



**HAL**  
open science

# Polarity focus in a cross-dialectal grammar of Coptic Egyptian

Karen De Clercq, Chris Reintges

► **To cite this version:**

Karen De Clercq, Chris Reintges. Polarity focus in a cross-dialectal grammar of Coptic Egyptian. Quaderni di lavoro ASIIt , In press. hal-03908091

**HAL Id: hal-03908091**

**<https://hal.science/hal-03908091>**

Submitted on 20 Dec 2022

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# Polarity focus in a cross-dialectal grammar of Coptic Egyptian

*Karen De Clercq and Chris Reintges*

CNRS, Laboratoire de Linguistique Formelle, UMR 7110 & Université Paris Cité

## 0. Introduction

Coptic Egyptian (not to be confused with present-day Egyptian Arabic) is the indigenous language spoken and written in Late Roman, Byzantine and Early Medieval Egypt (from around the mid-third century to the twelfth century CE). Historically speaking, it represents the last developmental stage of Ancient Egyptian [Afroasiatic] (see Reintges 2022 for further background information). The language itself presents us with a picture of great internal diversity. Although many issues are still outstanding, it may actually be more correct to speak of a cluster of mutually eligible speech varieties with a scattered geographical distribution. This led one scholar to posit that the very notion of the Coptic language amounts to a dialect continuum (Funk 1988: 150).<sup>1</sup>

The unusually rich inventory of tense–aspect–mood [TAM] markers is one of the most complex areas of the cross-dialectal grammar of Coptic Egyptian. As the morphological exponents of fine-grained distinctions in the temporal, aspectual and modal-evidential domain, TAM particles, which traditionally known as “conjugation bases”, are paradigmatically organized items, whose members are defined in opposition to each other (see, among various others, Polotsky 1960, 1987/1990: 175–176 §§1–2; Layton 2000: 252–254 §325; Reintges 2018: 246–252 §7.1). Example (1) from the Akhmimic dialect features the perfect tense/aspect particle *ha*, which appears clause-initially, leaning on the nominal subject *Paḡulos* ‘Paulus’. The canonical word order in Coptic Egyptian is subject–verb–object (SVO).

---

<sup>1</sup> The early literary varieties of Coptic that flourished in the fourth and fifth centuries CE look in many ways like migratory dialects without a localizable center. Ironically, the Akhmimic dialect (siglum A) did not develop in present-day Ḳahmīm (ancient Panopolis) where most of the extant manuscripts have been unearthed but rather emerged in the Theban region. The classical Sahidic dialect (Arabic: al-Ṣaʿīd “Southern Egypt”; siglum S) covers some middle ground between the southern and the northern dialect group, suggesting that it actually originated in the region of ancient Hermopolis (modern al-ʿAshmūnayn) before it spread southward. One of the more recently discovered dialects is the Oxyrhynchitic dialect (siglum O), also known as Middle Egyptian or Mesokemic, whose place of origin is the Graeco-Roman town of Oxyrrhynchos (modern al-Bahnasā). The linguistic material of the present study comes from two main sources, to wit, the Early Coptic Bible translations in the Sahidic, Akhmimic and Oxyrhynchitic dialects and the extensive literary corpus of Shenoute of Atribe (347–465 CE), whose idiolect represents high-standard literary Sahidic with some dialect admixture from Akhmimic (see Shisha-Halevy 1986 for a detailed syntactic description).

(1) Pre-subject perfect tense/aspect particle **ha** in basic SVO sentence

**ha**    Paulos    telɛl    əmmɔ=f    mən    Onɛ:siphoros    mən    wan  
 PERF    Paulus    rejoice.ABS    PREP=CL.3M.SG    with    Onesiphoros    with    one.M.SG  
 nim  
 each.M.SG

“Paulus rejoiced himself and Onesiphoros and everyone (else).”<sup>A</sup> (Acta Pauli 19: 25–26, ed. Schmidt)

On top of their multifaceted temporal, aspectual and modal semantics, Coptic TAM particles encode polarity oppositions as well. The negative future tense particle *nne*, for instance, is a portmanteau morpheme, synthesizing future temporal reference and negative polarity. The Sahidic Coptic example in (2) is another illustration for the basic word order pattern in the language, in which a TAM particle comes in front of a SVO sentence and is separated from the lexical verb by the subject expression. Due to the built-in negation of the negative future particle *nne*, the indefinite subject NP *la ʔau ən=ro.me* ‘some (of) man’ and the indefinite direct object NP *ənka* ‘thing’ are semantically interpreted as negative indefinites. As an aside, it should be noted that Coptic lacks morphologically distinctive negative indefinites altogether.

(2) Pre-subject negative future tense particle **nne** in basic SVO sentence with indefinite subject and direct object NPs

**nne**    laʔau    ən=ro:me    wəm    ənka    ən-te=f-ri  
 NEG.FUT    someone    LINK=man    eat.CS    thing    in-DEF.F.SG=POSS.3M.SG-cell

“No one should eat anything in his cell.”<sup>S</sup> (Precepts of Pachomius 115, ed. Lefort)

TAM particles, such as the above-discussed the perfect and the negative future marker *ha* and *nne* are not restricted to the pre-subject position of SVO sentences but may also appear higher up in the fine structure of the left periphery (see Rizzi 1997, 2001 and much related work). Particularly interesting evidence for the variable syntax of TAM particles comes from a syntactic variant of *clitic left-dislocation* (henceforth CLLD), which comprises two morphologically identical copies of one and the same TAM particle. The higher copy of the TAM marker (TAM<sub>2</sub>) precedes the CLDDed Topic, while the lower copy (TAM<sub>1</sub>) follows it in linear order. More precisely, TAM<sub>1</sub> is placed in pre-subject position in front of the resumptive subject clitic. The main structural features of the TAM doubling construction is illustrated with the Oxyrhynchitic example given in (3) below. The doubled TAM word is the perfect particle

*ha*. The CLLDed subject *ta-ʃɛ:re* ‘my daughter’ is anaphorically related to the enclitic subject pronoun third person feminine singular =s ‘she’ (as indicated by subscript<sub>i</sub>).

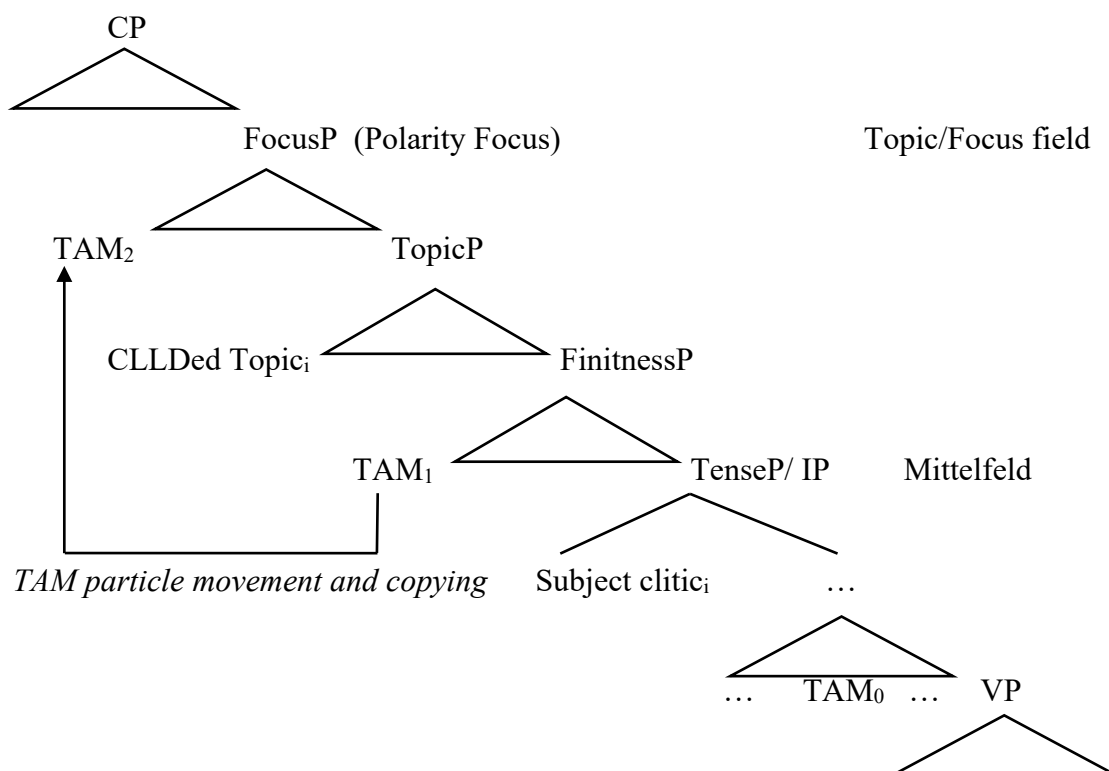
- (3) PERF<sub>2</sub> **ha** > CLLDed Topic<sub>i</sub> > PERF<sub>1</sub> **ha** > Subject clitic<sub>i</sub> > Verb  
**ha** ta-ʃɛ:re                      **ha** =s                      mu:                      ən-te-unu:  
 PERF DEF.F.SG.POSS.1SG-girl PERF =CL.3F.SG die.ABS in-DEF.F.SG-hour  
 “My daughter has just died.”<sup>O</sup> (Matthew 9:18 [Codex Scheide, ed. Schenke])

The joint patterning of clitic left-dislocation and TAM doubling is also attested for negative TAM portmanteaux, which makes the study of the construction all the more interesting from a theoretical perspective. In the Oxyrhynchitic Coptic example in (4), the main point of note is that despite the presence of two instances of the negative future *nne*, the left dislocation sentence as a whole does not convey a double negation reading. Neither is there a difference in temporal interpretation vis-à-vis the pragmatically neutral SVO sentence in example (2) above, which only comprises a single instance of the negative future particle.

- (4) NEG.FUT<sub>2</sub> **nne** > CLLDed Topic<sub>i</sub> > NEG.FUT<sub>1</sub> **nne** > Subject clitic<sub>i</sub> > Verb  
**nne** peï-tʰom                      peï                      **nne** =f                      wɔ:təβ  
 NEG.FUT DEM.M.SG-generation DEM.M.SG NEG.FUT =CL.3M.SG pass.ABS  
 “This very generation will not change.”<sup>O</sup> (Matthew 24:34 [Codex Schøyen, ed. Schenke])

In what follows we will present arguments and evidence for a unified syntactic analysis of the Coptic TAM doubling construction as a case of polarity emphasis or “verum” focus (Höhle 1992; Reintges 2011a: 566; Poletto 2010). The basic ingredients of our proposal are schematically represented in the below tree diagram.

(5) The cartographic structure of the Coptic TAM doubling construction (first outline)



The relation between the lower and the higher copy of the TAM particle is one of a division of labor: TAM<sub>1</sub> is responsible for the expression of the verb's TAM properties and polarity, whereas TAM<sub>2</sub> expresses affirmative or negative polarity focus. Support for the first part of our proposal comes from the fact that TAM<sub>1</sub> occupies the same pre-subject slot in the syntactic representation as the TAM particle does in regular clauses. Support for the second part comes from the fact that TAM<sub>2</sub> precedes the CLLDed Topic and must therefore be located in a higher left peripheral position—one that is associated with information structure. This informational structural position can be identified with the focus projection of the Rizgian (1997) cartography. In previous research, the focus position has been associated to polarity emphasis (Breitbarth et al 2013) and focus negation (Haegeman 2000, Poletto 2010). The Coptic facts provide hitherto unnoticed evidence for this cartographic position.

As for the syntactic relation between TAM<sub>1</sub> and TAM<sub>2</sub>, we follow Reintges (2011a: 562–567, 2015: 135) in treating TAM<sub>2</sub> as a copy of TAM<sub>1</sub> and in characterizing the structural relation between TAM<sub>1</sub> and TAM<sub>2</sub> in terms of movement or movement-like relations. In particular, the TAM movement and copying process connects the Finiteness and the Focus projection in the the left periphery of the clitic left-dislocation sentences. The Coptic TAM doubling construction is theoretically significant insofar as it provides prima facie evidence for Chomsky's (1993: 34–35) “copy theory of movement”, according to which the tail position of

movement chain is not a co-indexed “trace”, but a fully copy of the displaced constituent. Indeed, the TAM doubling construction displays two phonologically realized copies of the TAM particle in question.<sup>2</sup> But this does not mean that the movement dependency starts out in the preverbal subject position, which we will identify with the Finiteness projection. Based on the distributional behavior of preverbal (post-subject) TAM particles, we will take this analysis a step further and demonstrate that TAM<sub>1</sub> and hence also TAM<sub>2</sub> have an extended movement path that reached down into originate in the “Mittelfeld” domain of the root clause. Once TAM particles are raised out of the TP/IP, they are move to move from the Finiteness to the Focus projection for the formal expression of polarity focus.

Having detected three distinct positions in which TAM particles can occur, to wit, IP/TP, Fin, and Focus, we outline, following work by Starke (2020) and De Clercq (2022), a decompositional analysis of these particles into several TAM and polarity-related submorphemic features and relate their featural make-up to their external syntactic distribution. From a nanosyntactic perspective, Coptic TAM particles can be considered portmanteaux morphemes, whose location in the syntax and predisposition for particle movement are determined by the structural size of lexically stored tree structures. With these considerations in mind, it stands to reason that although TAM<sub>1</sub> and TAM<sub>2</sub> are identical in terms of their surface morphological shape, they are not identical in terms of their lexical tree structure, bearing in mind that TAM<sub>2</sub> carries focus semantics. Accordingly, the displacement and copying process that underlies the TAM doubling construction is not amendable to verbal head movement but rather involves non-head constituents of considerable size and structural complexity.

The roadmap of this paper is as follows. The next section (Section 1) takes a closer look at the morphosyntax and distributional behavior of pre-subject and preverbal TAM particles of various kinds. This leads to Section 2, which presents a combined cartographic/nanosyntactic analysis of TAM particle placement in general, and the syntactic derivation of TAM doubling in particular. Section 3 brings in the comparative dimension and calls attention to the similarities and differences in expressing polarity focus that we see between the Coptic TAM doubling construction and polarity focus in Italian dialects, as discussed in important work by the Jubilar (Poletto 2010). Section 4 concludes this paper.

---

<sup>2</sup> The TAM doubling facts are problematic for Nunes’ restrictive version of the copy theory of movement, in which the highest copy is privileged for phonological realization to meet certain linearization requirements. However, the “Pronounce Higher Copy” algorithm may be suspended when the convergence of the sentence structure at PF is at stake. But such a last resort scenario does not work for the Coptic TAM doubling construction, in which the Spell-out of both TAM<sub>1</sub> and TAM<sub>2</sub> is mandatory.

## 1. The variable syntax of Coptic TAM particles

As pointed out by Cinque (1999: 189 note 22), tense–aspect and mood-indicating particle and auxiliary verbs are distinguished from each other not only in terms of inflectionability but also in terms of syntactic mobility, with functional particles “being less prone to movement (perhaps as a consequence of their being poorer in features)”. By analogy, when we see TAM particles surfacing in more than one syntactic position, as in the case of the Coptic TAM doubling construction, it can be deduced that these particles have the relevant feature structure that enables them to move overtly in the syntax. This strongly suggests that TAM particles are actually auxiliary verbs. On the semantic side, however, they have a more abstract content as compared with temporal, aspectual or modal auxiliaries. Putting aside these classificatory issues for the moment, what is central to our analysis is that Coptic TAM markers are auxiliary-like clitics, which can appear in more than one syntactic positions. Crucially, these free functional morphemes are not bound inflectional affixes, which are part of a morpho-syntactic word, as the traditional grammar analysis would have it.

Due to the interaction between morphological structure and syntactic operations, the issues at hand are complex and necessitate a step-by-step approach. We will commence with the main syntactic characteristics of the TAM doubling construction, with particular attention for the contingency of TAM particle copying on a prior application of clitic left-dislocation (Section 1.1). We will then turn to the morphosyntax and distributional behavior of the small-sized class of preverbal (post-subject) TAM particles (Section 1.2). The main argument that we are developing is that despite appearances, all TAM particles originate in the Mittelfeld above the VP domain. For pre-subject TAM particles, the movement path further extends to the finiteness projection at the bottom of the left periphery. At the other side of the spectrum, there are preverbal TAM particles, whose movement path does not exceed the IP/TP domain, which calls for a structural explanation. The TAM doubling construction is also available for negative TAM portmanteaux (Section 1.3). However, additional complications arise when the relation with the bipartite negation pattern is taken into account.

### 1.1 *General properties of the TAM doubling construction*

The TAM doubling construction has received some scholarly attention in Coptic linguistics, where it is generally analyzed as a syntactic variant of CLLD (e.g., Shisha-Halevy 1986: 162–163 §6.0.2.2; Layton 2000: 247 §321, 257 §332(a); Reintges 2018: 380 §10.1.3.2). Bosson (2009) proffers a survey of the cross-dialectal evidence. In what follows we will

illustrate the core syntactic properties of the TAM doubling construction with the example of the perfect particle *ha* ~ *ʔa*.<sup>3</sup> According to Sethe (1915), the perfect tense/aspect particle has been grammaticalized from the Pre-Coptic positional verb *wʔh* ‘to place, put’, which also has a completive aspect connotation ‘to finish’. Of the two allomorphic variants, *ʔa* is the more common one. It is the only allomorph available in the Sahidic dialect, from which the following example of the TAM doubling construction has been taken.

- (6) PERF<sub>2</sub> **ʔa** > CLLDed Topic<sub>i</sub> > PERF<sub>1</sub> **ʔa** > Subject clitic<sub>i</sub> > Verb
- ʔa** ne-ro:me de əm=pə-ma [RC et \_\_\_ əmmau ]  
 PERF DEF.PL-man PCL LINK=DEF.M.SG-place REL there
- ʔa** =u: weh pə-sə:ma əm=pə-makarios Apa Mɛ:na  
 PERF =CL.3PL put.CS DEF.M.SG-body LINK=DEF.M.SG-blessed Apa Mena
- e-p-eset həm pə-kʔa:mul  
 to-DEF.M.SG-ground from DEF.M.SG-camel
- “The people of that place put the body of the blessed Apa Mena from the camel to the ground.”<sup>S</sup> (Apa Mena, Martyrdom 5a:14–19, ed. Drescher)

Although the TAM doubling construction is built on clitic left-dislocation, the topic phrase itself does not necessarily have a contrastive topic or aboutness reading. In example (6) above, we seem to be dealing with a topic shift that advances the story line (Reintges 2018: 381 § 10.1.3.3). In Coptic dialects other than Sahidic, the TAM doubling construction also admits the topicalization of non-subject constituents. In the Akhmimic example in (7), the CLLDed direct object *pa-het mən pa-nuβ* ‘my gold and my silver’ is a coordinated noun phrase, which consequently triggers plural number agreement on the direct object clitic =*u:* ‘they’.

- (7) PERF<sub>2</sub> **ʔa** > CLLDed Topic<sub>DOi</sub> > PERF<sub>1</sub> **ʔa** > Subject pronoun > Verb > direct object clitic<sub>i</sub>
- ʔa** pa-het mən pa-nuβ  
 PERF DEF.M.SG.POSS.1SG-silver with DEF.M.SG.POSS.1SG-gold
- ʔa** =tetən tʔit =u:  
 PERF =CL.2PL take.CS =CL.3PL
- “My silver and my gold, you plural) took it away.”<sup>A</sup> (Joel 3:5 §79, ed. Till)

<sup>3</sup> The inter- and intradialectal evidence clearly shows that in word-initial position, the glottal stop /ʔ/ may vary with voiceless fricative /h/—a variation that can be accounted for in terms of an optional phonological rule: h → ʔ/\_\_\_V). Thus, compare: hakɔ: <sup>S</sup> ~ ʔakʰɔ: <sup>B</sup> ‘magician’ (Crum 1939: 662b); hatre <sup>S</sup> ~ ʔatre, ʔatʰre <sup>B</sup>, ‘twin’ (Crum 1939: 726b); hu:he <sup>S</sup> ~ ʔu:he <sup>S</sup> ‘untimely birth’ (Crum 1939: 739b–740a); ʔas <sup>S</sup> ~ ʔes <sup>L</sup> ‘old’ (Crum 1939: 17a).



The higher particle copy need not be placed in the absolute sentence-initial position, but may be preceded by adverbial modifiers. As pointed out by Bosson (2006: 286–287), the Greek adverb *tote* ‘(and) then’, which indicates temporal progression in the narration, is particularly common in this context. A typical instance is shown below.

- (8) Adverb **tote** > PERF<sub>2</sub> **ʔa** > CLLDed Topic<sub>i</sub> > PERF<sub>1</sub> **ʔa** > Subject clitic<sub>i</sub> > Verb
- |                                    |           |                        |                |                        |                    |                 |            |
|------------------------------------|-----------|------------------------|----------------|------------------------|--------------------|-----------------|------------|
| tote                               | <b>ʔa</b> | p-aggelos <sub>i</sub> | ənte-          | pə-t <sup>f</sup> aeis | <b>ʔa</b>          | =f <sub>i</sub> | ʃi:βe      |
| then                               | PERF      | DEF.M.SG-angel         | LINK-          | DEF.M.SG-lord          | PERF               | =CL.3M.SG       | change.ABS |
| <b>ən-te=f-morphē:</b>             |           |                        | əntoot         | <b>əm-pə-ma</b>        | [ <sub>RC</sub> et | ___             |            |
| PREP-DEF.F.SG=POSS.3M.SG-form.F.SG |           |                        | through.CL.1SG | in-DEF.M.SG-place      | REL                |                 |            |
- əmmɔ:]  
there  
“Then the angel of the Lord, he changed his form through me in that place.”<sup>A</sup>  
(Apocalypse of Elias 6: 15–17, ed. Steindorff)

The initial adverb *tote* is a short adverbial modifier, but the position preceding the TAM<sub>2</sub> copy may also be occupied by a temporal adjunct clause with full functional superstructure, as shown by the Oxyrhynchitic dialect example in (9). As an important detail, it should be observed that adjunct clause [<sub>RC</sub> et *ha=i arkhesthe e-set<sup>f</sup>e*] “when I had begun to speak” takes the form of headless (‘antecedentless’) relative clause, which is introduced by the relative complementizer *et* ‘that’.

- (9) Adjunct clause > PERF<sub>2</sub> **ha** > CLLDed Topic<sub>SU</sub> > PERF<sub>1</sub> **ha** > Subject clitic<sub>i</sub> > Verb >
- |                    |                             |          |           |                      |                        |             |
|--------------------|-----------------------------|----------|-----------|----------------------|------------------------|-------------|
| [ <sub>RC</sub> et | <b>ha</b>                   | =i       | arkhesthe | de                   | e-set <sup>f</sup> e ] |             |
| REL                | PERF                        | =CL.1SG  | begin.ABS | PCL                  | to-speak.ABS           |             |
| <b>ha</b>          | pe-pneuma                   |          |           | [ <sub>RC</sub> et   | ___                    | weβ]        |
| PERF               | DEF.M.SG-spirit.NEUT.SG.NOM |          |           | REL                  |                        | purify.STAT |
| <b>ha</b>          | =f                          | i:       | ehreï     | et <sup>f</sup> ɔ=u: |                        |             |
| PERF               | =CL.3M.SG                   | come.ABS | PCL       | on=CL.3PL            |                        |             |
- “When I had begun to speak, the Holy Spirit, he came down on them”<sup>O</sup> (Acts 11:15 [Codex Glazier], ed. Schenke)

The TAM doubling construction may contain two topic constituents—a feature that can be explained from the versatility of clitic left-dislocation (Reintges 2018: 378 §10.1.3.1d). The combination of subject and direct object topicalization displays what one might call “inverse superiority effects”, with the CLLDed direct object preceding and c-commanding the CLLDed

subject constituent. Example (10), again from the Oxyrhynchite dialect, exemplifies this information-structurally complex construction.

- (10) CLLDed Topic<sub>DO</sub> > PERF<sub>2</sub> **ha** > CLLDed Topic<sub>SU</sub> > PERF<sub>1</sub> **ha** > Resumptive subject pronoun > Verb >> direct object clitic;  
 neī de tɛ:r=ʉ: **ha** Iɛ:sus **ha** =f tʰa =ʉ:  
 DEM.PL PCL entire=POSS.3PL PERF Jesus PERF =CL.3M.SG say.CS =CL.3PL  
 e-pə-mɛ:ʃe hən hen-paraβole:  
 to-DEF.M.SG-crowd in INDEF.PL-parable  
 “All these (things), Jesus said them to the crowd in parables.”<sup>0</sup> (Matthew 13:34 [Codex Scheide], ed. Schenke])

When both the subject and the direct object are topicalized, TAM<sub>2</sub> is sandwiched between the CLLDed direct object and subject. The information-structural status of the higher topic is indicated by the Greek discourse particle *de*. All this considered, it stands to reason that TAM<sub>2</sub> is not associated with topicality, but rather with focality. As a final observation, it should be noted that the TAM doubling construction is not restricted to root clauses but can also appear in finite embedded contexts. Finite subordinate clauses are introduced by the complementizer *tʰe* ‘that’, which is morphologically derived from the quotative verb *tʰo:* ‘to say’. The quotative complementizer itself has a broad syntactic distribution and is often used to introduce adverbial cause/reason clauses. The Sahidic example in (11) below illustrates this point.

- (11) Complementizer **tʰe** > PERF<sub>2</sub> **?a** > CLLDed Topic<sub>i</sub> > PERF<sub>1</sub> **?a** > Subject clitic<sub>i</sub> > Verb  
 mu:te erɔ=ī tʰe t- [RC et \_\_\_ sa:ʃe (...)]  
 call.IMP PREP=CL.1SG COMP DEF.F.SG REL turn\_bitter.STAT  
 [tʰe **?a** pə-hikanos əm=pə-dynatos  
 COMP PERF DEF.M.SG-sufficient LINK=DEF.M.SG-mighty  
**?a** =f ti si:ʃe na=ī emate ]  
 PERF =CL.3M.SG give.CS grief to=CL.1SG much  
 “Call me « She who is bitter (...) », because the Almighty One has given me a lot of grief.”<sup>S</sup> (Ruth 1:20, ed. Thompson)

We suspect that the embeddability of the TAM doubling construction is correlated with the general acceptability embedded topicalization (for additional examples, see Reintges 2018: 376–377 §10.1.3.1, see also Cinque 1990: 57–60 for comparable facts in Italian). The main syntactic characteristics of the TAM doubling construction are summarized in the syntactic template presented in (12) below.

## (12) Preliminary template for the TAM doubling construction

Comp	Topic <sub>DO</sub>	TAM <sub>2</sub>	Topic <sub>SU</sub>	TAM <sub>1</sub>	Subject clitic	VP
------	---------------------	------------------	---------------------	------------------	----------------	----

Two generalizations emerge from the facts gathered thus far. First, the presence of the higher copy TAM<sub>2</sub> is dependent on the presence of the lower copy TAM<sub>1</sub> as well as on a prior application of clitic left-dislocation. Second, TAM<sub>2</sub> must be located in a lower-than-Comp position, given that TAM doubling is permissible in subordinate and embedded contexts introduced by the quotative complementizer *te*.

In order to provide a neat map of the different constituents and their order, we adopt Rizzi's (1997, 2001) proposal of the fine-structure of the left periphery, which is demarcated upwards by the Comp/ForceP, which hosts clause-typing and subordinating devices, and downwards by the finiteness projection, which we propose to identify with the pre-subject TAM position. The topic–focus field is located between the Comp/Force and the Finiteness projection. In view of the fact that TAM<sub>2</sub> occupies an intermediate position between two topic constituents, it stands to reason that it occupies the Focus projection. The resulting template for the TAM doubling construction in (12) above can straightforwardly be associated with the sequence of left-peripheral functional projections of the Rizzian cartography. The extended syntactic template in (13) further illustrates these points.

## (13) Template for the TAM doubling construction including the topic/focus field

<b>ForceP</b>	<b>TopicP</b>	<b>FocusP</b>	<b>TopicP</b>	<b>FinP</b>	<b>TP</b>	<b>VP</b>
Comp	Topic <sub>DO</sub>	TAM <sub>2</sub>	Topic <sub>SU</sub>	TAM <sub>1</sub>	Subject clitic	VP

To make sense out of the dependency of TAM doubling on clitic left-dislocation, we capitalize on the idea that the topic–focus field needs to be activated to project the relevant configurational space for topics and foci. In the case of the TAM doubling construction, the projection of the focus phrase is triggered by a previous application of CLLD. Although most syntactic properties of the TAM doubling construction can be explained from the properties of CLLD, there is a non-neglectable explanatory residue. Unlike as in the case of CLLD topicalization, the TAM doubling construction is not attested with CLLDed independent pronouns. We leave this an open question for future research.

## 1.2 TAM particle movement out of the IP/TP

With this much about the core syntax of TAM doubling in place, we shall now turn to another type of TAM particle movement—one that lacks the earmarks of the construction, such as the presence of two occurrences of one and the same TAM particle and the association with polarity focus. The movement process that lies at the center of this section originates in the Mittelfeld of the IP/TP and targets the Finiteness projection at the bottom of the left periphery domain. The movement is reflected in the syntactic reordering process that some preverbal TAM particle must undergo in the context of full lexical subjects.

In terms of syntactic typology, Coptic can be classified as a subject–verb–object (SVO) language, in which the TAM particle is placed in front of the subject constituent. The resulting TAM SVO order can be identified as the language’s basic word order on the grounds that it involves a minimal amount of syntactic structure and morphological marking. In addition, TAM SVO order is selected in pragmatically neutral declarative clauses, without topicalized or focalized constituents.

### (14) TAM initial SVO order with pre-subject perfect particle **ʔa**

TAM	Subject	Verb	Object	Indirect Object
<b>ʔa</b>	tə–sophia	ket	u–εἰ	na=s
PERF	DEF.F.SG–wisdom	build.CS	INDEF.SG–house	for=3F.SG

“Wisdom has built a house for herself.”<sup>S</sup> (Proverbs 9:1, ed. Worrell)

There is another type of SVO order to consider, where the TAM particle is placed in a Mittelfeld position between the subject and the main verb. Example (15) features TAM-medial SVO order with the example of the epistemic future tense marker *na*. The tense-bearing element forms a verbal cluster with the lexical verb *tʿne* ‘to examine’, with the result that no intervening element can disrupt the syntactic relation between the two verbal elements.

### (15) TAM medial SVO word order with epistemic future particle *na*

Subject	TAM	Verb	Direct Object
pə–tʿɔeἰs	<b>na</b>	<b>tʿne</b>	pə–dikaïos      mən p–aseβεἰs
DEF.M.SG–lord	EPIST.FUT	examine.CS	DEF.M.SG–righteous      with      DEF.M.SG–lawless

“The Lord will examine the righteous and the lawless one.”<sup>S</sup> (Psalm 10:5, ed. Worrell)

Preverbal TAM particles interact with the language’s root-and-pattern system, where event semantics, argument structure and verb movement options are closely intertwined.

Alternating verb stem stems are morphologically derived by associating a consonantal root with a particular templatic pattern (Kramer 2006). Here we focus on the division between verbal nouns (traditionally called infinitives), which have an event-related semantics, and statives, which have a resultative or qualitative meaning (Reintges 2011a: 83–87). An illustrative case in point is the pair *muː* (infinitive) ‘to die’ ~ *mɔːwəʔ* (stative) ‘to be dead’, which denote, respectively, the process of dying and the resultant dead state (for the eventive–stative contrast, see also Polotsky 1960: 396).

- (16) Future tense sentence with epistemic future tense particle *na* and infinitive *muː*
- |          |          |           |            |        |      |                          |
|----------|----------|-----------|------------|--------|------|--------------------------|
| <b>e</b> | =f       | <b>na</b> | <b>muː</b> | tə–nau | ənte | pe=f–ran                 |
| REL      | CL.3M.SG | EPIST.FUT | die.ABS    | when   | CONJ | DEF.M.SG=POSS.3M.SG–name |
- takɔː  
perish.ABS  
“When will he die and his name perish?”<sup>s</sup> (Psalm 40:6, ed. Worrell)

Within the Coptic root-and-pattern system, the stative occupies a special position in that it represents an indisputable verbal category and residual finite verb form, which is inflected for subject agreement, albeit the phonological and semantic erosion that the agreement marking has undergone (see Reintges 2011b: 83 and the references cited there). Another well-established fact about the external syntactic distribution of stative-inflected verb stem is that they are in complementary distribution with all preverbal and pre-subject TAM particles, with the pre-subject preterit particle *ne* being the main exception (for further details, see Reintges 2018: 216–217 §6.2.3). As far as the small-sized class of preverbal TAM particles is concerned, we may think of this co-occurrence restriction in syntactic terms. Agreement-inflected statives compete with preverbal TAMs for the same structural slot in the syntactic representation. The stative stem *mɔːwəʔ* ‘to be dead’ in example (17) is located in the same functional projection that hosts the subject DP *pə–nɔːβe* ‘the sin’ in its specifier.

- (17) Present tense sentence with stative stem form *mɔːwəʔ*
- |         |              |              |               |
|---------|--------------|--------------|---------------|
| ʔatʰəm  | pə–nomos     | pə–nɔːβe     | <b>mɔːwəʔ</b> |
| without | DEF.M.SG–law | DEF.M.SG–sin | die.STAT      |
- “Without the law, the sin is dead.” (Roman 7:8, ed. Thompson)

For the specific case of the future particle *na*, one can put forward the even stronger claim that it represents a stative-inflected auxiliary verb by itself—a view that makes good

sense diachronically (Reintges 2011b: 74–83). Synchronically speaking, a stative analysis is also defensible. As we can see from the Sahidic dialect example in (18), the future tense particle *na* can stand on its own without a following lexical verb. When this happens, it receives the same progressive interpretation of stativized motion verbs. This provides a crucial argument for its classification as a “synchronic stative auxiliary” (Shisha-Halevy 2003: 255).

- (18) Independent use of the epistemic future tense particle *na*
- |       |       |           |           |           |                   |     |      |           |        |
|-------|-------|-----------|-----------|-----------|-------------------|-----|------|-----------|--------|
| alla  | nə    | =g        | so:wən    | ʔan       | [t <sup>f</sup> e | ənt | ʔa   | =f        | eḯ     |
| but   | NEG   | =CL.2M.SG | know.ABS  | not       | COMP              | REL | PERF | =CL.3M.SG | go.ABS |
| ton   | ʔawo: | e         | =f        | <b>na</b> | e-ton]            |     |      |           |        |
| where | and   | REL       | =CL.3M.SG | EPIST.FUT | to-where          |     |      |           |        |
- “You don’t know where it (the spirit) came from and where it is going to.”<sup>S</sup> (John 3:8, ed. Balestri)

The facts discussed so far show fairly clearly that there is an additional TAM position in the Mittelfeld domain, which hosts the epistemic future tense particle *na*. This raises a more general question as to whether the TP/IP internal TAM position plays a role in the derivation of TAM initial SVO order with pre-subject TAM particles. The cross-dialectal evidence suggests that it does. The Akhmimic dialect, which is renowned for its linguistic conservatism, has retained a phonologically fuller form *ʔah* of the perfect tense/aspect particle, which has a very limited syntactic distribution (Till 1928: 263–264 § 236b). As far as one can tell, this allomorphic variant only occurs in gapped subject relative clauses, such as the one in (19).

- (19) Gapped subject relative with phonologically fuller form *ʔah* of the perfect particle
- |                    |                           |            |          |           |               |
|--------------------|---------------------------|------------|----------|-----------|---------------|
| aḯ                 | hen-makarios              | ne         | wan      | nim       |               |
| and                | INDEF.PL-blessed.M.SG.NOM | COP.PL     | one.M.SG | each.M.SG |               |
| [ <sub>RC</sub> et | —                         | <b>ʔah</b> | eḯ       | aḥu(n)    | ənhε:t=əs ]   |
| REL                |                           | PERF       | come.ABS | inside    | into=CL.3F.SG |
- “And blessed is everyone who has gone inside into it (the doorway).”<sup>A</sup> (First Epistle St. Clement 48:4, ed. Schmidt)

In line with Rizzi’s (1990: 51–60) *Relativized Minimality* framework, the gap in the embedded subject position of the relative clause is licensed by the relative complementizer *et*. But how can we be sure that the phonologically fuller form *ʔah* is positioned lower in the structure, presumably in the same TP/IP-internal TAM position, as the epistemic future tense particle *na*? The very existence of gapping in subject relatives provides the crucial argument.

If the *ʔah* allomorph were located in the Finiteness position of the pre-subject allomorphs *ʔa ~ ha*, one would expect two things to be different. For one thing, the perfect tense/aspect particle would switch back to the standard forms *ʔa ~ ha*. For another thing, the fuller form *ʔah* would intervene between the relative complementizer *et* and the embedded subject position. As a result, the relative complementizer no longer governs the subject position and the gapping strategy is no longer available. The way out is to replace the offending relative gap by the corresponding resumptive pronoun clitic, as predicted by Rizzi’s (1990) theory. And this is indeed what we find. To see this more clearly, consider example (20), again from Akhmimic, in which the nominalized resumptive subject relative contains the standard form of the particle *ʔa*, which provides the prosodic host for the third person plural resumptive pronoun =*u:* ‘they’. In this respect, it contrast with the subsequent nominalized gapped subject relative, which contains the expected *ʔah* variant.

- (20) Nominalized resumptive subject relative with standard form *ʔa* and nominalized gapped subject relative with phonologically fuller form *ʔah*

f=	na	ər	krine	ən–	n–	[ <sub>RC</sub> et	<b>ʔa</b>	=u:	
CL.3M.SG=	FUT	do.CS	judge.ABS	PREP–	DEF.PL	REL	PERF	=CL.3PL	
ər	paraβa	ħən	tə–pe ]		mən	n–	[ <sub>RC</sub> et	___	<b>ʔah</b>
do.CS	trespass.ABS	in	DEF.F.SG–heaven	with	DEF.PL	REL		PERF	
eire	hitʰəm	pə–kah ]							
do.ABS	on	DEF.M.SG–earth							

“He (the Lord) will judge those who trespassed in heaven and those who did (it) on earth”<sup>A</sup> (Apocalypse of Elias 104: §42:4–6, ed. Steindorff)

Based on synchronic morphophonology and historical evidence, Sethe (1915) identifies the phonologically fuller form *ʔah* as a stative-inflected auxiliary. This analysis opens the way for understanding as to why we never find this allomorphic variant in the left periphery: it is too entrenched with lexical derivational process of stative stem formation. The allomorphs *ʔa ~ ha*, on the other hand, have no such stative features and can or must move to the finiteness projection of the left periphery. We formulate the syntactic generalization in terms of Rizzi’s (2017) typology of “criterial freezing”, to which we add another type.

## (21) Criterial Freezing in the syntax of TAM particles

The residual agreement inflection on stative verb stems and the statival preverbal TAM particles *na* and *ʔah* drive movement to the topmost position of the Mittelfeld domain. Once that position is reached, criterial freezing applies and statives and statival auxiliaries move no further.

The existence of a statival form *ʔah* of the perfect tense/aspect particle, which can only appear in the Middlefield, and the allomorphic variants *ʔa ~ ha*, which surface in pre-subject position favor an analysis in which the latter are not directly merged in Fin but rather arrive there as a result of movement out of the IP/TP.

Strong evidence that this account is on the right track is provided by a syntactic reordering process that the conditional mood *e=ʃfan-soɾəm* ‘if he hears’ and the deontic future *e=ʃe-soɾəm* ‘he shall hear’ must undergo in the context of full lexical subjects. The conditional mood and the deontic future are compound tenses in which the relative complementizer *e* and its phonologically fuller form *ere* appear in initial position. In the conditional sentence presented below, the relative-marked conditional mood appears in the protasis, and deontic future in the apodosis clause.

## (22) Conditional construction containing conditional mood construction in the protasis and deontic future in the apodosis clause

<b>e</b>	=f	<b>ʃan</b>	<b>eḷ</b>	<b>nə</b>	=f	<b>to:həm</b>
REL	=CL.3M.SG	COND	come.ABS	CONJ	=CL.3M.SG	knock.ABS
<b>e</b>	=u:	<b>e</b>	<b>won</b>	<b>na=f</b>	<b>ən-te-unu:</b>	
REL	=CL.3PL	DEON.FUT	open.ABS	for=CL.3M.SG	in-DEF.F.SG-hour	

“If he comes and knocks, they should open to him immediately.”<sup>S</sup> (Luke 12: 36, ed. Horner)

In the context of nominal subjects, the conditional mood particle *ʃan* is no longer permissible in the Mittelfeld TAM position but rather moves up to Fin. The univerbation of the relative complementizer *ere* and the conditional mood particle *ʃan* leads to the shortening of the initial relativizer to *er* (*ere + ʃan* → *er-ʃan*).



- (23) Movement of conditional mood particle *fan* to pre-subject position and univerbation with relative marker *ere*

etβe	paḯ	er	fan	pə-nu:te	kaʔat		
for	DEM.M.SG	REL	COND	DEF.M.SG-god	let.CS.1SG		
ti=	na	ho:	erɔ=i	e	=i	ɔ:	
CL.1SG=	EPIST.FUT	satisfy.ABS	PREP=CL.1SG	REL	=CL.1SG	do.STAT	
ən-	he:ge:mɔn	ε:	əm-	matɔḯ			
in-	general	or	in-	soldier			

“Because of this, if God allows me, I will satisfy myself being a general or a soldier.”  
<sup>S</sup> (Shenoute I.1 38:6–7, ed. Amélineau)

Matters become more complicated in the deontic future tense, whose morphological exponent can be identified with a fully grammaticalized prepositional complementizer *e* ‘to’. In the context of pronominal subjects, the deontic future tense particle appears in Mittelfeld TAM position, as shown by the construction *e=u:* *e-won* ‘they shall open’ in example (22) above. In the context of lexical subjects, it looks as if the deontic future tense marker *e* has been elided from the surface structure of the clause.

- (24) Movement of deontic future particle *e* to pre-subject position and univerbation with the relative marker *ere*

er	e	p-	[ <sub>RC</sub> et	__	ər	nɔ:βe	
REL	PREP.COMP	DEF.M.SG-	REL		do.CS	sin	
əm-pe-mtɔ:	eβɔl	əm=	pe-	[ <sub>RC</sub> nt	ʔa	=f	
in-DEF.M.SG-presence	PCL	LINK=	DEF.M.SG-	REL	PERF	=CL.3M.SG	
tamiɔ:	=f ]]	eḯ	e-toot=f		əm-pə-saeḯn		
create.CS	=CL.3M.SG	come.ABS	to-hand=POSS.3M.SG		as-DEF.M.SG-surgeon		

“He who commits sin in the presence of Him who has created him will come into the hand of the surgeon.”<sup>S</sup> (Sirach 38:15, ed. Lagarde)

As pointed out by Polotsky (1960: 394), the contention that a distinctive morpheme disappears with a trace is conceptually not very attractive. Based on the analogy with the conditional mood, it stands to reason that the deontic future tense particle *e* moves out of the TP/IP in much the same way as the conditional mood particle *fan*, but is coalesced with the final vowel *e* of the long form *ere* of the relative marker. In other words, the initial form *ere* is bimorphemic, consisting of the relative marker *er-* and the deontic future particle *e* (*ere* + *e* → *er-e*). Evidence for this alternative analysis comes from marginally attested examples in which the deontic future particle *e* remains in the Mittelfeld position and does not move. As a result, the initial relative marker retains its phonologically fuller form *ere*.

- (25) Deontic future tense sentence without movement of the preverbal TAM particle **e** to the pre-subject position.

**ere** n- [RC et ko: ənsə=u: əm-pə-tʰeɪs ]  
 REL DEF.PL- REL leave.ABS behind=CL.3PL PREP-DEF.M.SG-lord  
**e** eḯ e-toot=f  
 PREP.COMP come.ABS to-hand=POSS.3M.SG

“Those who abandon the Lord will come into his hand.”<sup>S</sup> (Sirach 28:24, ed. Lagarde)

The movement of preverbal TAMs out of the TP/IP can also be observed for modal auxiliary *əf* ‘can, to be able to’. Intriguingly, this movement is only attested in combination with the negative future *əne* to form the compound form *əne-f* (Shisha-Halevy 2003: 265–266; Bosson 2009: 289). Example (26) provides an illustration.

- (26) Movement of modal auxiliary **f** to pre-subject position and univerbation with the negative future particle **əne**.

ʔawo: er fan u-εḯ po:rətʰ e-nə=f-erεḯ  
 and REL COND INDEF.SG-house divide.ABS to-DEF.PL=POSS.3M.SG-RECIPROC  
**əne** f p-εḯ [RC et \_\_\_ əmmaḯ ] ʔahe  
 NEG.FUT CAN DEF.M.SG-house REL there stand.ABS  
 rat=f  
 foot=POSS.3M.SG

And if a house(hold) becomes divided into each other, that house(hold) will not be able to stand (upright).” (Mark 3:25, ed. Balestri).

The traditional division of the Coptic TAM system between two positional classes of preverbal and pre-subject TAM particles is in need of revision, considering that members of both particle classes exhibit a considerable amount of syntactic mobility. The cross-dialectal evidence conclusively shows that there is a specific position in the Mittelfeld, labelled TAM<sup>0</sup>, which is dedicated to the expression of TAM semantics. We can generalize this fact to argue that pre-subject TAM particles are not directly merged into the Finiteness projection but arrive there as a result of movement out of the TP/IP domain, even though this syntactic operation may partially be concealed. With reference to criterial freezing, we have proposed that preverbal TAM particles with statival features need to stay in the TP/IP domain, while others may or must move higher up in the clause. We are now in a position to revise the syntactic template in (13) above. The cartographic patterning that underlies the TAM doubling construction would look like in (27) below.

(27) Template for the TAM doubling construction including AGRSP and TP positions

ForceP	TopicP	FocusP	TopicP	FinP	AgrSP	TP*	VP
Comp	Topic <sub>DO</sub>	TAM <sub>2</sub>	Topic <sub>SU</sub>	TAM <sub>1</sub>	Subject clitic	TAM <sub>0</sub>	VP

Concerning the associated inflectional heads, we would like to argue that the subject is in AgrSP (going back to Pollock 1989), a position dedicated to establishing agreement between the subject and the predicate. The TAM<sub>0</sub> surfaces in a high position in the IP/TP domain, which is a rich and detailed domain as well (Cinque 1999; Julien 2002). We remain agnostic for now as to what this position exactly is, but we will come back to this issue in section 3.

### 1.3 A closer look at negative TAM portmanteaux and standard negation

The TAM doubling construction can also be formed with negative portmanteau morphemes, even though the number of attested examples is more limited than those formed with affirmative TAM particles. Reconsider in this regard the Oxyrhynchitic dialect example in (4) above, which is repeated here as (28).

(28) NEG.FUT<sub>2</sub> **nne** > CLLDed Topic<sub>i</sub> > NEG.FUT<sub>1</sub> **nne** > Subject clitic<sub>i</sub> > Verb  
**nne**            peĩ-tʰom                    peĩ            **nne**        =f            wɔ:təβ  
 NEG.FUT            DEM.M.SG-generation    DEM.M.SG    NEG.FUT    =CL.3M.SG    pass.ABS  
 “This very generation will not change.”<sup>O</sup> (Matthew 24:34 [Codex Schøyen, ed. Schenke])

Interestingly, the compound negative portmanteau *enne-f*, which contains the modal auxiliary *əf*, is permissible in the TAM construction as well. As we can see from example (29) from the same dialect, once a univerbized form is created in the lower left periphery, it becomes available for movement all the way up to the Focus projection.

- (29) NEG.FUT + CAN<sub>2</sub> **anne-ʃ** > CLLDed Topic<sub>SU<sub>i</sub></sub> > NEG.FUT + CAN<sub>1</sub> **anne-ʃ** > Resumptive subject pronoun<sub>i</sub> > Verb

**nne**    **ʃ**    **nə-ʃere**    **əm=pə-nymphon**                    **nneʊ**    =u:    **ʃ**  
 NEG.FUT    CAN    DEF.PL-son    LINK=DEF.M.SG-bridchamber    NEG.FUT    =CL.3PL    CAN  
**er**    **hε:βε:**    **hoson**    **pə-nymphios**                    **e**    =f            **nemme=u:**  
 do.CS    grief            COMP    DEF.M.SG-bridgroom    REL    =CL.3M.SG    with==CL.3PL

“The children of the bridechamber won’t be able to mourn as long as the bridegroom is with them.”<sup>O</sup> (Matthew 9:15 [Codex Schøyen, ed. Schenke])

In view of the parallelism between affirmative and negative TAM particles, it does not come as a major surprise to learn that the TAM doubling construction with negative portmanteau morphemes can be embedded under the finite quotative complementizer *tʰe*. Example (30), again from the Oxyrhynchitic dialect, features the negative habitual aspect particle *me=* and its allomorph *merε:*.

- (30) Complementizer **tʰe** > NEG.HAB<sub>1</sub> **merε:** > CLLDed Topic<sub>SU<sub>i</sub></sub> > NEG.FUT<sub>2</sub> **me** > Resumptive subject pronoun<sub>i</sub> > Verb

**mε:**    **me**            =k            **kite:**            **əntak**  
 Q        NEG.HAB    =CL.2M.SG    double\_drachma    INDEP.PRON.2M.SG  
**[tʰe**    **merε:**            **pe=ten-she**                    **əntaf**  
 COMP    NEG.HAB        DEF.M.SG=POSS.2PL-master    INDEP.PRON.3M.SG  
**me**        =f            **ti**            **kite:** ]  
 NEG.HAB    =CL.3M.SG    give.CS    double\_drachma

“Do you not give any double drachma because Your Master, he does not give any double drachma?”<sup>O</sup> (Matthew 17:24 [Codex Schøyen, ed. Schenke])

As with the affirmative TAM-particle, we assume that the highest negative TAM, which sits above a topical constituent and can only appear there in the presence of a topical constituent, contributes polarity focus, while the lower TAM contributes aspect/tense and also negation. Crucially, the doubling of negative TAM portmanteaux does not have the semantic effects of double negation, but is semantically interpreted as a single negation. This brings us to the issue of negation in Coptic, and more in particular to the fact that negative TAM-portmanteaux are incompatible with the bipartite negation strategy *nə ... ʔan*, which is illustrated for a future sentence in example (31). Here, the initial negator *nə* (NEG<sub>1</sub>) precedes the subject clitic first person plural *=tən* ‘we’, the preverbal TAM particle *na* ‘be going’, and the main verb *pot* ‘run’, while the postverbal negation adverb *ʔan* ‘not’ (NEG<sub>2</sub>) follows the lexical verb. The *nə ... ʔan* constructions conforms to the standard pattern of negation crosslinguistically (Miestamo 2005).

(31) Negated future tense sentence with bipartite standard negation *nə* ... *?an*

u:de	anən	ho?o=n	<b>nə</b>	=tən	na
and.not	FREE.PRON.1PL	EMPH.REFLEX=POSS.1PL	NEG <sub>1</sub>	=CL.1PL	FUT
pot	<b>?an</b>				
run.ABS	NEG <sub>2</sub>				

“And we, too, we will not run away.”<sup>S</sup> (Apophtegmata Patrum nr. 186, 46 : 10–11, ed. Chaîne)

Now, consider the slightly more complex example of a conditional construction, in which the protasis and the apodosis clause are negated. The apodosis clause, which contains the epistemic future tense particle *na*, is negated by the bipartite negation pattern *nə* ... *?an*, but this time the negation adverb *?an* is not the last sentence constituent.

## (32) Conditional sentences with negated protasis and apodosis clause

<b>er</b>	<b>?an</b>	<b>təm</b>	pə-ro:me	apotasse	ən-enka	nim
REL	COND	NEG.AUX	DEF.M.SG-man	give_up.ABS	PREP-thing	each.M.SG
[RC et	___	<b>həm</b>	pə-kosmos]			
REL		in	DEF.M.SG-world.M.SG.NOM			
<b>nə</b>	=f	<b>na</b>	ʃ	ʃo:pe	<b>?an</b>	əm monakhos
NEG <sub>1</sub>	=CL.3M.SG	FUT	CAN	become.ABS	NEG <sub>2</sub>	as monk.M.SG.NOM

“If a man will not give up everything that is in the world, he won’t be able to become a monk.”<sup>S</sup> (Apophtegmata Patrum nr. 242, 74: 28–29, ed. Chaîne)

Although we will not pursue the issue in further detail here, there is reason to assume that both parts of the bipartite negation can be used separately, yielding sentential negation.<sup>4</sup> As for the syntactic placement of NEG<sub>1</sub> and NEG<sub>2</sub>, we localize the negation adverb *?an* in a position

<sup>4</sup> Funk (2014) has collected a considerable number of attested examples in which the post-verbal negation adverb *?an* (NEG<sub>2</sub>) is missing from the structure of bipartite negation sentences. These examples have been emended in the critical text editions, without deliberating the possibility that the initial negator *nə* (NEG<sub>1</sub>) would still be capable of negating a sentence on its own. Apart from the literary sources, the negation by the initial negator *nə* (NEG<sub>1</sub>) is also attested in non-literary sources, which suggests that this is a viable option of the Coptic negation system. The opposite also happens and is actually quite common, i.e., that the *nə* is absent and that the sentential negation seems to be expressed alone by means of the post-verbal negation adverb *?an* (NEG<sub>2</sub>). These data may suggest that what we see across these Coptic dialects are different stages of the well-known Jespersen Cycle (Jespersen 1917; Dahl 1979; Horn 2001b; Van der Auwera and Neuckermans 2004; Zeijlstra 2004a; Breitbarth 2009; De Swart 2010; Breitbarth and Haegeman 2014; Willis et al. 2013, amongst many others). Another possible explanation would be that *nə* (NEG<sub>1</sub>) and *?an* (NEG<sub>2</sub>) are both fully negative throughout the entire Coptic period, and that differences in the distribution of bipartite negation vs only NEG<sub>1</sub> or only NEG<sub>2</sub> follow from yet unexplored syntactic and semantic properties of the contexts in which these negators occur. More research is needed to settle this matter, and we intend to take this up in future work. In the remainder of this paper, we adopt the idea that the bipartite stage is the dominant stage for Coptic and that there are (at least) two positions for negation in the syntactic template of Coptic.

above the verbal domain, which is vacated by the verb and the subject for aspectual or Case-related purposes (for further details on verb raising and argument voiding, see Reintges 2012: 152–155; cf. also Poletto 2008; De Clercq 2013 for similar proposals).<sup>5</sup> The initial NEG<sub>1</sub> *nə* is clearly higher than the subject clitic in AGRSP, as shown by examples (31) and (32) above. This raises a question as to whether NEG<sub>1</sub> is located in the Finiteness position of pre-subject particle or in a position higher up in the clausal left periphery. If NEG<sub>1</sub> were competing with pre-subject TAM particles for the same TAM slot, we would expect a complementary distribution. But this is not what we see in the data. The negated past tense sentence in (33) shows that NEG<sub>1</sub> *nə* precedes the preterit particle *ne*, which must be located in Fin as it comes in front of the subject clitic pronoun in AGRSP.

- (33) NEG<sub>1</sub> *nə* > PRET *ne* > Subject clitic > Verb > PCL *de* > NEG<sub>2</sub> *ʔan* > locative PP
- |                  |                       |                          |                               |                           |                  |               |  |
|------------------|-----------------------|--------------------------|-------------------------------|---------------------------|------------------|---------------|--|
| <i>nə</i>        | <i>ne</i>             | =f                       | <i>mɔ:kəh</i>                 | <i>de</i>                 | <i>ʔan</i>       | <i>ən-hət</i> |  |
| NEG <sub>1</sub> | PRET                  | =CL.3M.SG                | grieve.STAT                   | PCL                       | NEG <sub>2</sub> | in-heart      |  |
| <i>etβe</i>      | <i>pə-hi:se</i>       |                          | [ <sub>RC</sub> <i>ent ʔa</i> | <i>=u:</i>                | <i>ʔaʔa</i>      | =f            |  |
| because.of       | DEF.M.SG-suffer.ABS   |                          | REL PERF                      | =CL.3PL                   | do.CS            | =CL.3M.SG     |  |
| <i>na=f ]</i>    | <i>alla etβe</i>      | <i>tə-mənt-ʔat-hɔ:te</i> |                               | [ <sub>RC</sub> <i>et</i> | <i>=u:</i>       |               |  |
| to=CL.3M.SG      | but                   | because.of               | DEF.F.SG-NMLZR-NEG.ADJZR-fear | REL                       | =CL.3PL          |               |  |
| <i>mən</i>       | <i>eβɔl ənhət=s ]</i> |                          |                               |                           |                  |               |  |
| remain.STAT      | PCL                   | within=CL.3F.SG          |                               |                           |                  |               |  |
- “He (Pachomius) did not grieve because of the suffering that they (the brothers) did to him, but (rather) because of the impudence in which they remained.”<sup>S</sup> (Sahidic Vitae of S. Pachomius 6:12–14, ed. Lefort)

In line with other proposals in the literature for positions for negation/polarity at the edge of the left periphery (Klima 1964; Laka 1990; Moscati 2006, 2010, 2012 and McCloskey 2011), we propose to enrich the left peripheral structure with a polarity-related position ΣP on top of the Finiteness projection (Laka 1990). It has been overlooked in the philological literature, that the initial negator *nə* (NEG<sub>1</sub>) can undergo TAM doubling as well, behaving in this respect in much the same way as negative portmanteau morphemes. This pattern is illustrated in the following example from classic Sahidic.

<sup>5</sup> We are abstracting away here from the fact that the two parts of the standard negation probably arise within one and the same constituent above VP, hence explaining why they are both required for the expression of sentential negation and why they only give rise to one negation. Essentially, we want to suggest that an approach for bipartite negation as in Poletto (2008) and De Clercq (2013, 2017, 2019, 2020) is what we have in mind, but we postpone a fine-grained analysis to future work.

- (34) Q-particle  $\varepsilon$ : > NEG<sub>2</sub>  $m$  > CLLDed Topic<sub>SU<sub>i</sub></sub> > NEG<sub>1</sub>  $n\theta$  > Subject clitic<sub>i</sub> > Verb > Direct object pronoun > NEG<sub>2</sub>  $\text{ʔan}$

$\varepsilon$ :  $m\theta$   $p\theta$ -ro:me [RC ent  $\text{ʔa}$  =s  $\text{ɔ:f}\theta$ s  
 Q NEG<sub>1</sub> def.m.sg-man REL PERF =CL.3F.SG become\_broad.ABS  
 $ehra\dot{i}$   $n\theta mma=f$   $\varepsilon$ :  $hit\text{ɔ:wo=f}$  ]  $n\theta$  =f na  
 PCL with=CL.3M.SG or besides=CL.3M.SG NEG<sub>1</sub> =CL.3M.SG FUT  
 $t^f\text{ɔ}ʔ\text{ɔ}$  =s  $\text{ʔan}$   
 say.CS =CL.3F.SG NEG<sub>2</sub>

“Will the man with whom or besides whom it (the sword) has become at leisure (lit. broad) not say it?”<sup>S</sup> (Shenoute IV 11: 15–16, ed. Leipoldt)

While we will not discuss this type of doubling further in the analysis, we wish to call attention to the correlation between particles that appear in FinP and  $\Sigma$ P and polarity focus. The negation facts discussed in this section permits us to refine our cartographic analysis. The revised map in (35) below contains the polarity-related  $\Sigma$ P, which host NEG<sub>1</sub>, and the clause-internal NEG<sub>2</sub> position above the VP domain. In the doubling construction, the highest  $n\theta$  has been labelled NEG<sub>3</sub> to indicate that there is yet another position for negation.

- (35) Template for TAM particle placement including bipartite negation positions

ForceP	TopicP	FocusP	TopicP	$\Sigma$ P	FinP	AgrSP	TP*	NegP	VP
Comp	Topic <sub>DO</sub>	TAM <sub>2</sub>	Topic <sub>SU</sub>	NEG <sub>1</sub>	TAM <sub>1</sub>	Subject clitic	TAM <sub>0</sub>	NEG <sub>2</sub>	VP
		NEG <sub>3</sub>							

Going back to negative TAM portmanteaux, we can now formulate an explicit theoretical proposal of how morphological syncretism relates to syntactic structure. Given that negative TAM portmanteaux are in complementary distribution with the bipartite negation  $n\theta$  ...  $\text{ʔan}$  and given that pre-subject TAM particles originate in the Mittelfeld, it can be deduced that negative TAM portmanteaux lexicalize not only the contiguous cells for finiteness and polarity in the left periphery, but also the contiguous cells for TAM and negation in the Middlefield. The syntactic template in (36) further illustrates.

- (36) Template for TAM particle placement including negative TAM portmanteau positions

ForceP	TopicP	FocusP	TopicP	$\Sigma$ P	FinP	AgrSP	TP*	NegP	VP
Comp	Topic <sub>DO</sub>	TAM <sub>2</sub>	Topic <sub>SU</sub>	NEG <sub>1</sub> + TAM <sub>1</sub>		Subject clitic	TAM <sub>0</sub> +NEG <sub>2</sub>		VP
		NEG <sub>3</sub>		= NEG.TAM <sub>1</sub>			= NEG.TAM <sub>0</sub>		

## 2. The Coptic TAM construction: a first stab at an analysis

So far, we have seen that Coptic TAM doubling is a multifaceted grammatical phenomenon, in which morphological matters and syntactic cartographies are closely intertwined. Coptic TAM particles are prosodically light functional categories, often barely accommodating a minimal size requirement on morphosyntactic words, as in the case of the perfect tense/aspect particle *ʔa*. However, when we look at their morphosyntax and distributional behavior, they turn out to be syntactically extremely versatile. This syntactic versatility comes forth from a somewhat “hidden” internal structural complexity, for which the above-discussed negative TAM portmanteau particles provide illustrative cases in point. In order to disclose the internal syntactic structure of TAM particles, which enables them to undergo movement, we need to make a slight shift in theoretical perspective and move from cartographic to nanosyntactic analysis. Section 2.1 outlines our proposal in a (non-theoretical) nutshell. Section 2.2 provides some theoretical background on nanosyntax. Section 2.3 is on the nano-syntactic structure of Coptic TAM particle. The syntactic analysis of the Coptic TAM construction is developed in Section 2.4.

### 2.1 *The proposal in a nutshell*

In the previous section we ended up with a syntactic template for pre-subject negative TAM particles, (36). Since we argued extensively that there is reason to assume that these particles originate in the Middlefield, the upshot of this table is actually that these pre-subject TAM particles at least lexicalize all the features that we shaded in the table, i.e.  $\Sigma$ , Fin, some flavor of TAM, and Neg. The same reasoning actually applies to pre-subject affirmative particles, of which we repeat the syntactic template here and update it with a  $\Sigma P$ , a projection for polarity, hence also for affirmative polarity, (37). If indeed these particles originate in the TP domain, then these affirmative particles also lexicalize (at least) one TAM-related feature(s), Fin, and  $\Sigma P$ .

(37) Template for TAM particle placement including affirmative polarity

<b>ForceP</b>	<b>TopicP</b>	<b>FocusP</b>	<b>TopicP</b>	<b><math>\Sigma P</math></b>	<b>FinP</b>	<b>AgrSP</b>	<b>TP*</b>	<b>VP</b>
Comp	Topic <sub>DO</sub>	TAM <sub>2</sub>	Topic <sub>SU</sub>	TAM <sub>1</sub>		Subject clitic	TAM <sub>0</sub>	VP

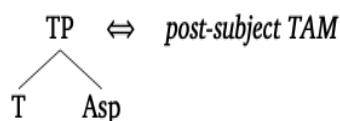
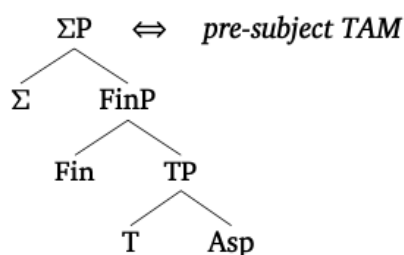
If both negative and affirmative TAM particles lexicalize all features, then it makes sense to argue that these particles are endowed with these features in the lexicon. This is exactly what



we will propose, but we will take it one step further. Because of the fact that these particular features can be ordered hierarchically, as has been argued for extensively in the work by Rizzi (1997), Cinque (1999), and many other linguists, and as we showed with the templates that we used, we will not only say that these lexical items are simply endowed with these features. We will argue that these particles are stored in the lexicon with (i) a small syntactic structure, which accounts for the distribution of that particular lexical item, and (ii) the phonology of that particular particle. Based on our discussion up until now, the rough lexical structure of a pre-subject TAM particle would thus look as in (38), while the rough lexical structure of a post-subject TAM particle would be smaller and would be missing FinP and  $\Sigma$ P as in (39), accounting for why these particles cannot make it to the left periphery. The double arrow indicates that there is a particular phonology attached to this lexical structure, left unspecified for now, which will lexicalize this entire structure.

(38) Lexical structure of pre-subject TAMs

(39) Lexical structure of post-subject TAMs



Under this type of proposal, the lexical size of items in the lexicon determines their distribution within one language, and/or across languages (Starke 2014). Moreover, the consequence of this type of proposal is that lexicalization must happen phrasally (and not under terminals), since even small particles, like the Coptic TAM particles, are actually portmanteaux, i.e. they consist of several submorphemic syntactic features. Before we develop this proposal further, and move on to explain how TAM<sub>2</sub> fits into the story, we need to say something more about the theory that uses this type of decomposed lexical structures, i.e. Nanosyntax.

## 2.2 *A note on Nanosyntax*

The idea to decompose lexical items and store them with their lexical structure, phonology (and conceptual information in the case of roots) in a post-syntactic lexicon is the core idea in Nanosyntax, a late-insertion theory that finds its origins in cartography, but which uses cyclic phrasal lexicalization (Starke 2009; Caha 2009; Baunaz et al 2018). The theory is

well-equipped to capture instances of syncretism or polyfunctionality, which is exactly what we see in Coptic with the TAM doubling construction. A hypothetical lexical item in Nanosyntax looks as in (40), with the conceptual information (here in capital letters), the phonological information (here between slanted brackets) and the tree structure (here as labelled brackets).<sup>6</sup>

- (40) Structural information associated with a hypothetical lexical item  
 < BLA, [XP [X][YP[Y] [ZP[Z]]], /bla/ >

The consequence of this type of approach is that lexicalization must be phrasal: a small phonological string can lexicalize several syntactic heads, i.e. a phrase. Lexicalization happens in a rigid cyclic way, i.e. after each step of merge, the lexicon will be consulted to check whether there is a matching lexical item. For instance when syntax merges, the structure in (41), the hypothetical structure in (40) is a candidate for insertion, thanks to the superset principle, defined in (42).

- (41) Syntactic structure matching hypothetical lexical item in (40)



- (42) Superset Principle (Starke 2009: 3)  
 A lexically stored tree matches a syntactic node, iff the lexically stored tree contains the syntactic node.

However, if there were another lexical item in the lexicon that had the structure in (43), then this item would have been the best match for (41) and would have won the competition. This is referred to as the Elsewhere Principle (Kiparsky 1973).

- (43) Structural information associated with another hypothetical lexical item  
 < BLI, [ZP [Z]], /bli/ >

---

<sup>6</sup> Conceptual information is only present with roots/non-functional material and will hence be irrelevant for most of our discussion.

If there is no match, lexicalization-driven movements will be tried according to a specific algorithm, the lexicalization algorithm in (44) (Starke 2018: 245), to assure a lexicalization for a given feature. We will not go very deep into the specifics of the lexicalization algorithm for the purpose of this paper. However, we do need to mention the algorithm, because we want the reader to be aware of the fact that each part of the derivation is derived by phrasal lexicalization and in line with the steps specified in the lexicalization algorithm in (44) (but see section 3.3 for an update on this).

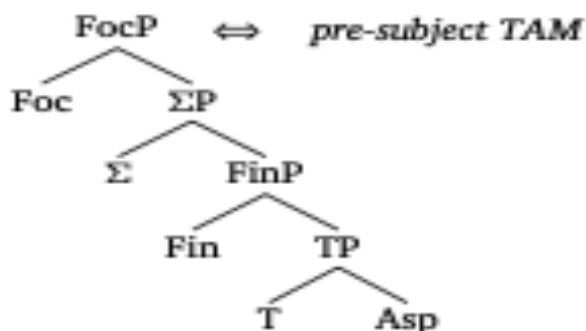
- (44) Lexicalization algorithm
- a. Insert feature and spell out.
  - b. If fail, try a cyclic (spec-to-spec) movement of the node inserted at the previous cycle and spell out.
  - c. If fail, try a snowball movement of the complement of the newly inserted feature and spell out.
  - d. If merge-f has failed to spell out (even after backtracking), try to spawn a new derivation providing feature X and merge that with the current derivation, projecting feature X to the top node.

In the next section we will present a more accurate decomposition for the perfect particle *ʔa*, the negative portmanteaux *nne* and the future particle *na*. Most crucially, we will dive into the appearance of TAM<sub>2</sub> in the Focus projection and argue that Focus is also part of the internal lexical structure of these TAM-particles that feature in the TAM-doubling construction, with Focus being the feature that triggers a copy mechanism, resulting in the appearance of an extra particle copy TAM<sub>2</sub>.

### 2.3 The Nanosyntax of Coptic TAM particles

Up until now we argued that the features of (NEG-)TAM<sub>0</sub> are also part of the feature structure of (NEG-)TAM<sup>1</sup>. The reason for this is that there is evidence for the fact that pre-subject particles and post-subject particles are connected via movement. Moreover, even without the empirical support for the mobility of TAM particles, there are semantic reasons to believe that the pre-subject TAM particles must be generated in the Middlefield: they all express properties that are usually related to the IP-domain, i.e. tense/aspect/mood/modality. Since it is a core idea in Nanosyntax that lexical structure determines the distribution of lexical items, a straightforward explanation for the fact that TAM particles can also appear in TAM<sub>2</sub> would be that (NEG-)TAM particles also consist of a focus feature in their lexical structure, i.e. the structure of the lexical items in (38) needs to be updated with a Focus feature, as in (45).

## (45) Focus feature in pre-subject TAM particles

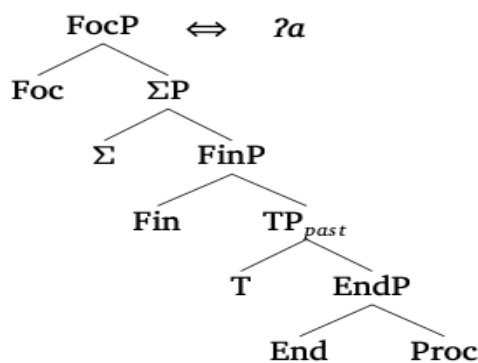


The consequence of adding this feature to the lexical structure of TAM particles would connect TAM<sub>2</sub> to the other TAM positions. It would also open the way for this particle to contribute different properties in different position in the clause. This is exactly what we see: TAM<sub>2</sub> does not contribute TAM or negation in the left periphery, but rather focus on the polarity present in the IP domain. In other words, TAM<sub>2</sub> indicates that there is another layer of meaning inside pre-subject TAM-particles in Coptic, which in Nanosyntax is naturally translated as another layer of internal structure. The idea that TAM<sub>1</sub> and TAM<sub>2</sub> are connected has been proposed before, for instance by Reintges (2011a: 135) who argues that they must be connected via movement and that TAM<sub>2</sub> is a copy of TAM<sub>1</sub>. We will adopt the essence of this proposal, as will become clear in section 2.4. Before we go there, we first need to make the internal structure of at least some particle a bit more precise. We will do that in this section.

We will only focus on three TAM particles: *?a*, *nne* and *na*. It is not our aim at this point to capture the exact TAM-properties of all different particles, since this would go well beyond the limits of this paper. We adopt the idea that there are several heads for tense in the TP-domain, which we label for now T(Preterit) > T(Past) > T(Future), in line with Reintges (2011a: 557), and with proposals by Cinque (1999), Julien (2002) for the tense domain. We also adopt the well-accepted idea in the literature that aspectual heads are lower in the structure than tense. The aspectual head relevant for our current study is the perfective head, which we will capture with the feature “End”, to indicate that it gives rise to the completion of an event (cf. Starke 2021, De Clercq 2022 for the use of this feature.)

Since the perfect tense/aspect particle *ʔa* cannot be used with states, but only with events, as opposed to the preterit particle, which can be used with both states and events (Reintges 2011: 552), the base of our lexical structure will need to reflect this. Hence, we propose that the base of the lexical structure of *ʔa* consists of the feature Process [Proc], which is a feature that makes up the core of eventive predicates according to Ramchand's (2008) decomposition of verbal predicates. In addition, we will need a feature that assures that the TAM particle expresses perfect aspect. As mentioned before, we adopt the feature End for this (but nothing crucially hinges on this and we could also just label this  $Asp_{pf}$ ). We adopt the feature  $T_{past}$ , one of the several Tense features in the TP domain to capture the fact that the perfect tense yields past events. The feature Fin is also part of the lexical structure of the particle, allowing it to mediate between the TP domain and the CP domain, and we will assume that  $\Sigma$ , responsible for polarity, is also there, on a par with the fact that we saw this position activated with negative TAM particles. As a final feature, we want to argue that *ʔa* also consists of a Focus feature, which is an optional feature and can be absent in the structure.

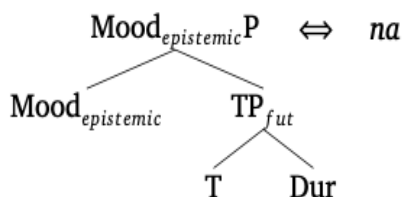
(46) The lexical structure of the perfect tense/aspect particle *ʔa*



With respect to the lexical structure of *na*, which can also function as an independent verb, we want to propose that it consists at least of the aspectual feature Durative [Dur] (cf. Starke 2021) to capture the progressive interpretation typical of stativized motion verbs, a  $T_{Future}$  feature and a  $Mood_{Epistemic}$  feature, which in line with Cinque's (1999) hierarchy sits above  $T_{past}$  and hence also above  $T_{fut}$ .<sup>7</sup>

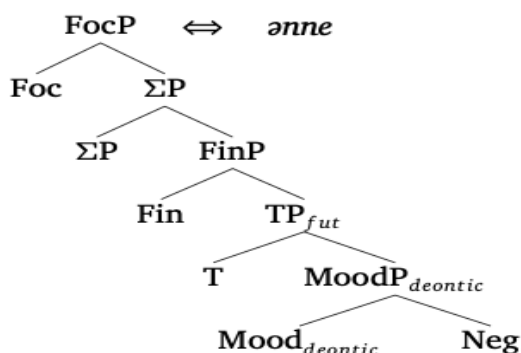
<sup>7</sup> It is possible that *na* consists of some additional feature related to the inner aspect of the verbal spine (Ramchand 2008), since it can also occur on its own. However, we will assume for now that the structure is as in (47) of the main text and keep this option open for future research.

(47) The lexical structure of the epistemic future tense *na*



Also for historical reasons, the negative future *nne* is commonly seen as “the isomorphic negation” of the deontic future (Shisha-Halevy 2003: 263). We wish to take the analogy between the negative and the positive deontic future one step further by decomposing the deontic future particle *ənn-e* into a geminated form of the sentence-initial negator *nə* and the deontic future tense particle *e*. We therefore want to propose that it consists of a low NEG head, to capture the incompatibility with the NEG<sub>2</sub> marker ?an; a Mood<sub>Deontic</sub> feature to capture its deontic meaning and a T<sub>Future</sub> feature to capture its future meaning. We follow Cinque (1999) for the order between Mood<sub>Deontic</sub> and T<sub>Future</sub>. The feature Fin is also part of the lexical structure of the particle, allowing mediation between the TP and the CP domain, as well as a Σ feature, accounting for the incorporation of NEG<sub>1</sub>. Finally, we want to argue that *nne* also consists of a Focus feature, an optional feature, which can be absent in the structure. Thanks to the Superset Principle in (42), above a syntactic structure without Focus would still be lexicalisable by the item in (48).

(48) The lexical structure of the negative future tense particle *nne*

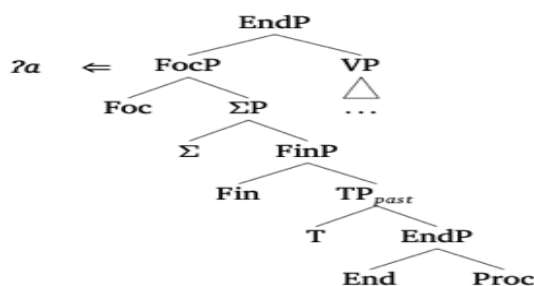


With the structures for these TAM-particles in place, the remainder of the story follows quite naturally, as we will see next.

#### 2.4 *A Nanosyntactic account of the Coptic TAM construction*

Before we get to the analysis of the TAM doubling construction itself, we need to emphasize that we will not explicate all different steps in the Nanosyntactic spellout algorithm, because this would lead us too far for the current objective of the paper. However, we will illustrate the main steps for the derivation of a TAM doubling construction with *ʔa*. After merge and lexicalization of VP, the complex TAM particle will be merged. The idea is that the complex particle will be generated in a complex specifier, i.e. a separate workspace, since there will be no easy lexicalization for the first aspectual feature that will be merged after VP, in this case End. If the syntax needs to open an additional workspace to lexicalize a particular feature, then it continues merging features until it has used the full potential of the complex specifier. The reason for this is related to the fact that opening a new workspace is the last step in the lexicalization algorithm, (44), and hence considered a last resort operation, that is very costly. For the particular perfect particle under discussion, this means concretely that the entire structure of *ʔa* will be generated in the complex specifier that was opened in an attempt to lexicalize the aspectual feature [End], needed for the lexicalization of *ʔa*. The generation of this particle will happen in a stepwise fashion, with attempts to lexicalize the structure after each new merge. The lexicalization within the complex specifier will be effortless, since each new merge will lead to a match. Ultimately, the specifier will be closed and the feature that needed to be lexicalized will project in the main spine.<sup>8</sup> This yields the structure in (49).

(49) Generation of the lexical structure of the perfect particle *ʔa* in the specifier of EndP



<sup>8</sup> Note that there is no head End<sup>o</sup> in the main spine. The idea is that this head is provided by the complex specifier and that having it in the main spine would be redundant. This idea goes back to Starke (2001).

As mentioned before, the syntax can either generate all possible layers relevant for the merge of the perfect TAM particle, but it can also stop at  $\Sigma P$ , since Foc is an optional (and marked) feature in a derivation. After merge of this complex left branch, the derivation will continue merging the relevant features of the clausal *fseq*. The same features that were merged in the complex specifier will be merged in the main spine and at each merge step, lexicalization of the feature will be tried. However, that will fail, given that there is a big chunk of structure underneath these features on the one hand, and given that the Coptic lexicon does not consist of lexical items with these structures. Now under the lexicalization algorithm provided in (44), the derivation would start lexicalization-driven movements to lexicalize these features. However, the syntax has already compiled a complex specifier (and lexicalized it) that contains most of these features, hence lexicalizing them again seems a redundant procedure. It would be better if this complex specifier could be attracted to these heads in a successive cyclic way to ensure interpretation of the various features the complex specifier consists. In other words, what we need in the algorithm is a step for feature-driven movement. De Clercq (2019, 2020: 181) proposed to update the algorithm with a step that allows for this, and this is shown in (50).

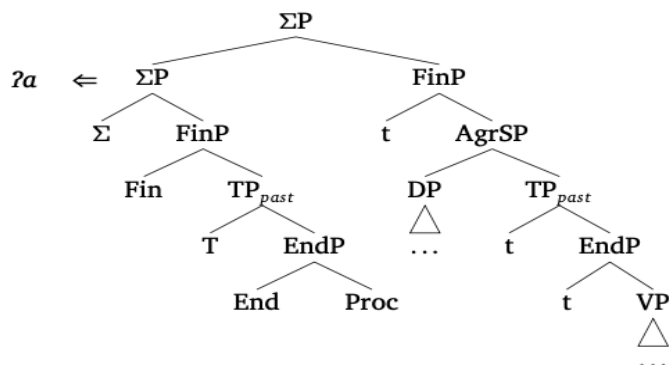
- (50) Revised Lexicalization algorithm
- a. Insert feature and spell out.
  - b. **If fail, screen the derivation and attract a constituent with the required feature.**
  - c. If fail, try a snowball movement of the complement of the newly inserted feature and spell out.
  - d. If merge-*f* has failed to spell out (even after backtracking), try to spawn a new derivation providing feature *X* and merge that with the current derivation, projecting feature *X* to the top node.

The result of this update is that after each step of merge, the first step will be to check whether there is any lexical item available in the lexicon that can spell the feature out immediately. If no such lexical item is available, the derivation will be screened for a constituent that can provide the feature. This is exactly what will happen when *Tpast* is merged in the clausal spine. Since this feature is present in the complex specifier, that specifier will be attracted and merge continues. The next feature in line is *AgrS*. In the same way as with our TAM particle the relevant constituent will be attracted to the specifier, and the derivation continues. *Fin* will be merged and then  $\Sigma$ , each time attracting the complex specifier that was lexicalized as the TAM-particle. If the complex TAM -particle were not merged up to its full potential, but only up to  $\Sigma P$ , then  $\text{Spec}\Sigma P$  in the main spine will be the halting position or



critical position of the particle, freezing the particle in place (see Rizzi 1997, 2017 and many others).<sup>9</sup> The derivation in (51) shows the path of the complex specifier through the main clause.

(51) Movement path of the complex specifier through the main clause

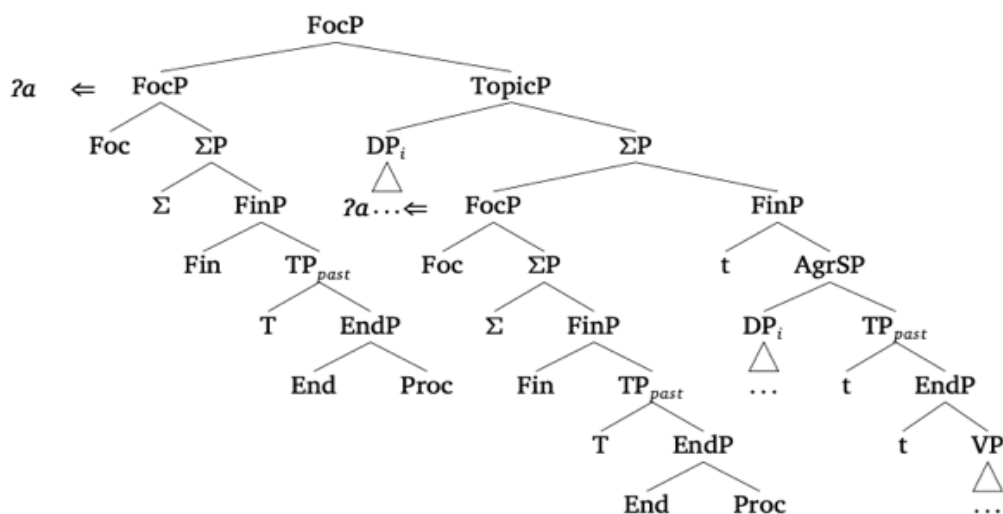


If the optional Foc feature was merged as well in the low complex specifier that lexicalized *?a*, as we illustrated in (49), then the complex constituent should be able to move further to SpecFocP, over the TopicP that activated this part of the left periphery.<sup>10</sup> However, since the main clause  $\Sigma P$  is a halting position for TAM-particles in Coptic, as we just discussed, movement of the complex specifier to SpecFocP will not be an option. So what will happen when Foc is merged in the main spine? In accordance with the updated lexicalization algorithm the derivation will be screened for a constituent that could lexicalize Foc. The frozen complex specifier in Spec $\Sigma P$  will be found, but since it can no longer move, and since subextraction is not possible from the complex specifier because the Foc-layer sits at the top of the spine, the only option is to copy the entire complex specifier and remerge it in SpecFocP, as illustrated in (5248), thus accounting for the TAM doubling construction.

<sup>9</sup> The implications of this proposal, i.e. that the internal structure of lexical items determines what their criterial position will be, go beyond the confines of this paper and need to be considered against the rich literature on Criterial Freezing. We will take this up in future work.

<sup>10</sup> We will not discuss the details of the relation between the resumptive clitic in SpecAgrSP and the DP in the left peripheral TopicP.

(52) Movement of the entire complex specifier to SpecFocP



The same mechanism applies to the negative future tense particle *nne*. The only difference is that due to the presence of NegP in the complex left branch, the polarity of the clause at  $\Sigma P$  will be negative. With respect to the post-subject TAM particles, they cannot play a role in the left periphery of the clause, since the lexical structure of these particles lack the relevant features associated to information structure and polarity.

### 3. Crosslinguistic comparison/ Polarity focus in Italian dialects

At first blush, the flexible syntax of Coptic TAM particles and the morphosyntactic expression of polarity focus via doubling has a very exotic flavor to it, which diminishes when comparative evidence is taken into consideration. Of special interest in this regard are comparable data on polarity focus from Italian dialects, as discussed in Poletto (2010). In Regional Italian and Veneto it is possible to combine the clause initial standard negator *non* with a clause final negative marker *no*.

(53) Non ci vado NO! [Regional Italian]  
Not there go NO

- (54) No ghe vado NO! [Veneto]  
 Not there go NO  
 “I won’t go there” (Poletto 2010: 40)

The positive counterpart of this construction also exists, (51), which increases the parallel with the Coptic doubling construction that also features a positive and a negative instantiation.

- (55) Ci vado SI. [Regional Italian]  
 There go YES  
 “I will go there indeed”

The construction in example (53) through (55) with clause-final NO/SI is not so widespread (Poletto 2010: 41), but the cleft-like construction in (56) is far more common and has the same meaning and pragmatic value and is also available in the positive and negative form.

- (56) Sì che ci vado  
 Yes that there go (Poletto 2010: 41)

- (57) NO che non ci vado! (Regional Italian)  
 NO that not there go

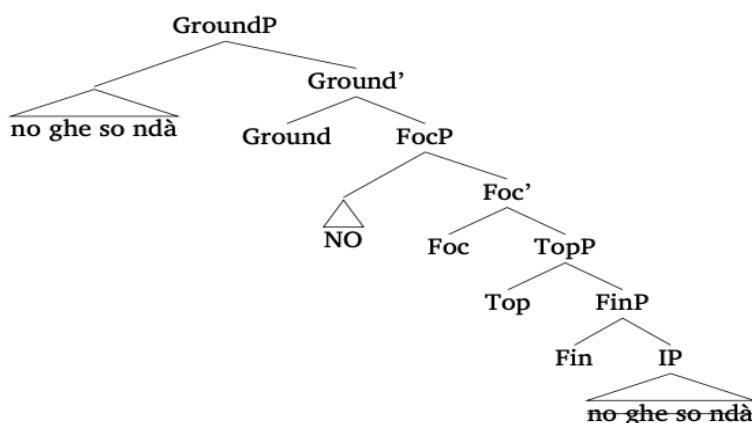
- (58) NO che non ghe vado (Veneto)  
 NO that not there go  
 “I won’t go there.” (Poletto 2010: 41)

Crucially, like in Coptic, the two negative elements in both constructions do not give rise to two semantic negations, but only to one negation. While the Coptic data involve TAM particles that include polarity features and the Italian data merely polarity particles, the situation is comparable in the sense that in both languages there is negative concord between two polarity sensitive particles. In Coptic the concord arises between two copies of the same TAM particle, while in Italian the concord arises between two morphologically different markers.

Addressing the issue, Poletto (2010: 41) suggests that there is an evidential value associated with the constructions: “The informal pragmatics of an utterance like the ones above is something like “why are you asking me whether I’m going, it is self-evident to me and it should be to you as well”.” Moreover, she argues that NO in both constructions contributes focus, since it is associated with a specific intonational contour. She argues that both in the clause final construction and in the *si/no*+ *che* construction, the polarity particle *si/no* sits in a

left peripheral FocP. For the construction with clause final NO/SI she proposes that the entire constituent preceding *si/no* moves to SpecGroundP (Poletto and Pollock 2004), a topic position higher than the left peripheral FocP. As in Coptic, we see that focalization goes hand in with topicalization.

(59) The syntax of polarity focus in Italian dialects (Poletto 2010)



Support for the analysis she proposes comes from the fact that nothing can follow clause final NO/SI unless dislocated constituents, as illustrated in (60). If *no/si* were in IP, one would expect that it could be followed by arguments, contrary to fact, (61).

- (60) No ghe so ndà NO, al cinema  
not there am gone NOT, to the cinema  
“I really did not go to the cinema.”
- (61) \*No ghe so ndà NO, da nisuna parte  
Not there am gone NOT, to no place  
“I really did not go anywhere.” (Poletto 2010: 48)

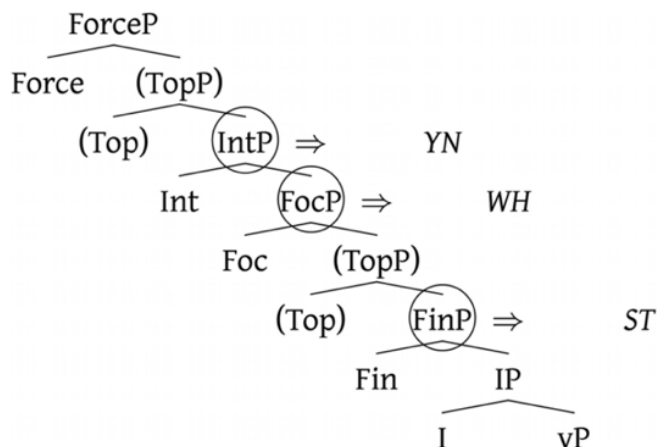
For the construction with *no/si + che* she proposes that the polarity particle *no/si* also sits in SpecFocP and that *che* does not sit in Force (as proposed by Rizzi 1997), but in a lower position. An argument for this is that if *che* were in Force one would expect that all projections of the entire left periphery could follow *che*, contrary to fact (Poletto 2010: 46), (63).

- (62) A Gianni NO che non glielo do  
 To Gianni NO that not to.him.it give  
 “I do not really want to give it to Gianni.”
- (63) \*No che a Gianni non glielo do  
 NO that to Gianni not to.him.it give

Important to mention with respect to both constructions is that for Poletto the polarity particles in SpecFocP are base-generated in the IP-domain, an issue that she developed in Poletto (2008), but not in Poletto (2010). This is relevant for the comparison with Coptic, since also for the Coptic polarity-TAM we argued that their origin is the IP-domain.

As a final point of comparison, it needs to be mentioned that the Italian constructions are incompatible with interrogative *wh*-words. The same seems to be true for the Coptic data: while *yes/no* interrogative words can be combined with the TAM-doubling construction, see (xx)-(xx), there is no example found of the co-occurrence of *wh*-words with the TAM -doubling construction. These facts follow if the highest TAM -copy in Coptic and the polarity particles *no/si* in Italian are indeed in SpecFoc, a position which is also commonly associated with the position for *wh*-words. The fact that *yes/no* interrogative markers are compatible with the construction, follows from the fact that the position dedicated to *yes/no* interrogatives has been proposed to be above FocP (Rizzi 2001). The tree in (64), taken from De Clercq (2017) and based on Rizzi (1997, 2001) shows the relevant functional heads involved in the derivation of regular statements, *wh*-questions and *Yes/No* questions.

(64) Sequence of functional heads including positions for interrogative elements



Since *wh*-question words target FocP as well, it follows that they cannot co-occur with the Coptic higher TAM<sub>2</sub> copies or the Italian polarity particles which also target this position.

In conclusion, while the Italian data differ substantially from the Coptic data, there is also considerable overlap. Crucially, both the Italian and Coptic data show that particles that are used elsewhere in the grammar can be used to express focus on polarity. In Italian the regular polarity particles can be used for that, giving rise to a concord pattern with the regular standard negator in the clause. In Coptic, affirmative and negative TAM particles can be copied in the left periphery thanks to their rich internal structure, also leading to a situation of negative concord in the presence of NEG-TAM doubling. While negative concord is a well-studied phenomenon for Italian, it is not so well discussed for Coptic.

#### 4. Conclusions

We explored a TAM doubling construction in Coptic Egyptian which features one TAM particle in the pre-subject position and one in the pre-topic position, both in the left periphery of the clause. The construction occurs with affirmative and negative TAM particles and does not give rise to double negation readings or to a double interpretation of TAM properties. To capture these facts, we adopted the idea proposed in Reintges (2011) that the highest TAM particle is a copy of the lower TAM particle and that it contributes polarity focus. It could be shown that the highest particle sits in a left peripheral Focus projection, and that it can only appear there if the left periphery has been activated by a lower topic. With respect to the lower particle we argued that it sits in  $\Sigma$ P/FinP. Crucially, we provided support to the idea that the regular position for pre-subject TAM particles is not its base position, but that they are actually generated in the IP domain, where another group of TAM particles, the so-called preverbal particles, is also generated.

Based on empirical support for a connection between the three different positions (Focus, Fin, TP/IP), in which TAM-particles surface, we proposed to decompose TAM particles into several layers, thus arguing for the fact that these particles are actually portmanteaux. While pre-subject particles were analyzed as having a lexical structure that consists of Foc,  $\Sigma$  and Fin in addition to several TAM-related features, the post-subject particles were argued to only consist of IP-related TAM features. It can thus be explained why only pre-subject particles move to the left periphery, while this option is not available to post-subject particles. Under this Nanosyntactic approach, the distributional differences between TAM particles are a consequence of the size of lexically stored trees, and the ability to give rise to a copy follows from the

presence of a marked/optional feature in syntax. We hope that this paper has succeeded in shedding some light on why this concord relation could arise in the TAM doubling construction that constitutes the topic of this paper.

## References

- Baunaz, Lena, De Clercq, Karen, Haegeman, Liliane and Eric Lander (eds.), *Exploring nanosyntax*, Oxford: Oxford University Press.
- Bosson, Nathalie (2006) 'Remarques sur la « structure (2)λ ... (2)λϕ ».' *Lingua Aegyptia* 14: 281–300.
- Breitbarth, Anne (2009). 'A hybrid approach to Jespersen's cycle in West Germanic.' *Journal of Comparative Germanic Linguistics* 12 :81–114.
- Breitbarth, Anne, De Clercq, Karen and Haegeman, Liliane (2013). 'The syntax of polarity emphasis.' *Lingua* 128: 1-9.
- Breitbarth, Anne and Liliane Haegeman (2014). 'The distribution of preverbal /en/ in (West) Flemish: syntactic and interpretive properties.' *Lingua* 147: 69–86.
- Caha, Pavel (2009). *The nanosyntax of case*. Tromsø: University of Tromsø dissertation.
- Cinque, Guglielmo (1999). *Adverbs and Functional Heads: A Cross-linguistic Perspective* (Oxford Studies in Comparative Syntax). Oxford: Oxford University Press.
- Dahl, Östen. 1979. 'Typology of sentence negation.' *Linguistics* 17: 79–106.

- De Clercq, Karen (2013). 'A unified syntax of negation.' Ghent: Ghent University dissertation.
- De Clercq, Karen (2017). 'Prosody as an argument for a layered left periphery.' *Nederlandse Taalkunde* 2017 22 (1):31-38.
- De Clercq, Karen (2017). 'The nanosyntax of French negation.' In S. Cruschina, K. Hartmann & E.-M. Remberger (eds.), *Studies on negation: Syntax, semantics, and variation*. Vienna: Vienna University Press, pp. 49–80.
- De Clercq, Karen (2018). 'Syncretisms and the morphosyntax of negation.' In L. Baunaz, K. De Clercq, L. Haegeman & E. Lander (eds.), *Exploring nanosyntax*, Oxford: Oxford University Press, 180–204.
- De Clercq, Karen (2019) 'French negation, the Superset Principle and feature conservation.' In M. Bouzouita, A. Breitbarth, L. Danckaert and E. Witzhausen (eds.) *Cycles in Language Change*, Oxford: Oxford University Press, pp. 199-227.
- De Clercq, Karen (2020) *The morphosyntax of negative markers. A nanosyntactic account*. Berlin: Mouton de Gruyter.
- De Clercq, Karen (2022) 'Perfective allomorphy and negative neutralisation in Bambara: a (nano) syntactic account'. Invited talk at Morphology as Syntax 2, UCLA, 10-11 June 2022.
- Funk, Wolf-Peter (1988) 'Dialects wanting homes: a numerical approach to the early varieties of Coptic.' In J. Fisiak (ed.) *Historical dialectology: regional and social*. Mouton De Gruyter: Berlin and New York, pp. 149–192.
- Funk, Wolf-Peter (2014). 'Negative **n-** without **an** as a Late Survival in Coptic Egyptian.' *Journal of Coptic Studies* 16: 125–138.
- Green, Melanie and Reintges, Chris H. (2005). 'Syntactic conditions on special inflection: evidence from Hausa and Coptic Egyptian interrogative and focus constructions.' *Working papers in linguistics and English language* 14 (05).
- Haegeman, Liliane (2000). 'Negative preposing, the Neg criterion and the structure of CP.' In: L. Horn, Y. Kato (eds.), *Negation and Polarity*. Oxford University Press, Oxford, pp. 29-69.
- Höhle, T. (1992). 'Über Verumfokus im Deutschen.' In: Jacobs, J. (ed.). *Informationsstruktur und Grammatik*. Westdeutscher Verlag (= Sonderheft der Linguistischen Berichte 4 ), Opladen, pp. 112–141.
- Horn, Laurence (2001). *A natural history of negation*. Chicago, IL: The University of Chicago Press 2nd edn.



- Jespersen, Otto (1917). *Negation in English and other languages*. København: A.F. Høst & Søn.
- Julien, Marit. (2001). 'The syntax of complex tenses.' *The Linguistic Review* 18(2). 125–167.
- Kiparsky, Paul (1973). 'Elsewhere' in phonology.' In P. Kiparsky and S. Anderson, *A Festschrift for Morris Halle*, Holt, Rinehart and Winston, New York.
- Klima, Edward. (1964). 'Negation in English.' In J. Fodor & J. Katz (eds.), *The structure of language*, Englewood Cliffs, NJ: Prentice-Hall, pp. 246–323.
- Kramer, Ruth (2006). 'Root and pattern morphology in Coptic: Evidence for the root.' In Christopher Davis, A. R. Deal & Y. Zabbal (eds.) *Proceedings of NELS 36*, Amherst GSLA. pp. 399–412.
- Laka, Itziar (1990). *Negation in syntax: On the nature of functional categories and projections*. Cambridge Massachusetts: MIT dissertation.
- Layton, Bentley (2000) *A Coptic Grammar with Chrestomathy and Glossary: Sahidic Dialect* [Porta Linguarum Orientalium 20]. Wiesbaden: Harrasowitz Verlag.
- Miestamo, Matti. (2005). *Standard negation. The negation of declarative verbal main clauses in a typological perspective*. Berlin: Mouton de Gruyter.
- Moscato, Vincenzo (2006). *The scope of negation*. Siena: University of Siena dissertation.
- Moscato, Vincenzo (2010). *Negation raising: logical form and linguistic variation*. Cambridge: Cambridge Scholars Publishing.
- Moscato, Vincenzo (2012). 'The cartography of negative markers: why negation breaks the assumption of LF/PF isomorphism.' In V. Bianchi and C. Chesi (eds.), *Enjoy linguistics! Papers offered to Luigi Rizzi on the occasion of his 60th birthday*. Siena, Italy: CISCL Press, pp. 1–7.
- McCloskey, James (2011). 'Polarity and case licensing: The cartography of the inflectional layer in Irish.' Talk presented at GIST 3: Cartographic Structures and Beyond. Ghent University.
- Poletto, Cecilia. (2008). 'On negative doubling.' *Quaderni di Lavoro ASIt* 8 : 57-84.
- Poletto, Cecilia. (2010). 'The Syntax of Focus Negation.' *Quaderni di Lavoro ASIt* 10: 39-61.
- Polotsky, Hans Jakob (1960). 'The Coptic conjugation system.' *Orientalia* 27: 392–422.
- Polotsky, Hans Jakob (1987/1990). *Grundlagen des koptischen Satzbaus* [American studies in papyrology 28/29]. Decatur, Georgia: Scholars Press.
- Ramchand, Gillian (2008). *Verb meaning and the lexicon*. Cambridge, Massachusetts: MIT Press.

- Reintges, Chris H. (2018). *Coptic Egyptian (Sahidic dialect): A learner's grammar*. 2<sup>nd</sup> Revised Edition (Study books of African languages 15). Cologne: Rüdiger Köppe Verlag.
- Reintges, Chris H. (2011a). High analyticity and Coptic particle syntax: a phase-based approach. *The Linguistic Review* 28, 533–599.
- Reintges, Chris H. (2011b). 'The Evolution of the Ancient Egyptian Stative: Diachronic Stability despite Inflectional Change.' *Folia Orientalia* 48: 7–97.
- Reintges, Chris H. (2015). 'Increasing Morphological Complexity and How Syntax Drives Morphological Change.' In: Th. Biberauer & G. Walkden (eds.) *Syntax over Time: Lexical, Morphological, and Information-Structural Interactions* [Oxford Studies in Diachronic & Historical Linguistics 15], Oxford: Oxford University Press pp. 125–145.
- Rizzi, Luigi (1990). *Relativized Minimality*. Cambridge, Massachusetts: MIT Press.
- Rizzi, Luigi (1997). 'The fine structure of the left periphery.' In L. Haegeman (ed.) *Elements of grammar: Handbook of generative syntax*, Kluwer, Dordrecht, pp. 281–337.
- Rizzi, Luigi (2017) 'Types of criterial freezing.' *Rivista di Grammatica Generativa* 39.
- Rizzi, Luigi (2001). 'On the position "int(errogative)" in the left periphery of the clause.' In: G. Cinque and G. Salvi, *Current studies in Italian syntax: Essays offered to Lorenzo Renzi*. Amsterdam: Elsevier, pp. 267-296.
- Sethe, Kurt (1915). 'Das perfektische Hilfsverbum w3ḥ im Demotischen und Koptischen' *Zeitschrift für Ägyptische Sprache und Altertumskunde* 52(1) : 112–116.
- Shisha-Halevy, Ariel (1986) *Coptic Grammatical Categories: Structural Studies in the Syntax of Shenoutean Sahidic* [Analecta Orientalia 53]. Rome: Pontifical Institute.
- Shisha-Halevy, Ariel (2003). Future, present, narrative past: a triple note on Oxyrhynchite Tempuslehre. In: W. Beltz, U. Pietruschka and J. Tubach (eds.) *Sprache und geist: Peter Nagel zum 65. Geburtstag*. Hallesche Beiträge zur Orientwissenschaft 35/03. Martin-Luther-Universität Halle-Wittenberg: Halle 5Saale), pp. 249–309.
- Starke, Michal. 2009. 'Nanosyntax: A short primer to a new approach to language.' *Nordlyd* 36. 1–6.
- Starke, M. (2021) Nanosyntax seminar. Spring 2021. Brno University, Czech Republic. [Online].
- Swart, Henriette de. 2010. *Expression and interpretation of negation: an OT typology*. Dordrecht: Springer.
- Van der Auwera, Johan and Annemie Neuckermans (2004). 'Jespersen's cycle and the interaction of predicate and quantifier negation in Flemish.' In B. Kortmann (ed.),

*Typology meets dialectology. Dialect grammar from a cross-linguistic perspective*, Berlin: Mouton de Gruyter, pp. 454–478.

Willis, David, Christopher Lucas and Anne Breitbarth (eds.) (2013). *The development of negation in the languages of Europe and the Mediterranean*, vol. 1 Case Studies. Oxford: Oxford University Press.

Zeijlstra, Hedde. 2004. *Sentential negation and negative concord*. Utrecht: Utrecht University dissertation.