## MACROPARAMETERS, 'DEEP' ANALYTICITY, AND SHIFTING PHASES

Chris H. REINTGES (CNRS & University Paris 7 – Denis Diderot)

### 1. MICRO- VS. MACROPARAMETERS

A widespread view about syntactic parameters is that they are restricted to formal features of functional categories. Since functional categories are part of the lexicon, the locus of variation is limited to the component of grammar for which there is strong evidence for learning (Borer 1984; Chomsky 1995). The *Borer-Chomsky Conjecture* favors a microparametric approach, which looks for localized differences between closely related languages/dialects. Kayne (2005) takes this *raison d'être* even further and posits a one-to-one correspondence between microparameters and functional elements made available by Universal Grammar. However, the proliferation of narrow and often construction-specific parameters vastly reduces their efficacy as explanatory devices (Baker 2008; Holmberg & Roberts 2008); it is a departure from the Principles-and-Parameters approach to large-scale typology, which, --in Chomsky's (1981:6) words--, seeks to derive "complexes of properties differentiating otherwise familiar languages" from "a single parameter, fixed in one way or the other".

In diachronic-comparative syntax, the micro-parametric approach accommodates the broad type of change known as grammaticalization, which can be modeled in terms of a shift from MERGE over MOVE, and hence manifests different PF- realization strategies for the spell-out of formal features associated with functional heads (Roberts & Roussou 2003). A macro-parametric approach fares better in explaining typological drifts altering a language's core structure (cf. Huang 2008 on Chinese). In over 4000 years of uninterrupted language history, Ancient Egyptian has changed from a largely agglutinative to an analytic/isolating language. The goals of this paper are two-fold: firstly, to argue that the rise of 'deep' analyticity in Coptic Egyptian is due to a resetting of a genuine macro-parameter rather than to an aggregation of micro-parameters acting in concert for markedness reasons, as in Holmberg & Robert's (2008) system, and secondly, to show that the abstract property corresponding to the analyticity parameter is the relocation of the finiteness feature on  $\nu$ P-external functional heads.

## 2. THE ANALYTICITY MACROPARAMETER (Huang 2008)

Holistic morphological typology has been criticized as being incoherent and useless for conflating too many different variables, such as the index of synthesis, degree of fusion and syntactic flexibility (Anderson 1985; Haspelmath 2008). However, Baker's (1996) work has shown that the four canonical types, --synthetic, agglutinative, analytic and polysynthetic--, are more than just accidental collections of morphological properties, but correlate in significant ways with the language's core syntactic structure. The positive setting of the analytic macro-parameter in Coptic underlies the division of labor between lexical verbs and a great variety of tense/aspect/mood (TAM) particles, which appear in the extended projection line of the verb (Grimshaw 1997), but do not form a constituent with it. As free-standing inflection words, TAM-particles do not trigger observable verb movement to meet phonological requirements of the spell-out procedure (Zwart 2001). Although analyticity limits the space for verb movement, TAM-particles are not in any sense structurally deficient functional categories: they can project (when endowed with an EPP-feature) and they can serve as phase heads. From the perspective of major syntactic categories, alternating stems are less finite and less verbal than their counterparts in Earlier Egyptian, which is why they have traditionally been analyzed as infinitives. Due to the dissociation of the finiteness feature from the verbal heads v and v, the Coptic vP is no longer a licensing domain for the subject and direct object.

# 3. SHIFTING PHASES

The shift from agglutinative to analytic morphological type is not an isolated morphological change, but occurs in tandem with a word order change from a rigid VSO to a discourse-configurational SVO language. Compare the Old Egyptian VSO structure in (1), in which the finite verb **ms-n** 'has given birth' contains the Perfect

suffix -n, with the Coptic SVO structure in (2), in which the Perfect particle marker a precedes the DP subject and the verb stem **mise** 'to deliver'. The main route for deriving VSO surface order in Old Egyptian involves  $V^0$ -to- $T^0$  movement, while the subject and the direct object remain in-situ in the  $\nu P$  domain. Evidence for  $\nu P$ -internal DP subjects comes from their relative positioning with respect to clause-internal negation **w** 'not'(3) (Reintges 2009). Prima facie evidence for  $\nu P$ -internal ASP(ect) position comes the selectional restrictions on imperfective verbal stems, which are only found with stem-final glide verbs, e.g. **hz.j** 'to praise' ~ **hzz** 'to be praising'.

In Coptic, the derivation subject moves to the highest inflectional node, which may instantiate a lower MOODP, although nothing much hinges on its precise semantic characterization. Verb movement never exceeds the inflectional domain of the MOODP, yet sanctions subject raising, allowing it to skip intermediate specifier positions *vis-à-vis* Chomsky's (1995) *Minimal Link Condition* (remodeled as phase extension in den Dikken 2007). Crucially, not only the DP subject but also the DP object moves together with the verb past the clause-internal negation **an** outside of the *v*P-domain. When direct object is frozen in place, it must be supplied with an empty case-preposition (*an-* in (2)). To accommodate the external and internal arguments of the main verb, the inflectional domain is extended and hosts now an ASPP projection, for which there is no configurational space in the eroded *v*P-domain.

### 4. CONCLUSION

An interesting way to look at the synthetic-analytic shift would be in terms of shifting phases, i.e. the weakening of an originally strong *v*P-phase through macroparametric change; see diagrams (5a) and (5b). It provides a hitherto unnoticed case of diachronic variation in the layered *v*P as the first-phase domain (cf. Gallego 2006; Boecks & Grohmann 2007 for synchronic variation).

### DATA SHEET

- (1) BASIC VSO PATTERN WITH PERFECT SUFFIX -n Old Egyptian (2600-1990 BCE)

  ms-n Nww Mrjj-n(j)-R\( \text{hr} d \cdot rt = f \) j7b-t

  give.birth-PERF ocean Meri-ni-Re on hand=POSS.3M.SG left-F.SG

  'The ocean has born (King) Meri-ni-Re on his left hand' (Pyramid Text 1701a/M)
- (2) BASIC **SVO** PATTERN WITH PERFECT PARTICLE **a Coptic Egyptian** (350-1200 CE) **a** t-k<sup>y</sup>aule **mise** ən-u-seere ən-shime PERF DEF.F.SG-camel give.birth.ABS PREP-INDEF.SG-girl LINK-woman 'The she-camel delivered a daughter' (Mena, Miracles 10<sup>b</sup>:33-34)
- (4) ARGUMENT VOIDING Coptic Egyptian

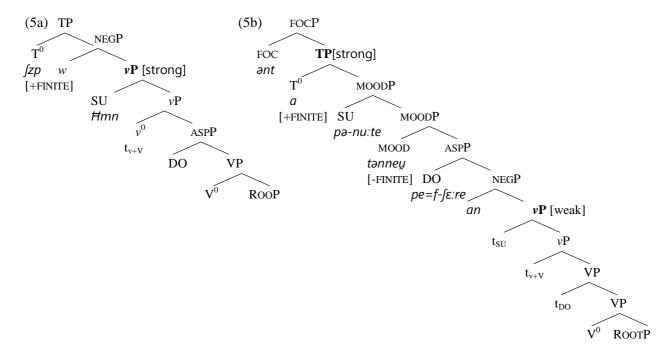
  ant-a pa-nu:te gar tanneu pe=f-s:re <u>an</u> e-pa-kosmos

  rel-perf def.m.sg-god PCL send.nom def.m.sg-child neg to-def.m.sg-world

  t e e=f-e-krine am-pa-kosmos

  COMP rel(-fut)=3m.sg-prep-judge.abs prep-def.m.sg-world

  'God has not send his son to the world that he judges the world (...)' (John 3, 17)



The 'strong' vP-phase in Old Egyptian (ex. 3)

The 'weak' vP-phase in Coptic Egyptian (ex. 4)

Anderson, S.R. (1985). Typological distinctions in word formation. Language Typology and Syntactic Description. T. Shopen (ed.). Vol. III. Cambridge: CUP, 3-56 | Boeckx, C. & K.K. Grohmann. (2007). Remark: Putting phases in perspective. Syntax 10: 204-222 | Borer, H.(1984). Parametric Syntax: case studies in Semitic and Romance languages. Foris: Dordrecht | Baker, M. (1996). The Polysynthesis parameter. Oxford: OUP, \_\_\_ (2008). The macroparameter in a microparametric world. The limits of syntactic variation. Th. Biberauer (ed.). Amsterdam/Philadelphia: Benjamins, 351-373. | Chomsky, N. (1981). Lectures on Studies Generative Grammar Government Binding. in 9. Dordrecht: and Publications. | Chomsky, N. (1995). The Minimalist Program. Cambridge, MA: MIT Press | Grimshaw, J. (1997). Projections, heads, and optimality. Linguistic Inquiry 28: 373-422 Dikken, M. den (2007). Phase extension: contours of a theory of the role of head movement in phrasal extraction. Theoretical Linguistics 22: 1-41. Haspelmath, M. (2008). An empirical test of the Agglutination Hypothesis. *Universals of language* today. Scalise, S. et al. (eds.). Berlin: Springer. | Holmberg, A. & I. Roberts (2008). Introduction. Parametric variation: null subjects in minimalist theory. Cambridge: CUP. Huang, J. C.-T. Sino-Kwa: analyticity, parametric theory, and the lexical-functional divide. Ms. Harvard University | Gallego, À.J. (2006). Phase effects in Iberian Romance. Selected Proceedings of the 9<sup>th</sup> Hispanic Linguistics Symposium. N. Sagarra & A.J. Toribio (eds.). Somerville, MA: Cascadilla Proceedings Project, 43-55 | Kayne, R. (2005). Some notes on comparative syntax, with special reference to English and French. The Oxford handbook of comparative syntax. G. Cinque & R. Kayne (eds.). Oxford: OUP, 3-69. | Reintges, C.H. (2009). Spontaneous syntactic change. Historical Syntax and Linguistic Theory. P. Crisma & G. Longobardi (eds.). Oxford: OUP | Roberts, I. & A. Roussou. (2003). Syntactic change: a minimalist approach to grammaticalization. Cambridge: CUP Zwart, J.-W. (2001). Syntactic and phonological verb movement. Syntax 4: 34-76.