

Verb movement in an emergent analytic language

Evidence from Coptic Egyptian*

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1 Introduction

One of the most tangible properties of natural languages is that they vary considerably with respect to their word-internal structure. Readily observable morphological properties present important cues for the acquisition of syntax. In this connection, Holmberg and Roberts (2013: 112) call attention to the fact that children are highly sensitive to the morphological properties and learn accurately complex paradigms. This outstanding fact about interlanguage variation led nineteenth century typologists like August Wilhelm von Schlegel, Wilhelm von Humboldt, and August Schleicher to posit a ternary division of languages into an agglutinative (or affixal), a fusional (or inflective) and an analytic (or isolating) type. Sapir (1921: 130) added a “uncomfortable ‘polysynthetic’ rear-guard to the agglutinative languages”.

Greenberg (1974: 36) has characterized holistic morphological typology as “individualizing in aim and intuitive in its methodology” in the sense that “the structure of the word was seized upon as in some sense central to the attempt to characterize the language as a whole”. Specialists in language typology and morphological theory have voiced doubts about the suitability of morphological typology to the study of crosslinguistic diversity (e.g. Anderson 1985: 9–10; Comrie 1989: 51–52; Spencer 1991: 37–39). The methodological criticism pertains to the conflation of too many variables, such as the index of synthesis, the degree of fusion, and the distributional freedom of grammatical formatives.

Baker (1996, 2008) has gone to considerable length to argue for a view to the contrary. Morphological types (agglutinative, inflexive, analytic, polysynthetic) are more than just accidental collections of (word) form-related properties but rather provide a window onto a given language’s core syntax. With an eye for diachronic change, Roberts (2012a: 326) presents a somewhat different perspective on the issue, stating that, “nineteenth century typology observed these highly salient properties of word structure and naturally attributed them to morphology, when in fact they are determined by syntax”.

If morphological typology amounts to syntactic typology, it must be the case that at the diachronic level, movement between morphological structure types are correlated with large-scale change, macro-parametric in the changes in the syntactic system. Based on this *raison d'être*, the Sapirian drift towards a maximally general pattern of analyticity presents an ideal test case to verify the interface connection between morphological and syntactic structural change (for analytic drift, see Sapir 1921: 206 and fn. 1, 216–217).

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Chinese language history presents a showcase for long-term Sapirian drift towards the analytic type. According to Huang (2015), Ancient Chinese was a language of considerable synthesis when compared to present-day Mandarin, which displays high analyticity in various domains of the grammar. Ancient Egyptian (Afroasiatic, 3500 BCE–13th c. CE) is another richly recorded ancient language, which shifted from a moderately agglutinative to a predominantly analytic morphological structure type in the later linguistic stages (Reintges 2012a, 2013). However, in contradistinction to Chinese, the analyticization process did not go all the way through, leaving a considerable part of the synthetic system unaffected. Coptic Egyptian, the final stage of the Ancient Egyptian language (late 3rd–13th c. CE), has a Janus face and discloses a neat and sharp dichotomy between analyticity in the functional and syntheticity in the inflectional component of grammar.

2 The analysis/synthesis dichotomy

Sapir already acknowledged the problems of classification that raises in language that appear “‘analytic’ from one standpoint, ‘synthetic’ from another”, with the taxonomic labels (agglutinative, inflexive, analytic, polysynthetic) being “more useful in defining certain drifts than as absolute counters” (Sapir 1921: 136). I shall begin by first outlining the typologically salient properties of the Coptic Egyptian inventory of temporal, aspectual, modal, evidential (TAME) particles and then turn to the inflectional system of verbal stem formation.

2.1 Analyticity in the functional syntax

According to the *Word Atlas of Language Structures* (Dryer 2013), 629 language out of a total sample of 1062 languages have tense and aspect suffixes, as opposed to a much smaller fraction of 139 languages, which have freestanding auxiliary verbs or particles. Coptic Egyptian falls within the latter group. The language possesses a large and diversified inventory of free functional free functional morphemes that convey temporal, aspectual, modal, evidential meaning as well as affirmative and negative polarities. There is also a smaller set of relative particles. These functional particle (actually complementizer; cf. Reintges 2012b) mark relative embedding, *wh/focus* dependencies as well as clause-chaining but will not receive special attention in the present contribution.

Table 1. The inventory of TAME particles

Pre-subject TAME particles			Preverbal TAME particles				
<u>Affirmative</u>		<u>Negative</u>		<u>Affirmative</u>		<u>Negative</u>	
Perfect	?a ?are	Neg. Perfect	əmpe			Neg. Aux.	təm
Habitual	ja jare	Neg. Habitual	me, mere	Epistemic	na		
		Neg. Future	əne	Future			
				Deontic	e		
				Future			
Terminative	jante	Neg. Terminative	əmpate	Conditional	jan	Neg. Conditional	jan təm
Optative	mare	Neg. Optative	mpor				
Conjunctive	nta, nə, ənte	Neg. Conjunctive	ənte təm				
Preterit	ne, nere						
Inferential	tare						

As we can see from Table 1, TAME particles often come in pairs of affirmative and negative polarity, which gives rise to paradigmatic oppositions in the functional system. In passing, it may be mentioned that negative TAMES represent a case of partial re-syntheticization insofar as they have a morpheme-initial labial or nasal velar /m/ or /n/ but the rest of the base does not bear any resemblance to the affirmative counterpart. This strongly suggests that the exponents of negative polarity and tense–aspect–mood have been fused into a single portmanteau morpheme (Reintges 2018: 347 §9.4).

In terms of Basic Word Order typology, Coptic can be classified as a Subject–Verb–Object (SVO) language, in which the freestanding TAME particle is placed in front of the subject constituent. The resulting auxiliary/tense–initial TAME 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. Moreover, TAME SVO order selected in pragmatically neutral declarative clauses, without topicalized or focalized constituents.

- (1) Pragmatically neutral declarative sentence, illustrating basic TAME SVO surface order

TAME	Subject	Verb	Object	
a	tə-k ^j amaule	mi:se	ən-u-je?ere	ən-shime
PERF	DEF.F.SG–camel	deliver.ABS	PREP–INDEF.SG–girl	LINK–woman

“The she-camel delivered a daughter.” (Mena, Miracles 10b: 33–34)

Greenberg (1963: 85, 93) contemplated but ultimately disregarded the possibility of integrating uninflected auxiliary verbs into his syntactic typology. Baker (2002) claims that tense- or auxiliary-initial SVO orders could not possibly emerge as a language’s basic word order, because the tense-bearing element and the main verb would be morphologically and syntactically divorced from each other, appearing on either side of the subject noun phrase. But this is exactly what happens in pragmatically neutral declarative sentences in Coptic Egyptian, where the DP subject **tə-k^jamaule** ‘the she-camel’ is sandwiched between the sentence-initial Perfect tense–aspect particle **a** and the lexical verb stem **mi:se**

‘to deliver’. TAME SVO basic word order falls out naturally from the language’s parameter setting, which involves a high degree of analyticity in the functional system and a high attachment of auxiliary-like TAME particle words.

There is another class of TAME particles, which are merged in the highest functional head of the inflectional (Mittelfeld) domain. In this position, the particle follows the subject and precedes the VP constituent. The following instance of S TAME VO word order involves the epistemic future tense particle **na**, which has a corresponding lexical verb **nɛw** ‘’.

(2) S TAME VO word order with lower-placed TAME particles

Subject	TAME	Verb	Object
pə-tʃɔeɪs	na	krine	ən-nə-laos
DEF.M.SG-lord	FUT.EPIST	judge.ABS	PREP-DEF.PL-people

“The Lord will judge the nations.” (Psalm 28, 11)

It should furthermore be observed that the future particle **na** forms an indivisible verbal cluster complex with the left-adjacent main verb **krine** ‘to judge’ (a borrowed, Greek-origin verb).

2.2 Synthesis in the root-based system of stem formation

Inflectional synthesis is represented by a root-based system of stem formation, whose morphology is unusually rich and complex and in which event semantics, argument structure and verb movement options are intertwined. Coptic stem forms are produced by associating a consonantal root with a particular structural pattern, which has come to be known as ‘state’ in the Coptic descriptive tradition. Depending on grammatical and semantic appropriateness, a given root can occur in four and at most five states. Table 1 presents the four alternating forms of the biliteral root $\sqrt{\text{KT}}$ ‘to build’, together with their event semantics and argument structure

Table 2. The four alternating stem forms of the biliteral root $\sqrt{\text{KT}}$

	Stative	Absolute State	Construct State	
			Nominal State	Pronominal State
Stem form	két	kót	ket	kót
Event Semantics	Stative	Eventive [–telic]	eventive [+telic]	eventive [+telic]
Transitive		Transitive with prep. DP/NP/pronoun object	Transitive with DP/NP object	Transitive with direct object pronoun
Intransitive	unaccusative adj. passive	unergative, inchoative		

Derivationally related stems are inflectionally distinguished from one another through their vocalism and their accentual patterns (see Kramer 2006 and Bendjaballah & Reintges 2014 for a more detailed analysis). In terms of lexical semantics, the transitive root $\sqrt{\text{KT}}$ ‘to build’ can be classified as a *verb of creation*. Verbs of creation are known for their complex event structure, which comprises a process component and a resultant state (Levin & Rappaport Hovav 1995: 247–248). The bound nominal construct state stem **ket** denotes a [+telic] event, as the following example is meant to illustrate.

- (3) Eventive [+telic] semantics of the Nominal construct state

a **tə-sophia** **ket** **u-ε:i** **na=s**
 PERF DEF.F.SG-wisdom build.CS INDEF.SG-house for=3F.SG

“Wisdom has built a house for herself.” (Proverbs 9, 1)

With transitive roots, the Stative stem pattern functions as a detransitivizing voice. The single Theme or Patient argument is promoted to the preverbal subject position. In Stative sentences, there is no semantically implied Agent, which thus look like adjectival passives.

- (4) Adjectival passive reading of the Stative stem pattern

tʰe **ne** =f **két** **kalo:s**
 COMP PRET =CL.3M.SG build.STAT well

“Because it (the house) was built well.” (Luke 6, 48)

The semantic side of the Eventive (**kót, ket**) ~ Stative (**két**) opposition has been discussed in further detail in my previous work (Reintges 2011: 549–554).

2.3 Verb movement past adverbial negation **an**

Coptic has a French-style double negation pattern **nə ... an** which involves the initial negation particle **nə** and its labialized allomorph **mə** and the postverbal negation adverb **an** ‘not’. In the research tradition initiated by Emonds (1978) and Pollock (1989), Reintges (2012a) and Reintges & Cyrino (2016, 2018) use the relative position of the verb and the subject with respect to the postnegation **an** as a diagnostic for the synchronization of verb movement and subject raising. The negated sentence below exemplifies the movement of the Stative-inflected verb **tét** and the unaccusative movement of the internal argument DP **pə-sən** ‘the brother’ to the canonical subject position.

- (5) Adverb > NEG > Subject DP > Stative
- tét**
- > Partitive > Neg. adverb
- an**

arεu **əm** **pə-sən** **tét** **ən-het** **an** **e-fatʰe** **nəmma=n**
 ADV NEG DEF.M.SG-brother persuade.STAT PREP-heart not to-talk.ABS with=CL.1PL

“Perhaps the brother does not agree (lit. is persuaded of heart) to talk to us.” (Apothegmata Patrum, ed. Chaîne, no. 238, 70, 21)

As shown next, the absolute state stem **areske** ‘to please’ and the subject DP **pei-hoβ** ‘this thing’ move past the postnegation **an**. By contrast, the prepositional object DP **əm-pə-ro:me ən-fu:ʃo** ‘the bragging man’ is left behind within the verbal domain and does not undergo object shift.

- (6) COMP > Subject DP > Particle
- kje**
- > Absolute state
- areske**
- > Neg. adverb
- an**
- > Prep. Object DP

eʃtʰe **pei-hoβ** **kje** **areske** **an** **əm-pə-ro:me** **ən-fu:ʃo** (...)

 COMP DEM.M.SG-thing PCL please.ABS not PREP-DEF.M.SG-man LINK-bragging

“If this thing does not please the braggard (...)” (Shenoute, Amélineau I, 1, 13, 7)

In the negated sentence presented below, the nominal construct state marked verb **tənnēu** ‘to send’, the subject DP **pə-nurte** ‘God’ as well as the direct object DP **pe=f-ʃε:re** ‘his son’ have all moved past the negation adverb **an**. The directional PP **e-pə-kosmos** ‘to the world’ is the only constituent left behind.

- (7) REL > TAME > Subject DP > Nominal construct state **tanneu** > Direct Object DP > Neg. adverb **an** > Directional PP

ant a pə-nu:te gar tanneu pe=f-ʃe:re an
 REL PERF DEF.M.SG-god PCL send.Nom.CS DEF.M.SG=POSS.3M.SG-son not
e-pə-kosmos (...)
 to-DEF.M.SG-world

“Since God has not sent his (own) son to the world (...)” (John 3, 17)

The nominal construct state configuration goes together with the voiding of the VP domain, due to the obligatory application of nominal object shift. It generally appears, then, that the stative, the absolute, and the nominal construct state pattern move past the negation adverb **an** into the lower middlefield.

The next question that arises concerns the landing site of verb movement. As shown by the following two examples, the absolute state and the nominal construct state verb end up in a position lower than the one that is occupied by the epistemic future particle **na**.

- (8) Subject DP > Preverbal Future Particle **na** > Absolute state **krine** > Prep. Object DP

pə-tʰe:is na krine ən-nə-laos
 DEF.M.SG-lord EPIST.FUT judge.ABS PREP-DEF.PL-NATION

“The Lord will judge the nations.” (Psalm 28, 11)

- (9) Subject DP > Preverbal Future Particle **na** > Absolute state **krine** > Prep. Object DP

pə-tʰe:is na tʰne pə-dika:ios mən p-aseβe:is
 DEF.M.SG-lord EPIST.FUT examine.Nom.CS DEF.M.SG-righteous with DEF.M.SG-lawless

“The Lord will examine the righteous and the lawless one.” (Psalm 10, 5)

The Stative stem pattern, on the other hand, is systematically in future tense sentences. Neither do statives appear in conditional sentences formed with the preverbal TAME particle **fan** or the deontic future particle **e**. This points towards a syntactic co-occurrence restriction, forcing Stative-inflected verbs to move all the way up to the highest inflectional head that is otherwise lexicalized by preverbal TAME particles.

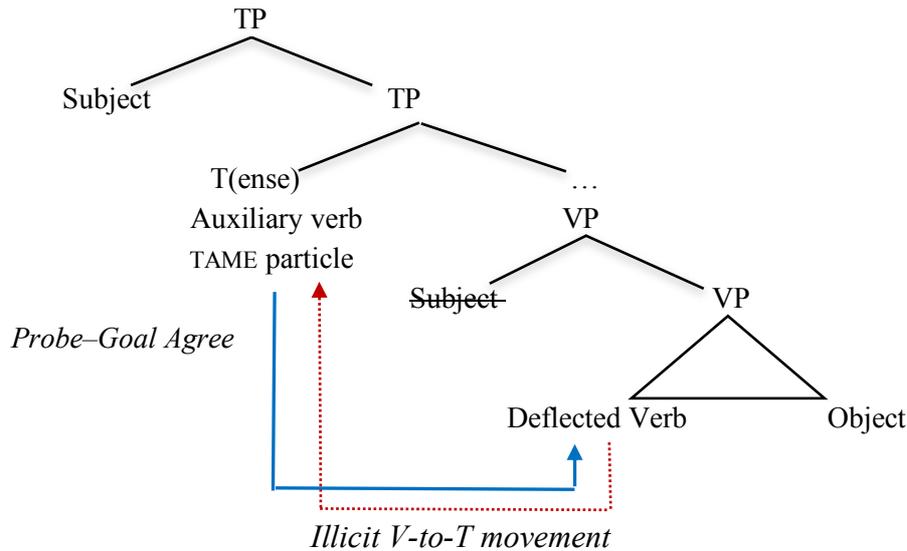
3 The syntactic basis of the analytic–synthetic split

Holmberg & Roberts identify a correlation between analyticization, morphological simplification and erosion and the loss of verb movement processes (Roberts & Holmberg 2010: 43; Holmberg & Roberts 2013: 114–115; Roberts 2012: 326–327). There are in principle two sides to Holmberg & Roberts’ correlation. On the one hand, if a functional head position is occupied by a free functional morpheme, be it an auxiliary or particle, it blocks verb movement to that position. This point has been made by Cinque (1999: 189 note 22), stating that “free functional morphemes (particles), in contrast to bound functional morphemes, bar adjunction of the immediately lower head ... and also prevent it from raising past them”. On the other hand, from a featural perspective, there is no morphological trigger for verb raising to an inflectional head position. This is so since the analyticization process goes hand in hand with deflexion,

i.e. the loss of inflectional material. In the absence of “needy” inflectional affixes, verb movement does not—and by economy considerations—cannot apply to prevent a Stray Affix Violation (Lasnik 1981).

The merge of the auxiliary verb or TAME particle into the T(ense) head blocks V-to-T movement of the deflected verb, which remains in situ in the verb domain and does not move. Because of that, the verb–tense relation must be accomplished via a more abstract feature computation procedure—the Probe–Goal agreement relation (Chomsky 2001 et seq.). The tree diagram in () further illustrates the above points.

(10) The complementary of Merge and Move in emergent analytic systems

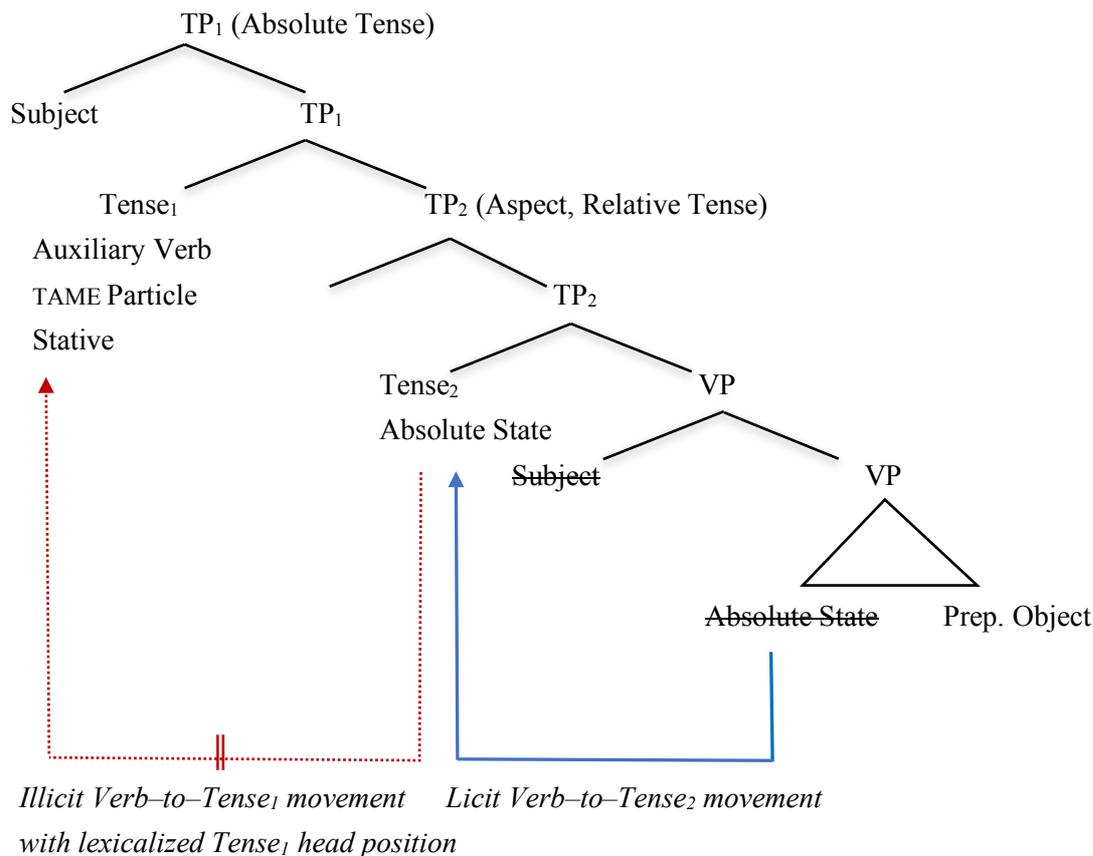


The situation is different for emergent analytic systems in which analysis and synthesis are compartmentalized in different corners of the grammar. In accordance with previous work (e.g.; Giorgi & Pianesi 1997; Demirdache & Uribe-Etxebarria 2000; Julien 2001), it is posited here that the temporal skeleton of the clause minimally contains two temporal projections TP₁ and TP₂. The higher Tense₁ head marks absolute tense distinctions while the lower Tense₂ head indicates aspectual oppositions and relative tense.

The hierarchical position of the Tense₁ and Tense₂ heads with respect to each other reflect semantic scope relations. Aspect has narrower scope than tense, as it is concerned with the internal temporal structure of the event itself. Tense, on the other hand, locates the state of affairs reported in the sentence on the time axis and thus takes scope of the entire sentential proposition.

Cyrino and Reintges (2016, 2018) propose that the positioning of an auxiliary verb or TAME particle prevents the deflected verb from raising to Tense₁ position and head–adjoining to it. In this way, analyticization severely restricts the configurational space available for verb movement operations. However, verb movement as a syntactic operation need not be entirely dispensed with, considering that the lower Tense₂ head is still available as a landing site for short verb movement.

(11) Narrowing down the scope of verb movement space in analytic systems



The above tree structure, in which the higher Tense₁ position is no longer available as a landing site for verb movement, whereas the lower Tense₂ position still is provides the relevant configuration for aspectually driven head movement of the deflected absolute state in **na**-future sentences. The V-to-Tense raising that stative-inflected verbs is blocked by the preverbal TAME particle. There is a more general issue at stake here, which concerns the site where the analyticization process starts from. The analyticization site may be as low in the structure as the layered VP. For Mandarin Chinese, Huang (2015: 4–8) calls attention to the extensive use of light verbs and pseudo-noun incorporation on the hand, and the prevalence of verb–resultative phrase complexes on the other hand, by means of which the decompositional event structure of telic transitive predicates is overtly lexicalized. This provides prima facie evidence that high analyticity applies all the way down to verb–argument configurations (Huang 2015: 10–13; Roberts 2019: 378–380). To recapitulate, in the split synthetic–analytic system of Coptic Egyptian, the analyticization site sets in at the Tense₁ position, which is the highest inflectional head of the Mittelfeld domain.

4 The hierarchical ordering of pre-subject TAME particles in the left periphery of the Coptic clause

Moving on to presubject TAME particles, it would seem a priori plausible to correlate the structurally high location with a categorial analysis as tensed complementisers, as has been proposed by Massam (2010: 292) and Biberauer & Roberts (2010: 296) for Niuean TAM particles. For Niuean, the tensed complementiser analysis correctly predicts that TAM particles must be dropped when a lexical complementizer is present (Massam 2010: 291–294). There are several reasons why this analysis does

not carry over to the Coptic case. Firstly, presubject TAME particles and tensed relative complementisers can occur in clusters, which may contain up to four particles.

(12) Relative particle **e** > Preterit particle **ne** > Relative particle **nt** > Perfect particle **a**

e ne nt a =i íre gar ən-u-tʰi ən-kʰɔns
REL PRET REL PERF =CL.1SG do.ABS PCL PREP-INDEF.SG-take.ABS PREP-violence

“For if I had committed an act of violence (...)” (Acts 25, 11)

Secondly, relative complementisers express a rudimentary [\pm PERFECT] contrast, which only partially reflects the fine-grained temporal distinctions that we see with TAME particles (Reintges 2012b). In expressing tense and finiteness, TAME particles turn out to be more verbal categorially than the deflected lexical verb stems, with the Stative being a notable exception. This strongly suggests that these particles can better be analyzed as uninflected (or poorly inflected) auxiliary verbs. The auxiliary verb analysis also fits in well with the distributional freedom that presubject TAME particles display—a point to which we have occasion to return to (§5).

To capture the syntax and semantics of presubject TAME particles, a more complex extended projection line must be posited. The Perfect tense–aspect particle **?a** is merged into an **T[\pm PAST]** head position that corresponds in structural height to the Fin(inteness) head of the Rizian (1997) cartography. The Preterit particle **ne**, on its part, must be located in a higher temporal head **T[\pm PRET]**, which dominates the **Fin/T[\pm PAST]** head. The combination of the Preterit particle **ne** and the Perfect particle **?a** gives rise to compound tense with a single Pluperfect tense value (Past-in-the-Past).

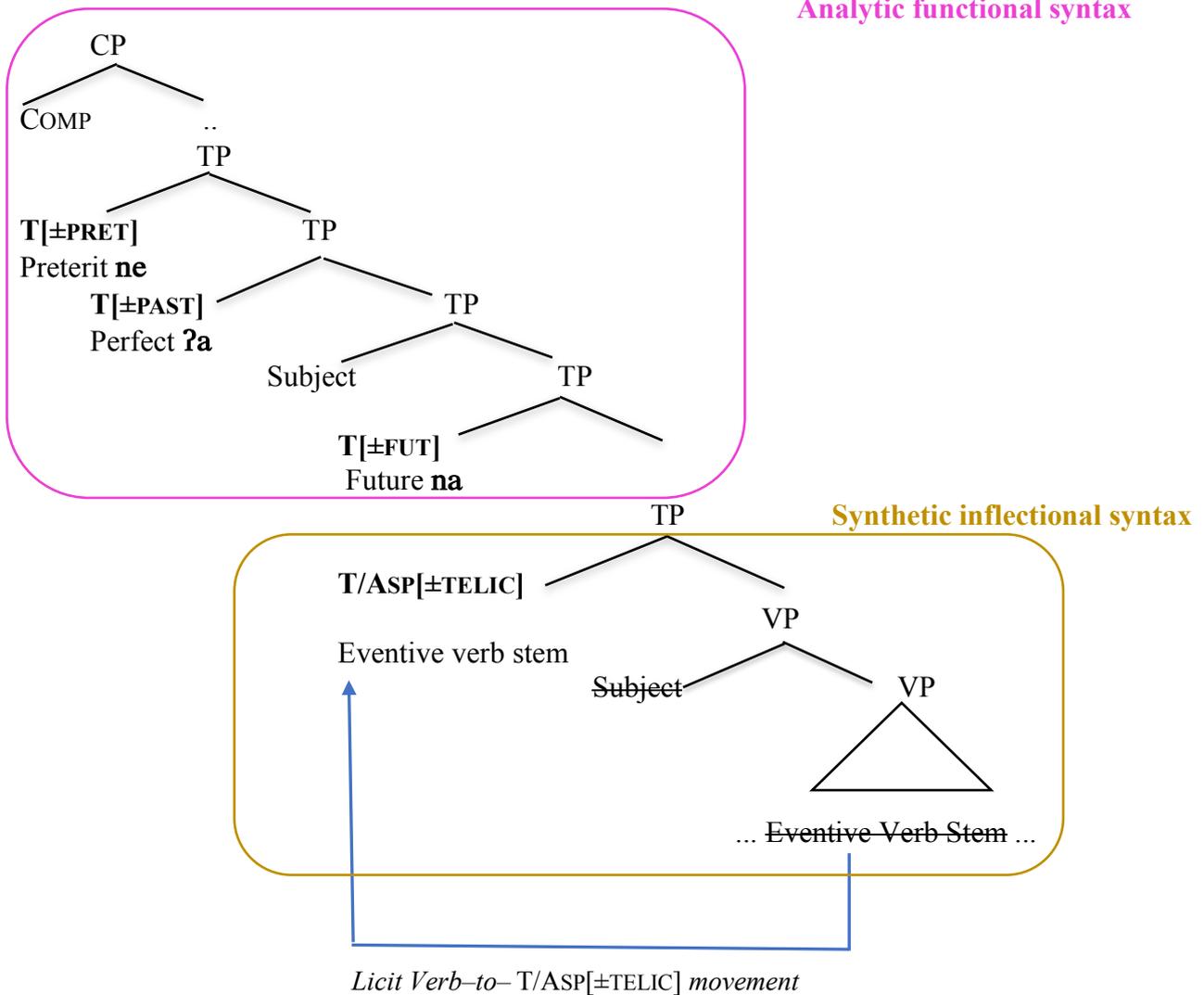
(13) Compound Pluperfect tense

ne a =f í eβɔl həm pə-jɔʔɔr
PRET PERF =CL.3M.SG come.ABS PCL upon DEF.M.SG-heretic

“He (Anthony) had come upon the canal.” (Vita of St. Anthony 21, 7–8)

The sequencing of TAME particles allows one to inspect directly the hierarchical order of clausal functional projections in head-initial languages (Cinque 1999: 58–59, 106–107). The hierarchical organization of temporal heads **T[\pm PRET]** > **T[\pm PAST]** > **T[\pm FUT]** > **T/ASP[\pm TELIC]** is in harmony with Julien’s (2001) contention that the temporal skeleton must be enriched by including into its universal structure a **T[\pm PAST]** and **T[\pm FUT]** projection.

(14) The extended temporal skeleton of the functional C–T system



The analyticization of the C–T domain creates a situation reminiscent to that of Modern Welsh, where clause-initial particles block verb raising into the left periphery and Verb-Second (Roberts 2005: 123–124). Coptic, too, no longer displays verb–subject orders derived by Verb-to–Comp movement, which were optionally available in the early stage of Ancient Egyptian (Reintges 2020). There is, however, a successor movement of Verb Second, in which the pre-subject TAME particle moves from a lower to a higher left-peripheral position.

5 The TAME particle movement and copying construction

Cinque (1999: 189 note 22) draws a distinction between auxiliary verbs and particles in terms of both morphological in/variance and syntactic flexibility. As for the latter, particles are said to be “less prone to movement (perhaps as a consequence of their being poorer in features)”. The picture needs fine-tuning when it comes to the functional syntax of Coptic Egyptian. The language has a special type of clitic left-dislocation (CLLD) structure whereby the CLLDed subject DP is linearly preceded and followed by one and the same pre-subject TAME particle. Below is a typical instance of the construction.

- (15) Perfect particle **?a** > CLLDed Subject > Perfect particle **?a** > Res. subject pronoun > Verb > Object

?a	nə-ro:me	əm-pə-ma	et	əmmau		
PERF	DEF.M.SG-person	LINK-DEF.M.SG-place	REL	there		
?a	=u	weh	pə-so:ma	əm-pə-makarios	Apa	Mε:na
PERF	=CL.3PL	put.NOM.CS	DEF.M.SG-body	LINK-DEF.M.SG-blessed	Apa	Mena
epeset	həm	pə-k ^j amul				
down	from	DEF.M.SG-camel				

“The people of that place let the body of the blessed Apa Mena down from the camel.”
(Mena, Martyrdom 5a, 14–20)

The Coptic particle movement and copying construction bears an at first sight striking resemblance to the predicate doubling structures of such diverse languages as Nupe (Kandybowicz 2007), Gungbe and Russian (Aboh & Dyakonova 2009). On closer inspection, there are important differences between the two cases. For one thing, the constituent being moved is the TAME particle itself rather than the predicate expression. For another thing, the construction is only attested with presubject TAME particles. Although the reason behind this is unclear, it looks as if particle movement and copying construction is contingent on a clitic left dislocation (CLLD) structure. The CLLD structure itself is restricted to subject DPs. That is to say, neither non-subject argumental DPs nor independent subject pronouns can be found.

On the other hand, it appears that all presubject TAME and relative particles are licit, whereas preverbal TAME particles are excluded from this complex construction. Consider another example of the particle movement and copying construction, which involves the Preterit particle **ne**.

- (16) Preterit particle **nerē** > CLLDed Subject > the Preterit particle **ne** > Res. subject pronoun > Verb

awo:	nerē	pə-wōin	ne	=f	ɔ	əm	mine	mine
and	PRET	DEF.M.SG-light	PRET	=CL.3M.SG	do.STAT	as	kind	kind
pe								
	COP.M.SG							

“And the light became as various kinds.” (Pistis Sophia 5,15)

As we have just seen, the Preterit particle **ne** is located in a higher left-peripheral position than the comparatively low Perfect particle **a**. From this it follows that the movement path does not have to start at the bottom of the left periphery. Intriguingly, the particle movement and copying construction is not a root phenomenon but is also attested in embedded CP contexts, which are introduced by the finite lexical complementiser **t^fe** ‘that’.

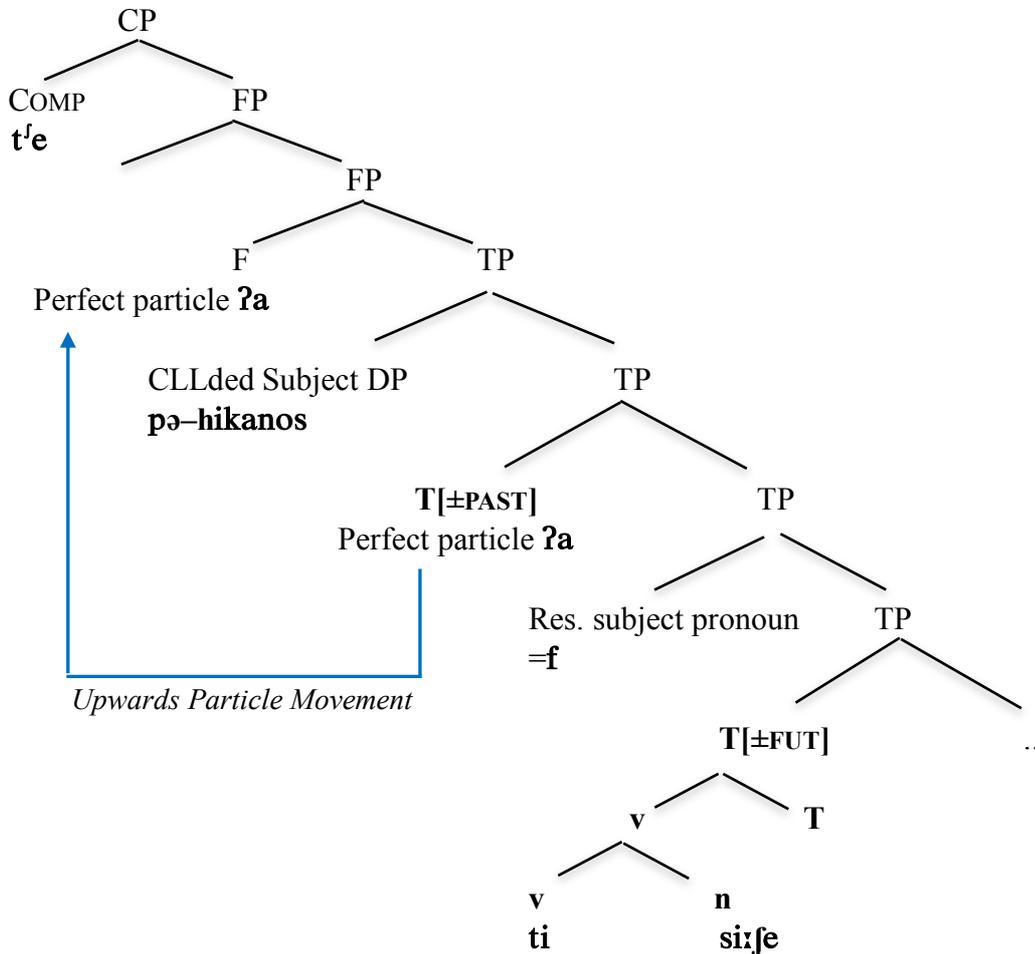
- (17) COMP > Perfect particle **a** > CLLDed Subject > Perfect particle **a** > Res. subject pronoun > Verb ^ Noun > Dative Clitic

t'e	?a	pə-hikanos	əm-pə-dyantos
COMP	PERF	DEF.M.SG-sufficient	LINK-DEF.M.SG-mighty
?a	=f	ti	si:ʃe na =i emate
PERF	=CL.3M.SG	give.NOM.CS	grief to =CL.1SG very much

“Since the Almighty One has given me a lot of grief.” (Ruth 1, 20)

The embeddability of the construction follows directly from the embeddability of CLLD in this language (see Bianchi, Valentina & Mara Frascarelli. 2010 for a general discussion on embedded topicalization). As a first approximation, the configuration corresponding to the embedded particle movement and copying construction would look as follows.

- (18) The embeddable presubject TAME particle movement and copying construction



The above tree structure incorporates some controversial hypotheses that need to be tested against a broader range of data. Firstly, the landing site of TAME particle movement cannot be identified with the left-peripheral focus head, considering that the construction does not exhibit any transparent contrastive or emphatic reading. Rather, the information structural properties of the construction are related to CLLD.

Second, the tentative analysis presented here involves some degree of overlap between the extended projection line of TAME particles and the topic/focus field in the left periphery of the clause. In particular, the CLLDed subject DP appears in the specifier position of the lower particle copy and receives a topic interpretation by being the antecedent of the resumptive subject pronoun in the comment clause. If the TAME particle is merged in a higher left peripheral position, so is the associated CLLDed DP.

Although the particle movement and copying construction is fraught with problematic properties, it sheds important light on the language's functional syntax and the morphological status of TAME particles. The possibility of TAME particles to appear in hierarchically distinct positions is evidence against the traditional analysis of these markers as morphological prefixes. See Grossman (2018) for a less convincing attempt to rehabilitate the prefix preference analysis.

6 Concluding remarks

In order to cover new ground in morphological and syntactic typology, parametric syntax must include outliers and mixed structure types. Coptic is a language with a relatively neat division between analytic functional and synthetic inflectional syntax. The borderline between synthesis and analysis is demarcated by the highest inflectional head **T[±FUT]**, which hosts either preverbal TAME particles or Stative-inflected verbs. Analyticity in the functional syntax is not an all-or-nothing phenomenon. Presubject TAME particles have some degree of syntactic freedom, which permits them to move around a CLLDed subject DP, with subsequent spell-out of the trace of the movement chain. Diachronically speaking, the particle movement and copying construction preserves part of the Verb-Second movement path, which finite verbs could undergo in earlier language stages.

References

- Aboh, Enoch O. & Marina Dyakonova. 2009. Predicate doubling and parallel chains. *Lingua* 119(7): 1035–1065.
- Anderson, Stephen R. 1985. Typological distinctions in word formation. In Timothy Shopen (ed.) *Language Typology and Syntactic Description*. Volume III: *Grammatical Categories and the Lexicon*, 3–56. Cambridge: Cambridge University Press.
- Baker, Mark C. 1996. *The Polysynthesis Parameter* [Oxford Studies in Comparative Syntax]. Oxford/New York: Oxford University Press.
- Baker, Mark C. 2002. Building and merging, not checking: The non-existence of (Aux)–S–V–O languages. *Linguistic Inquiry* 33(2): 321–328.
- Baker, Mark C. 2008. The macroparameter in a microparametric world. In Theresa Biberauer (ed.) *The Limits of Syntactic Variation* [Linguistics Today 132], 351–373. Amsterdam & Philadelphia: John Benjamins.
- Bianchi, Valentina & Mara Frascaelli. 2010. 'Is topic a root phenomenon?', *Iberia* 2(1), 43–88.
- Biberauer, Theresa & Ian Roberts. 2010. Subjects, Tense and verb-movement. In Theresa Biberauer, Anders Holmberg, Ian Roberts & Michelle Sheehan (eds.). *Parametric Variation: Null Subjects in Minimalist Theory*, 263–302. Cambridge: Cambridge University Press.
- Bendjaballah, Sabrina & Chris H. Reintges. 2014. Templatic structure and verb-internal syntax: The Stative–Eventive alternation in Coptic Egyptian. Paper Presented at the 42nd North American Conference on Afroasiatic Linguistics (NACAL 42), Leiden University (14th–16th February, 2014).

- Cinque, Guglielmo. 1999. *Adverbs and Functional Heads: A Cross-linguistic Perspective* (Oxford Studies in Comparative Syntax). Oxford: Oxford University Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.) *Ken Hale: A Life in Linguistics* [Current Studies in Linguistics 36], 1–52. Cambridge, Massachusetts: MIT Press.
- Comrie, Bernard. 1989. *Language Universals and Linguistic Typology: Syntax and Morphology*. 2nd ed. Oxford: Blackwell.
- Demirdache, Hamida & Myriam Uribe-Etxebarria. 2000. The primitives of temporal relations. In Roger Martin, David Michaels & Juan Uriagereka (eds.) *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, 157–186. Cambridge, Massachusetts: MIT Press.
- Dryer, Matthew S. 1992. The Greenbergian word order correlations. *Language* 68(1): 81–138.
- Dryer, Matthew S. 2013. Position of tense–aspect affixes, in: Matthew S. & Martin Haspelmath (eds.) *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at <http://wals.info/chapter/69>, Accessed on 11-05-2021).
- Emonds, Joseph. 1978. The verbal complex V'–V in French. *Linguistic Inquiry* 9(2): 151–175.
- Giorgi, Alexandra & Fabio Pianesi. 1997. *Tense and Aspect: From Semantics to Morphosyntax* (Oxford Studies in Comparative Syntax). Oxford: Oxford University Press.
- Greenberg, Joseph H. 1963. Some universals of grammar with particular reference to the order of meaningful elements”, in: Joseph H. Greenberg (ed.) *Universals of Language*, 73–113. Cambridge, Massachusetts: MIT Press.
- Greenberg, Joseph H. 1974. *Language Typology: A Historical and Analytic Overview* [Janua Linguarum 184]. The Hague: Mouton.
- Grossman, Eitan. 2016. From *rarum* to *rarissimum*: An unexpected zero person marker. *Linguistic Typology* 20(1): 1–23.
- Grossman, Eitan. 2018. “Did Greek influence the Coptic preference for prefixing? A quantitative–typological perspective”. *Journal of Language Contact* 11(1): 1–31.
- Holmberg, Anders & Ian Roberts. 2013. The syntax–morphology relation. *Lingua* 130: 111–131.
- Huang, C.–T. James. 2015. On Syntactic Analyticity and Parametric Theory, in: Audrey Li, Andrew Simpson and Wei-Tien Dylan Tsai (eds.) *Chinese Syntax in a Cross-Linguistic Perspective* [Oxford Studies in Comparative Syntax], 1–48. Oxford University Press: New York.
- Julien, Marit. 2001. The syntax of complex tenses. *The Linguistic Review*, 18(2): 125–167.
- Kandybowicz, Jason. 2007. On the fusion and multiple copy spell-out: The case of verbal repetition. In Norbert Cover & Jairo Nunes (eds.) *The Copy Theory of Movement* [Linguistic Today 107], 119–150. Amsterdam & Philadelphia: Benjamins.
- Klavans, Judith L. 1985. The independence of syntax and phonology in cliticization. *Language* 61(1). 95–120.
- Kramer, Ruth. 2006. Root and pattern morphology in Coptic: Evidence for the root. In Christopher Davis, Amy Rose Deal & Youri Zabbal (eds.) *Proceedings of NELS 36*, 399–412. Amherst GSLA.
- Lasnik, Howard. 1981. Restricting the theory of transformations: A case study, in: Norbert Hornstein & David Lightfoot (eds.) *Explanations in Linguistics: The Logical Problem of Language Acquisition* (Longman Linguistics Library 25), 152–173.
- Levin, Beth & Malka Rappaport Hovav. 1995. *Unaccusativity: At the Syntax–Lexical Semantics Interface* [Linguistic Inquiry Monographs 28]. Cambridge, Massachusetts: MIT Press.
- Massam, Diane. 2005. Lexical categories, lack of inflection, and predicate fronting in Niuean. In Andrew Carnie, Heidi Harley & Sheila Ann Dooley (eds.) *Verb First: On the Syntax of Verb-initial Languages* [Linguistic Today 73], 227–242. Amsterdam & Philadelphia: John Benjamins.
- Pollock, Jean-Yves. 1989. Verb Movement, Universal Grammar, and the structure of IP. *Linguistic Inquiry* 20(3): 365–424.

- Reintges, Chris H. 2011. High analyticity and Coptic particle syntax: A phase-based approach. *The Linguistic Review* 28(4): 533–599.
- Reintges, Chris H. 2012a. Macroparametric change and the synthetic–analytic continuum: The case of Ancient Egyptian. In Charlotte Galves, Sonia Cyrino, Ruth Lopes, Filomena Sandalo, and Juanito Avelar (eds.) *Parameter Theory & Linguistic Change* [Oxford Studies in Diachronic & Historical Linguistics 2], 133–157. Oxford: Oxford University Press.
- Reintges, Chris H. 2012b. The morpho-syntax of alternating complementisers in Coptic relative clause constructions. *Folia Orientalia* 49: 395–419.
- Reintges, Chris H. 2013. Sapirian “drift” towards analyticity and long-term morphosyntactic change in Ancient Egyptian. In Ritsuko Kikusawa and Laurence A. Reid (eds.) *Historical Linguistics 2011*. Selected Paper from the 20th International Conference on Historical Linguistics Osaka (25–30 July 2011) [Current Issues in Linguistic Theory 326], 289–328. Amsterdam & Philadelphia: John Benjamins.
- Reintges, Chris H. 2018. *Coptic Egyptian (Sahidic Dialect): A Learner’s Grammar* [Africanist Study books 15]. 2nd revised edition. Cologne: Rüdiger Köppe Verlag.
- Reintges, Chris H. 2020. Anatomy of a Linguistic Universal: Greenberg's Sixth Universal and the VSO/SVO Alternation in Early Egyptian. Thèse de l'habilitation à diriger des recherches. University of Nantes.
- Reintges, Chris H. & Sonia Cyrino. 2016. Rethinking Parameter Theory Diachronically: A Macrocomparative Approach to the Analyticization of the Verbal Tense–Aspect Systems of Brazilian Portuguese and Coptic Egyptian, in: Luis Eguren, Olga Fernández-Soriano & Amaya Mendikoetxea (eds.) *Rethinking Parameters* [Oxford Studies in Comparative Syntax], 329–385. New York: Oxford University Press.
- Reintges, Chris H. & Sonia Cyrino. 2018. Analyticization and the syntax of the synthetic residue; in: Ana Maria Martins & Adriana Cardoso (eds.) *Word Order Change* [Oxford Studies in Diachronic & Historical Syntax 29], 179–201. Oxford: Oxford University Press.
- Roberts, Ian G. 2005. *Principles and Parameters in a VSO Language: A Case Study in Welsh* [Oxford Studies in Comparative Syntax]. Oxford: Oxford University Press.
- Roberts, Ian G. 2012. Macroparameters and minimalism: A program for comparative research. In Charlotte Galves, Sonia Cyrino, Ruth Lopes, Filomena Sandalo & Juanito Avelar (eds.) *Parameter Theory & Linguistic Change* [Oxford Studies in Diachronic & Historical Linguistics 2], 320–335. Oxford: Oxford University Press.
- Roberts, Ian G. 2019. *Parameter Hierarchies & Universal Grammar* [Rethinking Comparative Syntax]. Oxford: Oxford University Press.
- Roberts, Ian G. & Anders Holmberg. 2010. Introduction: Parameters in minimalist theory. In Theresa Biberauer, Anders Holmberg, Ian G. Roberts & Michelle Sheehan (eds.) *Parametric Variation: Null Subjects in Minimalist Theory*, 263–302. Cambridge: Cambridge University Press.
- Rohrbacher, Bernard Wolfgang. 1999. *Morphology-Driven Syntax: A Theory of V to I Raising and Pro-Drop* [Linguistics Today 15]. Amsterdam & Philadelphia: John Benjamins.
- Sapir, Edward. 1921. *Language: An Introduction to the Study of Speech*. New York, Harcourt.
- Spencer, Andrew. 1991. *Morphological Theory: An Introduction to Word Structure in Generative Grammar*. Oxford & Cambridge: Basil Blackwell.
- Zwicky, Arnold M. 1985. Clitics and particles. *Language* 61(2). 283–305.