Future

In Late Egyptian (1300-700 BCE), the main future tense is the Earlier Egyptian Allative Future, which is usually called the ‘Future III’ in Egyptological linguistics.<sup>5</sup>

Ex. 1	<i>iwꜣi</i>	<i>r</i>	<i>spr</i>	<i>rꜣk</i>
	<i>iw-i</i>	<i>r</i>	<i>spr</i>	<i>r-k</i>
	FUT <sup>1</sup> -1SG	FUT <sup>2</sup>	arrive:INF	ALL-2SGM
	“I will come to you (...).” (P. Berlin 10463, r <sup>o</sup> 1-2 = Caminos 1963: pl. VIA)			

This construction comprises four elements:

- (1) the future auxiliary *iw*,
- (2) a subject expression (either a bound person index or a full noun phrase),
- (3) the allative preposition *r*,<sup>6</sup>
- (4) the verbal predicate, usually realized as an infinitive.<sup>7</sup>

<b>Late Egyptian</b>	<i>iw</i>	<i>f</i>	<i>r</i>	<i>sꜣm</i>
	FUT <sup>1</sup>	3SGM	FUT <sup>2</sup>	listen:INF
<b>Coptic</b>	<i>e</i>	<i>f</i>	<i>e</i>	<i>sôtm</i>
“He will listen”				

Figure 1. Constructional scheme of the Earlier Egyptian Allative Future (‘Future III’): source construction and Coptic

The auxiliary *iw* and the allative preposition *r* are grammaticalized as two parts of a single future construction (glossed here FUT<sup>1</sup> ... FUT<sup>2</sup>), although the allative preposition is not always written.

The future auxiliary *iw* has an allomorph *iri*, which occurs when the subject is a full noun phrase rather than a person index.<sup>8</sup>

Ex. 2	<i>bn</i>	<i>iri</i>	<i>pꜣyꜣi</i>	<i>sn</i>	<i>di.t</i>	<i>mdwꜣtw</i>	<i>m-diꜣi</i>
	<i>bn</i>	<i>iri</i>	<i>pꜣy-i</i>	<i>sn</i>	<i>di-t</i>	<i>mdw-tw</i>	<i>m-di-i</i>
	NEG	FUT	POSS-1SG	brother	CAUS-INF	talk:SBJV-one	with-1SG
	“My brother will not let someone dispute me!”						
	(P. BM EA 10052, r <sup>o</sup> 6,10 = KRI VI, 782,12)						

This construction appears for the first time in Old Egyptian (c. 2400 BCE), but develops the function of expressing predictions, and thereby grammaticalizing as a future tense, only in Middle Egyptian (Grossman & Polis 2014). In Late Egyptian (Ex. 1-2) and Demotic (Ex. 3), it is the main future tense:

Ex. 3	<i>iwꜣf</i>	<i>r</i>	<i>ꜣy-tꜣt</i>	<i>r</i>	<i>wꜣ-mꜣꜣ</i>
	<i>iw-f</i>	<i>r</i>	<i>ꜣy-t-t</i>	<i>r</i>	<i>wꜣ-mꜣꜣ</i>
	FUT <sup>1</sup> -3SGM	FUT <sup>2</sup>	take-INF-2SGF	ALL	ART.INDEF-place
	“He will take you to a place.” (Setne I, 5/8 = Goldbrunner 2006: 21)				

5 See Erman (<sup>2</sup>1933: 244-245, §503-504); Černý & Groll (<sup>3</sup>1984: 248-272); Winand (1992: 481-517, §756-800); Neveu (1996: 93-97); Junge (2001: 122-128).

6 Grossman & Polis (2012), with previous literature.

7 For Statives and other types of predicates occurring in this construction, see Winand (1996).

8 See Kruchten (2010) regarding the origin of this allomorph in the future construction.

This construction begins to show signs of acquiring optative modal meanings, i.e. the expression of a speaker's wish, in Late Egyptian:<sup>9</sup>

- Ex. 4 *iri Pth in.t:n mtw:n ptr:t*  
*iri Pth in-t-n mtw-n ptr-t*  
 FUT Ptah bring\_back-INF-1PL CONJ-1PL see:INF-2SGF  
 “May Ptah bring us back so that we may see you!”  
 (P. Leiden I 362, v<sup>o</sup> 1 = KRI II, 927,5)

In most Coptic dialects, its main function is the expression of future time reference (Ex. 5 from the Mesokemic dialect). In Sahidic, optative modality is also a prominent function (Ex. 6, Layton 2011: 263-267).

- Ex. 5 *ere-p-rome kô m-pef-iot nso-f*  
 FUT-ART.DEF.MSG-man place ACC-POSS.MSG:3SGM-father after-3SGM  
 “A man will leave his father.” (Matthew 19:5, Mesokemic = Schenke 1981: 98)
- Ex. 6 *t-eirênê e-s-e šôpe na-k*  
 ART.DEF.FSG-peace FUT<sup>1</sup>-3SGF-FUT<sup>2</sup> become for-2SGM  
 “May peace be unto to thee.” (Judges 6:23 = Thompson 1911: 170)

Only from Late Egyptian onwards does this construction have a symmetric standard negation, which precedes the auxiliary.<sup>10</sup> A symmetric standard negation is one in which ‘the structure of the negative is identical to the structure of the affirmative, except for the presence of the negative marker(s)’ (Miestamo 2013). An asymmetric negation, on the other hand, is one in which ‘the structure of the negative differs from the structure of the affirmative in various other ways too, i.e. there is asymmetry between affirmation and negation’ (Miestamo 2013). The following examples illustrate the symmetric negation of this construction, respectively from Late Egyptian (Ex. 7), Demotic (Ex. 8) and Coptic (Ex. 9):

- Ex. 7 *y3 bn iw:n sn r rh f3y:f*  
*y3 bn iw-sn r rh f3y-f*  
 indeed NEG FUT<sup>1</sup>-3PL FUT<sup>2</sup> know:INF bring:INF-3SG.M  
 “Indeed, they will not be in the position to contest it.”  
 (P. Anastasi V, r<sup>o</sup> 27,3 = LEM 71,14)
- Ex. 8 *bn iw:i htb:k*  
*bn iw-i htb-k*  
 NEG FUT<sup>1</sup>-1SG kill:INF-2SGM  
 “I am not going to kill you.” (Mythus 15/30 = de Cenival 1988: 46)
- Ex. 9 *nne-u-ka-ou-one hičn-ou-one m-pej-me*  
 FUT.NEG-3PL-place-ART.INDEF-stone on-ART.INDEF-stone in-DEM.MSG-place  
 “Stone will not be left on stone in this place.”  
 (Mesokemic, Matthew 24:2 = Schenke 1981: 110)

9 See Korostovtsev (1973: 382-383, “Futur optatif”); Polis (2009); Grossman & Polis (2014). This optative meaning is mostly attested with lexical NP subjects.

10 Detailed discussions of this construction can be found for some of the Coptic dialects (Wilson 1970; Reintges 2011 for Sahidic; Shisha-Halevy 2002, for the documentary texts of Kellis; Shisha-Halevy 2007, for Bohairic; Shisha-Halevy 2003, for Mesokemic).

## 1.2 The Later Egyptian Allative Future

In the Coptic dialects, one finds a second fully grammaticalized future tense, which is usually called the ‘Future I’ in Egyptological linguistics. This morphosyntactic construction comprises three elements: (1) a subject expression, either a bound person index or a full noun phrase, (2) the future auxiliary *na-*, and (3) a verbal lexeme, usually realized as an infinitive (Layton 2011 and below Fig. 2).

Ex. 10 *t<sup>i</sup>-na-bôk e-cep-tbt*  
 1SG-FUT-go to-fish-fish  
 “I am going to go fishing.” (Sahidic, John 21:3 = Quecke 1984: 217)

Ex. 11 *auô pe-šlel mn-t-pistis na-touče-pet-šône*  
 and ART.DEF.MSG-prayer with-ART.DEF.FSG-faith FUT-save-NMLZ-sick  
*auô p-čoeis na-tounos-f*  
 and ART.DEF.MSG-Lord FUT-raise-3SGM  
 “And prayer with faith is going to save the sick, and the Lord is going to raise him up.” (Sahidic, James 5:15 = Horner 1924: 234)

Gardiner (1906) suggested that this construction developed from a Late Egyptian source construction involving the lexical verb *n<sup>c</sup>y* ‘to travel (by boat)’. The source construction comprises five elements:

- (1) a subject expression (either a bound person index or a full noun phrase),
- (2) the locative preposition *m* (‘in’),
- (3) the infinitive form of the verb *n<sup>c</sup>y* (‘to travel’),
- (4) the allative preposition *r* (‘to’),
- (5) the lexical verb, realized as an infinitive.

<b>Late Egyptian</b>	<i>sw</i>	<i>m</i>	<i>n<sup>c</sup>y</i>	<i>r</i>	<i>šdm</i>
	3SGM	PROG	travel/go:INF	ALL	listen:INF
<b>Coptic</b>	<i>f</i>	-	<i>na</i>	-	<i>sôtm</i>
	3SGM	-	FUT	-	listen:INF
“He is going to listen”					

Figure 2. Constructional scheme of the Later Egyptian Allative Future:  
 source construction and Sahidic Coptic

The predicate of this construction, i.e., the movement verb *n<sup>c</sup>y*, occurs with a purpose clause comprising an infinitive phrase headed by the allative preposition *r*.

It should be noted that in Late Egyptian the construction [SUBJECT + *m* + VERB] is the typical means of encoding *progressive* aspect for intransitive verbs of motion, as well as some other intransitive verbs, while the unmarked *imperfective* aspect is expressed by the preposition *hr*, ‘(up)on’.<sup>11</sup>

11 Except for the verb *šm* ‘to go’, which generally occurs with *hr* + infinitive, due to the Aktionsart of this lexeme (see already Satzinger 1976: 135-139, 143-145), but cf. Ex. 49 below. Regarding the opposition progressive (*m*) vs unmarked imperfective (*hr*) in Late Egyptian and its origin, see Vernus (1990: 143-162, with previous literature) and Winand (1992: 419-423 §649-656; 2006: 303-313).

## 2 The emergence of a second Allative Future in Late Egyptian

Towards the end of the Late Egyptian stage of the language (c. 1050 BC), one finds the earliest examples of the source construction identified by Gardiner:<sup>12</sup>

Ex. 12 *twk rḥ.tw p3y mšc nty twi m ncy r ir=f*  
*twk rḥ-tw p3y mšc nty twi m ncy r ir-f*  
 2SGM know-STAT DEM.MSG expedition REL 1SG in go:INF ALL do:INF-3SGM  
 “You know the kind of expedition which I am going to make!”  
 (P. BN 197 V, v<sup>o</sup> 2-3 = *LRL* 35,15)

This sentence occurs in a short letter from Piankh, a general of Pharaoh, to a scribe, Dhutmose. Piankh asks Dhutmose to send some old clothes in the form of strips. “They shall be made into bandages with which to wrap up men,”<sup>13</sup> he says, and adds, “You know the kind of expedition which I am travelling/going to make,” alluding to battles going on in the south of Egypt (Wente 1967: 8).

Cited out of context, this example could be open to two readings. According to the first reading, the verb *ncy* (𓂏𓂏𓂏𓂏) could have a literal meaning “to travel”: the general Piankh, while travelling South for an expedition [MOTION WITH PURPOSE], sends a letter in order to have bandages sent to him. A second reading — which is favored by scholars due to the obvious link between the subject mentioned in this letter and in others, as well as the postulated temporal relationship between these letters<sup>14</sup> — is to consider that the general had not yet started his trip, but is still near Thebes and is trying to get the material that he needs, the bandages, for the expedition that he is about to make [IMMINENT FUTURE]. What matters in the framework of this study is that we are dealing with a *bridging context* (Evans & Wilkins 1998: 5; Heine 2002: 84). According to Heine, bridging contexts have the following properties:

- (a) They trigger an inferential mechanism to the effect that, rather than the source meaning, there is another meaning, the target meaning, that offers a more plausible interpretation of the utterance concerned.
- (b) While the target meaning is the one most likely to be inferred, it is still cancellable (see Grice 1967), that is, an interpretation in terms of the source meaning cannot be ruled out.
- (c) A given linguistic form may be associated with a number of different bridging contexts.
- (d) Bridging contexts may, but need not, give rise to conventional grammatical meanings.

In the present case, both the [MOTION WITH PURPOSE] and the [IMMINENT FUTURE] readings are potentially available, but the latter is the one most likely to be inferred, given the context. However, it is not a coded meaning, since it is cancellable. For example, if the writer were to say ‘You know the kind of expedition I am travelling (in order) to make,’ and continue with ‘In fact, it is very hot on the road,’ indicating that the subject is in the process of moving in order to do something.

12 On the use of *ncy* in Late Egyptian for future reference, see Erman (1933: 244, §500); Wente (1959: 38); Johnson (1976: 66); Černý & Groll (1984: 339-341); Winand (1992: 422, §656); Neveu (1996: 78); Junge (2001: 135-136).


13 Wente (1990: 182).

14 See e.g. Wente (1967: 16 & 53 n. d) and the discussion of Ex. 17 below.

Interestingly enough, this example of *m nꜥy r* INFINITIVE (‘going to V’) with a likely [IMMINENT FUTURE] reading appears in the written documentation at the same time as the first example of the construction with a [MOTION WITH PURPOSE] reading (see Ex. 16): the construction seems to first occur in the corpus at the end of the Ramesside period with both the [MOTION WITH PURPOSE] and the [IMMINENT FUTURE] interpretations available. Accordingly, we have no evidence here that would support a grammaticalization pathway [MOTION WITH PURPOSE] > [IMMINENT FUTURE]. Of course, written documentation is unlikely to capture the actual moment of innovation, and as such, it is not to be ruled out that the traditional assumption of directionality (e.g., Bybee et al. 1994) might hold.

Before proceeding with additional later examples of the construction, this first occurrence of the construction points to the need of defining more precisely the semantics of *nꜥy* in Late Egyptian, when it became a *prospective* or *mellic* auxiliary.<sup>15</sup>

## 2.1 The semantics of the verb *nꜥy* in Late Egyptian

The verb *nꜥy* (*Wb.* II, 206,7-21) is already well-attested in the *Pyramid Texts* and probably refers originally to motion over water (cf. the use of the boat classifier , a meaning which is still well-established in the Late Egyptian corpus:

Ex. 13	<i>ḥr</i>	<i>wnn</i>	<i>pꜥ</i>	<i>imw</i>	<i>nꜥy</i>		
	ḥr	wnn	pꜥ	imw	nꜥy		
	and	when:FUT	ART.DEF.MSG	boat	go:INF		
	<i>iwꜥi</i>	<i>ḥr</i>	<i>in</i>	<i>nꜥk</i>	<i>[n]ꜥyꜥk</i>	<i>bꜥk.w</i>	<i>ḥmw</i>
	iwꜥi	ḥr	in	nꜥk	nꜥyꜥk	bꜥk-w	ḥmw
	SEQ-1SG	on	bring:INF	for-2SGM	POSS.PL-2SGM	product-PL	crafts
	“Now when the boat will set sail, I will bring you your manufactured products.”						
	(P. Chester Beatty III, v <sup>o</sup> 5,5 = <i>KRI</i> IV, 88,1)						

In Earlier Egyptian, this verb was also used for referring to other kinds of movement with a vague or unspecified manner component, not necessarily by boat, e.g., *from* some location (*m* NP), *on* some surface (*ḥr* NP), *in the direction of* some place (*r* NP). Furthermore, it clearly appears from the corpus that the semantics of this lexeme is not defined in terms of deictic center with respect to the subject (like “to go,” away from the deictic center, or “to come”, in the direction of the deictic center), but rather depends on the types of arguments involved, as illustrated by the following Late Egyptian examples:

Ex. 14	<i>nꜥ.t</i>	<i>pw</i>	<i>ir.n</i>	<i>ḥm.f</i>	<i>m-ḥd</i>
	nꜥ-t	pw	ir-n	ḥm-f	m_ḥd
	go-INF	COP	do-REL.PST	Majesty-3SGM	northwards
	“His Majesty travelled north (his infantry and chariotry being with him).”				
	(Battle of Qadesh, §28 [L <sub>2</sub> ] = <i>KRI</i> II, 12,3)				

15 See already Reintges (2011: 68) who stresses that in Late Egyptian, “the andative construction (...) functions not so much as an immediate future, but rather as a periphrastic expression of prospective aspect. Prospective aspect relates the present state of the subject to some subsequent situation. It thus comprises the future-oriented dimension of current relevance.”

- Ex. 15 *hr ir se m nꜥy hr n3 šnw.w*  
*hr ir se m nꜥy hr n3 šnw-w*  
 and TOPZ 3SGF in walk:INF under ART.DEF.PL trees-PL  
 “And, while she was walking under the trees, (she gazed around and saw the Ennead busy eating in the presence of the Universal Lord in his pavilion).”  
 (P. Chester Beatty I, r<sup>o</sup> 6,2 = *LES* 44,5-6)

- Ex. 16 *hr wnn twi nꜥy m niw.t <r> in n3 rmt*  
*hr wnn twi nꜥy m niw-t r in n3 rmt*  
 and while 1SG go:INF in city-F to bring:INF ART.DEF.PL men  
*nty hms.w im*  
*nty hms-w im*  
 REL sit\STAT-3PL there  
 “And while I was walking in the city to bring the men who were staying there, (I met A and B, and they told me).”<sup>16</sup> (P. BM 10375, r<sup>o</sup> 14-15 = *LRL* 45,7-8)

Besides its usual use for referring to non-oriented motion, usually over water in a boat, *nꜥy* enters in Late Egyptian into a paradigmatic relationship with two other roots in the less formal registers for expressing more specifically an *oriented* “go-motion”.<sup>17</sup> In the Present I predicative pattern, two patterns participate in an aspectual opposition:

<i>sw m nꜥy</i>	3SGM in go	progressive aspect	‘he is going’
<i>sw hr šm</i>	3SGM on go	unmarked imperfective	‘he goes’ <sup>18</sup>

The number of examples of this construction remains however very small: less than 10 occurrences in the Late Egyptian corpus.<sup>19</sup>

Finally, we would like to point out a fact that has apparently gone largely unnoticed in the grammatical description of the Present I construction [SUBJECT + *m* + *nꜥy*] in Late Egyptian:<sup>20</sup> in some examples, the *progressive* construction is obviously used for referring to an event that is *about to* happen, which means that it rather encodes *mellic* aspect in this case. A clear example is found in one of the *Late Ramesside Letters* (same text as Ex. 16):

- 
- 16 This interpretation of *nꜥy m* (Wente 1990: 194) is perhaps to be preferred to Winand’s translation (1992: 421 n. 40, §653) “et comme je m’en allais vers la ville”, for which one would rather expect *nꜥy r*.
- 17 As shown by Peust (2007: 67) who stresses: “*nꜥi* existiert in älterer Zeit tatsächlich als eigenständiges Verb „(zu schiff) fahren“ und fließt erst im Neuägyptischen mit *šm* und *hn* in ein Paradigma zusammen”.
- 18 See n. 5, and Erman (<sup>2</sup>1933: 249-250 §500); Wente (1959: 136-139); Groll (1969: 186); Satzinger 1976: 135-139, 143-145); Winand (1992: 402, n. 5 §625 & 419).
- 19 In Late Egyptian, the verb *nꜥy* is constructionally much more limited than in Earlier Egyptian (Peust 2007: 72). Outside the progressive construction discussed here, it occurs mainly in the oracular expressions [<sup>c</sup>*hꜥ.n p3 nꜥr (hr)*] *nꜥy m-hꜥ.f* “to move forward” and *m-hꜥ.f* “to move backwards” referring to the approval or denial of the god statue in procession, see Parker (1962), Černý (1942: 23) and Kruchten (1986: 252). During the Ramesside Period, see e.g. O. Genève MAH 12550, r<sup>o</sup> 8-9 (= *KRI* v, 453,6-7), O. Caire CG 25555 + O. DeM 999, r<sup>o</sup> 7 (= *KRI* v, 456,13-14); O. Petrie 21, r<sup>o</sup> 6-7 (= *KRI* v, 518,13), St. for Herihor, l. 4 (*KRI* vi, 709,9).
- 20 To the best of our knowledge, the only exception is Wente (1959: 108-109) who states that “also in Late Egyptian this construction is used to express motion in process and by extension of this notion action about to take place in the future.” He quotes possible candidates with the verbs *iw* “to come”, *hd* “to sail north” and *kd* “to sleep”.



Ex. 17 (and she said to the scribe Tjary:)

(i)n bn twk m n<sup>c</sup>y irm<sup>w</sup> n<sup>3</sup> ḥbs.w  
 (i)n bn twk m n<sup>c</sup>y irm-w n<sup>3</sup> ḥbs-w  
 Q NEG 2SGM in go:INF with-3PL ART.DEF.PL clothes-PL


“Are you not travelling with them, the pieces of cloth? (for you are the one who shall deliver them to your lord).” (P. BM EA 10375, r<sup>o</sup> 2,6-7 = LRL 46,9-11)

In this text, which is related to, and in fact chronologically follows, the letter discussed in relation to Ex. 12, mention is made of a reminder by the general Piankh to the crew of Deir el-Medineh regarding a request that he previously made: he wants to have some clothes sent to him. In this remainder, he adds that they should be sent on to him, in case he has already left.<sup>21</sup> The letter then makes it clear that the general had set sail south before the bandages had been delivered and Tjary, the scribe in charge, is given the order to catch up with the general. Apparently in an attempt to avoid this burden, they deliver the clothes to his wife, but she reacts directly with Ex. 17: “Are you not travelling with them, the pieces of cloth? For you are the one who shall deliver them to your lord.” In this interrogative sentence, the progressive construction is clearly to be understood with a [SCHEDULED/IMMINENT FUTURE], since Tjary is obviously not yet on his way.

Bearing this example in mind, other occurrences of the construction are likely to be interpreted in the same way. A case in point is the following example:

Ex. 18 *ir ink twi n<sup>c</sup> 3tp m p3y <sup>c</sup>-tbw r mry.t*  
*ir ink twi n<sup>c</sup> 3tp m p3y <sup>c</sup>-tbw r mry-t*

TOPZ 1SG 1SG go:INF load:STAT withDEM.MSG pair-boxes ALL riverbank-F  
 “As for me, I was about to move (lit. I was leaving) in the direction of the riverbank loaded with these two *tbw*-boxes, (when PN arrived and took delivery).”  
 (O. DeM 569, r<sup>o</sup> 1-2 = KRI v, 568,13-14)

This example has generally been translated with a past tense in the scholarly literature: “I went to the riverbank”<sup>22</sup>. This translation means that *n<sup>c</sup>* has been understood as a Stative, i.e., a construction in which intransitive verbs of motion encode anterior/past meaning. It would therefore be a counter-example to Wentz’s argument (1959: 113) that in Late Egyptian, *n<sup>c</sup>y* is construed only as an infinitive headed by the locative preposition *m* in the First Present pattern. This itself is not problematic, but calls for closer attention. At the graphemic level, we find a bare *n<sup>c</sup>* (  ), without the suffixes *k(wi)* or *tw*, typical of the first person singular during the 20<sup>th</sup> dynasty:

Ex. 19 *twi ḥmsi.kwi šw.kwi r-š3[<sup>c</sup>] p3 hrw*  
*twi ḥmsi-kwi šw-kwi r-š3<sup>c</sup> p3 hrw*  
 1SG sit\STAT-1SG be.empty\STAT-1SG until ART.DEF.MSG day

“I am still lacking (it) today.” (O. Gardiner 54, v<sup>o</sup> 7 = HO, pl. XLIXa,3)

21 The hypothetical reading of the rhematized circumstantial form in *i.ir>tn di.t iw>w m-s3>i iw>i w<di.kwi* “In case I have already left, you will send them after me” (LRL 463-4) is probably to be preferred to the traditional “[o]nly when I have set out, you are to send them after me” (Sweeney 2001: 66; similarly see Wentz 1990: 194) if one takes into account the reaction of Dhutmose as described afterwards, namely that he almost died when he learned that Piankh had already left Thebes and that he had to go south himself with the bandages.

22 Allam (1973: 134, “Was mich anbetrifft – ich zog (...) zum Hafen.”); Winand (1992: 108 §200, “quant à moi, je suis parti chargé de X”).

- Ex. 20 *iwꜣi dy ḥsmi.tw wꜥ.k*  
*iw-i dy ḥmsi-tw wꜥ-k*  
 SBRD-1SG here sit-STAT be.alone\STAT-1SG  
 “I am sitting here alone (with PN).” (P. Berlin P 10494, r<sup>o</sup> 8-9 = *LRL* 23,13)

Other cases of Statives without these suffixes are known of course,<sup>23</sup> e.g., in the following example:

- Ex. 21 *iwꜣi ḥmsi.k(wi) iwꜣi wꜥ*  
*iw-i ḥmsi-kwi iw-i wꜥ*  
 SBRD-1SG sit\STAT-1SG SBRD-1SG be.alone:STAT  
 “(...) while I am sitting alone.” (O. UC 39619, r<sup>o</sup> 4-5 = *HO*, pl. LXX,1)

However, such examples are rare. More decisive here is the context. The sentence in Ex. 18 appears at the very beginning of a text, which reads directly afterwards:

- Ex. 22 (As for me, I was leaving in the direction of the riverbank loaded with these two *tbw*-boxes, when PN arrived and took delivery)  
*iwꜣi šm irmꜣ iw(ꜣi) ḥrꜣw*  
*iw-i šm irm-f iw-i ḥr-w*  
 SEQ-1SG go:INF with-3SGM SBRD-1SG under-3PL  
 “And I set out together with him, with these (boxes), (and I handed them over to PN).” (O. DeM 569, r<sup>o</sup> 2-3 = *KRI* v, 568,14-15)

It is therefore clear that the two protagonists move together (*šm irm*) at this point of the text, when the content of the boxes has been registered. It would be contextually awkward to read the first sentence in examples (18) and (22) as a past construction: in this case, the writer would have moved before the registration process took place. As such, a [SCHEDULED/ IMMINENT FUTURE] reading is most plausible,<sup>24</sup> suiting the graphemic, morphological, constructional and contextual features of the text.

In both cases, one sees that the progressive construction is used in order to present *scheduled future* actions as already actual.<sup>25</sup> The same holds for a third example:

- Ex. 23 *ptr twk m nꜥy m-ḥd*  
*ptr twk m nꜥy m\_ḥd*  
 ATT 2SGM in go:INF northwards  
 “Look, you’re travelling north (i.e. you’re about to travel north).”  
 (O. IFAO 1409, 2 [unpubl.] = Černý & Groll<sup>3</sup>1984: 339-340)

The mellic aspectual value<sup>26</sup> of the progressive is typologically well-represented (Bybee et al. 1994: 275-278) and accounts for Černý & Groll’s (1984: 340) translation of the preceding unpublished ostracon as “You are going to go north”.

23 See Winand (1992: 190 §200).

24 As in r<sup>o</sup> 5 of the same text, see *KRI* v, 569,3.

25 Discussing the opposition between SUBJECT + *m* + INFINITIVE and SUBJECT + *hr* + INFINITIVE in Earlier Egyptian, Vernus already noted (1990: 152) that “[t]he meaning of the two constructions may sometimes overlap (...) since the speaker/writer is likely to anticipate, indicating that he is performing the action whereas he is only about to perform it: For instance, a child may say ‘I am going to school’ while still in the house, preparing his schoolbag.”

26 These mellic uses of the progressive construction in Late Egyptian are linguistically conservative. Indeed, in Earlier Egyptian, the SUBJECT + *m* + INFINITIVE pattern had precisely this mellic value as the only available meaning for verbs of all *Aktionsart* classes (Vernus 1990: 143-162). As shown by the above-mentioned examples, this value is apparently sometimes preserved in Late Egyptian, even for durative events. The examples discussed here potentially enlarge the uses of SUBJECT + *m* + INFINITIVE in Late Egyptian that are presented in Winand (2006: 310).

## 2.2 Two additional post-Ramesside examples of the future construction

Besides the above-mentioned Ex. 12, the source construction of the Future I is probably attested twice in a fragmentary letter of the 21<sup>st</sup> Dynasty coming from the so-called “el-Hibeh” archive.<sup>27</sup> Unfortunately, the lacunary contexts in which these two examples appear<sup>28</sup> do not allow us to delve too deeply into the semantics of the construction in this document:

Ex. 24 [...] *st nꜥy r mšꜥ* [...]
   
[...] *st nꜥy r mšꜥ* [...]
   
[...] they go:INF ALL march:INF [...]
   
“[...] they are going to march [...].”
   
(P. Strassburg 24 IV+V<sup>29</sup>, v<sup>o</sup> 2 = Spiegelberg 1917a: 19)

Ex. 25 *yꜥ wnꜥf nꜥy smi* [...]
   
*yꜥ wn-f nꜥy smi* [...]
   
actually PST-3SGM go:INF report:INF [...]
   
“Actually, he was going to report [...].”
   
(P. Strassburg 24 IV+V, r<sup>o</sup> 5 = Spiegelberg 1917a: 18)

However, both examples display interesting features at the constructional level. First, it should be noted that the preposition *m* is missing in examples (24) and (25), as sometimes happens (Černý & Groll<sup>3</sup> 1984: 339) in the Late Egyptian corpus when the infinitive that follows the preposition *m* in the Present I pattern has a nasal initial consonant.<sup>30</sup> This is part of a broader tendency in Late Egyptian not to write clusters of two nasals. A further example of such omission with the verb *nꜥy* is found in the tale of *Wenamun*:

Ex. 26 *ptr st iwꜥw nꜥy r kbḥ.w*
  
*ptr st iw-w nꜥy r kbḥ-w*
  
ATT 3PL SBRD-3PL go:INF ALL swamp-PL
   
“Look at them (i.e. the birds) going to the swamps.”
   
(P. Moscow 120, r<sup>o</sup> 2,66 = *LES* 73,16)

The absence of *m* in the construction will be discussed further below in the context of Demotic (see §3.4), but it should be noted that it is already lacking in some of the earliest examples.

A second noticeable feature is the absence of *r* before the infinitival phrase after *nꜥy* in example Ex. 25, as opposed to Ex. 12 and 24. Indeed, the loss of the *r* before

27 See Müller (2009: 251-264) who convincingly shows that this archive is likely to come from el-Ahawaih, some 170 kilometers north of Thebes.

28 See already Wente (1959: 38).

29 The join between these two fragments is due to D. Lefèvre and M. Müller (see Lefèvre 2008: II,44). We are very grateful to D. Lefèvre for giving us access to his unpublished PhD thesis.

30 Winand (1992: 421-422 §654-655) notes that, in the Present I predicative pattern, “la préposition *m* est très rarement omise (3 cas sur 25). (...) Quand la préposition est absente, le verbe a toujours une consonne nasale à l’initiale” and he points to the fact that “[l]’absence de la préposition *m* (...) possède un caractère accidentel, dû à des raisons phonétiques”; as Wente (1959: 95) puts it: “assimilation of the first consonants can be regarded as responsible for the omission.” Given the absence of graphemes that would favor an analysis of *nꜥy* as a stative in these cases, we prefer this explanation to the one suggested by Reintges (2011: 68) who analyses Ex. 24-26 as statives already in Late Egyptian (see the discussion in §3.4; furthermore, the progressive reading attributed to the stative of verbs of motion in Late Egyptian — his Ex. 79 — appears to us disputable).

the infinitive in the [SUBJECT (*m*) *nʿy r sdm*] construction between Late Egyptian and Demotic has generally been considered to be problematic (e.g. Winand 1992: 423 §656). For example, while discussing the source construction of the Future I in Coptic, Polotsky (1960: 403) noted that “[t]here is no satisfactory explanation for the absence of the expected preposition *e-* after *na-*” in Coptic. But he refers immediately afterwards to Spiegelberg (1893), which discusses *Der infinitiv des Zweckes nach den Verben der Bewegung* (1893: 39-41). Elaborating on a remark by Erman (1880: 197-200 §303-307) in the first edition of his *Neuägyptische Grammatik*, Spiegelberg suggests that, besides the usual purpose construction comprising the allative preposition *r* + infinitive for expressing the goal after movement verbs, there is a less frequent construction<sup>31</sup> with the same meaning in which the *bare infinitive* is used after verbs of motion (i.e., with no preposition introducing the goal expression). Compare for instance the following two expressions of goal-oriented motion after the verb *iwi* “to come”:

- Ex. 27 *hr ir p3 nty iwzk r irf nsi*  
*hr ir p3 nty iw-k r ir-f n-i*  
 but TOPZ ART.DEF.MSG REL FUT<sup>1</sup>-2SGM FUT<sup>2</sup> do:INF-3SGM for-1SG  
*p3yzk iy.t r nwy.tsi*  
*p3y-k iy-t r nwy-t-i*  
 POSS.MSG-2SGM come-INF ALL take.care-INF-1SG  
 “But what you will do for me, is to come to take care of me (if you learn that something happened to me).” (P. d’Orbiney 8,3 = *LES* 17,11-12)
- Ex. 28 *wn.in t3 7 hw.t-hr.t hr iy.t ptrs*  
*wn\_in t3 7 hwt\_hrt hr iy-t ptr-s*  
 SEQ ART.DEF.FSG 7 Hathors on come-INF see:INF-3SGF  
 “And the seven Hathors came to see her.” (P. d’Orbiney 9,8 = *LES* 19,10)

As is often the case, one might imagine that the preposition *r* ‘to’ is simply omitted in the second case, i.e., we are dealing with a kind of scribal mistake that does not represent an actual linguistic construction. However, a quick survey of the available Late Egyptian material<sup>32</sup> shows that the second construction with the bare infinitive after the motion verb is found more than 30 times in the corpus and is not limited to particular lexemes, but is rather possible with any verb of motion.<sup>33</sup> Here, we will limit ourselves to quoting a handful of examples involving different verbs of motion (*ʿn* “to turn”, *hn* and *šm* “to go”, *h3i* “to go down”, *shsh* “to run in a hurry”)<sup>34</sup> in order to ascertain the plausibility of two different constructions for the expression of the goal after movement verbs.<sup>35</sup>

31 The earliest quoted occurrence is P. Westcar, 12,2; he also mentions Coptic examples.

32 In the Ramses corpus, see Polis, Honnay & Winand (2013).

33 As noted by J.Fr. Quack (p.c.), one could alternatively postulate that the preposition *r* was left unwritten in Late Egyptian hieratic because of its purely vocalic realisation. Although this possibility can definitely not be ruled out, we think that the relatively rare absence of the allative preposition *r* for introducing purpose clauses after other types of verbs makes the proposal put forward here likely.

34 One should probably also include here examples of the related construction *rwi* “to go away (from)” + INFINITIVE, which are common in epistolary formulas. See, e.g., P. Turin 1974+1945, r<sup>o</sup> 6 (= *LRL* 39,11).

35 Compare e.g. French *je viens manger* vs. *je viens pour manger*.

- Ex. 29 (And all the warriors who escaped me,)  
*iwꜣsn ꜥḥꜥ ḥr ꜥn mꜣꜣ ir.nꜣi*  
 iw-sn ꜥḥꜥ ḥr ꜥn mꜣꜣ ir-n-i  
 SEQ-3PL stand:INF on turn:INF see:INF do-PST.REL-1SG  
 “They stood up, turning (themselves) to see what I did.”  
 (P. Raifé-Sallier 3, = *KRI* II, 64,15)<sup>36</sup>
- Ex. 30 *mtwꜣk di.t ḥnꜣf wḥꜣ tꜣ iḥ.t*  
 mtw-k di-t ḥn-f wḥꜣ tꜣ iḥ-t  
 CONJ-2SGM CAUS-INF go:SBJV-3SGM search:INF ART.DEF.FSG cow-F  
 “(...) And you will have him go look for the cow.”  
 (O. Leipzig 16, r<sup>o</sup> 8-v<sup>o</sup> 2 = *HO*, pl. 33A,2)<sup>37</sup>
- Ex. 31 [...] *pꜣ nty ḥꜣy ꜥš nꜣk*  
 [...] pꜣ nty ḥꜣy ꜥš n-k  
 [...] ART.DEF.MSG REL go.down:INF call:INF for-2SGM  
 “[...] The one who goes down to call you.”  
 (O. Michaelides 102, r<sup>o</sup> 5 = Goedicke & Wente 1962: pl. 92)
- Ex. 32 *iwꜣf šm ꜥn-wšb.t n pꜣyꜣf it*  
 iw-f šm ꜥn\_wšb-t n pꜣy-f it  
 SEQ-3SGM go:INF avenge-INF for POSS.MSG-3SGM father  
 “(...) And so he went to seek justice for his father.”  
 (P. Chester Beatty 2, r<sup>o</sup> 6,7-7,1 = *LES* 33,13-14)
- Ex. 33 *m šḥšḥ pḥ pꜣ pḥ tꜣw*  
 m šḥšḥ pḥ pꜣ pḥ tꜣw  
 VET hurry:INF attack:INF ART.DEF.MSG attack.PTCP.PST =2SGM  
 “Do not hasten to attack the one who attacked you (leave him to the god)”  
 (P. Boulaq IV & P. DeM I, 21,14/8,2 = Quack 1994: 320)

If one accepts examples of this kind as an argument in favor of the existence of an alternate construction of the infinitive when encoding goals after verbs of motion, it appears that both the infinitive introduced by the allative preposition *r* and the bare infinitive were possible purpose clause constructions.

As shown by Ex. 25, as early as the 21<sup>st</sup> dynasty, the shorter, syntactically more bound expression may have been preferred for the SUBJECT (*m*) *nꜥ* (*r*) INFINITIVE construction with future reference. As such, the absence of the allative preposition *r* is probably not to be taken as an index of an advanced stage of grammaticalization: it was rather the short pattern, also available for other verbs of motion, that had been preferred in this case for the new construction with future reference.

### 2.3 Features of the Future I in Late Egyptian

Before proceeding, we briefly summarize the features of the Allative Future in Late Egyptian. First, it should be noted again that this exploratory construction is fairly rare: three examples occur in the published material (Ex. 12, 24-25), all of which come from the south of Egypt.

36 In the hieroglyphic version of the *Battle of Qadesh*, the construction is different since *mꜣꜣ* (‘see’) is introduced by the locative preposition *ḥr* (*KRI* II, 64,12-14). Another possible interpretation of this example would therefore be to consider that *ḥr* is omitted under relevance before *mꜣꜣ*.

37 For a similar construction of *ḥn* (‘go’), see P. BM 10375, v<sup>o</sup> 3-4 = *LRL* 47,3-4. In O. Leipzig 16, see also v<sup>o</sup> 4 for a construction *šm* (‘go’) + infinitive.

Furthermore, the construction is attested in a relative clause, as in Ex. 12, and can follow the backshifter *wn*, as in Ex. 25. In general linguistic studies, these are usually features considered to be characteristic of an *advanced* stage of grammaticalization of future constructions.<sup>38</sup> The Ancient Egyptian data, however, show that this is not necessarily the case, even if one has to keep in mind that this observation is based on very few examples and could be modified by new evidence.

Additionally, we suggested an explanation for the absence of both *m* and *r* at the graphemic level already in Late Egyptian. This means that the formal reduction observed in grammaticalization studies had actually taken place very early. It cannot be described as a long process of erosion, but is rather accounted for based on phonetic constraints, i.e., a constraint on clusters of nasals in *m nʿy*, and constructional constraints, i.e., the existence of an alternate construction for the infinitive of goal after verbs of motion in Late Egyptian.

Finally, there is no symmetrical negation attested for the innovative Allative Future. At this stage, the older negative construction, the symmetrical negation of the Earlier Egyptian Allative Future (*bn iwʿf r sdm* “he will not hear”) is the only means for negating future time reference, as in, e.g., Ex. 2 and 7.

The description above might lead one to think that the Later Egyptian Allative Future can already be described as a fully grammaticalized future tense in Late Egyptian, even if it is used solely for referring to *near* future events — the only restriction being that no symmetrical negation is attested. Based on the three examples at our disposal, this is however not the case, since the construction imposes strict *selectional restrictions* on the type of participants that are licensed: not all types of subject and predicate can appear in this construction. In other words, whatever the available readings, all inferences are limited to those that are permitted by the inherent semantics of the event participants, e.g., the subject, and by the inherent semantics of the event itself, i.e., the predicate.

Considering the three examples at hand, one sees that the subject always has a human [+ANIMATE] referent (pronouns of the 1<sup>st</sup> singular, 3<sup>rd</sup> singular and 3<sup>rd</sup> plural), who is presented as exercising control [+CONTROL] over the predicate: “the expedition which I am going to make”, “they are going to march”, “he was going to report”. In all cases, the speaker reports about the action (“to make”, “to march”, “to report”) that the grammatical subject intends to perform. Furthermore, all of the predicates are compatible with intentional subject referents. In other words, these clauses report on the *subject’s intentions*.

What consequences does this observation have for the analysis of the semantics of a future ‘tense’ like the emerging Allative Future in Late Egyptian? The most plausible reading or *inference* that is available to addressees in these contexts is a *subject-oriented* one: in these contexts, the addressee would plausibly infer that the writer is making a statement about the intentions of the grammatical subject to carry out an action.

---

38 See Bybee et al. (1991: 32); Bybee et al. (1994: 244). See also the comments on this point about the Earlier Egyptian Allative Future in Grossman & Polis (2014).

As will become clear, this point is crucial for the argument that follows regarding the grammaticalization of the construction. We have argued elsewhere<sup>39</sup> that, given the same perceptual input, addressees can make different types of inferences. A prominent type is *participant-oriented* inferences, e.g., subject-oriented inferences, as described above. The other type is *speaker-oriented* inferences. In this case, the reader infers that the writer is talking about *his or her own state of mind, perspective, or view of that which is said*. The difference between these two types of inference can be more or less salient, depending on the particular context and cotext, types of subject and types of predicate. For example, take the following utterance:

Ex. 34 Sebastian is going to move to Berlin.

The reader can infer that the speaker is reporting on the subject's *intention* (= subject-oriented inference), or that the speaker is making a *prediction* about an event (speaker-oriented inference). The point we would like to emphasize here is that speaker-oriented inferred meanings (e.g., *prediction* in this case) are those that impose fewer selectional restrictions on the construction than does the semantics of the earlier source construction: a speaker can use the innovative form-function pairing with previously unlicensed participants, i.e., new types of subjects and predicates. If a listener interprets the above utterance as being a statement about Sebastian and his *movement in space* or his *intentions*, this would tend to reinforce the existing selectional restrictions, which are essentially presuppositions about the way the world works; if, on the other hand, the listener interprets the utterance as being a *prediction* about an event that will come to pass, this would lead to the relaxation of selectional restrictions, since predictions can be made about nearly anything. When a relaxation of selectional restriction takes place, new types of subjects and predicates can occur in the construction.

Examples like the ones attested in the Late Egyptian corpus are potentially open to such speaker-oriented inferences; and if the meaning of a construction is interpreted, on the basis of a given utterance, as encoding the *prediction* of the speaker rather than the *intention* of the subject, then the construction can be replicated with the same constructional meaning, with the resulting relaxation of the selectional restrictions bearing on the INTENTIONAL/SCHEDULED future construction.

## 2.4 Other emergent future constructions in Late Egyptian?

Before turning to the Demotic evidence, we would like to point out that these first occurrences of a construction that was to become the Allative Future in Coptic appear alongside another incipient construction involving a movement verb, namely *šm* “to go (away)”.

This verb can express motion with purpose. Three different constructions are attested with the meaning “go (in order) to do something”. The most frequent is when *šm* governs a prepositional phrase introduced by the allative preposition *r*: *šm r* + INFINITIVE “to go to + INFINITIVE,” as in Ex. 35-36. As we have seen above (§2.2), another possibility after verbs of motion like *šm* is a bare infinitive in order to express the purpose of the movement, as in Ex. 37:

39 See Grossman and Polis (2014).

- Ex. 35 *bn t3 is.t (n)p3 hr*  
*bn t3 is-t n p3 hr*  
 NEG ART.DEF.FSG crew-F of ART.DEF.MSG tomb  
*hr šm [r] b3k*  
*hr šm r b3k*  
 on go:INF ALL work:INF  
 “The crew of the Tomb is not going to work (in the Tomb of Pharaoh L.P.H.)”  
 (P. Turin 2071/224 + 1960, col. II,11 = *HOP* pl. 122)<sup>40</sup>

- Ex. 36 (They were coming, saying:)  
*iw=n šm r knkn=s irm n3y=s rmt*  
*iw-n šm r knkn-s irm n3y-s rmt*  
 FUT-1PL go:INF ALL beat:INF-3SGF with POSS.PL-3SGF men  
 “We will go and beat her as well as her men.”  
 (P. BM EA 10416, r<sup>o</sup> 2-3 = *LRLC* pl. 15)

- Ex. 37 *i.šm dd n t3y=k hnw.t*  
*i-šm dd n t3y-k hnw-t*  
 IMP-go say:INF to POSS.FSG-2SGM mistress-F  
 “Go tell your mistress (*‘direct speech’*).” (P. Harris 500, v<sup>o</sup> 2,11 = *LES* 84,4)

The third construction is syntactically limited to occurrences where *šm*, as governing verb, is introduced by *hr* “(up)on”. In such cases, the purpose meaning can be expressed by a phrase also introduced by *hr*: *hr šm hr* + INFINITIVE. The second predicate introduced by *hr* is syntactically coordinated, even if semantically subordinated. The main patterns relevant here are the Present I, as in Ex. 38 and sequential narrative constructions, see Ex. 39-40.

- Ex. 38 (and as for any member of the army about whom one will hear that)  
*sw hr šm.t hr nhm dhr.w grw š3c m p3 hrw*  
*sw hr šm-t hr nhm dhr-w grw š3c m p3 hrw*  
 3SGM on go-INF on seize:INF skin-PL still since from ART.DEF.MSG day  
 “He is still going and seizing skins from now on, (one will apply him the law as follows).”  
 (Horemhab Decree, l. 27 = Kruchten 1981: 80)

- Ex. 39 *iw=f hr šm.t hr swr m p3 dmi*  
*iw-f hr šm-t hr swr m p3 dmi*  
 SEQ-3SGM on go-INF on drink:INF in ART.DEF.MSG village  
 “He went and drank in the village (and when the crew went up to work, he remained on leave in the village).” (O. IFAO 1357, r<sup>o</sup> 5 = *KRI* IV, 1626-7)

40 We quote this example here because, interestingly enough, it is the only example mentioned by Černý & Groll (<sup>3</sup>1984: 340 §23.4) in a section devoted to one peculiarity of the verb *šm* (‘go’) where they stress that it is able, much like (*m*) *n3y* (*r*) *sdm*, to convey the “near future”. It should be noted however that the “near future” reading of this example (“the crew is not going to go work”) is only a possible inference based on the coded progressive meaning “the crew is not going (i.e. actually moving) to work”. One can hypothesize that, in the present case, Černý & Groll might have been influenced by the polysemy of the construction in English. Indeed, nothing in the context indicates that a “near future” interpretation is required.



Ex. 40 (And he encountered the Ennead)

*iwꜣsn hr šm.t hr ir.t šhr.w n pꜣyꜣs t3 (r-)dr.f*  
*iw-sn hr šm-t hr ir-t šhr-w n pꜣy-s t3 r-dr-f*  
 SEQ-3PL on go-INF on do-INF plan-PL of POSS.MSG-3SGF land entire-3SGM  
 “As they were going and administrating their entire land”  
 (P. d’Orbiney, 9,3 = *LES* 19,1-2)

In the above examples, the context always seems to show that *šm* refers to actual motion with purpose. There are occurrences, however, where *šm* cannot be interpreted this way. It rather has to be understood as an aspectual auxiliary. Two uses should be distinguished.

The first auxiliary use of *šm* “go” to be mentioned here is when *šm* introduces verbs of motion that refer to an activity, like *mšꜥ* “to travel, to march” in Ex. 41. In this case, *šm* is an inchoative auxiliary<sup>41</sup> referring to the beginning of this movement:

Ex. 41 *hy-rꜥ iwꜣn r šm.t r mšꜥ*  
*hy\_rꜥ iw-n r šm-t r mšꜥ*  
 indeed FUT<sup>1</sup>-1PL FUT<sup>2</sup> go-INF ALL march:INF  
 “Indeed, we will set sail (lit. go and travel, namely by boat)”<sup>42</sup>  
 (P. Anastasi VIII, 2,6-7 = *KRI* III, 501,13)

This use of *šm* can be easily accounted for if one keeps in mind the punctual *Aktions-art* of this lexeme (which can be represented<sup>43</sup> as <+>~~~~~): the beginning (<+>) of this event is selected by the future pattern in the present case.

The second auxiliary use of *šm* can be approached by first considering a formulaic expression often used in letters:<sup>44</sup>

Ex. 42 *m-ir šm [r ir.t b]t3 rꜣw*  
*m\_ir šm r ir-t bt3 r-w*  
 VET go:INF ALL do-INF crime against-3PL  
 “Don’t proceed to do wrong to them, (or I will hold it against you as a great offense).”  
 (P. BN 199,5-9+196,v+198,iv, r<sup>o</sup> 14-v<sup>o</sup> 1 = *LRL* 6,3-4)<sup>45</sup>

Ex. 43 *iw m-ir šm r wꜣh wꜥ wꜥ.ty im imꜣw*  
*iw m\_ir šm r wꜣh wꜥ wꜥty im im-w*  
 SBRD VET go:INF ALL leave:INF one single there of-3PL  
 “And don’t proceed to leave a single one of them (i.e. the chariot poles) there.”  
 (P. BM EA 10100, r<sup>o</sup> 10 = *LRL* 50,12)

41 And can be added to the ones mentioned in Winand (2006: 325-337).

42 *KRITA* III, 355 interestingly translates “seeing that we are going to depart”. This example should be directly compared to Ex. 1: *nꜥy r mšꜥ* is used for the mellic whereas *šm r mšꜥ* is used for the inchoative.

43 See Winand (2006: 231).

44 See already Wentz (1967: 23), who noted about Ex. 27: “*šm* would appear to have auxiliary force here”, and mentioned six possible additional occurrences of this use.

45 An additional example of this construction could be P. DeM 8, r<sup>o</sup> 7 (= *KRI* VI, 671,12): *m ir šm* [LAC] “do not proceed [...]”. P. Sallier I, 5,5-6 (= *LEM* 82,6-7) reads *m dy hꜣtyꜣk šm hwꜣw mi dbꜣ.w r-hꜣ.t tꜣw* “do not let your heart go and flutter about like the leaves in front of the wind” (on the use of the Stative inflexion after the causative *rđi*, see Kammerzell 1983 and Peust 2006). Note that P. BN 199,4, v<sup>o</sup> 3 (= *LRL* 71,7-8) is probably not a case of an auxiliary use of *šm*, but rather an occurrence of the pair *šm iy* “to go back and forth (lit. ‘to go (and) to come’)” (on such pairs, see Winand 2006: 276 and here, n. 48).

- Ex. 44 *iw m-ir šm r di.t nʒf rmṭ n-š3w (...)* ʕn  
*iw m\_īr šm r di-t n-f rmṭ n\_š3w (...)* ʕn  
 SBRD VET go:INF ALL give-INF for-3SGM man competent (...) again  
 “And do not proceed to give him back a man of value (other than the ones exactly whom he had).” (P. Strassburg 25, r<sup>o</sup> 5-6 = Spiegelberg 1917a: pl. IV)

- Ex. 45 *iw m-ir šm nn t3y md.t*  
*iw m\_īr šm nn t3y md-t*  
 SBRD VET go:INF neglect:INF DEM.FSG matter-F  
 “And do not proceed to neglect this matter.”  
 (P. Aberdeen 162<sup>a+k</sup> + 163<sup>h+aq</sup> + 166<sup>k+cp</sup>, r<sup>o</sup> 4 = Lefèvre 2008: pl. 68A)

In these examples, the verb *šm* occurs in a vetitive construction where the actual movement reading is not possible. Rather, *šm* refers here to cognitive movement towards an event, i.e., the intention to start a process expressed by (*r*) + INFINITIVE. As such, *šm* can be described here as a *mellic* auxiliary, with a use restricted to fully agentive and intentional subjects who are able to initiate an event. Regarding the translation of Ex. 42-45, we opted above for a literal rendering “proceed to do something”, but the intended meaning is clearly a modally marked “do not voluntarily do something”, i.e. “do not dare do something”.

Bearing these examples in mind, one can quote additional examples where the meaning is much the same, even if the verbs involved (*ħmsi* “to sit”, ʕħʕ “to stand” and ʕk “to enter”) are compatible with a movement interpretation:

- Ex. 46 (Do not be slothful, do not be idle,)  
*iw m-ir šm r ħms m p3yʒk pr*  
*iw m\_īr šm r ħms m p3y-k pr*  
 SBRD VET go:INF ALL sit:INF in POSS.MSG-2SGM house  
 “And do not dare to stay in your house, (without caring for you superior, so that the harvest of Pharaoh which is under you responsibility perish).”  
 (P. Chester Beatty V, v<sup>o</sup> 1,6-7 = Gardiner 1935: pl. 26)

- Ex. 47 (Then, see, you should come to see who is going to go and perform the corvée labor for and who is not going to go,)  
*m-ir iry<zt>n šm.t r ʕħʕ*  
*m\_īr iry-tn šm-t r ʕħʕ*  
 VET AUX:SBJV-2PL go-INF ALL stand:INF  
 “And no!<sup>46</sup>, don’t dare stay inactive (when this retainer of mine reaches you [...]).”  
 (P. Mallet, IV,3-4 = KRI VI, 66,13)<sup>47</sup>

- Ex. 48 *imyʒk šm ʕk r knb.t*  
*imy-k šm ʕk r knb-t*  
 VET-2SGM go:INF enter:INF ALL tribunal-F  
 “May you not go and enter the tribunal!”  
 (P. Boulaq 4, 16,17 = Quack 1994: 289)<sup>48</sup>

Now, the question is whether *šm* can be used as *mellic* auxiliary in other syntactic environments, namely, outside the modally-colored *mellic* use in the vetitive pattern. Two examples seem to point in this direction, with a possible use of *šm* in a construc-

46 For this absolute use of the vetitive construction *m-ir*, see Vernus (2010b: 315-316; 324-325).

47 Similarly, see P. Mallet, III,8 = KRI VI, 66,8.

48 The traditional interpretation “do not go in and out the tribunal” (e.g. Quack 1994: 95; Vernus 2010a: 318) is perhaps not the most likely, since one would then expect the pair ʕk/pr: both *šm* “to go” and ʕk “to enter” seems to imply a movement away from the deictic center.

tion with future time reference. Unfortunately, both are problematic from a philological perspective.

The example occurs in a letter that definitely contains some mistakes, which makes the interpretation of the whole communication somewhat complicated. It seems clear, however, that the addressee is being criticized for not having been able to supply the birds that the writer previously asked for. We suggest understanding the passage as follows:

- Ex. 49 (Don't you have numerous scribes? And you have very many attendants! Can't you ask to provide this ?attendant? with an amount of birds)
- |            |           |             |             |           |              |            |            |
|------------|-----------|-------------|-------------|-----------|--------------|------------|------------|
| <i>twk</i> | <i>ḥr</i> | <i>šm.t</i> | <i>ir.t</i> | <i>iḥ</i> | < <i>r</i> > | <i>pʒy</i> | <i>rmṯ</i> |
| twk        | ḥr        | šm-t        | ir-t        | iḥ        | r            | pʒy        | rmṯ        |
| 2SGM on    | go-INF    | do-INF      | what        | about     | DEM.MSG      | man        |            |
- “What are you going to do with this man?; (Can't you tell him that there is none [i.e. no bird], so that he go [namely, to find some]; fare you well!)”  
(P. Anastasi V, r<sup>o</sup> 11,6 = LEM 61,14)

The second example comes from the first two lines of a “love song” written on an ostrakon. The reading of the subject of the main clause (*twtw*)<sup>49</sup> as well as the traces at the beginning of line 2 ([... *t*]wʒi) are problematic, but the reading of the whole sentence is likely to be:

- Ex. 50
- |           |              |               |                 |          |           |            |                    |             |
|-----------|--------------|---------------|-----------------|----------|-----------|------------|--------------------|-------------|
| <i>pʒ</i> | <i>grḥ</i> , | ( <i>i</i> )n | ? <i>twtw</i> ? | <i>m</i> | <i>šm</i> | <i>isk</i> | [... <i>t</i> ]wʒi | <i>ḥnʕs</i> |
| pʒ        | grḥ          | in            | twtw            | m        | šm        | isk        | [...] tw-i         | ḥnʕ-s       |
| VOC       | night        | Q             | one             | in       | go:INF    | delay:INF  | [...] PRS-1SG      | with-3SGF   |
- “O night, is one going to delay [the moment wh]en I will be with her?”<sup>50</sup>  
(O. Nash 12, l. 1-2 = Mathieu 1996: pl. 26)

In both examples, the verb *šm* occurs in the Present I pattern. It is introduced by the preposition *ḥr* in Ex. 49 and *m* in Ex. 50,<sup>51</sup> where the progressive aspect is overtly marked (see above, §1). It should be noted that, in both examples, the infinitive governed by *šm* is not introduced by *r* (see also Ex. 37 & 48), which could be taken — very cautiously — as an argument in favor of an auxiliary, viz., more bound, status of the verb *šm* in these contexts.

Most important in the context of this study, however, is that, if these examples are to be taken as positive evidence in favor of the existence of a construction involving *šm* with future time reference, then it means that more than one exploratory construction entered the written repertoire during the New Kingdom for expressing imminent/scheduled future reference, even if only one of them eventually came to be grammaticalized as a full-fledged future tense.

We now turn to the analysis of the Demotic examples of the Later Egyptian Allative Future in order to describe the evolution of the selectional restrictions of the *nʕy sdm*

49 Compare HO XL,6 with Mathieu 1996: pl. 26.

50 For the use of *iw* for introducing complement clauses after verbs of manipulation, see Polis (2009, with the previous literature). Mathieu (1996: 115), who translates “est-ce que l'on marche pour m'empêcher d'être avec elle”, understands the construction in a similar way, but suggests a disputable translation for the governing verb *isk* “to linger, to delay”.

51 This example contradicts Wentz's (1959: 114) observation that *šm* is not found after the preposition *m* in the Present I pattern in Late Egyptian, as opposed to Middle Egyptian.

construction and to see how the functional and formal features of the construction change during this period (7<sup>th</sup> c. BCE-5<sup>th</sup> c. CE).

### 3 The Later Egyptian Allative Future (‘Future I’) in Demotic

In the extant Demotic corpus, the examples of *n<sup>c</sup>y* (typically written *n<sup>c</sup>*, but see below) used as future auxiliary are much more numerous than in Late Egyptian. However, the most frequent form used for future reference is still the Earlier Egyptian Allative Future (‘Future III,’ see above §1.1).

Furthermore, as will be seen below, there is a significant time gap between the emergence of the construction in the Late Egyptian corpus at the end of the 20<sup>th</sup> dynasty and its first occurrences in Demotic: the first certain examples of the Later Egyptian Allative Future in Demotic can be dated to the 1<sup>st</sup> century CE,<sup>52</sup> i.e., some 1000 years after the first occurrences of the construction in Late Egyptian.

In this section, we first present a short overview of the verb *n<sup>c</sup>* in Demotic when used as a lexical verb of motion; we then turn to the future constructions based on this verb and their syntactic environments; the final part of this section will be devoted to the study of the selectional restrictions still in place on the use of the Later Egyptian Allative Future in Demotic.

#### 3.1 The verb *n<sup>c</sup>* in Demotic

In Demotic lexicographical tools, the verb *n<sup>c</sup>* is said to have the meaning “to go”,<sup>53</sup> which indicates that it has become a regular verb of oriented motion, the earlier [SAILING] semantic component being completely lost.

As shown by Ex. 51-53, this verb is used throughout the entire Demotic documentation. Indeed, these three examples belong to different genres, e.g., literary texts (Ex. 51 & 53), on the one hand, and, e.g., legal documents, on the other (Ex. 52). Moreover, they range from Early Demotic (P. Rylands IX) to Roman Demotic (P. Harkness):

Ex. 51 *in i.ir=k n<sup>c</sup>y r t3y=w-dy*  
*in iir-k n<sup>c</sup>y r t3y\_w\_dy*  
 Q PRS-2SGM go:INF ALL Teudjoi  
 “Are you going to Teudjoi?”  
 (P. Rylands IX, 4/19 – El-Hiba – 513 BCE<sup>54</sup> = Vittmann 1998: 17)

Ex. 52 *i.ir=k n<sup>c</sup> r t3 s.t n p3-rw*  
*iir-k n<sup>c</sup> r t3 s-t n p3\_rw*  
 SBRD-2SGM go:INF ALL the place-F of Paru  
 “(...) when you are going to the place of Paru.”  
 (P. Marseille 299, r<sup>o</sup> 8 – Thebes – 3<sup>rd</sup> c. BCE = Vittmann 1980: 129)

52 Ex. 87 is dated by its editor from the 2<sup>nd</sup> century BCE, but this dating, as well as the reading of the text itself, is problematic.

53 See Erichsen (1954: 207-208) and *CDD, N*, p. 22-24. It occurs 64 times in the *Thesaurus Linguae Aegyptiae* (as of January 2014), which does not cover the whole Demotic documentation.

54 All the dates of the Demotic examples are taken from [www.trismegistos.org](http://www.trismegistos.org), unless mentioned otherwise.

- Ex. 53 *dd iwꜣy n<sup>c</sup> i.ir wsir ʿnh-wdꜣ-snb*  
*dd iw-y n<sup>c</sup> iir wsir ʿnh wdꜣ snb*  
 QUOT FUT-1SG go:INF ALL Osiris life prosperity health  
 “(...) saying: I’m going to go to Osiris, life, prosperity, and health.”  
 (P. Harkness 2/5-6 – Per-nebet-oudji<sup>55</sup> – 1<sup>st</sup> c. CE = Smith 2005: 55)

In terms of transitivity and valency, the verb *n<sup>c</sup>* in Demotic is intransitive and occurs only with oblique arguments. These can be introduced by various prepositions, such as *r* (frequent, see above) or *n/n-im*<sup>56</sup>. In some instances, the verb can be modified by adverbs like *r-hry* (‘down’) and *r-hry* (‘up’),<sup>57</sup> which are in turn followed by an oblique argument.

### 3.2 The future construction with *n<sup>c</sup>* in Demotic

The corpus shows clear evidence that there are two constructions that involve the verb *n<sup>c</sup>* followed by an infinitive in Demotic. In the first construction, the infinitive after *n<sup>c</sup>* is introduced by the allative preposition *r* [SUBJECT *n<sup>c</sup>* *r* INFINITIVE], while in the second, the bare infinitive is used after *n<sup>c</sup>* [SUBJECT *n<sup>c</sup>* INFINITIVE].

#### 3.2.1 The construction SUBJECT *n<sup>c</sup>* *r* + INFINITIVE

There are 17 examples of this construction in the Demotic corpus of the *Thesaurus Linguae Aegyptiae*.<sup>58</sup> These examples occur in 6 different texts belonging to a variety of genres (literary, administrative and magical texts) and dating from the 3<sup>rd</sup> century BCE to the 3<sup>rd</sup> century CE. The spelling of *n<sup>c</sup>* in this construction varies quite a bit in the corpus:<sup>59</sup>



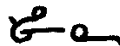
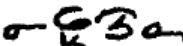
Texts	Transliteration	Writing
P. Mag. LL	<i>n-n<sup>c</sup> / n-n(<sup>c</sup>).k</i>	
O. MH 154; Setne I; Inaros	<i>n<sup>c</sup>.k</i>	
P. Magical LL; O. MH 4038	<i>in-n<sup>c</sup> / in-n(<sup>c</sup>).k</i>	
Inaros; P. Mag. LL; Setne II	<i>in-n<sup>c</sup>.k</i>	

Fig. 3. Writing of the auxiliary verb in the *n<sup>c</sup>* *r* + INFINITIVE construction

The main difficulty with this construction in Demotic is to decide whether the examples are to be understood as having future reference or as denoting a progressive motion with purpose. As illustrated by the following example, it is often not easy to

55 In the 10<sup>th</sup> nome of Upper-Egypt, north of Antaiopolis/Qaw el-Kebir.

56 See for instance Mythus 16/29 or P. Vienna D 12006 4/11.

57 Setne I, 3/12 and Setne II, 6/1 respectively, as well as P. Mag. LL 6/30.

58 To the examples listed by the *TLA* (as of January 2014), one can add O. MH 4038 A/4, *iwꜣf hꜣpr iw.irꜣk in-n<sup>c</sup> r ir nꜣy km* “If you are going to be a gardener for me”.

59 We will come back to this issue later (see under §3.4) when discussing the probable reanalysis of the auxiliary verb constructed as *m* + infinitive as a Stative.

know whether the subject is actually moving, the interpretation relying heavily on difficult contexts:

- Ex. 54 (It is he who placed the sky and the air under Horus,)  
*iwꜣf nꜥ.k<sup>60</sup> r kbḥ n itꜣf wsir*  
*iw-f nꜥk r kbḥ n it-f wsir*  
 SBRD-3SGM go:AUX ALL make\_libation:INF for father-3SGM Osiris  
 “When he goes to make libation for his father Osiris” (P. Spiegelberg, 1/7-8  
 (Inaros/Benefice of Amun) – 1<sup>st</sup> c. BCE = Spiegelberg 1910: 14)

Is Horus actually travelling to make libation for Osiris or are we to understand this sentence as involving future reference alone? The context favors the first interpretation, i.e., that motion is actually taking place.

Other examples are certainly best understood as involving future reference, even if the [MOTION WITH PURPOSE] cannot be completely ruled out:

- Ex. 55 (The balm that you should apply to your eye,)  
*i.irꜣk in-nꜥ.k r šn n pꜣ ḥbs*  
*iir-k innꜥk r šn n pꜣ ḥbs*  
 SBRD-2SGM go:AUX ALL interrogate:INF ACC the lamp  
 “When you are going to perform a lamp divination.”  
 (P. Mag. LL 5/24 – 3<sup>rd</sup> c. CE = Griffith & Thompson 1904: 48)

In the context of Ex. 55, a [MOTION WITH PURPOSE] reading is difficult: why would the balm have to be applied to the eye specifically before or during the walk to the lamp? It probably makes more sense to simply understand this sentence as a future tense.

Finally there are examples of the construction *nꜥ r* + INFINITIVE with a future meaning as the only possible reading (see also n. 50):

- Ex. 56 *dy iwꜣf nꜥ r byk*  
*dy iw-f nꜥ r byk*  
 ship SBRD-3SGM go:AUX ALL sink:INF  
*iw-dbꜣ nꜣ rn.w n Dioskoros*  
*iw\_dbꜣ nꜣ rn-w n Dioskoros*  
 because ART.DEF.PL name-PL of Dioskoros  
 “A ship that is going to sink because of the names of Dioskoros.”  
 (P. Mag. LL v<sup>o</sup> 15/5-6 – 3<sup>rd</sup> c. CE = Griffith & Thompson 1904: 188)

It would make little sense to understand that the ship is actually purposefully sailing in order to sink. The sentence has to be understood as an example of the construction *nꜥ r* + INFINITIVE used to express future reference. Much in the same vein are examples where the infinitive phrase is built with a verb of goal-oriented motion, which shows that the *nꜥ* is a future auxiliary and cannot be understood as a verb of motion.<sup>61</sup>

60 Concerning the presence of a final *.k*, see below §3.4.

61 On this example, see already the comments by Reintges (2011: 79-80).

Ex. 57 (He made Pharaoh, as well as the people from Egypt who were standing in the court, see him as an evil bird.)

*iwꜣf nꜥk r šm nꜣf*  
iw-f nꜥk r šm n-f

SBRD-3SGM go:AUX ALL go:INF DAT-3SGM

“That was going to go.” (Setne II, 6:23 = Griffith 1900: 198-200)<sup>62</sup>

One could argue at length about the examples where both readings are possible, but what should be stressed is that, while some instances are actually open to two readings, the only one to be sometimes excluded is the motion reading, the future reading being always available, at least as an inference.

### 3.2.2 The construction SUBJECT *nꜥ* + INFINITIVE

In addition to the examples discussed in the previous section, the Demotic corpus contains occurrences of an alternative construction without the allative preposition *r* governing the infinitive after the verb of motion *nꜥ*.<sup>63</sup> As we have seen (cf. §2.2), this construction is already attested in the Late Egyptian material and is the exact parallel of the Allative Future *t̄-na-sôtm* in Coptic.

This construction is not yet very common in Demotic, but 45 examples from 24 different texts have been found in the whole Demotic corpus.<sup>64</sup> As noted by Quack (2006: 193), all of them appear rather late in Demotic: they are to be dated to the Roman period or to the very end of the Ptolemaic period, except for maybe one example (see below, Ex. 87).

When compared to the construction with the allative preposition *r*, this second construction involving *nꜥ* displays two interesting features. First, at the semantic level, the FUTURE reading is the *only one* available — unlike with the *nꜥ r* INFINITIVE construction where the [MOTION WITH PURPOSE] meaning is possible, if not always plausible. Second, at the graphemic level, except for the examples from one document,<sup>65</sup> all texts exhibit a *non-etymological* writing of the verb *nꜥ*, in sharp contrast with the first construction (compare Fig. 3 and Fig. 4, below).

62 Based on the photographs at our disposal, the presence of the allative preposition *r* after *nꜥk* is not entirely certain.

63 For the Later Egyptian Allative Future (‘Future I’) in Demotic grammatical descriptions, see e.g. Spiegelberg (1925: 69, §139; 77, §162); Lexa (1947-1951: §575, §630, §691); Johnson (1976: 63-66); Quack (2006: 193-194).

64 We have collected 45 examples, and there are more. In addition to the examples quoted in this study, see O. MH 4038, B/17-21; O. MH 4038, D5-6; O. MH 4038, D8-11; P. Mag. LL 3/34; P. Mag. LL 17/14-15; P. Mag. LL 18/31-32; P. Mag. LL 20/19-20; P. Mag. LL 20/21; P. Mag. LL v° 28/1; P. Wien 6920-6922 x+2/6; P. Wien 6920-6922 x+2/7; Ph. 218/4-5; Ph. 285/4; Ph. 289/8; Ph. 417/10; Ph. 422/6; Ph. 445/1; Kal. 14/6-7; Kal. 15/3; Dak. 61/4; OMM 100/7-8; OMM 777/6-11. In terms of diatopic variation, the 24 texts in which the examples are found come from the Fayyum, Abydos, Thebes, El-Hesa (near Aswan) and the Dodecaschaenus, which means that the construction occurs in documents ranging from all over Egypt. This wide array of provenances, as well as the chronological proximity of the examples, make it hard to know if the use of the *nꜥ* INFINITIVE construction was originally limited to a particular region.

65 O. MH 4038, which has 6 occurrences of the Later Egyptian Allative Future. It should be noted that, in this document (the so-called “Gardening Agreement”), besides the usual spelling *nꜥ* of the future auxiliary, one finds an instance of *in-nꜥ* (see the example quoted in n. 58), when the infinitive of the construction is introduced by the preposition *r* (cf. 3.2.1). Wentz (1959: 37) sug-

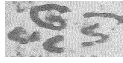



Texts	Transliteration	Writing
O. MH 4038	<i>n<sup>c</sup></i>	
Graffiti of the Dodecaschenus/ODN P. Vienna 6920/6922	<i>n3w</i>	
P. Mag. LL	<i>n3e</i>	
Graffiti/St. Aswan 1057	<i>n3</i>	

Fig. 4. Writing of the auxiliary verb in the *n<sup>c</sup>* + INFINITIVE construction

We think that this “phonetic” spelling of the auxiliary<sup>66</sup> might be considered as a graphemic symptom of a higher degree of grammaticalization: the idea is that the etymological link between the lexeme *n<sup>c</sup>* “to move” and its use as future auxiliary was no longer perceived by writers.<sup>67</sup>

### 3.2.3 Replacement of the Future III in the “curse/blessing” formula

Approximately a fourth of the examples of the new future construction comes from the Graffiti of the Dodecaschaenus, a region South of modern Aswan. Of these 15 attestations, all but two appear in a very specific context, i.e., at the end of the graffito, in a formula aimed at the potential reader or eraser of the said graffito. It typically reads as follows:

Ex. 58 *p3*                    *nt* *n3w*    *fte*                    *t<3>y*    *wšte*  
*p3*                    *nt* *n3w*    *fte*                    *t3y*        *wšte*  
 ART.DEF.MSG REL go:AUX    erase:INF    DEM.FSG    adoration

*rnɸ*                    *gbe*  
*rn-f*                    *gbe*  
 name-3SGM    cut\_off:STAT

“He who will erase this adoration, his name is cut off.”

(Ph. 97/1-2 – Philae – 30 BC-499 CE = Griffith 1937: 63)

These examples are precious since they allow us to observe the replacement of the older Earlier Egyptian Allative Future construction (the ‘Future III’) in a stable syntactic environment and to have a grasp on the semantic value of the Later Egyptian Allative Future (‘Future I’) without having to make use of the later Coptic corpus.<sup>68</sup>

---

gested that this case “represents a writing of *nna* and the rest of the examples *na*, perhaps a reflection of Sahidic tendency as against Akhmimic and sub-Akhmimic in the Theban area, whence this text derives.”

66 Even if it is part of a tendency in favor of non-etymological phonetic spellings in the latest phase of Demotic. This phenomenon is acknowledged by several authors (see e.g. Depauw 1997: 26; Johnson 2000: 2), but see Tait (2013) for a different view.

67 A good illustration of the etymological vs non-etymological spelling of the verb *n<sup>c</sup>* is found in P. Mag. LL 21/26 and 35, which contains the three constructions discussed here (*n<sup>c</sup> r/n* NOUN; *n<sup>c</sup> r* INFINITIVE and *n<sup>c</sup>* INFINITIVE). It is remarkable that the scribe of this text uses a non-etymological spelling of *n<sup>c</sup>* for the last construction solely.

68 A similar approach has been taken by Roquet (1978) in his study of the semantic value of the Earlier Egyptian Allative Future (‘Future III’) in the Coptic graffiti.



This closing formula has a long history, which makes it possible to compare the graffiti from the Dodecaschenus and earlier examples from the Third Intermediate Period (10<sup>th</sup>-7<sup>th</sup> c. BC). Here we cite some examples from the temple of Khonsu in Karnak<sup>69</sup> that are characteristic of earlier uses:

- Ex. 59 *ir p3 nty iwꜥf ft p3 dgs*  
*ir p3 nty iw-f ft p3 dgs*  
 TOPZ ART.DEF.MSG REL FUT-3SGM erase:INF ART.DEF.MSG footprint  
*iwꜥi ft rnꜥf*  
*iw-i ft rn-f*  
 FUT-1SG erase:INF name-3SGM  
 “As for the one who will erase the footprint, I [i.e. Khonsu] will erase his name.”  
 (Khons. 123/3-5 – Karnak – 22<sup>nd</sup>/23<sup>rd</sup> dyn. = Jacquet-Gordon 2003: 48)
- Ex. 60 *iwꜥi fdꜥ rn p3 nty*  
*iw-i fdꜥ rn p3 nty*  
 FUT-1SG destroy:INF name ART.DEF.MSG REL  
*iwꜥf ft p3 dgs*  
*iw-f ft p3 dgs*  
 FUT-3SGM erase:INF ART.DEF.MSG footprint  
 “I will destroy the name (of) the one who will erase the footprint.”  
 (Khons. 129/3 – Karnak – 22<sup>nd</sup>/23<sup>rd</sup> dyn. = Jacquet-Gordon 2003: 50)
- Ex. 61 *p3 nty iwꜥf ft p3 dgs n D.*  
*p3 nty iw-f ft p3 dgs n D.*  
 ART.DEF.MSG REL FUT-3SGM erase:INF ART.DEF.MSG footprint of D.  
*p3 b3kꜥi (sic) iw[ꜥi] ftt rnꜥf n bnbn*  
*p3 b3k-i iw-i ftt rn-f n bnbn*  
 ART.DEF.MSG servant-1SG FUT-1SG erase:INF name-3SGM from benben  
 “The one who will erase the footprint of D., my servant, I will erase his name from the benben.”  
 (Khons. 145/3-5 – Karnak – 22<sup>nd</sup>/23<sup>rd</sup> dyn.,  
 year 4 of Shoshenq III? = Jacquet-Gordon 2003: 55)

As can be seen, the future construction in the relative clause is always the Earlier Egyptian Allative Future in Ex. 59-61. While this construction is still found in numerous examples of the Demotic graffiti of the Dodecaschenus, the following examples show that the new future construction is also found in this environment:

- Ex. 62 *p3 nt n3w fte t<3>y wꜥte.t*  
*p3 nt n3w fte t3y wꜥte-t*  
 ART.DEF.MSG REL go:AUX erase:INF DEM.FSG adoration-F  
*rnꜥf gb m-b3h p3y šy ʕ3*  
*rn-f gb m\_b3h p3y šy ʕ3*  
 name-3SGM cut\_off:STAT before DEM.MSG divinity great  
 “He who will erase this adoration, his name is erased in front of this great divinity.”  
 (Kal. 2/4-5 – Kalabsha – 30 BC-284 CE = Griffith 1937: 36)

69 These are taken from Jacquet-Gordon (2003).

- Ex. 63 *p3*                    *nt n3*            *fte*            *t3y*            *wšte*  
*p3*                    *nt n3*            *fte*            *t3y*            *wšte*  
 ART.DEF.MSG REL go:AUX erase:INF DEM.FSG adoration  
*iw≠w*            *r*            *g[b*            *rn≠f...*]  
*iw-w*            *r*            *gb*            *rn-f ...*  
 FUT<sup>1</sup>-3PL FUT<sup>2</sup> cut\_off name-3SGM  
 “He who will erase this adoration, [his name] will be cu[t off...]”  
 (Ph. 416/23 – Philae – 10<sup>th</sup> April 253 = Griffith 1937: 115)

- Ex. 64 *p3*                    *rmṯ nt n3e*            *rk*            *p3*                    *wyṯ*  
*p3*                    *rmṯ nt n3e*            *rk*            *p3*                    *wyṯ*  
 ART.DEF.MSG man REL go:AUX change:INF ART.DEF.MSG stela  
*n3[e]*            *f[t ...]*  
*n3e*            *ft*  
 go:AUX erase:INF  
 “He who will change the stela (or) will erase [...]”  
 (St. Abydos 1326, 8 – Abydos – 664-30 BCE = Mariette 1880: 504)  
 See Spiegelberg (1917b: 119) for a different reading; also Vleeming (2001: 209-210).

The newer construction is used exclusively in the first part (“He who will...”) and not in the second, apodotic, part of the formula (where one usually finds a Stative,<sup>70</sup> but there are also some examples of the earlier future construction, as in Ex. 59-61 & 63).

What can be inferred about the semantics of these examples? In these relative clauses, the available inferences are clearly subject-oriented and not speaker-oriented. In other words, the meaning is “as for the man who — as an intentional subject — will plan to do this and this” rather than “as for the man who — I as a speaker predict — will do this”. This can be illustrated by other examples of the Later Egyptian Allative Future construction in relative clauses, where the subject is a fully intentional (sometimes divine) entity:

- Ex. 65 (If he says ‘Immediately’, you shall say to him:)  
*p3*                    *nṯr nt n3e*            *ir*            *p3y(zy)*            *šn*                    *n p3 hrw*  
*p3*                    *nṯr nt n3e*            *ir*            *p3y-y*            *šn*                    *n\_p3\_hrw*  
 ART.DEF.MSG god REL go:AUX do:INF POSS.MSG-1SG interrogation today  
 “The god who will make my inquiry today, (let him stand up).”  
 (P. Mag. LL 3/1-2 – Thebes – 3<sup>rd</sup> c. CE = Griffith & Thompson 1904: 32)

- Ex. 66 *iw≠f*                    *ḥpr*                    *iw mtwk nt n3e*            *šn*  
*iw-f*                    *ḥpr*                    *iw mtwk nt n3e*            *šn*  
 COND-3SGM happen:INF SBRD 2SGM REL go:AUX interrogate:INF  
 “If it happens that you are the one who will interrogate, (you shall fill your eye with green eye-paint and stibium).”  
 (P. Mag. LL 23/21 – Thebes – 3<sup>rd</sup> c. CE = Griffith & Thompson 1904: 146)

As shown by this last example, the Future I can also be found in a slightly different syntactic environment, i.e., a cleft-sentence, but the semantic value of the construction remains identical: the subject is conceived as intentional, and as such exerts full control over the event.

70 This applies of course only to the corpus of 13 examples featuring the ‘Future I.’ The graffiti of the Dodecaschenus also exhibit a number of curse formulas in which no ‘Future I’ is found, but only the ‘Future III’ is used. Ex. Dak. 4, Dak. 10, Ph. 270.

In summary, the occurrences of the Future I in this syntactic pattern are symptomatic of this construction still being associated most strongly with subject-oriented inferences, rather than with speaker-oriented ones. As in Late Egyptian (§2.3), the subject exercises full control over the predicate and is presented as intending to perform the action.

One isolated example is worth mentioning.<sup>71</sup> In one graffito (Ex. 67), the scribe apparently combined the older future construction (Future III) with the auxiliary use of *n3*.<sup>72</sup> If our interpretation of the semantic value of the new allative future construction is correct, it could mean that he somehow used this means for combining the future value of the older construction and the strongly intentional meaning of the new future construction (i.e., subject-oriented inferences):

Ex. 67	<i>p3</i>	<i>nt iwꜣf</i>	<i>n3</i>	<i>fte</i>	<i>t3y</i>	<i>wš.t</i>
	p3	nt iw-f	n3	fte	t3y	wšt-t
	ART.DEF.MSG	REL FUT-3SGM	go:AUX	erase:INF	DEM.FSG	adoration-F
	<i>rnꜣf</i>	<i>gb</i>	<i>m-b3ḥ</i>	[...]		
	rn-f	gb	m_b3ḥ	[...]		
	name-3SGM	cut:STAT	in_front_of	[...]		
	“He who will erase this adoration, his name is cut in front of [...]”					
	(Ph. 422/6 – Philae – 26 <sup>th</sup> December 232 CE = Griffith 1937: 122)					

### 3.2.4 The syntactic environments of the Future I

While the Late Egyptian examples were not numerous enough for us to analyze the syntactic distribution of the Future I, such a description appears within reach for Demotic. We will illustrate below the various syntactic construction in which the Future I occurs.

First, it can be used autonomously in independent main clauses (13 examples), both declarative (see below Ex. 68) and interrogative ones (Ex. 69):

Ex. 68	<i>tizy</i>	<i>n3.w</i>	<i>tī</i>	<i>ir</i>	<i>p.t</i>	[ <i>ḥw</i>	<i>r</i>	<i>p3</i>	<i>t3</i> ]
	tī-y	n3w	tī	ir	pt	ḥw	r	p3	t3
	PRS-1SG	go:AUX	CAUS:INF	do:INF	sky	fall:INF	ALL	ART.DEF.MSG	earth
	“I will make (the) sky fall to the earth.” (P. Vienna 6920-6922, r <sup>o</sup> x+2/6-7 – Fayyum – 2 <sup>nd</sup> c. CE = Hoffmann 1996: 173-174)								

Ex. 69	(While he makes them eat and makes them drink, you tell Anubis:)								
	<i>(i)n</i>	<i>st</i>	<i>n3e</i>	<i>šn</i>	<i>nꜣy</i>	<i>n p3 hrw</i>			
	in	st	n3e	šn	n-y	n_p3_hrw			
	Q	3PL	go:AUX	interrogate:INF	DAT-1SG	today			
	“Will they interrogate me today? (If he says ‘Yes’ again...)” <sup>73</sup>								
	(P. Mag. LL 18/31 – Thebes – 3 <sup>rd</sup> c. CE = Griffith & Thompson 1904: 122)								

As discussed above (§3.2.3), it is also well attested in relative clauses (23 examples), where the grammatical subject has full control over the predicate (see §3.3):

71 It should be stressed that the reading of this text is not certain; Griffith (1937: 122) tentatively reads *p3 nt iwꜣf mwšn(?)*.

72 Another occurrence of this construction might be found in P. Cairo 30605, r<sup>o</sup> 16 (see Lexa 1947-1951: §691), but the reading of *n3* is problematic (see de Cenival 1972: 76 & pl. VI).

73 This example could also be interpreted as a conjunctive, see Ex. 82.

- Ex. 70 (Write these ostraca that are after them together with these 50 papyri and (the note,)

*irm n3 nt iw.ir=k n3w sh*  
*irm n3 nt iw\_ir-k n3w sh*  
 with ART.DEF.PL REL PRS-2SGM go:AUX write:INF  
 “Together with those which you will write (...).”

(OMM 100/7-8 – Narmouthis – 150-225 AD = Giannotti 2007: 130-131)

- Ex. 71 *iw bn-iw p3 nt n3w h<sup>c</sup>*  
*iw bn\_iw p3 nt n3w h<sup>c</sup>*  
 SBRD NEG.EXIST ART.DEF.MSG REL go:AUX stand:INF  
*p3y(εy) Bhr̥y(?)*  
*p3y-y l̥hr̥y(?)*  
 POSS.MSG-1SG healing(?)

“(...) there being no one who would help my healing(?)”

(ODN 136/5-6 – Narmouthis – 198-206 CE = Menchetti 2005: 76)

- Ex. 72 (and you will make him stand on a new brick)

*n p3 nw nt-iw.ir-e p3-r<sup>c</sup> n3e h<sup>c</sup> n-im=f*  
*n p3 nw nt\_iw\_ir\_e p3-r<sup>c</sup> n3e h<sup>c</sup> n\_im-f*  
 in ART.DEF.MSG moment REL Prâ go:AUX raise:INF in-3SGM

“When Prâ will raise up (and ascend full...)”

(P. Mag. LL 29/2-3 – Thebes – 3<sup>rd</sup> c. CE = Griffith & Thompson 1904: 164)

It is also found after the circumstantial (Ex. 73) and second tense converters (Ex. 74):

- Ex. 73 (My heart hangs upon you in Egypt, in Meroe and in the deserts.)

*p3y sn w<sup>c</sup>.t nt mtwεy iwεy n3w h3<sup>c</sup>εf*  
*p3y sn w<sup>c</sup>t nt mtw-y iw-y n3w h3<sup>c</sup>-f*  
 DEM.MSG brother one REL with-1SG SBRD-1SG go:AUX leave:INF-3SGM

“This only brother of mine, I will leave him (and I say to you: ‘Keep him safe until I come back to Egypt’).”

(Ph. 416/21 – Philae – 10<sup>th</sup> April 253 CE = Griffith 1937: 115)

- Ex. 74 (... the son of a master of song for 202 generations,)

*r.ir pr-c3 wsir n3w ti w<sup>c</sup> n-imεw nεn(?) i.r-hrεs(?)*  
*r\_ir pr\_c3 wsir n3w ti w<sup>c</sup> n\_im-w n-n(?) i\_r\_hr-s(?)*  
 THMZ Pharaoh Osiris go:AUX give:INF one in-3PL to-1PL before-3SGF

“It is before her that king Osiris will give one of them to us.”

(Ph. 319/6-7 – Philae – 81 BC-499 CE = Griffith 1937: 94)

Finally, one notices the frequent occurrence of this construction in conditional constructions, both in the protasis (e.g. Ex. 75, with second person subjects; see §3.3) and in the apodosis (e.g. Ex. 76, with first person subjects; see also §3.3):

- Ex. 75 *hpr-i.ir=k n3w in p3yεk šš r-bnr*  
*hpr\_iir-k n3w in p3y-k šš r\_bnr*  
 COND=2SGM go:AUX bring:INF POSS.MSG-2SGM garbage outside  
 “If you intend to bring your garbage outside, (you carry your earth for the pot-task).” (OMM 785/7-5 – Narmouthis – end of 2<sup>nd</sup> c. CE = Menchetti 2006: 146)

- Ex. 76 *twεy n<sup>c</sup> ti st n-wš-n 3wts(?)*  
*tw-y n<sup>c</sup> ti st n\_wš\_n 3wts(?)*  
 PRS=1SGM go:AUX give:INF =3PL without substitution

*n t3*                      *md3.t n p3*                      *gdm3(?)*  
*n t3*                      *md3.t n p3*                      *gdm3(?)*  
 in ART.DEF.FSG *md3-F* of ART.DEF.MSG handful  
 “(If it is agreed by me to give to you wheat), I will give it without substitution(?),  
 by the of the handful(?)”  
 (O. MH 4038, B/17-21 – Thebes – 3<sup>rd</sup> c. CE = Parker 1940: 87)

This variety of syntactic contexts is usually seen as evidence of an advanced stage of grammaticalization (see n. 36). However, as mentioned above regarding the Late Egyptian example (see §2.3), this might not necessarily be the case. Indeed, some of the oldest examples in Late Egyptian are already found after the relative marker *nty* and the backshifter *wn*.

### 3.2.5 Negation of the Future I in Demotic

Up until recently, no example of a symmetric negation was attested for the Future I in Demotic, the negation of future reference always being expressed by the older symmetric negation of the Earlier Egyptian Allative Future (Future III), even in the latest Demotic texts (as mentioned by Quack 2006: 193):

Ex. 77 *iwɛf*                      *hpr*                      *iw*                      *t3 mn t3 md.t*                      *n<sup>c</sup>*                      *hpr*                      (...)

<i>iw-f</i>	<i>hpr</i>	<i>iw</i>	<i>t3_mn_t3_mdt</i>	<i>n<sup>c</sup></i>	<i>hpr</i>	(...)
COND-3SGM	happen:INF	SBRD	anything	go:AUX	happen:INF	(...)

*iwɛf*                      *hpr*                      *iw*                      *bn iwɛs*                      *hpr*                      (...)

<i>iw-f</i>	<i>hpr</i>	<i>iw</i>	<i>bn iw-s</i>	<i>hpr</i>	(...)
COND-3SGM	happen:INF	SBRD	NEG FUT-3SGF	happen:INF	(...)

“If anything happens (...) if it doesn’t happen (...)”  
 (P. Mag. LL 8/13-15– Thebes – 3<sup>rd</sup> c. CE = Griffith & Thompson 1904: 64)

The publication of new Demotic ostraca from Narmouthis, a town in the Fayyum in which were found several hundreds of late Demotic ostraca (late 2<sup>nd</sup> c. CE–early 3<sup>rd</sup> c. CE), whose chief characteristic is their use of Greek words written with the Greek alphabet, has changed this situation. Indeed, we now have at least two occurrences of the symmetric negation of this construction in Demotic:<sup>74</sup>

Ex. 78 *r bn-iw twɛy {twɛy}*                      *n3w*                      *ir*                      *παραγράφιν*                      *n-imɛf*

<i>r</i>	<i>bn_iw</i>	<i>tw-y</i>	<i>n3w</i>	<i>ir</i>	<i>paragrap<sup>h</sup>in</i>	<i>n_im-f</i>
SBRD	NEG	PRS-1SG	go:AUX	do:AUX	register	ACC-3SGM

“(…) because I am not going to register him.”<sup>75</sup>  
 (ODN 156/8-9+ODN Narmouthis 2006/1-5 – Narmouthis – 198-206 CE  
 = Menchetti 2005: 95 and Bresciani et al. 2010: 65)

74 Note that the writing of the negation *bn-iw* in Demotic is equivalent to Coptic *n-* in this case. As will be seen below (§4.4), the symmetrical negation of the Later Egyptian Allative Future is normally constructed with *n-* ... *an*. No examples of a Demotic ‘Future I’ negated by *bn(-iw)* ... *in* are known to us, unless the very beginning of l. 10 in ODN Narmouthis 2006 (cf. Ex. 79) is to be interpreted as an *n*; we are grateful to J.Fr. Quack for this comment.

75 For the context of this sentence, see Quack (2006/2007: 180).

## Ex. 79 (Give me food)

*r bn-īw twꜣy nꜣw ir* παραγράφιν *n-imꜣtn ?n?*<sup>76</sup>

*r bn\_īw tw-y nꜣw ir* *paragraf<sup>h</sup>in n\_im-tn ?n?*

SBRD NEG PRS-1SG go:AUX do:AUX register:INF ACC-2PL ?NEG?

“For I am not going to register you (because it is your duty to report him).”

(ODN Narmouthis 2006/8-12 – Narmouthis – 198-206 CE

= Bresciani et al. 2010: 65)

At a semantic level, it is significant that these two Demotic examples of a symmetric negation for the Later Egyptian Allative Future appear in discourses with first person singular subjects, i.e., *subject* that refer to the speaker as a strictly *intentional* source of assertion.

## 3.3 Selectional restrictions on the construction

As shown in §3.2, there is ample evidence that the construction *twꜣy nꜣ sdm* is already well on its way to becoming a future tense in Demotic: the loss of the preposition *r* before the infinitive in most of the examples, the non-etymological writing of *nꜣ*, the variety of syntactic environments in which the construction can occur and the emergence of a symmetrical negation of the Future I all attest to this. All in all, at the formal level, the Future I construction in Late Demotic is very similar to its Coptic descendant.

In terms of semantics, however, the selectional restrictions of the construction (see §2.3) indicate that *subject-oriented* inferences (*intentional* reading) are still very prominently associated with this future construction, compared with *speaker-oriented* inferences, i.e., the ones that lead to the *predictive* meanings in context.

Fig. 5 below shows the types of subjects attested for this future construction in Demotic:

ANIMATE		INANIMATE
Pronominal	Nominal <sup>77</sup>	
1SG <sup>78</sup>	<i>ꜣy</i> (11 occ.)	<i>tꜣ mn tꜣ md.t</i> <sup>84</sup>
2SG.M <sup>79</sup>	<i>ꜣk</i> (5 occ.)	“anything”
2SG.F <sup>80</sup>	<i>ꜣt</i> (3 occ.)	
3SG.M <sup>81</sup>	<i>ꜣf</i> (1 occ.)	
3SG.F <sup>82</sup>	<i>ꜣs</i> (1 occ.)	
3PL <sup>83</sup>	<i>st</i> (1 occ.)	

Fig. 5. The subjects of the Future I in Demotic

76 See the comment in n. 74.

77 P. Mag. LL 29/2-3; Ph. 319/6-7; St. Aswan 1057.

78 O. MH 4038, B/17-21; O. MH 4038, B/31-36; P. Mag. LL 20/19; P. Mag. LL 20/19-20; P. Mag. LL 20/21; P. Wien 6920-6922 x+2/6; P. Wien 6920-6922 x+2/6-7; P. Wien 6920-6922 x+2/7; Ph. 416/21; ODN 156/2-9+ODN Narmouthis 2006/1-8; ODN Narmouthis 2006/8-12.

79 P. Mag. LL v° 28/1; P. Mag. LL v° 33/3; OMM 100/7-8; OMM 777/6-11; OMM 785/5-7.

80 O. MH 4038, C22-24; O. MH 4038, D5-6; O. MH 4038, D6-8.

81 Ph. 422/6 (see the discussion above of Ex. 67).

82 O. MH 4038, D8-11.

83 P. Mag. LL 18/31.

84 P. Mag. LL 8/13-14.

One can first observe the significant proportion of first person subjects in assertive speech acts, i.e., in sentences where the subject/speaker is stating his personal intentions for the future:

Ex. 80 (If you want gold, gold being what you want,)

<i>twɜy</i>	<i>n<sup>c</sup></i>	<i>ti</i>	<i>ʕlɜw</i>	<i>ʔk</i>	<i>r</i>	<i>pʒ</i>	<i>lgtw<sup>c</sup>n</i>
tw-y	n <sup>c</sup>	tī	ʕl-w	ʔk	r	pʒ	lgtw <sup>c</sup> n

PRS-1SG go:AUX CAUS:INF ascend:SBJV-3PL 2SGM ALL ART.DEF.MSG *lgtw<sup>c</sup>n*  
 “I will have you brought to the *lgtw<sup>c</sup>n* (three times a month, since there is no agreement by me to give you gold).”

(O. MH 4038, B/31-36 – Thebes – 3<sup>rd</sup> c. CE = Parker 1940: 87)

Ex. 81 (... saying ‘You are praised,)

<i>twɜy</i>	<i>nʒe</i>	<i>hys.ʔk</i>	<i>pʒ</i>	<i>nhh</i>
tw-y	nʒe	hys-ʔ-k	pʒ	nhh

PRS-1SG go:AUX praise-INF-2SGM ART.DEF.MSG oil

“I will praise you, Oil, (...)”

(P. Mag. LL 20/19 – Thebes – 3<sup>rd</sup> c. CE = Griffith & Thompson 1904: 130)

Second and third person subjects are not exceptional, but they always occur in non-asserted contexts, i.e., in contexts where the speaker does *not* make a *prediction* about the behavior of an animate subject (e.g. “he will go to the city tomorrow”) but rather leaves the possible future fulfillment of the event entirely up to the grammatical subject.<sup>85</sup> Such non-asserted contexts where the intentions of the grammatical subjects are typically interrogative clauses (Ex. 82), protatic clauses (Ex. 83) and relative clauses (Ex. 84):

Ex. 82 (They said ‘Horus, come, are you eating? Horus, come,)

<i>(i)n iw.irɜk</i>	<i>nʒe</i>	<i>wnm</i>
in iw_ir-k	nʒe	wnm

Q PRS-2SGM go:AUX eat:INF

“Will you eat?” (He said ‘Get off me!’)<sup>86</sup>

(P. Mag. LL v<sup>o</sup> 33/3 – Thebes – 3<sup>rd</sup> c. CE = Griffith & Thompson 1904: 202)

<i>iwɜf</i>	<i>hpr</i>	<i>iw.ir(ɜt)</i>	<i>n<sup>c</sup></i>	<i>ir</i>	<i>nʒy</i>	<i>hr-nʒy</i>
iw-f	hpr	iw_ir-t	n <sup>c</sup>	ir	nʒy	hr_nʒy

COND-3SGM happen:INF SBRD-2SGF go:AUX do:INF DEM.PL thus

“If you do this in this way, (without me having had to call after you again...)”

(O. MH 4038, C22-24 – Thebes – 3<sup>rd</sup> c. CE = Parker 1940: 88)

[ <i>pʒ</i> ]	<i>nt</i>	<i>nʒw</i>	<i>ʕʃ</i>	<i>t&lt;ʒ&gt;y</i>	<i>wʃte.t</i>
pʒ	nt	nʒw	ʕʃ	tʒy	wʃtet

ART.DEF.MSG REL go:AUX read:INF DEM.FSG adoration

<i>my-irɜf</i>	<i>ti</i>	<i>tʒe</i>	<i>wʃte</i>
my_ir-f	tī	tʒe	wʃte

JUSS-3SGM give:INF DEM.FSG adoration

“[He] who will read this adoration, may he give this adoration.”

(Kal. 3/4-5 – Kalabsha – 30 BC-284 CE = Griffith 1937: 37)

On the other hand, it is quite remarkable that there is only one example in our corpus with an inanimate, unintentional subject — that is consequently unable to exercise any

85 See already the remarks in Polis (2006: 242).

86 This example is analyzed by Quack (2006: 194-195) as a conjunctive.

kind of control over the predicate. This sentence is part of a magical formula to be recited by the officiant:

- Ex. 85 (I am Ramshou Shou Ramshou, the son of Pashou, of his mother Tapashou,)  
*iwꜥf hꜥr tꜥ mn tꜥ md.t nꜥe hꜥr*  
*iw-f hꜥr tꜥ\_mn\_tꜥ\_mdt nꜥe hꜥr*  
 COND-3SGM happen:INF anything go:AUX happen:INF  
 “If anything happens, (do not come to me in your face of Pekhe).”  
 (P. Mag. LL 8/13-14 –Thebes – 3<sup>rd</sup> c. CE = Griffith & Thompson 1904: 64)

Correlatively, this is the only example with a predicate (*hꜥr* “to happen”) that presupposes a non-agentive subject. Such an example shows that, in Late Demotic, the selectional restrictions of the construction are increasingly relaxed, leading progressively to a fully fledged future tense, able to express prediction.

This predictive meaning is indeed attested in the Demotic corpus, even if admittedly rarely, for a second person subject (Ex. 86) as well as a generic third person subject (Ex. 87):

- Ex. 86 (The small cattle which escaped from the herders,)  
*twꜥt nꜥ gm.tꜥf hr tꜥyꜥw nbꜥ.t ꜥꜥ.t*  
*tw-t nꜥ gm-tꜥ-f hr tꜥy-w nbꜥ-t ꜥꜥ-t*  
 PRS-2SGF go:AUX find-INF-3SGM on their nbꜥ-F big  
 “You will find it on their great *nbꜥ.t*.”  
 (O. MH 4038, D6-8 – Thebes – 3<sup>rd</sup> c. CE = Parker 1940: 89)

- Ex. 87 *rmꜥ nb nꜥ gm md.t*  
*rmꜥ nb nꜥ gm md-t*  
 man every go:AUX find:INF thing-F  
  
*nt iwꜥw iy r smne(?) nꜥ hb.w*  
*nt iw-w iy r smne(?) nꜥ hb-w*  
 REL FUT-3PL come:INF ALL enrich:INF(?) ART.DEF.PL festival-PL  
  
*nꜥ hꜥs.w r.ti ꜥs.t ꜥy.w*  
*nꜥ hꜥs-w r\_ti ꜥs.t ꜥy-w*  
 ART.DEF.PL acts\_of\_praise-PL CAUS:PTCP.PST Isis be\_great:SBJV-3PL  
 “Every man will find wealth(?), who shall come to enrich(?) the festivals and the acts of praise which Isis has made great”<sup>87</sup>  
 (St. Aswan 1057 – El-Hesa – 150-100 BCE = Ray 1987: 173)  
 See Winnicki (1996: 128) for a reading *iwꜥw iy r ti [nꜥr?] nꜥ hb.w*.

One could of course claim that the Demotic corpus is limited and that the data at hand are quite fragmentary, but the fact remains that, out of more than 40 occurrences, only a few of them have the predictive meaning as the most plausible inference.

### 3.4 Morphological reanalysis:

From a prepositional phrase to a Stative and a future morpheme?

Throughout §3.2-3, the auxiliary *nꜥ/nꜥ* has been glossed “AUX”, thereby avoiding taking any position regarding the morphological status of this core element of the Later Egyptian Allative Future in Demotic. We now turn to this question. In a nutshell, the Late Egyptian and Demotic material seems to show that a morphological

87 On this problematic example, see n. 52. The reading suggested by the editor is syntactically difficult. Quack (p.c.) suggests reading *rmꜥ nb (n) tꜥ gm-md.t*.



reanalysis from a prepositional phrase ( $m$  + INFINITIVE) to a Stative took place quite early.

As suggested by Wentz (1959: 25-46), it is likely that the Statives of certain verbs of motion in Coptic — which convey a state of motion (be going, etc.) and not a completed motion event (be gone, etc.) — are not *etymologically* morphological Stative forms (i.e., the so-called “Old Perfective”), but derive rather from an earlier construction involving the locative preposition  $m$  + INFINITIVE,<sup>88</sup> which clearly expresses a progressive aspect with verbs of motion in earlier stages of the language.<sup>89</sup> The relevant Coptic verbs, cited here in the Sahidic dialect, are primarily the following:<sup>90</sup>

Infinitive	Stative	Translation
<i>bók</i>	<i>bék</i>	“to go, be going”
<i>ei</i>	<i>nêu</i>	“to come, be coming”
<i>pôt</i>	<i>pêt</i>	“to run, be running”
<i>he</i>	<i>hêu</i>	“to fall, be falling”
<i>hól</i>	<i>hél</i>	“to fly, be flying”

Fig. 6. Coptic verbs with Statives of ongoing motion

Even though it seems clear that these forms are grammatically Stative forms in Coptic, both at a syntactic and morphologic level, to the extent that they conform to phonological patterns for formation of other Statives, Wentz’s explanation accounts for the difference in meaning of these Statives as well as for otherwise unexplained phonological features.<sup>91</sup>

Crucially, in the framework of the present study, Wentz’s proposal also applies to the verb  $n^c/n3$ : one most probably observes a reanalysis of an original construction  $m$  + INFINITIVE as a Stative.

The Demotic spellings of the auxiliary  $n^c$  in the construction SUBJECT  $n^c$   $r$  + INFINITIVE studied above (§3.2.1) definitely supports such a scenario. Indeed, the grapheme *in-* in spellings such as *in-n<sup>c</sup>* or *in-n<sup>c</sup>.k* (see Fig. 3) indeed seem to indicate that this form is not a Stative in origin, but derives from earlier  $m$  + infinitive used as durative predicate.<sup>92</sup> The grapheme *k* that can occur at the end of the form, on the other hand, is probably to be understood as graphemically reflecting the fact that the form is considered by the scribes to be morphologically a Stative, without necessarily having any phonological substance.<sup>93</sup>

88 Some of these reanalyzed forms might have come from an infinitive headed by a different locative preposition (*hr*). See the remarks in Wentz (1959: 43-44). This opinion is endorsed by Johnson (1969: 19, 63).

89 See above §1.2 (with n. 10) and §2.1.

90 See Layton (2011: 130, §168; 237, §309); Wentz (1959: 27).

91 He actually generalizes an observation made by Griffith (1900: 153-154) regarding the origin of the stative *nêu* “be coming” of the verb *ei* “to come”, which he suggested to link to the predicative  $m$  “in” + *iw* “to come”.

92 See Simpson (1996: 148, §9.5.2(5)), with reference to Johnson (1976: 25-27).

93 See e.g. Spiegelberg (1925: 53, §98); Wentz (1959: 28 with n. 3); Johnson (1976: 22 & 26). Even if some Coptic lexemes probably preserve traces of the first person *-k* ending for the Stative (like *nkoik* ‘to sleep’, see Reintges 2011: 57), we think it is risky to generalize such rare cases backwards by analogy to the Demotic spellings that display a final *-k* for the Stative.

Finally, the fact that the vast majority of non-etymological/phonetic spellings for the verb  $n^c$  in the (more grammaticalized) construction SUBJECT  $n^c$  + INFINITIVE (§3.2.2) is indicative of the fact that the verb form is considered by the scribes to be a *future auxiliary* in this construction, the etymological link with the lexeme  $n^c$  “to move” no longer being obvious to the writers. At this stage, the presence of the allative preposition  $r$  for introducing the lexical predicate simply becomes irrelevant, since the link with the original goal-oriented verb form is lost; this accounts for the systematic absence of this preposition in the Coptic corpus.<sup>94</sup>

The evolution of the grammatical status of the verb  $n^c y$  could therefore be summarized as follows:<sup>95</sup>

$m$ + INFINITIVE	→	STATIVE	→	FUTURE AUXILIARY
$m n^c j$	→	( $in-$ ) $n^c(.k)$	→	$n^c/n\beta$

Fig. 7. The reanalysis of  $n^c y$  as a future auxiliary (1)

To sum up, the two — apparently — contradictory opinions that have been expressed regarding the origin and nature of the future auxiliary  $n^c/n\beta$  are actually compatible:<sup>96</sup> it simply depends on the point of view one wishes to adopt. From a diachronic point of view, Gardiner’s suggestion (1906: 98) that the early Late Egyptian example<sup>97</sup> SUBJECT + ( $m$ )  $n^c y$  ( $r$ )  $s\dot{d}m$  is “clearly an early instance of the Coptic tense *tinastm*” — which was to be almost unanimously adopted by Egyptologists — still holds.<sup>98</sup> From a synchronic point of view, on the other hand, the analysis of  $n^c/n\beta$  in Roman Demotic<sup>99</sup> and of  $na-$  in Coptic<sup>100</sup> as a Stative is legitimate. To sum up, as Polotsky

94 See Polotsky (1960: 403, obs. 2).

95 Reintges (2011: 81-82) argues against the ‘traditional’ view that the future auxiliary developed from a Stative form of the verb  $n^c y$ . He postulates that  $n^c y$  is cyclically derived, created by a process of ‘participle formation’ (we assume that ‘particle’ was intended by the author), followed by a number of phonological rules. For Reintges, there are three main arguments against the analysis of the auxiliary as a Stative form. The problems raised in his first two arguments, which are morphosyntactic in nature, are addressed in this paper (sections §2.2 and §3.4, respectively). The third argument, phonological in nature, which deals with “the replacement of the voiced pharyngeal fricative /ʕ/ by a glottal stop /ʔ/,” (2011: 81) could be explained as typical reductive morphophonological changes characteristic of grammaticalization processes, i.e., loss of phonetic substance.

96 Pace Winand (1992: 422-423, §656). Vergote’s proposal (1983: §149) that it could be “une forme atone de l’infinitif” is not easy to corroborate.

97 Namely *LRL* 35,15 about which Spiegelberg (1895: 60) already observed that it was a periphrasis for a future tense similar to English “I am going to do” and the French “je vais faire”.

98 Recently, see Quack (2006: 193) who stated that “[é]tymologiquement, le futur I tire son origine de la construction  $iw=f m na\dot{i} r s\dot{c}m$  ‘Il est en train d’écouter’ [*sic*], attesté en néo-égyptien mais sans grammaticalisation. (...) En démotique, il n’est pas utilisé avant la période romaine.”

99 Johnson (1976: 63): “[t]his construction (...) was rare in Demotic, where it first appeared in the Roman period. (...) It consists of the present tense with the qualitative of the verb  $n^c$  ‘to go’ written  $n\beta$ .”

100 Starting with Jernstedt (1927); see also Westendorf (1965/1977: 116, with n. 8). Schenke (1978: 55) was of the opinion that the syntactic distribution of  $ne-$  in Middle Egyptian (namely the possibility of its occurrence in the tripartite conjugation pattern) could indicate that  $na-/ne-$  was originally an infinitive. However, it seems risky to infer anything regarding the origin of the Coptic future auxiliary based on this highly grammaticalized complex morpheme. For the Coptic infinitive *nou* “to go” as a back-formation from  $na-$ , see already Polotsky (1960: 403) “(...) as soon as a ‘Future’ is formed

(1959: 458) — independently of Wente — already noted:<sup>101</sup> “[z]wischen Gardiner’s Nachweis daß *na-* auf *m nʿyt r* zurückgeht [...] und Jernstedt’s Beweis daß *na-* (Funktionell) ein Qual. ist [...] besteht jedenfalls keine Antinomie.”

When the reanalysis of *m nʿy* as a Stative in the Present I construction for expressing ongoing motion took place is yet another issue. Based on Wente’s data regarding the spellings of *nʿ/nʿ3* in Demotic,<sup>102</sup> it seems safe to assume that this reanalysis had already taken place in Ptolemaic Demotic. However, this reanalysis is probably even older, if we are to trust the hieratic spellings of the verb *nʿy* in the following examples coming from the tale of the Papyrus Vandier (c. 600 BCE):

Ex. 88 (How could Pharaoh L.P.H. possibly be with me again?)

<i>ptr-sw</i>	<i>i.ir(zi)</i>	<i>nʿ.k</i>	<i>r</i>	<i>pʒ</i>	<i>mwt</i>
ptr_sw	i_ir-i	nʿ-k	r	pʒ	mwt
ATT	THMZ-1SG	go\STAT-1SG	ALL	ART.DEF.MSG	death

“Look, it’s to death that I am going.”<sup>103</sup>

(P. Vandier, r<sup>o</sup> 3,9 [similarly in r<sup>o</sup> 3,10-11] = Posener 1985: 61)

Ex. 89 (You will live, you will not die!)

<i>[iwʒf hpr iw</i>	<i>mntk pʒ</i>	<i>nty]</i> <sup>104</sup>	<i>nʿi.tw</i>
<i>iw_f_hpr_iw</i>	<i>mntk pʒ</i>	<i>nty</i>	<i>nʿi-tw</i>
COND	2SGM	ART.DEF.MSG	REL

<i>r</i>	<i>[di].t</i>	<i>ʿnh[zi]</i>
<i>r</i>	<i>di-t</i>	<i>ʿnh-i</i>
ALL	CAUS-INF	live:SBJV-1SG

“[If you are the one who] was going to make [me] live, (are you the one who will not live?)”<sup>105</sup> (P. Vandier, r<sup>o</sup> 2,3-4 = Posener 1985: 50)

In these two examples, we do not take the graphemes *.k* and *.tw* at the end of the verb form *nʿy* as being necessarily indices of the phonetic level at that time, since the characteristic endings of the Stative are usually not written then.<sup>106</sup> Rather it might be a graphemic index of the way scribes categorized this verb form.<sup>107</sup>

One should stress here the interest of Ex. 89 both at the formal and semantic level. At the formal level, the full etymological construction (SUBJECT *nʿ r* INFINITIVE) here occurs in hieratic script, but with the verb form clearly reanalyzed as a stative, much

---

from a conjugation of the Tripartite Pattern, *na-* is replaced by its non-durative (Infinitive) alternant *nou* (Bohairic *noui*) *e-*. [...] it may very well be a late back-formation from *na-*.”

101 See also Polotsky (1990: 214).

102 See the table in Wente (1959: 34).

103 Note that Shisha-Halevy (1989: 429) considers the *ptr sw* introducing the sentence to be an instance of *ptr/pty sw* “what is it” rather than the presentative *ptr sw* “behold”. On the use of the Stative after a Second Tense converter (basically, a predicate-backgrounding construction), see Johnson (1976: 60) and Shisha-Halevy (1989: 428).

104 A similar restitution is suggested by Hoffmann & Quack (2007: 155 & 346 n. g).

105 Posener (1985: 50) notes that “[i]ci *nʿy* a un sens prospectif bien attesté en démotique et qui donnera les futurs I et II coptes”.

106 See Winand (1992: 138-140, §246-249).

107 The reanalysis of the *m* + Infinitive phrase (for expressing ongoing-motion) as a Stative — and the consequent alignment of the paradigm of the verbs of motion with the formal system of opposition that holds for other verbs, i.e., (*hr*) + Infinitive vs Stative —, might even have taken place earlier, namely in later Late Egyptian (c. 1000 BCE), at least for the verb *iwi* “to come” (see the spelling of the verb *iwi* in P. BM EA 10416, r<sup>o</sup> 2 [= *LR*LC pl. 15; curiously, Janssen (1991: 30, n. 5) considers the spelling *n-iw* to be equivalent to *nʿy*]; P. Moscow 120, r<sup>o</sup> 2,63 [= *LES* 73,10-11]).

like in the Demotic corpus (construction §3.2.1). At the semantic level, on the other hand, one observes a strong *intentional* reading coming from the subject-oriented inferences that are available for third person subjects in relative clauses (see §3.3); these subject-oriented inferences lead to [SCHEDULED FUTURE] meaning in a past context. As such, this example appears to be some kind of “missing link” between the Late Egyptian and Demotic material, i.e. the etymological construction SUBJECT  $n^c r$  + INFINITIVE encoding a strongly subject-oriented modal meaning, but with the verb  $n^c y$  already re-analyzed as a Stative form.

Taking into account the first occurrences of the non-etymological writing of the future auxiliary in Demotic (§3.2.2), we can now emend Fig. 7 chronologically and observe that around 450 years took place between the first occurrences of each stage:

Stage 1 c. 1050 BCE		Stage 2 c. 600 BCE		Stage 3 c. 100 CE
$m$ + INFINITIVE	→	STATIVE	→	FUTURE AUXILIARY
$m n^c y$	→	$(in-)n^c(.k)$	→	$n^c/n^3$

Fig. 8. The reanalysis of  $n^c j$  as a future auxiliary (2)

#### 4 The Later Egyptian Allative Future (‘Future I’) in Coptic

In this section, we examine only those aspects of the construction that are relevant to our main argument. A full study of future tenses in the Coptic dialects is well beyond the scope of the present paper. In the majority of Coptic dialects (ca. 4<sup>th</sup> century CE), the Later Egyptian Allative Future has been fully grammaticalized.<sup>108</sup> We find indications of its advanced stage of grammaticalization both at the syntactic and at the semantic level.

At the syntactic level, not only does the construction freely occur in all sorts of subordinate clauses (as was already the case in Demotic, see §3.2.4), but the Later Egyptian Allative Future has also developed a productive symmetrical negation in Coptic (§4.1).

At the semantic level, we have argued above that selectional restrictions on constructions are a useful diagnostic for identifying the type of semantic change typical of grammaticalization. In this section, we provide evidence that the selectional restrictions on the construction have been totally relaxed: it can now freely occur with all types of subjects (§4.2) and predicates (§4.3), which is characteristic of fully fledged future tenses, crucially able to express prediction in all persons. In at least one dialect, Sahidic, its grammaticalization goes further, acquiring optative modality as part of its polysemy network (§4.4).

108 See e.g. Wilson (1970: 65-70); Vergote (1983: §148); Polotsky (1990: 213-216); Shisha-Halevy (2003, 2007); Reintges (2004: 262-267); Layton (2011: 239-240, §311).

## 4.1 Symmetrical negation

In Coptic, the Later Egyptian Allative Future has a symmetrical negation, the same (*n*) ... *an* that negates most non-verbal clauses and the so-called First Present, also known as the Bipartite Pattern or Durative Pattern ‘durative sentence pattern.’<sup>109</sup>

*Sahidic*

Ex. 90 *t-pe mn-p-kah na-parage*  
 ART.DEF.FSG-heaven and-ART.DEF.MSG-earth FUT-pass.away  
*na-šače=de na-parage=an*  
 POSS.PL:1SG-word=but FUT-pass.away=NEG  
 “Heaven and earth are going to pass away but my words are not going to pass away.” (Matthew 24:35 = Perez 1984: 251)

Ex. 91 *p-et-pisteue ero-f n-se-na-krine mmo-f=an*  
 ART.DEF.MSG-REL-believe ALL-3SGM NEG<sup>1</sup>-3PL-FUT-judge ACC-3SGM=NEG<sup>2</sup>  
 “He who believes in him will not be judged.” (John 3:18 = Quecke 1984: 88)

*Bohairic*

Ex. 92 *p<sup>h</sup>araô na-sôtem nsa-t<sup>h</sup>ênou=an*  
 Pharaoh FUT-listen after-2PL=NEG  
 “Pharaoh will not listen to you.” (Exodus 11:9 = Lagarde 1867: 151)

Ex. 93 *p<sup>h</sup>ê-et<sup>h</sup>-nah<sup>i</sup> ero-f se-na-t<sup>i</sup>-hap ero-f=an*  
 DEM.MSG-REL-believe ALL-3SGM 3PL-FUT-give-judgment ALL-3SGM=NEG  
 “He who believes in him will not be judged.” (John 3:18 = Horner 1898: 356)

*Lycopolitan*

Ex. 94 *p-et-r-pisteue ara-f se-na-rkrine mma-f=en*  
 ART.DEF.MSG-REL-believe ALL-3SGM 3PL-FUT-judge ACC-3SGM=NEG  
 “He who believes in him will not be judged.” (John 3:18 = Thompson 1924: 2)

*Fayyumic*

Ex. 95 *pê et-ne-elpisteuin ela-f n-se-ne-ti-hep*  
 DEM.MSG REL-FUT-believe ALL-3SGM NEG<sup>1</sup>-3PL-FUT-give-judgment  
*ela-f=en*  
 ALL-3SGM=NEG<sup>2</sup>  
 “He who believes in him will not be judged.” (John 3:18 = Till 1931: 10\*-11\*)

*Mesokemic*

Ex. 96 *ešope=de a-tetn-tm-kô ebal n-n-rome*  
 COND=but COND-2PL-NEG-put out ACC-ART.DEF.PL-man  
*m-petn-iot ne-kô=nêtn ebal=en n-netn-paraptôma*  
 NEG<sup>1</sup>-POSS.MSG:2PL-father FUT-put=DAT:2PL out=NEG<sup>2</sup> ACC-POSS.PL:2PL-sin  
 “But if you do not forgive people, your father will not forgive your sins.” (Matthew 6:15 = Quecke 1981: 64)

Interestingly, in some corpora, the negated Later Egyptian Allative Future exists but is relatively rare, the older Allative Future being more frequent in negative contexts. For example, Shisha-Halevy (2003: 272) notes that in the Mesokemic dialect, the negated Allative Future is rare.<sup>110</sup> In the Scheide Codex manuscript of the Gospel of John, we

109 See e.g. Layton (2011: 233-250, §305-324).

110 See also Shisha-Halevy (2002: 300) who stresses that, in the hitherto published documents from Kellis, ‘practically the only negative future occurring is the negative energetic future *nne-*’.

find 10 examples of the negated Allative Future, compared with 51 examples of the negated older construction.

We interpret this as meaning that in such corpora the newer construction has not yet become the unmarked means of expressing future reference in negative contexts, despite the newer construction's compatibility with negation. This situation is paralleled in other languages, e.g., some varieties of Canadian French, in which the newer future construction is the most frequent in affirmative contexts, but the older future construction is retained in negative contexts, leading to a virtual 'polarity split' or statistical asymmetry between the two future constructions (Poplack and Turpin 1999).

## 4.2 The selectional restriction of the Later Egyptian Allative Future in Coptic

We now describe the semantic evolution of the construction in Coptic based on its selectional restrictions, i.e., the types of subjects and predicates that are attested in the textual material.

### 4.2.1 Types of subject

The construction occurs with inanimate subjects, which do not allow the event to be interpreted as involving an agentive subject referent. As such, readings involving a subject's intention are excluded, the only meaning available in these examples being a *prediction* made by the speaker about a forthcoming, scheduled, event. This means that they are instances of *switch context* (Heine 2002), contexts in which the meaning of the source construction is incompatible with the meaning of the utterance in context.

- Ex. 97 *kan ešôpe a-f-r-hen-ke-nobe se-na-kaa-u na-f ebol*  
 even if PST-3SGM-do-some-other-sin 3PL-FUT-put-3PL DAT-3SGM out  
 "Even if he has committed sins, they are going to be forgiven him."  
 (James 5:15 = Horner 1924: 234)

- Ex. 98 *šen nim ete-n-f-na-t'-karpos=an e-nanou-f (...)*  
 tree each REL-NEG<sup>1</sup>-3SGM-FUT-give-fruit=NEG<sup>2</sup> SBRD-good-3SGM (...)  
*se-na-koore-f n-se-noč-f e-p-kôht*  
 3PL-FUT-cut.down-3SGM SEQ-3PL-throw-3SGM ALL-the-fire  
 "Every tree that is not going to give good fruit (...) is going to be cut down and cast into the fire."  
 (Luke 3:9 = Quecke 1977: 116)

- Ex. 99 *mn-ou-fô=gar nouôt na-he ebol hn-t-ape*  
 NEG.EXIST-ART.INDEF-hair=for single FUT-fall out in-ART.DEF.FSG-head  
*n-laau mmôtn*  
 of-any of:2PL  
 "For there is not one hair about to fall out of the head of any of you."  
 (Acts 27:34 = Thompson 1932: 81)

- Ex. 100 *e-n-r-nobe=gar ntencom mnnsa-tre-n-či*  
 COND-1PL-do-sin=for deliberately after-CAUS-1PL-receive  
*m-p-sooun n-t-me mn-t<sup>h</sup>usia ce*  
 ACC-ART.DEF.MSG-knowledge of-the-truth NEG.EXIST-sacrifice PTCL

*na-šôčp ha-nobe*

FUT-get under-sin

“For if we sin deliberately after receiving the knowledge of the truth, there is no longer any sacrifice (which) is going to be reserved for sin.”

(Heb. 10:26 = Thompson 1932: 180)

- Ex. 101 *oun-ou-raše na-šôpe na-k mn-ou-telêl*  
 EXIST-ART.INDEF-joy FUT-become DAT-2SGM and-ART.INDEF-joy  
 “Joy and gladness are going to be yours.” (Luke 1:14 = Quecke 1977: 97)
- Ex. 102 *mn-laau n-sark<sup>s</sup> na-tmaeio*  
 NEG.EXIST-trifle of-flesh FUT-justify  
 “No flesh is going to be justified.” (Galatians 2:16 = Thompson 1932: 191)

The construction can also occur with non-referential subjects, which refer cataphorically to a clause. Such cases also preclude intentional readings:

- Ex. 103 *auô s-na-šôpe hm-p-ehoou etmmau peče-p-čoeis*  
 and 3SGF-FUT-become in-the-day DEM said-the-Lord  
*p-rê na-hôtp m-p-nou-m-meere*  
 ART.DEF.MSG-sun FUT-set at-the-moment-of-noon  
*auô p-ouoein f-na-r-kake hičm-p-kah*  
 and ART.DEF.MSG-light 3SGM-FUT-make-dark upon-ART.DEF.MSG-earth  
 “And it will come to pass on that day, said the Lord: the sun will set at noon, and the light will darken upon the earth.” (Amos 8:9 = Ciasca 1889: 329)
- Ex. 104 *auô s-na-šôpe n-ouon nim et-na-ôš m-p-ran*  
 and 3SGF-FUT-become to-one every REL-FUT-call on-the-name  
*m-p-čoeis f-na-oučai*  
 of-ART.DEF.MSG-Lord 3SGM-FUT-save  
 “And it shall come to pass that everyone who is going to call on the name of the Lord is going to be saved.” (Acts 2:21 = Thompson 1932: 4)
- Ex. 105 *auô f-na-šôpe hn-ne-hoou n-hae e-f-ouonh ebol*  
 and 3SGM-FUT-become in-the-days of-end SBRD-3SGM-appear out  
*nci p-toou m-p-čoeis*  
 NOM ART.DEF.MSG-mountain of-ART.DEF.MSG-Lord  
 “And it is going to be in the last days that the mountain of the Lord will be manifested.” (Micah 4:1 = Ciasca 1889: 336)

#### 4.2.2 Types of predicate

The construction is compatible with predicates denoting goal-oriented motion (see Ex. 10). This indicates that the auxiliary is a future marker, and cannot be a lexical verb of motion, as in English, *he is going to go* or French *il va aller*.

Conversely, it occurs with predicates that exclude any motion reading. This also provides evidence that the future auxiliary *na-* does not have spatial motion as part of its semantics:

- Ex. 106 *t<sup>i</sup>-na-hupomeine e-p-čois*  
 1SG-FUT-wait ALL-the-Lord  
 “I am going to wait for the Lord.” (Psalms 26:14 = Budge 1898: 28)

Ex. 107 *eishêete t<sup>i</sup>-na-ahera-t hirm-p-ro auô ti-na-tôhm*  
 ATT 1SG-FUT-stand-1SG at-ART.DEF.MSG-door and 1SG-FUT-knock  
 “Behold, I am going to stand at the door and knock.”  
 (Apoc. 3:20 = Horner 1924: 300-302)

Ex. 108 *t<sup>i</sup>-na-cô šant-k-i*  
 1SG-FUT-tarry LIMIT-2SGM-come  
 “I am going to tarry until you come.” (Judges 6:18 = Thompson 1911: 169)

Ex. 109 *hn-ou t<sup>i</sup>-na-ime e-pai*  
 in-what 1SG-FUT-know ALL-this  
 “How am I going to know this?” (Luke 1:18 = Quecke 1977: 97)

Crucially, this construction occurs with verbs that exclude an intentional reading. As such, the only possible reading is prediction, since the *intentional* subject-oriented inferences are not available with such predicates. These are also instances of *switch context* (see above).

Ex. 110 *psah psah tn-na-tako*  
 master master 1PL-FUT-perish  
 “Master, master, we are going to perish!” (Luke 8:24 = Quecke 1977: 157)

Ex. 111 *hn-ou-mou tn-na-mou eboġ\_ĉe a-n-nau e-pnoute*  
 in-a-death 1PL-FUT-die because PST-1PL-see ALL-God  
 “We will surely die because we have seen the Lord.”  
 (Judges 13:22 = Thompson 1911: 212-213)

#### 4.2.3 Modal meaning

Similarly to the Earlier Egyptian Allative Future (see §1.1 with n. 9), the Later Egyptian Allative Future develops deontic modal meanings. For example, in Bohairic, one finds cases of the second person Allative Future with a clearly directive function.

##### *Bohairic*

Ex. 112 *pa-son k<sup>h</sup>-na-i nte-n-ôli m-p-sôma*  
 POSS.MSG:1SG-brother 2SGM-FUT-come SEQ-1PL-take ACC-ART.DEF.MSG-body  
*m-pai-marturos ntot-ou n-nai-matoi*  
 of-DEM.MSG-martyr from-3PL MOD-DEM.PL-soldier  
 “My brother, come and let’s take the body of this martyr from these soldiers.”  
 (Nitrian Bohairic = Hyvernat 1886: 136)

In Sahidic, a form of the Allative Future — traditionally considered to be the Second Future<sup>111</sup> — comes to encode optative meanings (Shisha-Halevy 1986, Layton 2011, Richter 2008). This is apparently a case of insubordination (Evans 2007), but the actual pathway of change in Coptic has yet to be studied. What can be said at this point is that it appears to have developed only in those Coptic dialects in which Second Tenses can encode predicate-centered focus, (Güldemann et al. 2010, Grossman 2014). Interestingly, in some varieties of late Coptic, e.g., the language of the documentary texts from Thebes (Richter 2008), it almost completely replaces the Earlier Egyptian Allative Future as the main optative construction in affirmative contexts.

<sup>111</sup> The 'Second Future' is the descriptive label used for a form which originally was associated with predicate-backgrounding, and by Coptic comes to have greatly extended functions.



## Sahidic

- Ex. 113 *ebol=de hn-t-bô n-knte e-tet(n)-ne-eime*  
 out=but in-ART.DEF.FSG-tree of-fig THMZ-2PL-FUT-know  
*e-t-parabolê*  
 ALL-ART.DEF.FSG-parable  
 “From the fig tree you shall learn the parable.”  
 (Gk. imperative *mathete tēn parabolēn*) (Sahidic, Mark 13:28 = Quecke 1972: 155)
- Ex. 114 *mntsnouos n-sop te-rompe ere-p-hllo*  
 twelve MOD-time ART.DEF.FSG-year THMZ-ART.DEF.MSG-old  
*na-bôk ehoun e-n-êei tēr-ou n-t-sunagôgê*  
 FUT-go in to-ART.DEF.MSG-house ALL-3PL of-ART.DEF.FSG-congregation  
 “Twelve times a year, the Senior Monk shall enter all the houses of the congregation.”  
 (Sahidic, Shenoute, Leipoldt IV: 58,1-2)
- Ex. 115 *e-k-na-tôôbe an n-n-et-tôôbe*  
 THMZ-2SGM-FUT-retaliate NEG ACC-ART.DEF.PL-REL-retaliate  
*na-k n-hen-pet<sup>h</sup>oou*  
 DAT-2SGM ADVZ-ART.INDEF.PL-bad  
 “Don’t retaliate against those who retaliate against you with badness.”  
 (Sahidic, Shenoute, Leipoldt III: 104,27-28)
- Ex. 116 *ere-p-sahou n-ne-grap<sup>h</sup>ê na-ei ečô-f*  
 THMZ-ART.DEF.MSG-curse of-ART.DEF.PL-scripture FUT-come upon-3SGM  
 “May the curse of the Scriptures come upon him.”  
 (P. KRU 106, 194-195 = Crum & Steindorff 1912: 333)
- Ex. 117 *prot[on]=men nne-f-op<sup>h</sup>ulist<sup>h</sup>ai n-laau*  
 first=CONTR OPT.NEG-3SGM-need ACC-thing  
*deuteron=de e-f-na-sôk ehrai*  
 second=CONTR THMZ-3SGM-FUT-draw down  
*ha-p-krima m-pnoute*  
 under-ART.DEF.MSG-judgment of-God  
 “Fir[st], may he need nothing. But second, may he submit to the judgment of God.”  
 (P. KRU 83, 12-13 = Crum & Steindorff 1912: 270)
- Ex. 118 *t<sup>i</sup>-kêleue ntehê etbe pe-ftoou n-termêseion*  
 1SG-order so about ART.DEF.MSG-four of-trimesion  
*ere-pa-hai na-bit-ou*  
 THMZ-POSS.MSG:1SG-husband FUT-take-3PL  
*ne-f-taa-u n-prosp<sup>h</sup>ora haro-i*  
 CONJ-3SGM-give-3PL as-offering for-1SG  
 “I order the following about the four trimesion: may my husband take them and give them as offering for me.”  
 (P. KRU 69, 29-31 = Crum & Steindorff 1912: 222)
- Ex. 119 *hôb nim nt-a-u-ei ečô-i ha-na-eiote (...)*  
 thing every REL-PST-3PL-come upon-1SG from-POSS.PL:1SG-parents (...)  
*e-u-na-šôpe=na-k tēr-ou mn-nek-šêre*  
 THMZ-3PL-FUT-be=DAT-2SGM all-3PL and-POSS.PL:2SGM-child  
 “Everything that came to me from my parents (...) may they be yours and those of your children.”  
 (P. KRU 67, 97-99 = Crum & Steindorff 1912: 213)

## 5 Conclusions

In this paper, we have sketched the grammaticalization of the Later Egyptian Allative Future, from its first documentation in later Late Egyptian, through Demotic, and up to late Coptic. In this section, we summarize our descriptive findings, and afterwards turn to their theoretical implications. In terms of functional change, we take the selectional restrictions of the construction to be a good diagnostic of the semantics of the construction at each particular stage, and as such, of semantic change. We trace the development of the source construction that codes an animate subject's intentional motion through space, with intention as a prominent inference (Late Egyptian), to a construction that codes future tense, and as such imposes no restrictions on the type of subject or predicate (Coptic). In Coptic, we even find non-referential subjects and clear examples of first person futures that express predictions bare of any speaker intention. In Demotic, we find an interim stage, in which the selectional restrictions on the construction are somewhat relaxed, as subjects overwhelmingly tend to be high on the animacy scale, which means that they are compatible with intention readings, with prediction as the most plausible meaning in some contexts. Similarly, it is in Demotic that predicates that preclude motion readings begin to occur in the construction, as do the first examples of subjects that preclude intentional readings.

From a formal point of view, we argue that the original source construction, involving a locative preposition-cum-aspectual marker (*m*), followed by an infinitive, is reanalyzed in Demotic, or perhaps even earlier, as a Stative. This is corroborated by the prevalence of non-etymological writings of the incipient future auxiliary. Additionally, we show that the assumption that the allative preposition (*r*) heading a purpose clause was 'lost' over the course of grammaticalization is unwarranted, at least in any simple sense. Rather, alongside the more explicit construction with the allative preposition existed a construction with a bare infinitive after verbs of motion, both encoding purpose clauses. A more nuanced view of the grammaticalization of the Later Egyptian Allative Future indicates that it was the latter construction that 'won' the competition.

Furthermore, we show that this construction is limited to affirmative contexts for most of its history, with symmetric negation developing only in the very late Demotic of Narmouthis, which is in many respects close to Coptic.

	AFFIRMATIVE	NEGATIVE
Late Egyptian	<i>twzī m nʿy r/∅ sdm</i>	<i>bn jwzī r sdm</i>
Demotic	<i>twzī nʒ sdm</i>	<i>bn jwzī r sdm</i>
Coptic	<i>ti-na-sōtm</i>	<i>n-ti-na-sōtm an</i>

Fig. 9. The development of a symmetric negation in late Demotic (Narmouthis) and Coptic

This study also provides an interesting counter-example to assumptions about the grammaticalization of future tenses, i.e., that their occurrence in conditionals and in subordinate clauses in general occurs at a rather late stage of development. The Egyptian data show that the source construction of the Later Egyptian Allative Future occurred in subordinate clauses from its very first documentation.

From a theoretical point of view, we argue that the documented history of the Later Egyptian Allative Future corroborates assumptions about the ways in which contexts and inferential mechanisms interact in semantic change. Crucial here is the notion of *bridging context*, a context in which multiple readings of a given utterance are possible, with an innovative meaning being more plausible — but still cancellable.

We add to this the conceptual distinction between *subject-oriented* vs. *speaker-oriented* inferences, claiming that speaker-oriented inferences lead to the relaxation of selectional restrictions on constructions. Subject-oriented inferences strengthen existing selectional restrictions, because they involve understanding an utterance as being a statement about an entity and an event. Entities and events impose particular semantic restrictions on the type of statements that can be made. In the present case, we argue that directed motion events presuppose intentional subjects that are capable of movement with purpose. Speaker-oriented inferences, on the other hand, do not impose the same restrictions. For example, if a listener interprets a given utterance as involving a speaker's prediction — rather than a statement about a given subject's intention to act — the listener can replicate the construction, in his or her turn as speaker, in ways that are not limited by the selectional restrictions of the source construction.

This study is intended as a part of a broader project to understand the future cycles of Ancient Egyptian. Looking at the domain of allative futures in Egyptian, we find the first Old Egyptian occurrences of the source construction that would later grammaticalize into an allative future *iwꜣf r sdm* — in Middle Egyptian. This construction, which develops both modal meanings and a productive symmetric negation — *bn iwꜣf r sdm* — only in Late Egyptian is the main future tense up until latest Demotic. It survives nearly until the end of Coptic, where its attestation as an optative — at least in some varieties and in affirmative contexts — is much reduced, in favor of the innovative optative *efnasôtm*.

The Later Egyptian Allative Future, in some respects, replicates the grammaticalization pathway of its earlier antecedent (Grossman & Polis 2014), both functionally and formally. For example, the relative lateness of modal meanings and productive symmetric negation is observed in both developmental pathways; bridging contexts are clearly implicated in the changes in selectional restrictions observed; the selectional restrictions of the construction are gradually relaxed, with intentional animate subjects at the first stage, and only afterwards inanimate, non-referential, or otherwise unintentional subjects.

The picture sketched here has dealt only with allative futures, and still has to take into account the other constructions that participate in the long-term future cycle in Ancient Egyptian, in which innovative future tenses are continually grammaticalized from a variety of source constructions.<sup>112</sup> A more complete understanding of the history of the future also has to take into account exploratory future constructions, which can be built with allative verb forms, e.g., the incipient grammaticalization of *šm* as a future auxiliary in Late Egyptian (§2.4). We also find a Coptic modal construction in

---

112 See e.g. in late Coptic documentary texts, the grammaticalization of *ouafsôtm* as yet another future tense (Müller 2007).

which *bôk* (“to go”) is not plausibly understood with its lexical meaning (see Crum 1939: 29a-b). In Ex. 120, *bôk* highlights the agent’s control over a future event.

Ex. 120 *ešče mp-k-rpistos hn-nai et-k-na-bôk e-kaa-u*  
 COND PST.NEG-2SGM-be\_faithful in-DEM.PL REL-2SGM-FUT-go ALL-leave-3PL  
 “If you were not faithful in those you are going to leave, (how will you fare in those who will remain)?” (ShA 2 146 = Amélineau 1911: 146)

These constructions, as well as many others in the domain of future time reference, still await systematic study.

## Glossing abbreviations

1	1 <sup>st</sup> person	FUT	future	PTCP	participle
2	2 <sup>nd</sup> person	IMP	imperative	PST	past
3	3 <sup>rd</sup> person	INDEF	indefinite	Q	question marker
ACC	accusative marker	INF	infinitive	QUOT	quotative
ADVZ	adverbializer	JUSS	jussive	REL	relative marker / relative form
ALL	allative	LIMIT	limitative	SBJV	subjunctive
ART	article	LOC	locative	SBRD	subordinating particle
ATT	attention marker	M	masculine	SEQ	sequential
AUX	auxiliary	MOD	modifier	SG	singular
CAUS	causative	NEG	negation	STAT	stative
COND	conditional marker	NMLZ	nominalizer	THMZ	thematizer, i.e., predicate- backgrounding marker
CONJ	conjunctive	NOM	nominative marker	TOPZ	topicalizer
CONTR	contrast marker	OPT	optative	VET	vetitive
CORD	coordinating particle	PL	plural		
DAT	dative	PN	proper name		
DEM	demonstrative	POSS	possessive		
EXIST	existential	PRS	present		
F	feminine	PTCL	particle		

## Bibliography

- Allam, Schafik. 1973. *Hieratische Ostraka und Papyri aus der Ramessidenzeit*, Tübingen.
- Amélineau, Émile. 1911. *Œuvres de Schenoudi, tome deuxième*, Paris.
- Bresciani, Edda. 1969. *Graffiti démotiques du Dodecaschoene : Qertassi - Kalabcha - Dendour - Dakka – Maharraqa*, Le Caire: Centre de documentation et d'études sur l'ancienne Égypte.
- . [n.d.]. *Dendour, Kalabcha et Kertassi : graffiti démotiques*, Le Caire: Centre de documentation égyptologique.
- Bresciani, Edda, Alain Delattre, Paul Heilporn, Alain Martin, Angiolo Menchetti, Georges Nachtergaele, Rosario Pintaudi & Flora Silvano. 2010. *Narmouthis 2006 : documents et objets découverts à Médinet Madi en 2006*, Monografie di "Egitto e vicino oriente" 2, Pisa: Edizioni Plus – Pisa University Press.
- Budge, E.A. Wallis. 1898. *The earliest known Coptic Psalter*, London: Kegan Paul, Trench, Trübner & Co. Ltd.
- Bybee, Joan L., William Pagliuca & Revere Dale Perkins. 1991. Back to the Future, in: Elisabeth Cl. Traugott & Bernd Heine (eds.), *Approaches to Grammaticalization*, Typological Studies in Language 19, Amsterdam/Philadelphia: John Benjamins, vol. 2, 17-58.
- . 1994. *The Evolution of Grammar. Tense, aspect and modality in the languages of the world*, Chicago/London: The University of Chicago Press.
- Camino, Ricardo A. 1963. Papyrus Berlin 10463, in: *Journal of Egyptian Archaeology* 49, 29-37.
- CDD = *Chicago Demotic Dictionary* (<http://oi.uchicago.edu/research/pubs/catalog/cdd/>).
- de Cenival, Françoise. 1972. *Les associations religieuses en Égypte d'après les documents démotiques*, Bibliothèque d'Études 46, Cairo: Institut Français d'Archéologie Orientale.
- . 1988. *Le mythe de l'œil du soleil*, Demotische Studien 9, Sommerhausen: Gisela Zauzich Verlag.
- Černý, Jaroslav. 1942. Nouvelle série de questions adressées aux oracles, in: *Bulletin de l'Institut Français d'Archéologie Orientale* 41, 13-24.
- Černý, Jaroslav & Sarah I. Groll (with Christopher Eyre). 1984. *A Late Egyptian Grammar*, 3<sup>e</sup> ed., Roma.
- Ciasca, Augustinus. 1889. *Sacrorum Bibliorum fragmenta Copto-Sahidica musei Borgiani*, vol. II, Rome.
- Crum, Walter E. 1915. *Der Papyruscodex saec. VI.-VII der Phillipsbibliothek in Cheltenham*, Strassburg.
- . 1939. *A Coptic Dictionary*, Oxford: Clarendon Press.

- Crum Walter E. & Georg Steindorff. 1912. *Koptische Rechtsurkunden des achten Jahrhunderts aus Djême (Theben)*, Leipzig: J.C. Hinrichs.
- Depauw Mark. 1997. *A Companion to Demotic Studies*, Papyrologica Bruxellensia 28, Brussels: Fondation Égyptologique Reine Élisabeth.
- Di Biase-Dyson, Camilla, Frank Kammerzell & Daniel A. Werning. 2009. Glossing Ancient Egyptian: Suggestions for adapting the Leipzig Glossing Rules, in: *Lingua Aegyptia* 17, 243–266.
- Erichsen, Wolja. 1954. *Demotisches Glossar*, Kopenhagen: Einar Munksgaard.
- Erman, Adolf. 1880. *Neuaegyptische Grammatik*, Leipzig: Engelmann.
- . <sup>2</sup>1933. *Neuaegyptische Grammatik*, 2<sup>nd</sup> ed., Leipzig: Engelmann.
- Evans, Nicholas. 2007. Insubordination and its uses, in: Irina Nikolaeva (ed.), *Finiteness: Theoretical and Empirical Foundations*, Oxford: Oxford University Press, 366–431.
- Evans, Nicholas & David Wilkins. 1998. *The knowing ear: An Australian test of universal claims about the semantic structure of sensory verbs and their extension into the domain of cognition*, Arbeitspapier Nr. 32 (Neue Folge), Köln: Allgemeine Sprachwissenschaft, Institut für Linguistik, Universität zu Köln.
- Gardiner, Alan H. 1906. The origin of the Coptic tense Futurum I, in: *Zeitschrift für Ägyptische Sprache und Altertumskunde* 43, 97–98.
- . 1935. *Hieratic papyri in the British Museum – Third series: Chester Beatty gift*, 2 vol., London: British Museum.
- Giannotti, Sara. 2007. Istruzioni per un apprendista bibliotecario negli ostraka demotici e bilingui di Narmuthis, in: *Egitto e Vicino Oriente* 30, 117–152.
- Goedicke, Hans & Edward F. Wente. 1962. *Ostraka Michaelides*, Wiesbaden: Harrassowitz.
- Goldbrunner Sara. 2006. *Der verblendete Gelehrte*, Demotische Studien 13, Sommerhausen: Gisela Zauzich Verlag.
- Griffith, Francis Llewellyn. 1900. *Stories of the high priests of Memphis: The Sethon of Herodotus and the demotic tales of Khamuas*, Oxford: Clarendon Press, 2 vol.
- . 1935–1937. *Catalogue of the Demotic Graffiti of the Dodecaschoenus*, Oxford: Oxford University Press.
- Griffith, Francis Llewellyn & Herbert Thompson. 1904–1909. *The Demotic Magical Papyri of London and Leiden*, London: H. Grevel & Co., 3 vol.
- Groll, Sarah Israelit. 1969. *iw sdm.f* in Late Egyptian, in: *Journal of Near Eastern Studies* 28, 184–191.
- Grossman, Eitan. 2014. Predicate-centered focus in Coptic: a synchronic lay of the land and a diachronic puzzle. Paper presented at workshop on *Information Structure in Ancient Egyptian* (Berlin, June 2014). Available online.
- Grossman, Eitan & Martin Haspelmath. 2014+. The Leipzig-Jerusalem transliteration of Coptic, in: Eitan Grossman, Martin Haspelmath & Sebastian Richter (eds), *Egyptian-Coptic in Typological Perspective*, Berlin & New York: De Gruyter Mouton.
- Grossman, Eitan & Stéphane Polis. 2012. Navigating polyfunctionality in the lexicon: Semantic maps and ancient Egyptian lexical semantics, in: Eitan Grossman, Stéphane Polis & Jean Winand (eds), *Lexical Semantics in Ancient Egyptian*, *Lingua Aegyptia, studia monographica* 9, Hamburg: Widmaier Verlag, 175–225.
- . 2014. On the pragmatics of subjectification. The emergence and grammaticalization of a verb-less Allative Future in Ancient Egyptian, in: *Acta linguistica Hafniensia* [special issue on grammaticalization and subjectification edited by Hubert Cuyckens & Daniël Van Olmen].
- Güldemann, Tom, Ines Fiedler, Yukiko Morimoto & Kirill Prokhorov. 2010. Preposed verb doubling and predicate-centered focus. Paper presented to the international conference of the SFB 632, Potsdam, 2010.
- Heine, Bernd. 2002. On the role of context in grammaticalization, in: Ilse Wischer & Gabriele Diewald (eds), *New Reflections on Grammaticalization. International Symposium, Postdam, 17–19 June, 1999*, *Typological Studies in Language* 49, Amsterdam/Philadelphia: John Benjamins, 83–101.
- HO = Jaroslav Černý & Alan H. Gardiner. 1957. *Hieratic ostraca*, Oxford: Griffith Institute.
- Hoffmann, Friedhelm. 1996. Der literarische demotische Papyrus Wien D6920–22, in: *Studien zur Altägyptischen Kultur* 23, 167–200.
- Hoffmann, Friedhelm & Joachim Fr. Quack. 2007. *Anthologie der demotischen Literatur*, Einführungen und Quellentexte zur Ägyptologie 4, Berlin: Lit Verlag.
- HOP = *Hieratische Ostraka und Papyri*. See Allam 1973.

- Horner, George W. 1898. *The Coptic version of the New Testament in the Northern Dialect. Volume II*, Oxford: Clarendon Press.
- . 1924. *The Coptic version of the New Testament in the Southern Dialect. Volume VII*, Oxford: Clarendon Press.
- Hyvernat, Henri. 1886. *Les Actes des martyrs de l'Égypte*, Paris: Ernest Leroux.
- Jacquet-Gordon, Helen. 2003. *The Graffiti on the Khonsu temple roof at Karnak*, Oriental Institute Publications 123, Chicago: Oriental Institute.
- Jernstedt, Petr Viktorovitch. 1927. Die grammatische und lexikalische Stellung des koptischen Verbuns *na-* ‚gehen‘, in: *Comptes-rendus de l'Académie des Sciences de l'URSS*, 33-35.
- Johnson, Janet H. 1976. *The Demotic Verbal System*, Studies in Ancient Oriental Civilization 38, Chicago: Oriental Institute.
- . <sup>3</sup>2000. *Thus wrote Onchsheshonqy*, Studies in Ancient Oriental Civilization 45, Chicago: Oriental Institute.
- Junge, Friedrich. 2001. *Late Egyptian grammar: an introduction*, Griffith Institute Publications, Oxford: Griffith Institute.
- Kal. = Kalabsha. See Griffith 1935-1937.
- Kammerzell, Frank. 1983.  $\sqrt{rdj}$  + Pseudopartizip: eine unmögliche Konstruktion?, in: *Göttinger Miszellen* 67, 57-64.
- Khons. = Khonsu. See Jacquet-Gordon 2003.
- Korostovtsev, Michail. 1973. *Grammaire du Néo-Égyptien*, Moscow: Nauka.
- KRI = Kenneth A. Kitchen. 1969–1990. *Ramesside Inscriptions. Historical and Biographical*, 8 vol., Oxford: B.H. Blackwell Ltd.
- KRITA = Kenneth A. Kitchen. 1993-2012. *Ramesside Inscriptions, Translated & Annotated*, 6 vol., Malden, MA; Oxford: Wiley-Blackwell.
- Kruchten, Jean-Marie. 1981. *Le Décret d'Horemheb. Traduction, commentaire épigraphique, philologique et institutionnel*, Brussels: Université Libre de Bruxelles.
- . 1986. *Le grand texte oraculaire de Djéhoutymose : intendant du domaine d'Amon sous le pontificat de Pinedjem II*, Monographies Reine Élisabeth 5, Bruxelles: Fondation Égyptologique Reine Élisabeth.
- . 2010. Les serments des stèles frontières d'Akhénaton : origine du Futur III & dynamique de l'apparition et de l'extension de l'auxiliaire *iri*, in: *Lingua Aegyptia* 18, 131-167.
- de Lagarde, Paul. 1867. *Der Pentateuch Koptisch*, Leipzig: B.G. Teubner.
- Layton, Bentley. 2004. \$\$\$.
- . <sup>3</sup>2011. *A Coptic Grammar, with Chrestomathy and Glossary. Sahidic Dialect*, 3<sup>rd</sup> ed., Wiesbaden: Harrassowitz.
- Lefèvre, Dominique. 2008. *Les papyrus "d'El-Hibeh" à la 21ème dynastie : étude philologique et prosopographique* (unpublished Ph. D. dissertation).
- Leipoldt, Johannes. 1908. *Sinuthii archimandritae vita et opera omnia III*, Corpus Scriptorum Christianorum Orientalium 42, Scriptorum Coptici 2, Leipzig: Harrassowitz.
- . 1913. *Sinuthii archimandritae vita et opera omnia IV*, Corpus Scriptorum Christianorum Orientalium 73, Scriptorum Coptici 5, Leipzig: Harrassowitz.
- LEM = Alan H. Gardiner. 1937. *Late-Egyptian miscellanies*, Bibliotheca Aegyptiaca 7, Brussels: Édition de la Fondation Égyptologique Reine Élisabeth.
- LES = Alan H. Gardiner. 1932. *Late-Egyptian stories*, Bibliotheca Aegyptiaca 1, Brussels: Édition de la Fondation Égyptologique Reine Élisabeth.
- Lexa, František. 1947-1951, *Grammaire Démotique*, 7 vol., Praha: Orbis.
- Loprieno, Antonio. 1995. *Ancient Egyptian. A Linguistic Introduction*, Cambridge: Cambridge University Press.
- LRL = Jaroslav Černý. 1939. *Late Ramesside Letters*, Bibliotheca Aegyptiaca 9, Brussels: Édition de la Fondation Égyptologique Reine Élisabeth.
- LRLC = Jac J. Janssen, 1991. *Late Ramesside Letters and Communications*, Hieratic Papyri in the British Museum 6, London: Published for the Trustees of the British Museum by British Museum Press.
- Mathieu, Bernard. 1996. *La poésie amoureuse de l'Égypte ancienne. Recherches sur un genre littéraire au Nouvel Empire*, Bibliothèque d'Étude 115, Cairo: Institut Français d'Archéologie Orientale.

- Menchetti, Angiolo. 2005. *Ostraka demotici e bilingui da Narmuthis: ODN 100-188*, Biblioteca di studi egittologici 5, Pisa: ETS.
- . 2006. Il paesaggio visto da Narmuthis: testimonianze documentarie, in: S. Pernigotti & M. Zecchi (eds), *La terra, gli uomini e gli dèi: il paesaggio agricolo nell'antico Egitto; atti del secondo colloquio, Bologna - 22/23 maggio 2006*, 135-150. Imola (Bologna): La Mandragora.
- Miestamo, Matti. 2013. Symmetric and Asymmetric Standard Negation, in: Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures Online*, Leipzig: Max Planck Institute for Evolutionary Anthropology (Available online at <http://wals.info/chapter/113>, Accessed on 2014-05-12.)
- Müller, Matthias. 2007. Futur V? Modales Futur in nicht-literarischen koptischen Texten aus der Thebais, in: *Lingua Aegyptia* 15, 67-92.
- . 2009. The “el-Hibeh”-Archive: Introduction and Preliminary Information, in: G.P.F. Broekman, R.J. Demarée & Olav E. Kaper (eds.). 2009. *The Libyan Period in Egypt. Historical and Cultural Studies into the 21<sup>st</sup>-24<sup>th</sup> Dynasties: Proceedings of a Conference at Leiden University, 25-27 October 2007*, Egyptologische Uitgaven 23, Leiden: Nederlands Instituut voor het Nabije Oosten, 251-264.
- Mythus = *Le mythe de l'œil du soleil*. See de Cenival 1988.
- Neveu, François. 1996. *La langue des Ramsès. Grammaire du néo-égyptien*, Paris: Khéops.
- ODN = Ostraka Demotici di Narmouthis. See Bresciani et al.: 2010; Giannotti: 2007 and Menchetti: 2006.
- O. MH 154 = Ostrakon Medinet Habou 154. See Lichtheim 1957.
- O. MH 4038 = Ostrakon Medinet Habu 4038. See Parker 1940.
- Parker, Richard A. 1940. A Late Demotic Garden Agreement, in: *Journal of Egyptian Archeology* 26, 84-113.
- . 1962. *A Saite Oracle Papyrus from Thebes in the Brooklyn Museum [Papyrus Brooklyn 47.218.3], Edited with Translation and Commentary, with a chapter by Jaroslav Černý*, Brown Egyptological Studies 4, Providence, Rhode Island: Brown University Press.
- Perez, Gonzalo A. 1984. *El Evangelio de San Mateo en copto sahidico*, Madrid: Consejo Superior de Investigaciones Científicas.
- Peust, Carsten. 2007. Die Konjugation des Verbs für “gehen” im Neuägyptischen, in: *Göttinger Miscellen* 212, 67-80.
- Ph. = Philae. See Griffith 1935-1937.
- P. KRU = See Crum & Steindorff 1912.
- P. Mag. LL = Magical Papyrus London and Leiden. See Griffith & Thompson 1904-1909.
- P. Vienna 6920-6922. See Hoffmann 1996.
- Polis, Stéphane. 2006. Les relations entre futur et modalité déontique. À propos des sens du futur III en néo-égyptien, in: *Lingua Aegyptia* 14, 233-250.
- . 2009. Interaction entre modalité et subjectivité en néo-égyptien: autour de la construction *mri + iw<sub>circ</sub>* souhaiter que, in: *Lingua Aegyptia* 17, 201-229 (= Matthias Müller & Sami Uljas [eds], *Proceedings of the Fourth International Conference on Egyptian Grammar (Crossroads IV): Basel, March 19-22, 2009*).
- Polis, Stéphane, Anne-Claude Honnay & Jean Winand. 2013. Building an annotated corpus of Late Egyptian. The Ramses project: review and perspectives, in: Stéphane Polis & Jean Winand (eds), *Texts, languages & information technology in Egyptology: Selected papers from the meeting of the Computer Working Group of the International Association of Egyptologists (Informatique & Égyptologie), Liège, 6-8 July 2010*, *Ægyptiaca Leodiensia* 9, Liège: Presses Universitaires de Liège, 25-44.
- Polotsky, Hans Jacob. 1959. Zur Neugestaltung der koptischen Grammatik, in: *Orientalische Literaturzeitung* 9/10, col. 453-459 (= *Collected Papers* 234-237).
- . 1960. The Coptic Conjugation System, in: *Orientalia* 29, 392-422.
- . 1987-1990. *Grundlagen des koptischen Satzbaus*, American Studies in Papyrology 29, 2 vol., Atlanta, GA: Scholars Press.
- Poplack, Shana & Danielle Turpin. 1999. Does the FUTUR have a future in (Canadian) French?, in: *Probus* 11/1, 133-164.
- Posener, Georges. 1985. *Le papyrus Vandier*, Bibliothèque générale 7, Cairo: Institut Français d'Archéologie Orientale.



- Quack, Joachim Fr. 1994. *Die Lehren des Ani: ein neuägyptischer Weisheitstext in seinem kulturellen Umfeld*, Orbis Biblicus et Orientalis 141, Freiburg/Göttingen: Universitätsverlag.
- . 1995. Notes en marge du Papyrus Vandier, in: *Revue d'Égyptologie* 46, 163-170.
- . 2006. En route vers le copte. Notes sur l'évolution du démotique tardif, in: *Faits de langues* 27, 191-216.
- . 2006/2007. Review of Menchetti 2005, in: *Enchoria* 30, 174-181.
- Quecke, Hans. 1972. *Das Markusevangelium säidisch*, Barcelona: Papyrologica Castroctaviana.
- . 1977. *Das Lukasevangelium säidisch*, Barcelona: Papyrologica Castroctaviana.
- . 1984. *Das Johannesevangelium säidisch*, Barcelona: Papyrologica Castroctaviana.
- Ray, John D. 1987. A pious soldier: Stele Aswan 1057, in: *Journal of Egyptian Archaeology* 73, 169-180.
- Richter, Tonio Sebastian. <sup>2</sup>2008. *Rechtssemantik und forensische Rhetorik: Untersuchungen zu Wortschatz, Stil und Grammatik der Sprache koptischer Rechtsurkunden*, Philippika 20, Wiesbaden: Harrassowitz.
- Reintges, Chris H. 2004. *Coptic Egyptian (Sahidic dialect): A learner's grammar*, Afrikawissenschaftliche Lehrbücher 15, Köln: Rüdiger Köppe.
- . 2011. The Evolution of the Ancient Egyptian Stative: Diachronic stability despite inflexional change, in: *Folia Orientalia* 48, 7-97.
- Roquet, Gérard. 1978. Formes verbales à distribution équivalente : modalité dépréciative de la forme  $j(w)=fr sdm, \epsilon \rightarrow a \ \epsilon / \lambda \ c \omega r m$ , in: *Bulletin de l'Institut Français d'Archéologie Orientale* 78(2), 497-523.
- Satzinger, Helmut. 1976. *Neuägyptische Studien. Der Partikel ir. Das Tempusssystem*, Beihefte zur Wiener Zeitschrift für die Kunde des Morgenlandes 6, Wien: Verlag des Verbandes der wissenschaftlichen Gesellschaften Österreichs.
- Schenke, Hans-Martin. 1978. On the Middle Egyptian dialect of the Coptic language, in: *Enchoria* 8 (Sonderband, Lieferung 2), 43\*-58\*.
- . 1981. *Das Matthäus-Evangelium im Mittelägyptischen Dialekt des Koptischen (Codex Scheide)*, Texte und Untersuchungen zur Geschichte der altchristlichen Literatur 127, Berlin: Akademie Verlag.
- Setne I. See Griffith 1900.
- Shisha-Halevy, Ariel. 1983. Middle Egyptian Gleanings: Grammatical Notes on the "Middle Egyptian" text of Matthew, in: *Chronique d'Égypte* t. LVIII, n° 115-116, 311-329.
- . 1986. *Coptic Grammatical Categories. Structural Studies in the Syntax of Shenoutean Sahidic*, Analecta Orientalia 35, Rome: Pontificium Institutum Biblicum.
- . 1989. Papyrus Vandier Recto: an early Demotic literary text?, in: *Journal of the American Oriental Society* 109, 421-435.
- . 2002. An Emerging New Dialect of Coptic, in: *Orientalia* 71, 298-308.
- . 2003. Future, Present, Narrative Past: a Triple Note on Oxyrhynchite Tempuslehre, in: *Sprache und Geist. Peter Nagel zum 65. Geburtstag*, Hallesche Beiträge zur Orientwissenschaft 35, Halle (Saale), 249-309.
- . 2007. *Topics in Coptic Syntax: Structural Studies in the Bohairic Dialect*, Orientalia Lovaniensia Analecta 160, Leuven: Peeters.
- Simpson, Robert S. 1996. *Demotic grammar in the Ptolemaic sacerdotal decrees*, Oxford: Griffith Institute.
- Smith, Mark. 2005. *Papyrus Harkness (MMA 31.9.7)*, Oxford: Griffith Institute.
- Spiegelberg, Wilhelm. 1893. Varia, in: *Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes* 14, 39-43.
- . 1895. *Correspondances du temps des rois-prêtres publiées avec autres fragments épistolaires de la Bibliothèque nationale*, Paris.
- . 1910. *Der Sagenkreis des Königs Petubastis: nach dem Strassburger demotischen Papyrus sowie den Wiener und Pariser Bruchstücken*, Demotische Studien 3, Leipzig: Hinrichs.
- . 1917a. Briefe der 21. Dynastie aus El-Hibe, in: *Zeitschrift für Ägyptische Sprache und Altertumskunde* 53, 1-30.
- . 1917b. Demotische Miscellen, in: *Zeitschrift für ägyptische Sprache und Altertumskunde* 53, 116-129.
- . 1925. *Demotische Grammatik*, Heidelberg: Winter.

- Stern Ludwig. 1880. *Koptische Grammatik*, Leipzig: T.O. Weigel.
- Sweeney, Deborah. 2001. *Correspondence and dialogue: Pragmatic factors in late Ramesside letter writing*, Ägypten und Altes Testament 49, Wiesbaden: Harrassowitz.
- Tait, William J. 2013. Uniconsonantal signs and patterns of change: Exploring the orthography of the Demotic script, in: Sven P. Vleeming (ed.), *Aspects of Demotic orthography: Acts of an International Colloquium held in Trier, 8 November 2010*, Leuven/Paris: Peeters, 127-143.
- Thompson, Herbert H. 1911. *A Coptic Palimpsest containing Joshua, Judges, Ruth, Judith and Esther in the Sahidic dialect*, Oxford: Oxford University Press.
- . 1924. *The Gospel of John according to the earliest Coptic manuscript*, London: British School of Archeology in Egypt.
- . 1932. *The Coptic Version of the Acts of the Apostles and the Pauline Epistles in the Sahidic Dialect*, Cambridge: Cambridge University Press.
- Till, Walter. 1931. *Koptische Dialektgrammatik*, Munich: C.H. Beck.
- TLA = *Thesaurus Linguae Aegyptiae* (<http://aew.bbaw.de/tla/index.html>)
- Traugott, Elisabeth Cl. 2010. (Inter)subjectivity and (inter)subjectification: A reassessment, in: Kristin Davidse, Lieven Vandelanotte & Hubert Cuyckens (eds.), *Subjectification, Intersubjectification and Grammaticalization*, Topics in English Linguistics 66, Berlin/New York: De Gruyter Mouton, 29-71.
- Vergote, Jozef. 1956. Review of “Walter Till, *Die Satzarten im koptischen*”, in: *Chronique d’Égypte* t. XXXI, n° 61, 218-219.
- . 1983. *Grammaire copte*, 2 vol., Louvain: Peeters.
- Vernus, Pascal. 1990. *Future at Issue. Tense, Mood and Aspect in Middle Egyptian: Studies in Syntax and Semantics*, Yale Egyptological Studies 4, New Haven: Yale Egyptological Seminar.
- . 2010a. *Sagesses de l’Égypte pharaonique*, Paris: Actes Sud.
- . 2010b. Du moyen égyptien au néo-égyptien, de *m* à *m-jr*: l’auxiliation de l’impératif à la dix-huitième dynastie, in: Zahi Hawass & Jennifer Houser Wegner (eds), *Millions of jubilees: Studies in honor of David P. Silverman*, Cairo: Conseil Suprême des Antiquités, vol. 2, 315-335.
- Vittmann, Günther. 1980. Ein thebanischer Verpfändungsvertrag aus der Zeit Ptolemaios’ III. Euergetes: P. Marseille 298 + 299, in: *Enchoria* 10, 127-139.
- . 1998. *Der demotische Papyrus Rylands 9. Teil I: Text und Übersetzung. Teil II: Kommentare und Indizes*, Ägypten und Altes Testament 38, Wiesbaden: Harrassowitz.
- Vleeming, S. P. 2001. *Some coins of Artaxerxes and other short texts in the Demotic script found on various objects and gathered from many publications*, Studia Demotica 5. Leuven; Paris; Sterling, VA: Peeters.
- Wb. = Adolf Erman & Hermann Grapow. 1926/1928/1929/1930/1931. *Das Wörterbuch der aegyptischen Sprache*, 5 vol., Leipzig: J.C. Hinrichs.
- Wente, Edward F. 1959. *The Syntax of Verbs of Motion in Egyptian*, Chicago.
- . 1967. *Late Ramesside Letters*, Studies in Ancient Oriental Civilisation 33, Chicago: The University of Chicago Press.
- . 1990. *Letters from ancient Egypt*, Writings from the Ancient World 1, Atlanta: Scholars Press.
- Westendorf, Wolfgang. 1965-1977. *Koptisches Handwörterbuch*, Heidelberg: Carl Winter Universitätsverlag.
- Wilson, Marvin R. 1970. *Coptic Future Tenses: Syntactical Studies in Sahidic*, Berlin: De Gruyter.
- Winand, Jean. 1992. *Études de néo-égyptien, I. La morphologie verbale*, Ægyptiaca Leodiensia 2, Liège: C.I.P.L.
- . 1996. Les constructions analogiques du futur III en néo-égyptien, in: *Revue d’Égyptologie* 47, 117-145.
- . 2006. *Temps et aspect en égyptien. Une approche sémantique*, Probleme der Ägyptologie 25, Leiden/Boston: Brill.
- Winnicki, Jan Krzysztof. 1996. Petisis, Sohn des Pachnumis, Offizier und Priester an der Südgrenze Ägyptens im 2. Jh. v. Chr., in: *Journal of Juristic Papyrology*, 127-134.