

SOME MINIMAL NOTES ON MINIMALISM*

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1 Introduction

Based on the framework outlined in chapter 4 of *The Minimalist Program* (Chomsky 1995), Chomsky (1999, 2000) rethinks the issues and concerns that motivate the minimalist program and further develops minimalism. Chomsky 2000 is the first part of an unfinished manuscript and Chomsky 1999 is the extended and revised version of Chomsky 2000.¹ Some significant claims in Chomsky 1999, 2000 are summarized in section 2. Comments and questions regarding these two papers are spelt out in section 3.

2 Claims

2.1 The architecture of the faculty of language FL outlined in Chomsky 1999, 2000 is more or less the same as that in Chomsky 1995. FL includes a cognitive system that stores information, making it available to performance systems that access it in language use. The only difference is that Chomsky (2000) assumes that the performance systems are external to FL, contra Chomsky 1995, 1998.²

2.2 Universal Grammar UG makes available a set **F** of features and operations that access F to generate expressions Exp. The language L makes a one-time selection of a subset [**F**] (or [**F_L**]) of F. L also includes a one-time operation that assembles elements of [F] into a lexicon **Lex**, in which lexical items **LIs** are assembled. These processes specify the language. Derivations make a one-time selection of a lexical array LA from Lex, then map LA to Exp, with no recourse to [F] for narrow syntax.

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¹ Chomsky 2000 was originally distributed by MITWPL as a form of MIT occasional paper in linguistics in 1998. The second part of the manuscript is perhaps incorporated into Chomsky 1999.

² The performance systems are of two kinds: 'sensorimotor systems' and 'systems of thought'. 'Sensorimotor' is known as 'articulatory-perceptual' in Chomsky 1995. As pointed out by Chomsky (1998:fn2), 'one obvious error is the restriction to articulation and auditory perception, plainly incorrect, as the study of sign language has shown'. 'Systems of thought' is also known as 'conceptual-intentional systems' in Chomsky 1995, 1998.

These processes derive a particular Exp.

2.3 Merge, Agree, and Move are three major operations in the computation. **Merge** provides two natural relations: sisterhood and immediately-contain, from which three new relations are derived: contain, identity, and c-command. Matching of a probe and a goal induces **Agree**, eliminating uninterpretable features that activate them. Long distance agreement (without raising to the specifier SPEC) is possible. 'Feature checking' is eliminated. **Move** combines Merge and Agree. It merges Y to XP and Y becomes the specifier of XP.

2.4 Computations are required to be performed as quickly as possible. The principle Procrastinate is no longer formulable.

2.5 A chain is defined as a set of occurrences of an object in a syntactic structure.

2.6 C (complementizer), T (tense), and *v* (light verb) are assumed to be the core functional categories CFC (Chomsky 1995, 2000). However, it is suspected that T is construed as a substantive rather than a functional category, falling together with N and V (Chomsky 1999).

2.7 Categorical features/substantive lexical categories do not exist, only bare roots, along the lines in Marantz (1997).

2.8 **Phases** are propositions, including a verb phrase *v*P (having all θ -roles) and a full clause CP (including tense and force). The head of phases may be assigned an EPP-feature/P(eriphery)-feature for interpretive complex. Derivations proceed phase by phase (Phase-Impenetrability Condition PIC).

2.9 Spell-Out is cyclic, at the phase level.

2.10 Head/ X^0 movement may be an operation of the phonological component, not part of narrow syntax.

3 Comments and questions

3.1 Chomsky (2000) points out that there are two 'imperfections' in narrow

syntax: (a) uninterpretable features of lexical items, and (b) the ‘dislocation’ property. Given that uninterpretable inflectional features are used to yield the dislocation property, Chomsky (2000:121) further suspects that the two imperfections (a) and (b) might reduce to one. However, some uninterpretable features, such as ϕ -features of T, do not induce dislocation, given that long-distance agreement is possible. If operations can apply only if they have an effect on outcome (Chomsky 2000:109, see also Chomsky 1995:294), why do we need the uninterpretable features that do not have any effect on outcome (e.g. inducing dislocation)? Let us consider ϕ -features of T. One line of research is to assume that they are actually interpretable, which could have referential properties (Rohrbacher 1994 and Griffith 1996), and thus they survive in the LF interface. In this vein, the existence of ϕ -features of T should not be an imperfection and perhaps is required by the systems of thought, subject to some sort of binding.³

3.2 In the configuration in (1) below, in which ‘EA’ is the ‘external argument’ selected by $H = v$, Chomsky (2000:102) points out that XP is not introduced by pure Merge if H is v or C,⁴ which follows from the θ -theoretic principle: Pure Merge in θ -position is required of (and restricted to) arguments (Chomsky 2000:103). Is it the case that EA is missing in CP? If it lacks EA, it implies that pure Merge in SPEC of CP should be barred. If Chomsky (2000) is correct, the analysis of the parametric variation between Chinese and English with respect to *wh*-movement advocated by Tsai (1994), who claims that a language will not resort to Move if it may introduce an operator by Merge, has to be scrutinized.⁵ Furthermore, all sorts of so-called base-generated topics and sentential adverbs will have a different story.⁶

(1) $\alpha = [XP [(EA) H YP]]$

3.3 Based on the grammaticality of (2), Chomsky (1999:5) concludes that the EPP-feature of T_{def} (without a complete set of ϕ -features) can be satisfied by Merge of expletive *there*. On the contrary, Chomsky (1999:6) also points out that T_{def} cannot have an EPP-feature, given that there are no intermediate reconstruction sites. Does T_{def} have the EPP-feature?

(2) We expect [there to be awarded several prizes].

3.4 In the configuration in (3), XP prevents Agree between the probe P and the

³ See also a discussion on binding, control, and Agree in Chomsky 2000:fn71.

⁴ ‘Pure Merge’ is Merge that is not part of Move.

⁵ According to Tsai (1994), merging a question operator in SPEC of CP blocks *wh*-movement in Chinese.

⁶ Perhaps C should be decomposed into a couple of functional categories, along the lines in Rizzi

specifier SPEC of HP under MLC (Chomsky 1999:22). However, if XP is the object of the verb derived by object shift OS, how can we rule out the possibility that OB induces intervention effects, blocking Agree between T and the subject SU in (4)? There could be two possible solutions (Chomsky 1999:24): (a) There could be a [\pm OS] parameter: [+OS] languages allow association of T and *in-situ* subject; [-OS] languages allow such association at the phonological edge. The parameter might be related to ‘richness’ of T, a richer T allowing a deeper search of the category including the goal. (b) There could be a dislocation rule DISL that raises OS to a higher position. Assume that in Chinese the preverbal object *yuyanxue* ‘linguistics’ in (5) raises to SPEC of *vP* required by the P-feature of *v* (focus) (Zhang 1997, Tang 1998, and references cited therein). To rule in (5), it is unlikely to say that Chinese T is as rich as Icelandic T. If the preverbal object raises to a position higher than T in Chinese (contra the ‘collective wisdom’ in the literature), then where is it?

(3) P [_{HP} XP [SPEC [H YP]]]

(4) T [_{vP} OB [SU [V *t*_{OB}]]]

(5) Wo *yuyanxue* *xihuan*.

I linguistics like

‘I like LINGUISTICS.’

3.5 Basically Phase-Impenetrability Condition PIC is a constraint on Move. In addition, PIC can extend to Agree, which bars ‘deep search’ by the probe in Agree (Chomsky 1999:11, fn50). To some extent, phases and PIC are reminiscent of ‘bounding nodes/governing categories/barriers’ and ‘subjacency’, respectively, in the pre-minimalist era. The original motivation for dispensing with ‘government’ was to eliminate the ugly dichotomy between the specifier-head and head-complement relations in terms of Case assignment (Chomsky 1993). Now the specifier position (created by Move) seems to be exclusively reserved for the EPP-feature or P-features. Agreement and Case assignment in the head-complement configuration is possible in the new framework. To some extent, the insight of government revives in the minimalist program and thus reconsidering locality under the new assumptions (e.g. Agree, PIC, etc.) is unavoidable.

References

Aoun, Joseph, and Yen-hui Audrey Li. 1989. Scope and constituency. *Linguistic Inquiry* 20: 141-172.

(1997) and Cinque (1999).

- Chomsky, Noam. 1993. A minimalist program for linguistic theory. In Kenneth Hale and Samuel Jay Keyser, eds., *The view from Building 20: essays in linguistics in honor of Sylvain Bromberger*, 1-52. Cambridge, Mass.: The MIT Press.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: The MIT Press.
- Chomsky, Noam. 1998. Some observations on economy in generative grammar. In Is the best good enough? *Optimality and competition in syntax*, eds. Pilar Barbosa et al., 115-127. Cambridge, Mass.: The MIT Press and MITWPL.
- Chomsky, Noam. 1999. Derivation by phase. *MIT Occasional Papers in Linguistics 18*. Cambridge, Mass.: MITWPL.
- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In Roger Martin, David Michaels, and Juan Uriagereka, eds., *Step by step: essays on minimalist syntax in honor of Howard Lasnik*, 89-155. Cambridge, Mass.: The MIT Press.
- Cinque, Guglielmo. 1999. *Adverbs and functional heads: a cross-linguistic perspective*. New York and Oxford: Oxford University Press.
- Griffith, Teresa A. 1996. Projecting transitivity and agreement. Doctoral dissertation, University of California, Irvine.
- Hornstein, Norbert. 1995. *Logical Form: from GB to Minimalism*. Oxford and Cambridge, Mass.: Blackwell.
- Huang, C.-T. James. 1995. Logical Form. In Gert Webelhuth ed., *Government and binding theory and the Minimalist Program: principles and parameters in syntactic theory*, 125-175. Oxford and Cambridge, Mass.: Basil Blackwell Ltd.
- Marantz, Alec. 1997. No escape from syntax: don't try morphological analysis in the privacy of your own lexicon. *U. Penn Working Papers in Linguistics 4.2*, 201-225.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman, ed., *Elements of grammar*, 281-337. Dordrecht: Kluwer.
- Rohrbacher, Bernhard W. 1994. The Germanic VO languages and the full paradigm: a theory of V to I raising. Doctoral dissertation, University of Massachusetts, Amherst.
- Tang, Sze-Wing. 1998. Parametrization of features in syntax. Doctoral dissertation, University of California, Irvine.
- Tsai, Wei-Tien. 1994. On economizing the theory of A-bar dependencies. Doctoral dissertation, MIT.
- Zhang, Ning. 1997. Syntactic dependencies in Mandarin Chinese. Doctoral dissertation, University of Toronto.