

BOOK REVIEW

Norbert Hornstein, Howard Lasnik, Pritty Patel-Grosz and Charles Yang (eds.): *Syntactic Structures after 60 years. The impact of the Chomskyan revolution in linguistics*. Berlin & Boston: Mouton/Walter de Gruyter, 2018, pp. iv + 459.

Syntactic Structures (SS) is a milestone in the history of Western linguistic thought. It is also one of Chomsky's most accessible theoretical works on linguistics, perhaps in part because this 'nice booklet'¹ was based on lecture notes for his students at MIT (mostly engineers and mathematicians). It is not a work replete with detailed analyses of high technical complexity: indeed, Chomsky himself calls the reader's attention to 'the informality of the presentation' in the preface to SS (p. 5). *The Logical Structure of Linguistic Theory* (LSLT), originally written in 1955/1956 (but not published until twenty years later), went into much greater detail, totalling some 800 pages when perused by Robert Lees,² the reviewer of SS in *Language* in 1957 – the same year in which SS itself came out. Neither LSLT nor SS had been intended for publication, writes Chomsky in his short contribution to the present volume;³ MIT Press in fact rejected a version of LSLT

¹ This, according to Zonneveld (1982), is how Anton Reichling (Professor of Linguistics in Amsterdam, later a vociferous critic of Chomskian linguistics) recommended SS to Henk Schultink. The latter reviewed the book in the Dutch newspaper *Nieuwe Rotterdamsche Courant* in July 1957 – a review of SS that appeared before Lees (1957).

² Lees (1957, 375, fn. 1): 'The reviewer [i.e., Lees] was privileged to read a first version of the larger work – *The logical structure of linguistic theory*, pp. 752 + li (Cambridge, Mass., 1956) – and now finds it difficult to refrain from referring to topics and results which appear there but not in the book under review [i.e., SS]. This discussion may therefore serve in part as a preview of the author's detailed statement of his theory of language'.

³ '*Syntactic Structures*. Some retrospective comments' (pp. 131–136).

submitted at Roman Jakobson's instigation because, according to the reviewers, 'it did not fall within any recognizable field' (p. 131). But Mouton, a Dutch publishing house, released SS in 1957 in its *Janua Linguarum* series. In an interview he gave in Maceió, Brazil, in 1996, Chomsky recounts the publication of SS in a surprisingly laconic way: 'At the time Mouton was publishing just about anything, so they decided they'd publish it along with a thousand other worthless things that were coming out. That's the story of *Syntactic Structures*: course notes for undergraduate science students published by accident in Europe' (Dillinger & Palácio 1997, 162–163, reproduced in Noordegraaf 2001, 225). Accident or not, the publication of SS was a far from 'worthless thing'. It, and its lengthy summary in Lees (1957), put the generative-linguistic enterprise on the world map.

First published in early 1957,⁴ SS was reprinted many times, and translated into several languages. But though it revolutionised linguistics, it probably has not ranked highly on the reading lists of linguistics students for many decades. My generation of generativists was raised syntactically not on kernel sentences and transformational rules but on principles and parameters, by way of *Lectures on Government and Binding* (Chomsky 1981) and *Barriers* (Chomsky 1986), with *Aspects* (Chomsky 1965) getting the occasional reference in relevant contexts. Younger generations have been introduced to generative syntax through the lens of the minimalist programme, whose antecedents the present-day teaching curriculum rarely affords students a close look at. The published version of Lasnik's lectures on SS and its later developments (Lasnik 2000) offers an excellent introduction to the issues and Chomsky's approach to them. But there still is nothing like reading the original text. So one of the highly commendable features of the volume under review is that it includes as Part I of the book (the first 117 pages) a *verbatim* reproduction of the entire text of SS, including its preface.⁵

⁴ There is apparently quite some debate about the exact publication date of SS. Noordegraaf (2001), who reviews this debate, places the date of publication in early 1957, based on an announcement of the book in a Dutch periodical that appeared on 14 February 1957.

⁵ This reprint of SS as part of the volume was made possible by the fact that the titles originally published by Mouton are in De Gruyter Mouton's portfolio. The volume would have been a truly self-sufficient little universe if it had also included a reprint of Robert Lees's (1957) review of SS and David Lightfoot's long introduction to the 2002 re-edition of SS (also by De Gruyter), both of which enhance and enlighten the discussion in SS in many ways.

This short preface is noteworthy for being the only place in SS where Chomsky explicitly acknowledges his indebtedness to Zellig Harris's ideas, in the form of a blanket statement (p. 5): 'So many of his ideas and suggestions are incorporated in the text below and in the research on which it is based that I will make no attempt to indicate them by special reference'. The notion that the grammar of a language consists in part of a set of so-called kernel sentences, which is central to SS, is prefigured in Harris's (1951) work – as is the notion of a transformation (in Harris's 1951, 373 terms, 'statements' which 'transform certain sentences of the text into grammatically equivalent sentences'). Harris did not have a derivational perspective on syntax. But the idea that phenomena like nominalisation, particle placement and question formation involve explicit relationships between two rather different forms is explicitly present in Harris (1957).

Nominalisation, particle placement and question formation also play prominent roles in the empirical discussion in SS – along with passivisation and, most saliently, the morphosyntax of the auxiliary system of English, including affix hopping (*avant la lettre*) and *do*-support, whose treatment doubtless represents SS's most enduring analytical achievement and its single strongest plea for a transformational approach to morphosyntax. Today we may not (all) be hopping our inflectional affixes down the tree anymore (let alone 'yo-yo'ing them around, as in Chomsky's 1991 most elaborate implementation to date of the derivational morphosyntax of English verbs); but minimalism's 'feature checking' approach to inflection owes much to, and could not have arisen without, the proposal presented in SS (see also Bjorkman's relevant comments on pp. 306 and 309). Chomsky's original transformational account captures in a single, simple and elegant analysis the complex interdependencies of verbs, auxiliaries, inflectional affixes, the dummy *do*, the element now called I or T (then referred to as C, a label apparently adopted from Harris 1948, as we learn from Aronoff's chapter⁶), negation, and question formation. Generations of generative linguists have since tried to reinvent this wheel in more recent developments of the framework, but though the empirical breadth of the discussion has made considerable strides, the simplicity of the SS approach has never been matched.

The field's love of Chomsky's analysis of the English verbal inflection and auxiliary system is declared passionately in many places in this volume. Lasnik (in a chapter⁷ that, in essence, is a reprise in miniature format

⁶ 'English verbs in *Syntactic Structures*' (pp. 381–402).

⁷ '*Syntactic Structures: Formal foundations*' (pp. 137–152).

of Lasnik 2000) calls it ‘the single best syntactic analysis of anything ever’. Aronoff, whose chapter is devoted specifically to this analysis, invokes the last lines of Keats’s *Ode to a Grecian Urn* (‘Beauty is truth, truth beauty – that is all / Ye know on earth, and all ye need to know’) to sing its praise. And indeed, the syntax of the English verb system is a beautiful microcosm within which to bring home the interdependence of levels of linguistic analysis and the importance of having, alongside a system of phrase-structure rules that deliver kernel sentences, a set of transformations that work on these kernel sentences. The American structuralists’ rigorous prohibition on mixing levels was motivated from their descriptive, fieldwork oriented perspective, by their desire to have linguistic theory serve as a discovery procedure. But SS argues that the best we can hope for is for the theory of grammar to be an evaluation procedure, with simplicity as the primary evaluation criterion. The structuralists’ struggle with past-tense forms such as *took* (from *take*), ‘where it is difficult without artificiality to associate any part of this word with the past tense morpheme which appears as /t/ in “walked” /wɔkt/, as /d/ in “framed” /freymd/’ (SS, p. 58), is over once we allow the levels of morphology and phonology to be interdependent, with the morphosyntactic combination of the lexical verb *take* and the abstract morpheme *past* being realised in phonology as /tɔk/. The resulting analysis of English past tense formation is optimally simple. It requires a transformational rule (later called ‘affix hopping’) to bring the verb and the morpheme PAST together. But the affix hopping transformation does excellent service elsewhere in the grammar of the English verb system as well. With its help, we also procure an elegant account of the selectional relations between the auxiliary *have* and the past-participial morpheme *-en*, between the auxiliary *be* and *-ing*, etc.: though discontinuous on the surface, *have+ -en* and *be+ -ing* are introduced together as underlying units by the phrase-structure component, which thus encodes morphological selection directly; and affix hopping subsequently takes care of the proper linear arrangement.

In his contemporary review of SS, Lees (1957, 385–386) characterises the major advance of Chomsky’s enrichment of phrase-structure grammar with a transformational component in the following passage:

‘The difficulties which arise in [...] a simple-minded model, e.g. with discontinuous components and portmanteau morphemes, have been the topic of much recent methodological discussion. But, previous to Chomsky’s attempt, no one has really taken seriously any set of criteria of adequacy and simplicity in the construction of a grammar of any one language, has ever really followed out to its last implication any consistent method of representing the sentence of any one language in a revealing, intuitively satisfying way. Chomsky is, then, one of

the first to emphasize clearly the ever compounding difficulties attendant upon any such grammatical description based exclusively on such a phrase-structure model, and he is the first to offer constructive suggestion for circumventing these difficulties.’

In SS, we see the ‘ever compounding difficulties’ encountered by a ‘simple-minded’ phrase-structure model laid out for a number of different constructions. The analyses proposed for several of these constructions are explicitly taken up in the present volume, and sometimes placed in the context of the 60 years that have passed since the publication of SS.

Thus, Chomsky’s analysis of the passive in SS is compared to Collins’s (2005) influential approach and to proposals of their own in Alexiadou, Anagnostopoulou and Schäfer’s chapter⁸ – but though the analyses compared differ in detail, they all remain true to the basic insight expressed in SS that the passive is transformationally derived from the active. Harley’s chapter⁹ goes over the ambiguity of *the shooting of the hunters* as SS’s argument for a transformational treatment of this gerundial nominalisation, relating it either to the kernel sentence *the hunters shoot* or to *x shoot the hunters*. The transformational approach to nominalisations was championed in the dissertation of SS’s reviewer (Lees 1960) – and eventually became the linchpin of Chomsky’s (1970) exercise in forcing the generative-semantics genie back into the bottle (based on the fact that *the growth of tomatoes* is unambiguous and **the farmer’s growth of tomatoes* is ungrammatical, hinted at only in passing in Harley’s fn. 4). Harley also reviews SS’s treatment of secondary predication constructions such as *the police brought <in> the criminal <in>* and *everybody in the lab considers John incompetent*, in terms of a phrase-structure rule generating a complex verb V+Prt/Comp and a transformation delivering the order ‘V NP Prt/Comp’ (obligatorily so under certain circumstances). Here, Harley notes correctly that in order for Chomsky’s analysis of *John found the boy studying in the library* (for a parse analogous to *John found the boy unconscious*) to be able to treat *find* and the string *studying in the library* as a complex verb, this complex verb should be the product of a transformational rule and could not be produced in the phrase-structure component because one of the component parts of the complex verb, the constituent *studying in the library*, is itself the product of a transformation applied to the kernel sentence *the boy studies in the library*. Unfortunately, she does not take

⁸ ‘Passive’ (pp. 403–426).

⁹ ‘Kernel sentences, phrase structure grammars, and theta roles’ (pp. 241–254).

this point further.¹⁰ There would have been a good opportunity here to use this observation as a launching pad for a brief précis of approaches emerging over the past 60 years to complex predicate formation and secondary predication constructions.

This may be an opportune moment to remind ourselves that although Chomsky uses the term ‘construction’ several times in SS, there is, as Van Riemsdijk puts it in his chapter¹¹ (p. 318), ‘no sense, no intention, ... to start using the term construction as a technical term. On the contrary, Chomsky in *Syntactic Structures* already envisages the possibility, indeed necessity, of abstracting away from language specific or, for that matter, cross-linguistic constructions, taking the relevant properties of these constructions, linking them with the properties of other constructions, thereby paving the way for the search of general principles of grammatical design’. There is extensive discussion in SS of what Chomsky calls ‘constructional homonymy’ (reviewed in Pietroski’s chapter¹²). But it is important to bear in mind (as do both Pietroski and Harley in this volume) that Chomsky emphatically rejects the notion of constructional or structural meaning. While one might be tempted to equate the subject–verb (or NP–VP) structure with the meaning ‘actor–action’, or the verb–object (V–NP) structure with the meaning ‘action–object of action’, Chomsky argues that sentences such as *John received a letter* or *I missed the train* should persuade one otherwise (p. 100): ‘to assign “structural meanings” to grammatical categories or constructions just as “lexical meanings” are assigned to words or morphemes, is a step of very questionable validity’ (p. 104).¹³

¹⁰ Harley’s point is different from but related to the question raised by Lees (1957, 400) of how the output of a transformation can be the input to another transformation if the label of the output of the first transformation, to which the second transformation makes reference, is not straightforwardly derivable from the input. Lees’s problem arises in the derivation of *Britain’s offer was rejected*: how can *Britain’s offer*, supposed to be derived from the sentence *Britain has an offer* via nominalisation, acquire the label ‘NP’ and then be recognised as such in the structural description of the passive transformation?

¹¹ ‘Constructions’ (pp. 317–330).

¹² ‘Meanings via syntactic structures’ (pp. 331–354).

¹³ Chomsky’s examples are not devastating counterarguments to constructional/structural meaning if we think of the latter as being encoded by PS-rules (‘at D-structure’) and of the former as cases involving *derived* subjects.

In the paragraph immediately following the quote taken from p. 104, Chomsky brings up ‘[a]nother common but dubious use of the notion “structural meaning” [...]

That SS is a world away from Construction Grammar (Goldberg 2003) is mentioned in the volume in the context of discussions of the autonomy of syntax as well, in the chapters by Adger¹⁴ and Harley (see pp. 161, 251). Adger also mentions Langacker's (1987) Cognitive Grammar; and in Aronoff's chapter there is a comment about Gazdar et al.'s (1982) Generalised Phrase Structure Grammar approach to the English verb system. But these are all just passing remarks. What I think is sorely missing from this book is an in-depth discussion of the ways in which non-transformational approaches relate to SS. The focus of the volume is squarely on what is sometimes called 'the Chomskian mainstream'. The past 60 years have undeniably witnessed significant advances in this area, some inspired by SS. But over these decades, there have also been many dissenters and 'defectors'. At MIT, there used to be a linguistics course (and perhaps it is still a part of its curriculum today) informally referred to as 'The bad guys' (Robert Fiengo, p.c.), the purpose of which was the critical discussion of approaches outside the Chomskian mainstream. Such courses are all too rare in the field, and as a consequence, there is a widespread lack of awareness among its practitioners of what has been proposed by linguists not working within their own particular framework. I would very much have welcomed contributions to this volume from some prominent non-conformists – people like Joan Bresnan, Adele Goldberg, Ronald Langacker, Paul Postal or Geoff Pullum. Constructive discussion of the significance of SS from their points of view would have enriched the volume, and could even have helped to mend old fences or build new bridges. The fact that their perspectives on SS are not represented in it subtracts from the volume's overall balance and, concomitantly, its appeal.

It may be that the editors solicited contributions from some of these colleagues but did not get them to sign on. It may also be that the editors were worried that contributions by dissenters and 'defectors' might dis- or subtract from the *communis opinio* that the theory that SS presents is, in Lasnik's words (p. 137), an 'awesome accomplishment'.¹⁵ There is no way

with reference to the meanings of so-called "grammatically functioning" morphemes such as *ing*, *ly*, prepositions, etc.'. On this, see Ramchand's chapter, discussed below.

¹⁴ 'The autonomy of syntax' (pp. 153–176).

¹⁵ Though the volume is usually more subdued, there are the occasional slips into hagiography (e.g., on p. 335: 'Chomsky's (1957) strategy was inspired. But we should remember how bold it was.'). The volume is also stylistically less than balanced, with the matter-of-fact prose of most contributions contrasting markedly with the occasionally rather informal style of the editors' introduction or Berwick's chapter ('Let the scientific games begin!' (p. 181); 'I at least don't give an apatropaic penny about modeling the actual words coming out of my mouth' (p. 191)).

to tell what moved the editors in the way they put this volume together: they never give the reader a sense of what they themselves had envisioned the volume to be, or what they had expected/instructed their contributors to write (about). On this latter point, my guess is that the instructions were minimal. The net result is a volume that is not perfectly balanced in every respect.

The balance between different generations of generative linguists is definitely good, however. At one end of the scale are a good number of contributors who were linguistically brought up on SS and other early generative work (incl. Mark Aronoff, Robert Berwick, Norbert Hornstein, Howard Lasnik, and Henk van Riemsdijk); at the other, several colleagues who did their dissertations in the 21st century are represented – Bronwyn Moore Bjorkman, Omer Preminger, Florian Schäfer, Jon Sprouse, and co-editor Pritty Patel-Grosz.¹⁶

The balance between subfields of the generative linguistic enterprise in the volume is largely adequate. There are, naturally, plenty of chapters on topics in syntax: the title of the book paid homage to is, after all, *Syntactic Structures*. But we also find high-quality discussion of SS-related issues in morphology (Harley, Bjorkman), semantics (Harley, Pietroski, Ramchand), and questions relating to acceptability judgements and grammaticality (Sprouse),¹⁷ to acquisition and learnability (Lidz), and to the relevance of statistical approaches to syntax (Adger, Berwick). Though space does not allow me to do justice to everything on this list, the following paragraphs take a closer look at most of these topics, beginning with the vexing question of meaning.

Because of the fact that SS follows in the footsteps of the American structuralists' obsession with keeping meaning out of grammatical analy-

¹⁶ The four editors are themselves a good mix of generations and specialisations. On its face, though, the book is very much a Hornstein enterprise. He is thanked in the acknowledgements of five of the chapters (while of the other editors, only Yang gets two notes of thanks), and he put a clear rhetorical stamp on the introduction to Part II. He and his long-time department at the University of Maryland also put a clear mark on the list of contributors, several of whom are current or former affiliates of this department. To be sure, the Department of Linguistics at UMD is one of the pre-eminent centres for linguistics in the world. But with two of the editors already associated to Maryland, a little more of a geographical spread among the contributors would not have been a bad idea.

¹⁷ On 'grammaticalness', grammaticality and acceptability, see also Berwick's chapter. Chomsky explains in fn. 8 of his chapter in the volume that '[t]he non-English term "grammaticalness" was selected to make it clear that it is a new technical concept, perhaps a mistake' (p. 133).

sis, it should come as no surprise that Chomsky does not present a detailed outlook on the relationship between morphosyntactic form and meaning, a connection which to him is fraught with confusion and in serious ‘need of clear and careful formulation’ (p. 93). Pietroski calls SS ‘a prolegomenon to a theory of meaning’ (p. 331) – though it took another half a decade for Katz and Fodor (1963) to take up the challenge to construct a theory of meaning in the generative framework. Their ‘projection rules’ soon afterwards gave way to Katz and Postal’s (1964) hypothesis that all semantic interpretation is based on the output of the phrase-structure component (D-structure), prior to the transformational component – a hypothesis already envisioned by Lees (1957, 394) when he writes that ‘it would be a great step forward if it could be shown that all or most of what is “meant” by a sentence is contained in the kernel sentences from which it is derived’. This hypothesis catalysed the generative semantics movement, called to order by Chomsky (1970) with an appeal for an interpretive semantics (i.e., a theory in which semantics ‘supervenes on’ phrase structure¹⁸). As Harley puts it in her chapter, ‘[a] commitment to compositionality leads naturally to a commitment to interpretive semantics, despite the conclusions about the independence of semantics and syntax at the end of SS’ (p. 251).

Ramchand’s (characteristically polemical) chapter¹⁹ continues the discussion of meaning in the volume with particular focus on the distinction between lexical and functional/grammatical material. Calling SS’s approach ‘a serious candidate for actually being right’ (p. 284), Ramchand steers her readers away from the ‘strict separation between conceptual content and functional information, operationalized in distinct zones of the syntactic derivation’ (p. 290) that Distributed Morphology represents, and from the sharp distinction between lexical and functional/grammatical elements that comes with this strict separation. The lexical/functional distinction is also central to Bjorkman’s contribution,²⁰ which looks at it from a morphological angle. Bjorkman finds that SS represents ‘an approach to morphology that more closely resembles contemporary realizational theories than it does lexicalism, in that phrase structure rules and transformations are responsible for both word and sentence formation’ (p. 301) – which is true, but, in SS, only for the kind of word formation

¹⁸ It appears that *supervene (up)on* (common in the philosophical literature) has recently gained popularity in the writings of some linguists: both Adger and Harley use this verb a couple of times in their chapters.

¹⁹ ‘Grammatical versus lexical formatives’ (pp. 283–300).

²⁰ ‘*Syntactic Structures* and morphology’ (pp. 301–316)

executed with inflectional morphology (agreement, tense and aspectual morphology, and *-ing* nominalisation).

Chomskian generative linguistics has come to be famous as a model in which the language learner/acquirer is at centre-stage. It is appropriate in this light that Lidz's chapter²¹ puts questions of learnability and language acquisition in the spotlight in the context of SS – even though SS itself does not say anything about these questions directly (see also Lees 1957, 406). The empirical focus of Lidz's chapter is on the well-known binding (non-)ambiguity contrast between sentences such as *Bob wonders how many pictures of himself Donald owns* and *Bob wonders how pleased with himself Donald is*, the former allowing both a 'downstairs' and an 'upstairs' reading for the reflexive while the latter supports only a reading in which Donald is the one who is pleased with himself. Huang (1993) derived this contrast from what is sometimes referred to as the predicate-internal subject hypothesis ('PISH'):²² the *wh*-fronted constituent in the second example contains a trace of the subject of predication, to which *himself* must necessarily be linked in compliance with Principle A of the Binding Theory. Lidz accepts this analysis, and goes on to ask whether the PISH could be learnt ('discovered') or must instead be innate. He is led to conclude that the latter must be true. But, one might ask, how exactly is this relevant to SS? In his chapter, Adger asks the same question of Lappin and Shieber's (2007) claim that 'information theoretical approaches to modeling grammar are not vulnerable to the simple arguments for rich innate structure'. Adger rightly retorts that 'Chomsky's argument here is not for "rich innate structure"' (p. 156). Indeed, there is no argument for innateness presented in SS: explicit arguments to this effect only emerge in Chomsky's writings at a much later time.

The remark just quoted from Lappin & Shieber (2007) appears in an assessment of Pereira's (2000) statistical spat with Chomsky over the latter's claim that *colourless green ideas sleep furiously* and its inverse, *furiously sleep ideas green colourless*, are equally (un)likely to occur. Berwick's chapter²³ delves in detail into the attempts in recent years to counter

²¹ 'The explanatory power of linguistic theory' (pp. 225–240).

²² Lidz uses this term as well, as a generalisation of the more familiar 'VP-internal subject hypothesis'. For subjects that are external arguments of the predicate, the term 'predicate-internal subject' is strictly speaking an oxymoron: external arguments are by definition external to, not contained within, the constituent formed by the predicate.

²³ 'Revolutionary new ideas appear infrequently' (pp. 177–194) – the title is an example of Chomsky's introduced in *LFLT*, a meaningful variant of *colourless green ideas sleep*

Chomsky's statement in SS that 'the notion "grammatical in English" cannot be identified in any way with the notion "high order of statistical approximation to English"' (pp. 15–16).²⁴ Berwick points out that while Markovian *n*-gram statistical models may be (trained to be) reasonably accurate, 'predicting the next word that one might say isn't the same goal at all as explaining the faculty of language – it confuses language capacity with language use' (p. 181, echoing Lees 1957, 379). The conclusion he draws is a strong one, worth quoting in its entirety: 'The rejection of the idea that linguistic competence is just (a possibly fancy statistical) summary of behaviors should be recognized as the linguistic version of rejecting the general Rationalist endorsement of the distinction between powers/natures/capacities and their behavioral/phenomenal effects – that is to say, an endorsement of Empiricism' (p. 191). May this conclusion put the colourless green ideas of the statistical modelling of the human language faculty to sleep forever – furiously, no doubt.

The last chapter²⁵ of the volume explores linguistic variation from the perspective of SS, saying in the conclusion that 'SS has changed the way we think about language and therefore it also changed the way we think about how languages vary' (p. 455). SS itself (heavily focused on English) did not make much of a contribution in this context. It is true that the abstractness of SS's syntactic analyses and its introduction of transformational rules 'affected our exploration of language variation' (p. 437). But the chapter on linguistic variation does not, to my mind, have very much to say on what specifically SS's contributions are in this arena.

Finally, though no single chapter is devoted to this, there is some mention in the volume (in the chapters by Adger, Ramchand, and especially Sprouse²⁶) of sentence production and sentence processing – welcome, in light of the peculiarly one-sided opening lines of chapter 1 of SS: 'Syntax is the study of the principles and processes by which sentences are

furiously. In his contribution to the volume, Chomsky himself also uses this, as his example (2).

²⁴ Chomsky eradicates in his chapter the misunderstanding that SS outright rejects statistical approaches to the study of language (p. 135). Indeed, SS affirms 'the undeniable interest and importance of semantic and statistical studies of language' (p. 17). What SS takes issue with is what Lees (1957, 379) calls the 'confusion [...] that statistical methods, that is, elaborate counting techniques, will not only reveal the correct analysis but even explicate linguistic behavior'; see also Lees (*ibid.*, 384) for a critique of Markovian approaches.

²⁵ 'Discovering syntactic variation' (pp. 427–459).

²⁶ 'Acceptability judgments and grammaticality, prospects and challenges' (pp. 195–224).

constructed in particular languages. Syntactic investigation of a given language has as its goal the construction of a grammar that can be viewed as a device of some sort for producing the sentences of the language under analysis' (p. 11). Chomsky revisits this later in SS, where he calls the perception that the grammar is interested only in the speaker a 'misunderstanding', and says that 'grammars of the form that we have been discussing are quite neutral as between speaker and hearer, between synthesis and analysis of utterances' (p. 49).

In the volume under review, the balance between speaker and hearer – between original proposals and reflection on topics or claims in SS – is interesting, but not entirely satisfactory. There are occasions in the book on which an author could have been less of a hearer of the word and more of a speaker reporting on some thinking outside the box. But there certainly are some interesting original proposals floated in the volume. Thus, in Adger's chapter, the contrast between *those three green balls* and **those green three balls* is approached from the perspective of the interface between autonomous syntax and the systems of thought: 'applying the semantic function of color before that of counting is a less resource intensive computation' (p. 169) than doing things the other way around. In the contribution by Saito,²⁷ the suggestion is advanced that the ungrammaticality of the sentence **anything the man didn't eat* can be derived from Chomsky's recent labelling algorithm: *anything* can only front by internally merging directly with TP, but the XP–YP product of this application of Internal Merge cannot be labelled (see p. 279). But by far the most original contribution to the volume is Preminger's very dense but powerful plea for syntax to go 'back to the future',²⁸ i.e., to return to non-generation approaches to ungrammaticality of the type represented by SS, and against the freedom-plus-filtering strategies that came to dominate the field in the wake of Chomsky & Lasnik (1977). Preminger's chapter is almost entirely an exploration of original research by the author (reported at more length in his dissertation), which makes it stand out rather drastically from the more reflective approaches taken in most of the other chapters. But the volume as a whole is well served by this provocative call to abandon filters (and, might I add, other coffee-related metaphors as well, such as percolation and the strong/weak distinction) and to return to SS.

²⁷ 'Transformations in the quest for a simpler, more elegant theory' (pp. 225–282).

²⁸ '*Back to the future: Non-generation, filtration, and the heartbreak of interface-driven minimalism*' (pp. 355–380).

Preminger's chapter is a representative of the first of the three central themes emerging from the volume in relation to SS:

- (i) SS was right but we forgot in the meantime, or never really appreciated how right it was
- (ii) SS and its legacy in current linguistic research
- (iii) SS and its roots/antecedents

Understandably, most of the contributions fall into the second category. It is a pity, I think, that theme (iii) is basically represented only by Aronoff's chapter, which does an excellent job 'reconstruct[ing] the (largely implicit) view of morphology that lies behind' the SS analysis of the English verb (p. 381). And there are no contributions to the volume that argue that SS was wrong on some point but we know better now, or we are still none the wiser – perhaps not surprisingly, in light of my earlier remark about the absence of any of 'the bad guys'.

The editors of the volume do not lay out these themes themselves; but they do relate to (i) and (ii) on p. 123 of their introduction to Part II of the volume: 'It is amazing (and at times disheartening) to see how many of the important points SS made have still not been fully appreciated (let alone assimilated). Some of us look forward to the day when SS will be a boring read because all of its insights have been fully integrated into the received wisdom. It is also impressive (and heartening) to see how many of the ambitious goals SS set have been successfully realized, albeit (unsurprisingly) in modified form'.

'*Syntactic Structures* (SS) needs no introduction', write the editors in their opening remark to Part II of the volume (p. 123). But this volume **about** SS could certainly have done with a traditional introduction in which the individual contributions are introduced briefly and bridges are built between the chapters of the volume. Instead, the editors content themselves with some remarks about important insights contained in SS that are still highly relevant today (remarks that are indeed unnecessary: the chapters that follow elaborate on these insights themselves), a comment about the concision and elegance of the essays and the excellent job done by their contributors, and a self-congratulatory remark about their own extraordinary sagacity in choosing the contributors ('we the editors (plus Norbert Corver (the instigator of this volume) definitely deserve kudos for having chosen as wisely as we did'; p. 123). Because the individual chapters themselves make no effort (some sporadic cross-references aside) to engage in a conversation with one another, a little help from the editors in this regard would have been welcome. The contributors presumably had

little or no access to each other's chapters. As a result, there not only are very few cross-references, but there is also a considerable amount of overlap between the chapters. For readers perusing just a single chapter, the virtual absence of explicit references to other chapters will lose them the opportunity to learn more about the topic of their choosing elsewhere in the book. And for those who make their way through the entire volume, the overlap between chapters may become a source of mild frustration.²⁹

But mild frustrations are survivable. Making one's way through the book from cover to cover is certainly highly recommended. If there is any linguistics book you are going to pick up this year, let it be this one. This volume should be compulsory reading for doctoral students and others whose arrival to the field of generative linguistics does not date back very far, but also for those who have been around much longer – because '(re)reading *Syntactic Structures* is to be presented with a disorienting combination of ideas so clear and completely obvious as to be scarcely worth expending rhetorical energy on, together with others that seem bizarre, unintuitive or unwieldy to those who are not old enough to have read it in its time' (Ramchand, p. 283), and because Part II of this volume provides a very valuable set of commentaries that help us all channel our thoughts on this timeless document. *Syntactic Structures after 60 years* is a splendid addition to the library of linguistics, and a very educational reading experience. One reader of SS commented on Amazon (giving the book five stars): 'This Chomsky guy is on to something!' If you are unsure exactly what he is on to, or if you would like to have your memory refreshed and your braincells stimulated by a bunch of specialists, this is the tome to consult.

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²⁹ Other mild frustrations stem from the presentational side of the book. Some passages are to my taste a tad too autobiographical (see, e.g., the passage on p. 148, which certainly contains useful information but could have been formulated less personally). Some serious copy-editing would have filtered these out – and it would also have prompted the authors to include all in-text references (and not just a subset) in their bibliographies. There are a large number of small presentational glitches (such as missing italicisation, or missing characters, or agreement mismatches) throughout the text, and some more serious errors as well (for instance, at the top of p. 287 a significant amount of text has gone missing from the quotation reproduced there, making the end of the quote entirely unintelligible). All of this suggests that too little copy-editing was done on the manuscript.

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