[Review]

Natural Language Syntax


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1. Introduction

Natural Language Syntax (henceforth, NLS) is a unique and challenging introductory textbook for generative syntax: it follows the new theoretical framework of generative syntax presented in Simpler Syntax (hereafter, SS) (Culicover and Jackendoff (2005)) and it is well-suited for use as an introductory textbook for both undergraduates and graduates.

This review consists of five sections. Section 1 is an introduction. In section 2, I shall briefly outline the intellectual background of NLS and define its characteristic features in relation to this. In section 3, I will point out what I regard as the most noteworthy points of each chapter in which the characteristics defined in section 2 are reflected. Section 4 will be concerned with those descriptions of NLS that the present reviewer thinks should be the subject of future examination and section 5 will be devoted to an evaluation of NLS.

2. The Intellectual Background of NLS

NLS has as its intellectual background Conceptual Semantics (Jackendoff (1983, 1987, 1990, 1997, 2002, 2007, 2010) and Simpler Syntax, which is a new generative syntax, harmonious with Conceptual Semantics, that has been developed by Culicover (1999), Culicover and Nowak (2003),

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Culicover and Jackendoff (2005). In particular, NLS is based mainly on the various analyses of English syntax conducted in SS. It is, therefore, necessary for us to understand the major theoretical revisions made in SS to the mainstream of generative grammar (hereafter, MGG) in order to evaluate NLS properly in the generative linguistic context.

The four major theoretical revisions made in SS to MGG are as follows. (i) Rejection of syntactocentrism. MGG adopts syntactocentrism but SS does not. In MGG, what we call the “generative engine” is placed solely within syntax. The only task that phonology and semantics have to do is to interpret the output of syntax. In this sense, syntax is central to MGG while phonology and semantics are secondary. By contrast, in SS, the “generative engine” is placed equally in three components, i.e. phonology, syntax and semantics. Each component generates its own structure: phonological structure, syntactic structure and semantic structure. And each structure is correlated with the others by the correspondence rules. Thus we can say that SS adopts a parallel architecture. (ii) Adoption of the constraint-based system. In MGG, syntactic structures are generated in terms of a sequential derivation. SS does not adopt such a derivation-based system but instead adopts a constraint-based system where syntactic structures are licensed by the simultaneously applied constraints. (iii) Total abolition of movement. MGG adopts movement whereas SS eliminates movement totally. Due to the adoption of movement, hidden and invisible syntactic structures like D-structure and LF are allowed in MGG. In contrast, thanks to the total abolition of movement, such hidden structures are excluded in SS: that is, SS sets up monostratal syntactic structures where the visible surface forms are represented as is. Furthermore, SS assumes “flat” syntactic structures, instead of hierarchical ones in MGG. It turns out that various empty categories, projections of functional categories and other numerous superfluous nodes that MGG posits are prohibited completely in SS. In this sense, syntax in SS becomes simpler, compared to syntax in MGG. (iv) Taking a constructionist view. MGG does not admit constructions as primitives in language but SS does. MGG makes a strict distinction between grammar and the lexicon: grammar deals with the generalities of language and the lexicon is concerned with the idiosyncrasies of language. In the minimalist program, the essence of grammar is reduced to only Merge and Move (Internal Merge). SS, in contrast, squarely admits constructions (a unique pair of form and meaning) as primitive linguistic units, since the fact that they cannot be reduced to others is clear from Culicover’s (1999) studies on “Syntactic Nuts” as well as numerous studies by Construction Gram-
The adoption of the constraint-based system makes it possible to capture words, phrasal idioms, constructional idioms, phrase structure rules and long distance dependencies as a continuum of generality. Thus the strict distinction of grammar and the lexicon dissolves in SS and it is replaced with this continuum in SS.

The most important characteristic of NLS is that it reflects these four major theoretical revisions (i)–(iv) made in SS as a departure from MGG.

3. Notable Features of Each Chapter

In this section, I will point out some remarkable features of each chapter which, I think, are worth mentioning, focusing on the portions of description that reflect the notable characteristics of NLS stated in section 2.

The points to be noticed in Chapter 1 (Overview) are the following. Firstly, NLS adopts the version of UG proposed by Pinker and Jackendoff (2005). That is, NLS admits both the Narrow UG, which is a language acquisition system specific to human language, and the Broad UG, which is a language acquisition system general to the other human cognitive systems. Secondly, following the idea of SS, NLS states that the simplest syntactic structure that mediates between sound and meaning is a “what you see is what you get” syntactic structure. NLS presents us with such syntactic analyses as in SS but it also supplies us with syntactic analyses seen in MGG since MGG is the lingua franca in contemporary syntax.

Chapter 2 (Syntactic Categories) includes a very interesting section 2.4.4, entitled “A paradox resolved?” This section suggests to us one possibility of resolution for the paradox of why we have such a universal category as noun in the mind though we cannot define it linguistically in terms of necessary and sufficient conditions. The key idea for this resolution is that children identify nouns as things that denote physical objects by using the Semantic Bootstrapping Hypothesis (cf. Pinker (1984)) at a certain stage of language acquisition and that at a later stage of language acquisition they proceed to identify nouns as other materials and abstract ideas as well, based on the fact that they also occur after the, any, some and so on, by using the Syntactic Bootstrapping Hypothesis (cf. Landau and Gleitman (1985)). This way of thinking leads to the explanation for the fact that we have such a universal category as noun. What should be noticed here is that we cannot define the most basic syntactic category of noun without recourse to the intermediate stages of language acquisition that children go through. This seems to the present reviewer to indicate that such a dy-
namic theory of grammar as advocated by Kajita (1977, 1997, 2002) should be required when we try to define syntactic categories adequately.

Concerning Chapter 3 (Basic Sentential Structure), I would like to point out two minor problems. The first problem is that NLS analyses gerundive nominals as VPs, i.e. Non-NPs (p. 66). Surely their heads are Vs but their outer structures are NPs as is clear from their distributions in sentences. Gerundive nominals can be represented as \( [N^{n} [N^{n} \text{ing} [V^{r} [V \ldots]]]] \) in terms of Jackendoff’s (1977) X-bar notation. The second minor problem is that NLS regards proposition as a grammatical function along with subject and object (p. 67). However, proposition is a kind of semantic category, not a grammatical function.

The noteworthy points in Chapter 4 (Phrasal Categories) are the following. Firstly, NLS adopts a “flat structure” (p. 106). Instead of taking the strong version of X-bar theory which says that phrase structures are always strictly in accordance with the ordinary X-bar schema \([XP \text{Spec} [X' [X] [Comp]]]\) (p. 105), NLS takes the weak version of X-bar theory which says that those structures that deviate from the ordinary X-bar schema are also admitted (p. 106). NLS prefers phrase structures which are as flat as possible in so far as they are in consistence with linguistic evidence. Thus, NLS regards \([XP \ldots [X] \ldots]\) as a typical phrase structure (p. 106). In addition, NLS excludes projections of functional categories totally, unlike MGG. The second point, which is correlated with the first one, is that NLS assumes that VP structure is flat and that the word order in VP is determined by the interaction of such factors as Heaviness and Newness, advocated by Wasow (2000) (cf. also Culicover and Jackendoff (2005: Chapter 4)).

In Chapter 5 (Conceptual Structure and the Lexicon), we find a particularly good illustration of how the book implements the ideas of Conceptual Semantics and SS. NLS represents semantic structures in terms of the notations adopted in Conceptual Semantics (p. 140). I am afraid that readers without any knowledge about the basic concepts of Jackendoff (1983, 1990, 2002) will feel some difficulty, especially in understanding the content of section 5.2.1 (Concepts). What is important in Chapter 5 is that the strict dichotomy of lexicon and grammar in traditional generative grammar dissolves in NLS. Lexical items can be regarded as correspondence rules in NLS, as is implied from such statements as “the lexicon expresses the correspondences between the sounds, the grammatical properties, and the meanings of the basic elements of the language” (p. 144) and “the correspondences that are expressed in the lexicon for individual words form part of the correspondences for larger expressions” (p. 145) (cf. section 2.1 (iv)
The most remarkable part of Chapter 6 (Argument Correspondences) is section 6.8.5 (Passives without Movement). *NLS* demonstrates that passives cannot be analyzed in terms of movement, based on such linguistic evidence as Manggarai passives, Spanish SE passives, Italian SI passives, German impersonal passives and Italian impersonal passives.

The point to be noticed in Chapter 7 (Complex Clauses: Raising and Control) is that *NLS* does not posit an invisible element PRO when analyzing control constructions. MGG analyses a subject control construction such as, say, an infinitival complement of the verb *try*, as *try* \[_{s} \text{PRO to VP}\] by assuming an invisible element PRO and determines a controller of PRO in terms of the syntactic notion C-command. By contrast, *NLS* does not posit PRO on the grounds that empty categories are totally excluded from syntactic representations and it assumes the syntactic structure *try* \[_{to} \text{VP}\] for the same construction, and tries to determine how that subject should control the infinitival complement \[_{to} \text{VP}\], based on the lexical meaning of the verb *try* (p. 241 and p. 278).

The point to be noticed in Chapter 8 (Predication) is that *NLS* tries to capture the coreference relation between the secondary predicate and its antecedent in terms of argument binding in conceptual structure (p. 304). It does not analyze secondary predicate constructions as small clauses with PRO being the subject of a secondary predicate. It assigns such a flat syntactic structure \[_{VP} \text{V NP AP}\] to a secondary predicate construction (p. 303).

Three things are remarkable in Chapter 9 (A’ Constructions). First, the constraints on movement in MGG are recaptured as constraints on syntactic configurations in which a gap (not a trace generated by movement but a gap for the lack of an original element) appears. In fact, the constraints on *wh*-movement, for instance, are regarded as ones on the chain which consists of the *wh*-element and its gap. The second point of departure is concerned with the difference in the treatment of long dependencies in *wh*-questions between MGG and *NLS*. *NLS* basically takes long dependencies as involved with operator-variable binding in conceptual structure and it maintains that movement chains in MGG are only an abbreviation of the form/meaning correspondences and CS chains (p. 351). Third, *NLS* claims that the notion of MGG that the *wh*-element moves so as to discharge \[_{c^{0} [wh]}\] should be discarded, based on the facts of multiple initial *wh*-movement in Slavic languages (p. 376).

The three noteworthy points in Chapter 10 (Coreference and Binding) are as follows. Firstly, the whole description of this chapter is based on the
descriptions given in Chapter 10 and Chapter 11 of SS. Secondly, NLS differs from MGG in the treatment of binding. In MGG, binding is a syntactic notion and it is captured by the coreferential indices assigned to two NPs in syntactic structure. By contrast, NLS regards such a syntactic treatment of binding as simply an abbreviation of a full form of binding in which two arguments are argument-bound in conceptual structure and each argument is mapped into each NP in syntactic structure by correspondence rules. NLS maintains that argument-binding in conceptual structure is primary in binding. Thirdly, NLS issues a warning against reconstruction, which is often favored in MGG. To allow for such an invisible operation as reconstruction, which covertly brings an element back to its original position, would make it possible for us to deal with whatever inconveniences occur by adjusting them to whatever arguments we like through such an invisible operation. MGG should at least recognize that this risk is involved in the operation of reconstruction.

The most remarkable point in Chapter 11 (Fragments) is that like SS, NLS appeals to Indirect Licensing to account for BAE (Bare Argument Ellipsis) as well as other fragments. This point will be discussed at the end of section 4 below.

4. Some Points for Future Investigation

In this section, I will discuss three points of NLS which I think should be the subject of future investigation.

The first problematic point is concerned with the treatment of grammatical functions (GFs) in Chapter 5. First of all, NLS takes GFs as theoretical primitives but Chomsky (1965) defines them as defined notions: subject-of, for example, is defined as NP immediately dominated by S in Chomsky (1965). NLS assumes GF-structure as the third linguistic level, in addition to syntactic structure and conceptual structure and posits correspondence rules among these three levels. Jackendoff (1990), however, proposes that syntactic structures and conceptual structures are directly related to each other by correspondence rules and that an intermediate level like argument structure proposed by Grimshaw (1990) should not be posited. Is there any guarantee that GF-structure does not similarly correspond to a hidden syntactic level which, SS maintains, should be excluded?

The second problematic point is concerned with the way to assume information structure for topicalization in Chapter 9, section 9.6. In Jackendoff (2002) and SS, information structure is assumed as just a tier that is part
of conceptual structure, along with a thematic tier, an aspectual tier and a referential tier. In *NLS*, however, information structure does not constitute part of conceptual structure, as is clear from Culicover’s expression “in addition to CS” (p. 361).

The third point lies in the analysis of fragments in Chapter 11. As stated in section 3 above, *NLS* tries to obtain an interpretation for BAE in terms of the mechanism of Indirect Licensing. Indirect Licensing constructs an interpretation for BAE, based on the meaning of the antecedent for BAE and the meaning of the context, at the same time as referring to the relevant portions of syntactic structure of the antecedent. Here, the notion of “relevance” is crucially involved in Indirect Licensing. Problematically, the notion of “relevance” cannot be made explicit in either *NLS* or in *SS*.

5. Evaluation

*SS* reflects Culicover and Jackendoff’s belief that it is time for us to go beyond the MGG approach to syntax. *NLS*, based on *SS*, therefore, is written in order that students should understand syntactic phenomena not only from the viewpoint of MGG, but also from that of *SS*. In particular, the book reflects Culicover’s belief that it is important for us to teach students how to contrast the way in which *SS* and MGG capture the relation between form and meaning. So while it is normal for conventional introductory textbooks for syntax to deal exclusively with the forms of sentences, *NLS* deals with the conceptual structures of sentences and the correspondences between syntactic and conceptual structures as well. Thus, *NLS* enables students to learn not only about syntactic structures but also about conceptual structures and the correspondences between them.

Another characteristic of *NLS* is that, with its description being divided into two levels for learners, we can use it as an introductory textbook for natural language syntax for both undergraduates and graduate students.

When we use it as a textbook for undergraduates, we will do well to teach them the so-called “sections without a star” thoroughly. These basic sections are placed in the first part of each chapter and devoted to the descriptive issues which are theoretically neutral to MGG and *SS*. In particular, these sections are described without derivations. A lot of exercises and problems are supplied for the students without any knowledge of syntax. The exercises are designed for undergraduates to learn how to draw conceptual structures for sentences as well as syntactic structures. Thus, the exercises include a lot of basic questions. The problems are morechal-
Challenging than the exercises and are thus more suited to graduates. At the same time, most of the exercise and problems are data-oriented so that students learn from them how to identify significant linguistic patterns among the data.

When we use NLS as a textbook for graduate students, on the presupposition that they have already mastered the content of the “not starred” basic sections, we will do well to teach for them “starred” sections devoted mainly to theoretical issues. These sections are located in the second part of each chapter. The purposes here are twofold: one is to sketch the notions and methods of syntactic theory of MGG and the other is to evaluate the analysis and methods of MGG. Some of the problems and research questions are supplied for graduate students to critically consider the two purposes just given above. Thus, the research questions, for which answers cannot be found easily and which go well beyond the introductory level, are designed to stimulate the interest of graduate students in syntactic research and provide them with stimuli for their future research.

To conclude, I believe NLS is an excellent introductory textbook for natural language syntax and I would strongly recommend it to both undergraduates and graduate students of linguistics and to the professors at universities who teach them.

REFERENCES


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