

PARAMETERS OF LINGUISTIC VARIATION

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OTHER APPROACHES TO SYNTACTIC VARIATION AND OPEN QUESTIONS

1. MACRO- AND MICROPARAMETERS

(1) "there are at most a few simple (not composite) parameters that define typologically distinct sorts of languages." [Baker 2008:5]

Baker (in R& H in press): "if all variation were microvariation, we would not expect to find coarse-grained types of the "head-initial", "head-final" kind. If each category were able to vary freely, independently of all others, for its linear order in relation to its complement (this can of course be phrased in terms of triggering movement of its complement or not), then we would expect there to be a normal distribution of word-order variants across languages."

There should be many mixed languages of different kinds.

Macro- + microparameters:

languages should cluster around one type or another, with some amount of noise

Italian dialects

- All ID are SVO
- all are prepositional
- none is ergative
- none is fully polysynthetic
- none shows the Chinese value of Chierchia's nominal Mapping Parameter
- all have definite and indefinite articles

BUT:

- subject clitics have different status in different varieties

- object and subject agreement with past participle is different
- aspectual auxiliaries
- finite and non-finite complementation...

OV to VO in one swoop?

Major typological differences

OV to VO and greater analyticity

2. GENERALIZATION OF THE INPUT (R&H IN PRESS)

preference for "harmonic" ordering seems to derive from an overriding tendency for independent parameters to conspire to produce a certain type of grammar.

(R&H in press: 36)

Roberts (2007a:194) [restatement of Hawkins' (1983) generalisation regarding cross-categorial harmony]:

(2) There is a preference for the EPP feature of a functional head F to generalise to other functional heads G, H ...

(2): like a markedness convention of the type proposed for phonology by Chomsky & Halle (1968, Chapter 9).

Ex:

basic order is VO and OV is derived by leftward movement (following Kayne 1994).

(3) [_{VP} [_{VP} O (V)] v+V (VP)]]

Is movement the marked option?

If so, languages like Japanese would be heavily marked

Languages like German and Latin (mixed types) would be partially marked

But why would consistent head final languages (harmonic order) more frequent then?

Restatement of markedness wrt the whole language system

- (4) For a class of heads H, μEPP for $H_{[F:\dots]} \neq v \rightarrow \{ [+EPP] / V_{[+EPP]} \}$
 $\{ [-EPP] \text{ elsewhere} \}$

For some languages, the unmarked value for the probe heads is [+EPP]. These are the OV languages.

For some other languages, the unmarked value for the probe heads is [-EPP]. These are the VO languages.

Mixed systems are more marked.

For all head-complement pairs, head-final is the unmarked order in an OV system, and head-initial in a VO system.

v is the crucial head because it is also the head that encodes argument structure.

Conservatism of the learner: the learner exploits pieces of input, perhaps marked input, to the full.

- (5) GENERALISATION OF THE INPUT

If acquirers assign a marked value to H, they will assign the same value to all comparable heads. [R&H in press: 37]

Rewriting the Polysynthesis parameter in terms of this generalization.

Kayne (2005:7): "it could alternatively be the case that the systematic obligatoriness of pronominal agreement morphemes in Mohawk is just an extreme example of what is found to a lesser extent in (some) Romance"

rich subject agreement is like obligatoriness of clitics

Clitics: overt realization of the features of the probe and the goal matching phi-features on the probe --> the goal cannot be realized in its grammatical function position

Realizing all features on all possible probes is the more marked option than never realising them, but less marked than realising them sporadically.

Other parameters:

Huang: High Analyticity parameter

Properties of highly analytic languages:

- (6) a. Generalized bare N (denoting kinds)
- b. A generalized classifier system
- c. No plural morphology
- d. Action verbs are atelic
- e. No simplex accomplishment verbs.
- f. Resultative compounds or phrases
- g. Periphrastic causatives
- h. Extensive use of light verbs.
- i. No agreement, tense, case morphology
- l. No *wh*-movement.
- m. Word order: "V2" counting backwards (no Kaynean VP-movement over adjuncts).
- n. No V-to-T movement
- o. Radical pro drop

Lack of N-to-n

lack of V-to-v

etc: High Analyticity Parameter: aggregate of head-movement parameters acting together, not triggering movement.

We can derive morphological typology in this way! (see below, (12))

3. MODULARIZED GLOBAL PARAMETRIZATION

Are all parameters applicable to all languages?

YES

BUT: Gianollo, Guardiano, Longobardi (2008): NO

Instead of innate parameters UG makes available parameter schemata

(7) parameter schemata + PLD = grammatical system

Piaget's epigenesis

Boden (2006: 493) characterises epigenesis as follows: "a self-organising dialectic between biological maturation and experience." A similar suggestion, but restricted to what he calls "core parameters" (approximately equivalent to Baker's notion of macroparameter), is put forward by Uriagereka (2007:106ff).

- (8)
- a. Is F, a functional feature, grammaticalized?
 - b. Checking: is F, a grammaticalised feature, checked by X, X a category?
 - c. Spread: is F, a grammaticalised feature, spread on Y, Y a category?
 - d. Strength: is F a grammaticalised feature checked by X, strong? (i.e. does it overtly attract X?)

[Gianollo, Guardiano & Longobardi 2008:119].

a. Grammaticalized: the feature must obligatorily occur and be valued in a certain structure (i.e. definiteness is obligatorily marked in argument DPs in certain languages, like English or Italian, but not others, like Russian or Latin)

- b. does a feature F require establishing a relation with a specific category in the structure (creating a dependency)? [Is F a probe?]
- c. Does F, interpreted in a certain structural position, have uninterpretable counterparts on other categories which depend on it for valuation [can F be a Goal?]
- d. does the dependency in b involve overt displacement of X, remerging of X next to F, or not?
- e. What is the size of the Goal (head or phrase, see Richards & Biberauer 2005 for pied piping and expletives)

TABLES

(9) Topological Mapping Theorem

The locus of interpretation of each grammatical feature is universal, not parametrized [GGL 2008:120]

(10) Ex: For F = definiteness, X=nouns, Y = adjectives

- a. GRAMMATICALIZATION of definiteness (par. 8,9): YES (Italian); NO (Russian)
- b. CHECKING of definiteness by nouns (par. 17): YES (Romanian); NO (Italian)
- c. SPREAD of definiteness on adjectives (par. 19): YES (Arabic); NO (Italian)

Taxonomy of languages according to parameter schemata
grammatical typology

Typology derived by applying the generalization of the Input:

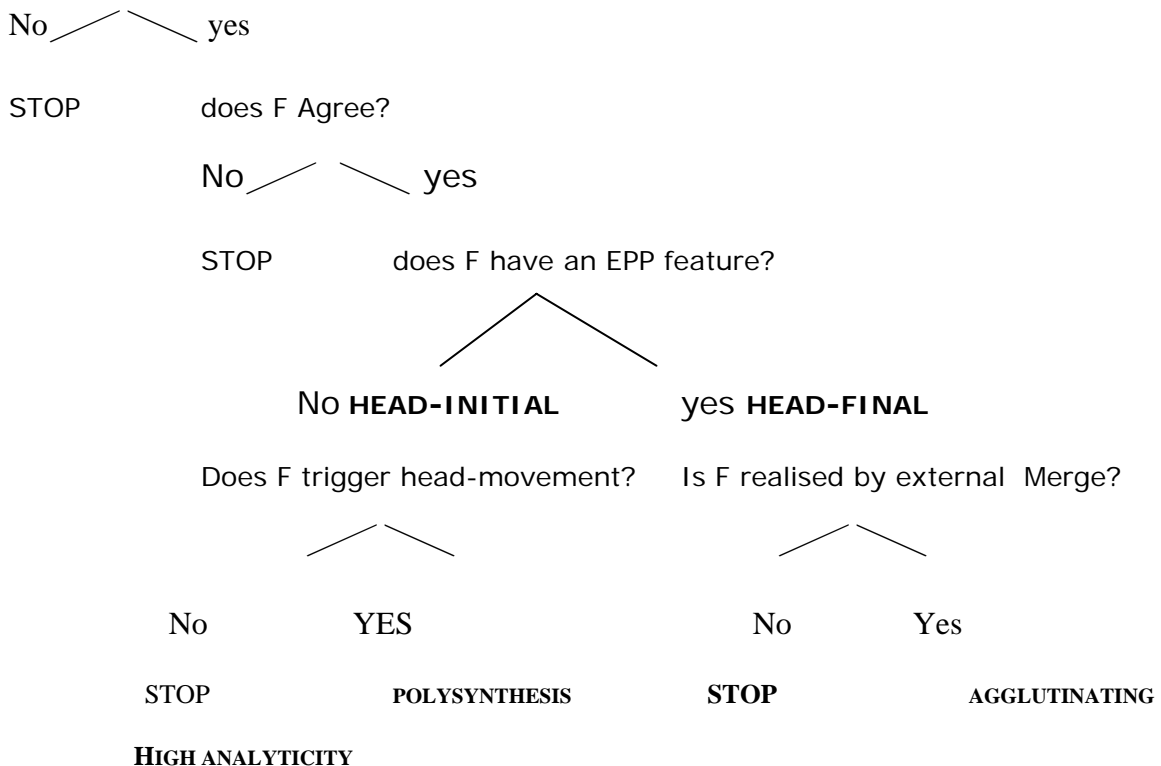
- (11) a. is F realised by (external) Merge (i.e. does it correspond to an overt grammatical formative?)
- b. does F enter an Agree relation?
- c. if so, does F attract?
- d. if so, does F attract a head or an XP?
- e. if (c), does F attract both a head and an XP?

- f. does F combine realisation by external and internal Merge?
- g. if so, does F attract a head or an XP?

[Roberts & Roussou 2003:213]

Basic assumption: universal set of formal features

(12) F?



[R&H in press: 44]

4. OPTIMALITY THEORY

UG provides us with a universal set of structural constraints.

These constraints can be violated and are ranked in different order in different languages. The higher ranked constraints in a language are those whose violation results in possibly ungrammatical structures.

Given two candidates, A and B, A is better than B on a constraint if A incurs fewer violations than B. Candidate A is better than B on an entire constraint hierarchy if A incurs fewer violations of the highest-ranked constraint

distinguishing A and B. A is optimal in its candidate set if it is better on the constraint hierarchy than all other candidates.

4.1. pro-drop


English *it rains* (**rains*)

Italian *piove* (**esso piove*)


Same universal constraints SUBJECT ("the highest specifier position must be filled") and FULLINT(ERPRETATION) ("lexical items must contribute to the interpretation of the structure") (Grimshaw & Samek-Lodovici 1998, Legendre 2001).

In English, SUBJECT is ranked above FULLINT (so that the expletive *it* is allowed and required), while in Italian, FULLINT is ranked higher than SUBJECT (so that the expletive *esso* is disallowed and the sentence can remain subjectless).

(13) a.

	FULL INT	SUBJ
 piove		*
esso piove	*!	

(14)

	SUBJ	FULL INT
rains	*!	
 it rains		*

(15) "one of the most compelling features of OT...is the way that it unites description of individual languages with explanation of language typology".

[McCarthy 2002: 1]

Constraints are universal

Cross-linguistic variation exclusively derives from variation in constraint ranking.

(16) "if the grammar of one language is known exhaustively, then in principle the grammars of all possible human languages are known.[McCarthy 2002: 108]

typology by re-ranking

BUT: differently from PPT

Principled explanation for the EMERGENCE OF THE UNMARKED

(17) A parameter which is off is completely inactive. A constraint that is crucially dominated can be still "active" [McCarthy 2002: 110]

Ex: Italian: the constraint SUBJECT is not always irrelevant: when a subject does not have a topic antecedent, the subject appears overtly to satisfy SUBJECT.

Cross-linguistic variation but also intra-linguistic variation.

Haspelmath: many constraints are functionally motivated.

Bresnan (1997:38): functional motivation for the constraint PROAGR ("Pronominals have agreement properties"): "The functional motivation for the present constraint could be that pronouns...bear classificatory features to aid in reference tracking, which would reduce the search space of possibilities introduced by completely unrestricted variable reference."

Economy and easiness of identification.

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