Review of Andreas Trotske's 'Rethinking Syntactocentrism --Architectural issues and case studies at the syntax-pragmatics interface'

Kriszta Szendroi UCL

No concept in Chomskian generative syntax is more fundamental than syntactocentrism. This book reexamines this notion in the light of recent advances in Minimalism and compares the framework to other alternatives who do not embrace the notion. The book starts with an expose of the concept of syntactocentrism and its manifestation in Chomskyian generative grammar since the 60s. Chomsky (1957) noted that finite-state grammars are inadequate to model natural language, due to the recursive property of natural language. Recursivity or self-embedding is central to natural language and the earliest encoding of this property in natural language were so-called rewrite rules (Chomsky 1957). Later, Chomsky (1970) pointed out that lexical insertion introduces a certain redundancy into the system, as categorical and selection information is essentially doubled in the lexicon. Thus, the syntactic computation can be impoverished. This led to the introduction of the X-bar schema (Chomsky 1970). In the 90s, a further reduction of the system involved the introduction of bare phrase structure, where it was assumed that phrase structure consists of nothing else other than features and objects available in the lexicon itself. Chomsky (1995) formulated this as the Inclusiveness Condition. The only two syntactic operations allowed are Merge and Move elements from the lexicon, listed in the numeration of a particular derivation.

In phonology, where the discussion turns next, Trotske explains, cyclicity is central. The original idea is attributed to Chomsky and Halle (1968), who proposed that stress assignment in English is accounted for by the Nuclear Stress Rule to syntactic concatenations and by the Compound Stress Rule inside words. The application of the rules takes place in accordance with the principle of the 'transformational cycle', which means that stress assignment takes place inside out, to smaller concatenations first, and once the rules applied on a particular hierarchical level, they then apply to groupings on a higher level. The cyclic application of the rules can account for the difference in stress pattern for [[black board] eraser] vs [black [board eraser]]. The cyclic system has been generalised to apply for determining the strength of phonological junctures in prosodic structure by Wagner (2005). He showed that in coordinate structures, prosodic boundaries can be determined accurately if one relies on a cyclic (i.e. bottom-up, cumulative) mapping of phonological groupings from the syntactic hierarchy.

Hornstein and Pietroski (2009) proposed a minimalist view of the semantic computation, which is again cyclic in nature. Rooted in Katz and Fodor's (1965) early proposals, they provide a view of the semantic computation as a bottom-up process, which is compositional in the sense that more complex meaning is created from its parts. (This concludes Chapter 2 of the book.)

In Chapter 3, the discussion starts with the description of the T-model, where the output of the syntactic derivation is simply read off by the semantic and

phonological components, without the latter two having any direct communication. The discussion turns to the description of the cartographic framework within the syntax of information structure, relying on Rizzi's (1997) well-known proposal. A sketch is provided of the translation of Frey's (1994) analysis of the German left-periphery in cartographic terms, using a KontrastP position as a target for elements that appear in the left-peripheral position with a contrastive interpretation and FinP for elements that appear in the left periphery without any pragmatic import. Next is a critique of the cartographic approach to information structure. Trotske cites Horvath (2010) and Neeleman and Szendroi (2004) (but see also Szendroi 2001, Fanselow 2006 among others) for proposing the argument that information structure features, such as [+Focus] violate Chomsky's (1995) Inclusiveness Condition, as they are not lexical features. For this reason they pose conceptual problems for the Minimalist architecture, and if possible, should be dispensed with.

Let us now turn to the empirical discussion in Chapter 4. After charting the historical development of representations in the Chomskian tradition. Starting with the exposition of the motivation for the elimination of Deep and Surface structure, continuing with the notion of the numeration, finally arriving at the motivations for multiple, cyclic spellout at phase edges. Trotske notes that mutiple spellout allows for a certain convergence between the Chomskian model, which is no longer dealing with PF or LF interpretation only at the end of the derivation, and the Jackendovian Parallel Architecture framework, where interfaces exist between the three independent computational modules, syntax, semantics and phonology.

The chapter continues with a summary of Fanselow and Lenertova's (2011) account of subpart of focus movement in German, who argued that utterances like (1b) do not involve focus movement, but rather as part of the cyclic linearisation of the syntactic derivation (Fox and Pesetsky 2005), a syntactic operation allows fronting the closest accented element to the initial position for pragmatic effect. Pars-pro-toto focus movement would not make sense for parts of idioms. In addition, they argued, as the ungrammatical (1c) shows, fronting can only target the closest accent bearing element (i.e *FLInte*, and not *KORN* in (1a)).

- (1) a. Er hat die Flinte ins Korn geworfen. he has the gun in-the grain thrown
  - b. Die Flinte hat er ins Korn geworfen the gun has he in-the grain thrown
  - c. \*Ins Korn hat er die Flinte geworfen the gun has he in-the grain thrown 'He has given up.' (F&L 2011: 129)

Trostke calls into question the generalisation that accentuation would be the crucial factor determining the mobility of idiom parts. (2a), he argues, has the same accentuation pattern, as (1a), with two accented elements. But unlike (1c), either element can be fronted in the case of the idiom in (2a), as shown in (2b) and (2c), although these important examples are not actually provided by

Trotske. So, (2c) would potentially constitute fronting of an accented element over another, contrary to F&L's proposal.

- (2) a. Er hat zwei Fliegen mit einer Klappe geschlagen. he has two flies with one swat hit (Trotske 90: ex 50)
  - b. Zwei Fiegen hat er mit einer Klappe geschlagen. two flies has he with one swat hit (Florian Breit p.c.)
  - c. Mit einer Klappe hat er zwei Fliegen geschlagen.
    'He has killed two birds with one stone.' (Florian Breit p.c.)

Instead, Trotske proposes that in idioms 'where a non-idiomatic reading is not (easily) accessible to the hearer' there is more syntactic flexibility and 'the ordering constraint can [...] be violated [...], without destroying the idiomatic reading.' (T: 90). Trotske offers a test to measure the accessibility/plausibility of the literal meaning: turning the idiom into an imperative (targeting the literal reading) should sound natural for idioms with an accessible literal meaning. These, in turn, should be syntactically less flexible than less accessible idioms, by assumption. Concretely, Trotske argues that the idiom in (2a) is inaccessible, as apparently the imperative test illustrated in (3a) yields only the idiomatic meaning, according to him. He then cites (3b) to illustrate, that as expected under his proposal, argument reordering is possible with this idiom.

- (3) a. A: Hör zu! Du musst zwei Fliegen mit einer Klappe schlagen! Listen up! You must two flies with one swat hit B: Okay [gets a swat and hits two flies]
  - b. Sie schlagen damit mit einer Klappe zwei Fliegen [...] you hit thereby with one swat two flies (http://www.laufen-in-koeln.de/lik4.php?aid=A-1673) (T:91: ex. 53)

According to Trostke, (3a) contrasts with (4), where the literal meaning is supposed to be accessible, which in turn is proposed to explain the ungrammaticality of (1c), because an accessible idiom is expected to show more syntactic rigidity.

(4) A: Hör zu! Du musst die Flinte ins Korn werfen.
Listen up! You must the gun in the grain throw
B: Okay [takes his gun and throws it into a pile of grain]

But there are several problems with this account. First, the possibility of the ordering in (3b) actually provides an alternative base order for the fronted order that is unexpected on F&L's account, i.e. (2c). If (3c) is possible, then it can be the underlying order for (2c), so in fact no accented element needs to be moved over another accented element in (2c), and thus (2c) is not a counterexample to F&L's account. Note that the corresponding alternative base order is not grammatical for the idiom in (1), so the unavailability of (2c) is still explained.

(5) \*Er hat ins Korn die Flinte geworfen.
he has in-the grain the gun thrown
'He has given up.' (Florian Breit p.c)

Second, it is not obvious to me that the literal meaning is actually more accessible or plausible in (3b) compared to (4). According to what measure are we supposed to determine accessibility and plausibility? Individual judgement? Why should these coincide across speakers on such subtle matters? Should we not expect lots of speaker variation then with respect to the syntactic flexibility of such idioms? Given these issues, I conclude that F&L's account is superior to Trotske's proposal regarding subpart of focus fronting of idioms.

The remainder of Chapter 4 addresses certain island violations in syntax and argues that they constitute a case of pragmatic influence on syntax. The idea is that such opacity effects arise 'when a derivation layer contains two syntactic objects whose deictic interpretation clashes at the syntax-discourse interface' (T: 99). T goes on to state that this explanation rests on the assumptions that '(i) unbounded dependencies are placed in discourse-prominent slots; (ii) constituents conveying new information allow extraction most easily, (cf. Erteschik-Shir 1973 et seq.); (iii) elements occurring later in the string (usually the object) are canonically more likely to be interpreted as focus, whereas earlier constituents (usually the subject) are canonically interpreted as topics.' T: 99. But Trotske provides no motivation for these assumptions, or any evidence why they might hold, and no explanation how the island effects actually follow from these assumptiona, so it is impossibe to evaluate this part of the proposal in more detail.

Chapter 5 compares the minimalist proposal that assumes cyclic spellout to Jackendoff's Parallel Architecture and to Cognitive Linguistics, as two alternatives to the syntactocentric view of Minimalism. I will only concentrate on the first of these in the interest of space. (The second comparison argues that Minimalism and Cognitive Linguistics share substantial common ground with respect to language evolution, and the interested reader can check out the details of this in the book.) After introducing the main tenets of Jackendoff's system, Trotske proposes that once cyclic spellout is accepted into the Minimalist grammar, there is in fact no syntactocentrism. It is not clear what he means by this. One way to understand this would be in the sense that syntactocentrism disappears because later syntactic steps of a particular derivation can be dependent on the PF or LF representations of the previous cycle. This, however, does not seem to be Trostke's interpretation. As the discussion on page 117 reveals, rather, it seems that he states that minimalism (despite the presence of cyclic spellout and cyclic linearisation) must nevertheless syntactocentrism in that it must allow for direct communication between PH and LF to be able to account for the contrastive interpretation of contrastively accented phrases. But direct PF-LF communication then, is not an inherent property of the Minimalist system or of cyclic linearisation, but an additional assumption that is forced on us by the need to provide an account for empirical data. In other words, it seems that syntactocentrism in this area simply cannot be maintained, direct PF-LF communication must be allowed, or alternatively, the Inclusiveness condition must be violated by the presence of a syntactic feature [+Focus] whose role is to encode the accent-focus correspondence. But this state of affairs does not reflect an 'amended notion of syntactocentrism'

(T:134) then, as Trotske puts it, but rather, a mighty throw of our gun into the grain: the admission that as far as the prosody-focus correspondence is concerned the Jackendovian architecture is empirically more adequate than the Chomskian syntactocentric view.

## References:

Fanselow, Gibert. 2006. On Pure Syntax (Uncontaminated by Information Structure). In: Patrick Brandt & Eric Fuss (eds.) *Form, Structure and Grammar*. Berlin: Akademie Verlag. 137-157.

Szendrői, Kriszta. 2001. Focus and the Syntax–Phonology Interface. PhD dissertation, University College London.