Gema Chocano: *Narrow Syntax and Phonological Form.*
Amsterdam: John Benjamins 2007 [Lingusitik Aktuell/Linguistics Today 109].

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The term scrambling was coined by Ross (1967) to refer to 'the permutation of two adjacent constituents'. Ross focussed on the clause-boundedness of the operation and argued that scrambling should be placed in the stylistic component of the grammar since scrambling was formally so unlike other transformational rules. Along these lines, Williams (1984) proposed that scrambling applies between S-Structure and PF.

It was soon noticed, though, that scrambling has syntactic effects that influence the grammaticality and the interpretation of the clause, most notably, the anti-crossover effects, pointed out first by Webelhuth (1985) and illustrated in (1).

(1)   a. * weil seine Lehrer$_i$ jeden$_i$ fürchten
              since his teachers-NOM everyone-ACC fear
         b.   weil jeden$_i$ seine Lehrer$_i$ fürchten
              since everyone-ACC his teachers-NOM fear

In the author's unified minimalist treatment of scrambling in German and object shift in Scandinavian, Chocano is taking us back to the earliest treatments of scrambling, proposing that scrambling is constituted by syntactic movement to the edge of vP plus a phonological operation called DISL that locates the scrambled constituent into the middle field preceding VP-adjuncts, forgetting about evidence, like anti-crossover, that was brought forward as argument for a strictly syntactic operation of scrambling that is both visible at PF and LF.

Having said this, the reader will get the wrong impression that the book is not worth reading. What the author is implicitly suggesting is that there is not a uniform treatment of scrambling of definites and of quantifiers and indefinites; the latter undergoing scrambling for reasons of scope taking and binding. Chocano shows that it is possible to devise a unified account of scrambling of definites in German and object shift in Scandinavian at the expense of a unified account of scrambling of referential and non-referential types of categories in German, as is possibly the case in Icelandic. This proposal merits discussion and I recommend reading the book since it provides an excellent, clear and thorough discussion of the central issues connected with scrambling.

Chapter 1 provides a crosslinguistic survey of free word order phenomena in the languages of the world, discusses early treatments of free word order in terms of the configurationality parameter (cf. Hale 1983 and Kiss 1994) and in terms of an adjunction parameter by Müller and Sternefeld (1993). It then surveys scrambling phenomena in Japanese, Persian and Russian and finishes with a descriptive presentation of scrambling data in Germanic, including an informal discussion of object shift in Icelandic.

Chapter 2 presents an overview of the basic syntactic phenomena of German, preparing the reader for the more theoretic discussion of issues concerning scrambling in Chapter 3. The basic architecture of the German clause with its division in Vorfeld, Mittelfeld and Nachfeld given by V2 and the placement of non-finite verbs (or verb particles) is introduced. The chapter also contains a brief discussion of the properties of coherent infinitives and remnant movement and evaluates the status of weak pronouns in German in the light of Cardinaletti and Starke's (1999) theory of deficient categories, since the proper treatment of coherent infinitives and the phonological properties of weak pronouns will become important for the account of scrambling later in Chapter 5. The chapter finishes with a discussion of the differences between scrambling (proper) and focus scrambling (Neeleman 1994). The latter will be put aside and is not treated anymore in this book.

Chapter 3 constitutes a thorough, well written and concise summary of the empirical properties of scrambling in German that serves as background for evaluating the different accounts of scrambling discussed in Chapter 4. Chocano concludes that scrambling is a) iterable, b) clause-bound and c) may not affect predicates and 'verbnahe' arguments and then provides a lucid discussion of the difficult and controversial issue of whether scrambling leeds to freezing effects which could constitute an important criterion for deciding between movement and base-generation approaches. Chocano carefully discusses the relevant evidence given by cases of NP-PP splits, *was-für* splits and extraction from coherent infinitives, states that the evidence provided is highly controversial and concludes from the data that a satisfying treatment of the freezing/anti-freezing effects requires taking into account the pragmatic and phonological constraints pointed out by the studies of De Kuthy (2002) and of Fanselow and Cavar (2002). The section closes with the constrast in (2) noticed first by Müller (1998), which will figure prominently in Chapter 5.

(2)   a. * dass zu lesen das Buch keiner versuchte
                that to read the book no one tried
        b.   dass zu lesen es keiner versuchte
                that to read it no one tried

The remainder of the chapter is dedicated to the phonological and semantic/pragmatic properties of scrambling. Chocano states a) that scrambled phrases are deaccented and involve marked word orders in so far as the focus potential of the clause is reduced and b) that scrambled phrases are discourse-given, presuppositional and involve strong readings while phrases remaining in situ are typically discourse-new, non-presuppositional and, if indefinite, involve an existential interpretation. Chocano concludes, following Haider & Rosengren (1998), that the correlation between position and interpretation is not perfect, however, since discourse-given elements can also remain in situ with ditransitive predicates, in contradistinction to transitive ones, as is illustrated in (3), and since bare plurals can receive a generic interpretation in situ, as is illustrated in (4).

(3)   a.   Wem hat heute der Zeuge den Weg gezeigt?
                whom has today the witness the way shown?
                'To whom did the witness indicate the way today?'
                Heute hat der Zeuge dem Polizisten den Weg gezeigt
                today has the witness to the policeman the way shown
        b.   Was ist mit dem Buch geschehen?
                What happened with the book?
            * Ich habe gestern das Buch verkauft
                I have yesterday the book bought

(4)   a.   dass Max immer Primaballerinas bewundert
             b.   dass Max Primaballerinas immer bewundert
                      that Max (always) primaballerinas (always) adores

The only drawback in this chapter are the many errors in the German examples, which is less to the discredit of the author, but rather something that the editor(s) of the volume should have better taken care of.

In Chapter 4, Chocano undertakes the difficult task of reviewing the most influential accounts of German scrambling. The task is rather complex since the descriptive properties of scrambling are far from being fixed, as Chocano correctly points out at the beginning of this chapter. Chocano first discusses the most important movement approaches and shows what a challenge scrambling posed for the GB-framework, since it did not fit into the pertinent A/A'-movement dichotomy in which A-movement was restricted to Case-licensing movement. Chocano provides an excellent review of the accounts of scrambling in terms of A-movement (cf. van den Wyngaerd 1989), in terms of A'-movement, focussing on Müller & Sternefeld (1993), scrambling as non-triggered A-chains by Haider & Rosengren and finally scrambling as move (in the minimalist program) focussing on the accounts of Zwart (1993, 1997) and Meinunger (1995). The chapter concludes with an evaluation of the base-generation approaches by Neeleman & Reinhart (1998) and by Fanselow (2001, 2003).

Based on the descriptive properties of German scrambling discussed in chapter 3, Chocano does an excellent job in pointing out the merits and weaknesses of these account, and discards each one of them by showing either that they are empirically insufficient (concerning a certain subpart of the data) or that they are incompatible with the general assumptions within the latest versions of the Minimalist program (cf. Chomsky 2001, 2004).

The arguments Chocano puts forward in this section are all very well taken, the discussion is lucid, concise and data-oriented so that this chapter provides a great read for anyone who would like to have a quick survey of the treatment of scrambling in the generative framework in the last 20 years.

One approach that is unfortunately left out of the discussion is the minimalist account by Hinterhölzl (2004, 2006), which solves the trigger problem that will become important in Chapter 5, by proposing that both PF- and LF-interface conditions fix the Spell-out of A-movement chains that are established to check scope and specificity features (in general the reference section has not been updated with respect to the author's dissertation it seems; see for instance Meinunger (1995) that has been published as a book in Meinunger (2000); I have not checked whether the criticism Chocano makes with respect to Meinunger (1995) also applies to Meinunger (2000)).

Chapter 5 finally presents the author's account of scrambling in German. First, Chocano devides the empirical cake into vP-internal scrambling which is rendered in a base-generation account and scrambling into the middle field which is argued to be the same process as object shift in Scandinavian. The account is cast in the latest version of the Minimalist Program and specifically adopts Chomsky's (2001) account of object shift, the most important features of which are a) the assumption of the existence of special operations that spell out phonological features at points different from the completion of strong phases (DISLocation) and b) the object shift parameter which has the effect of assigning a different interpretation to a constituent depending on whether it occupies the phonological border within the vP-phase or not. DISL explains why shifted objects can appear in the middle field in Scandinavian without intervening between T and the subject in Spec,vP.

With this instrumentarium at hand, Chocano shows how the relevant differences in (2) as well as the grammaticality of (5) vis-à-vis the ungrammaticality in (2a) can be derived. The account is convincing, presented in a clear fashion and re   sts on the assumption that DISL can only affect complete categories. While in (5), the infinitival constituent is still complete at

the point of the application of DISL, this is not the case in (2ab). However, (2b) can be repaired at PF, where this condition of completeness applies, since the weak pronoun, in contradistinction to the scrambled full DP in (2a), arguably forms a prosodic constituent with the infinitive.

(5)   Was hat [t zu lesen] keiner versucht?
           what has to read no one tried

Also the contrast in (3ab) follows in Chocano's account, since the direct object in (3a), not occupying the phonological border of the vP, can be assigned the correct interpretation by the procedure called object-shift parameter in Chomsky (2001), which is not the case in (3b).

It is interesting to note the sharp contrast between the critical verve exhibited by Chocano in the previous chapters and in Chapter 5. The critical stance that is very welcome in the preceding chapters is missing almost completely in this chapter. There is no critical evaluation of the account adopted. The complex procedure called object shift parameter by Chomsky (2001) stipulates what is to be explained about object shift in Scandinavian. Chocano does not take into consideration other accounts of object shift (cf. Erteshik-Shir 2005).

How minimalistic is the assignment of a certain interpretation dependent on the presence of any phonological material? Does this effect show up in other phases or in other languages? Chocano argues that the very same effect occurs in German, pointing to the questionable contrast in (3ab). Note, however, that scrambling of weak pronouns in German behaves differently from object shift in Scandinavian, as is shown by the ungrammaticality in (6), defying any treatment in terms of the object shift parameter.

(6)   Wem hat Peter den Roman gegeben?
           Whom has Peter the novel given?
      *   Peter hat der Sabine ihn gegeben
           Peter has to Sabine him (the novel) given

Scrambling is not subject to minimality effects in contradistinction to object shift. A point that the author is not addressing at all. Since the approach cannot be extended to scrambling operations that extend the scope of an argument or create new binding positions, as already pointed out in (1) above, the empirical coverage is minimal(istic) and reduces to an explanation of the contrast in (2), thereby raising the expectation that the contrast is to be explained in another way. One problem with (2) is that scrambling of a predicate (*zu lesen*) is rather marginal anyway for lack of a referential value. The second problem with (2) is that both dislocated constituents have the same trigger, which would require the order in (7a). The specific problem with (2a) is that it is additionally marked at PF, since it violates the condition that unstressed phonological phrases preferably precede stressed phonological phrases; something that can be avoided in (2b), since the weak pronoun can restructure with the preceding infinitive; a point that is very well taken by Chocano. However, if all these issues are taken care of, namely, if an appropriate trigger is added for the scrambling of the infinitival predicate and if an extra stressed constituent is added after the scrambled object, the result is still marked but fully grammatical, as is illustrated in (7b) (cf. Hinterhölzl (2006) for the details).

(7)   a.   weil das Buch # zu lesen keiner vermochte
                 since the book to read no one was-able-to
           b.   weil [so zu lieben] die Maria nur der Peter vermochte
                 since so to love the Maria-ACC only the Peter-NOM was-able-to

Overall evaluation:

The book is well worth reading. It has its definite merit in pointing out the degree of complexity constituted by scrambling phenomena and in providing an excellent overview of the strengths and weaknesses of the diverse accounts to scrambling to date, but readers not familiar with the empirical domain of the phenomenon should be aware that it does not provide an alternative minimalist solution with a satisfying empirical coverage.

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