

his greatest contributions, the reviewer believes, is the radical simplification concerning theory of government. The ECP is reduced to the proper head government requirement on traces. This simplification is made by a symmetric approach to the minimality requirement on government. Since the notion of government is essential to many of the subsystems of grammar, a small change concerning the notion will affect a wide range of subsystems. The far-reaching consequences of the theory developed in his book are well worth testing.

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Iggy Roca (ed.): *Thematic Structure: Its Role in Grammar*

New York: Foris Publications, 1992. xiii+325pp.

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Since the inception of generative grammar, lexical representations and lexical processes have been hotly discussed because they play a crucial role in determining the underlying syntactic structure of a sentence. One of the most interesting issues

* I would like to thank the members of Tokyo Morpho-syntax Study Group for discussing some parts of this book.

in this respect is how a lexical representation is mapped to a syntactic structure and in what way this mapping is constrained. The book under review is a collection of papers discussing this topic. Some of the papers were originally presented as part of a seminar cycle on the title theme which Iggy Roca organized at Essex University in the academic year 1988–89, and the others were written specifically for the volume.

The first chapter is “Introduction” by Martin Atkinson, summarizing the issues of thematic roles, lexical representations and the mapping mechanism of these to syntactic representations.

The second chapter is by Mark Baker on “Thematic conditions on syntactic structures: evidence from locative applicatives.” Based on some syntactic tests, Baker observes that locative arguments appear in apparently distinct syntactic configurations in Chichewa and Kinyarwanda, and tries to derive the differences by making crucial use of incorporation.

The third chapter “Morphology, semantics and argument structure” by Geert Booij deals with morphological operations that affect syntactic valency. He argues that these operations should not always be characterized in terms of operations on predicate-argument structure (PAS), but often as operations at the level of Lexical Conceptual Structure (LCS). As an instance of LCS-based operation, Booij studies English middles like *His book reads easily*, postulating a LCS like “the property of y such that, for x_{arb} , it is possible that x READ y .” In this LCS, the variable x is bound by the operator x_{arb} and hence only the variable y can be projected on the level of PAS, as the external argument. Booij further argues that the LCS of a verb can vary from language to language. In Dutch, for instance, middle formation can apply to an optional indirect internal argument as in (1) and to intransitive verbs, where the subject position is filled with the expletive pronoun *het* ‘it’, as in (2).

- (1) Dat paard rijdt lekker.
That horse rides nicely.
‘On that horse, one can ride nicely’
- (2) Het zingt hier gemakkelijk.
It sings here easily.

These patterns cannot be found in English. To account for this difference, he proposes the following LCS for Dutch middles, where the appearance of the y variable is specified to be optional.

- (3) the property (of y) such that, for x_{arb} , it is possible that [x PREDICATE
(y)]_{ACTION}

This idea of optionality and obligatoriness in LCS seems to me to be supported by the following English paradigm, where the LCS of *spray* has an optional Location

variable whereas that of *spread* has an obligatory Location variable:

- (4) a. to spray red paint on the wall / to spray the wall with red paint
 b. to spread butter on the bread / to spread the bread with butter

Here the deletion of the PP *with butter* in (4b), unlike the deletion of *with red paint* in (4a), gives rise to a completely different meaning, i.e. spreading the bread by using a rolling pin.

Anna-Maria Di Sciullo contributes the fourth chapter "Deverbal compounds and the external argument." Her main concern is to derive some differences between English and Italian deverbal nouns from whether *pro* is available in a given language.

The fifth chapter "Sentence accents and argument structure" by Carlos Gussenhoven claims that argument structure can determine the location of sentence accents in English and Dutch. He discusses this point by noting some different accent patterns seen in depictive and resultative secondary predicates like *John hammered the metal flat* and *John ate the meat raw*.

Ken Hale and Samuel Jay Keyser (H&K) co-authored the sixth chapter "The syntactic character of thematic structure." Here H&K discuss denominal verbs like *shelve* as exemplified by the sentence *John shelved his books*, which is similar to *John put his books on the shelf*. They propose to derive this denominal verb sentence from what they call Lexical Relational Structure (LRS), in the same way that the latter sentence with *put* is derived from Larson-style syntactic structure:

- (5) [V' [V [VP his books [V' [V [PP [P [NP [N shelf]]]]]]]]]
-

The N head *shelf* undergoes successive head movement from N to V through P, resulting in the denominal verb *shelve*. A sentence similar to *John gave his money to the church* cannot have a denominal verb sentence like **John churched his money*. This difference, they argue, follows from the different argument structures between *put* and *give*: the former selects a PP as its complement while the latter selects an NP, to which it assigns dative case. This NP is assumed to be found in K (ase) Phrase. When *church* undergoes successive head-movement, it creates a chain from the lexical head N into another lexical head V through the functional head K. This heterogeneous chain makes the sentence ungrammatical. An interesting problem with this analysis will be posed by Pesetsky's (1993) analysis of similar sentences. Pesetsky derives a sentence like *Pictures of himself amused John* by head-movement of the verb *worry* through a zero morpheme like CAUS. He motivates this idea by using what he calls Myers' generalization, which says that zero-derived words do not permit further affixation. Thus the above sentence cannot have a corresponding derived form **Pictures' amusement of John*, just as a zero-derived noun like *support*

does not have a derived word like **supportial* or **supportious*. Going back to H&K's sentence *John shelved the book* which is derived through a similar head movement, we find that this sentence does not involve a zero-morpheme and thus correctly predict that we should have a derived nominal like *John's shelving of the book*. It is unclear, however, what triggers head movement of *shelve* to V. We do not face this mystery in Pesetsky's analysis involving CAUS, which would attract a word to avoid dangling morphemes.

The seventh chapter is by Teun Hoekstra on "Aspect and theta theory." He notes a contrast involving secondary predicates:

- (6) John laughed himself silly
- (7) *John laughed himself intelligent
- (8) *The psychopath killed the village into a ghost town.
- (9) *I saw myself blind.

Hoekstra advances a generalization to the effect that the predicate must be stage-level and dynamic, but not inherently bounded. The role of the SC complement, Hoekstra argues, is to turn a non-telic predicate into a telic one by specifying the state which terminates the event. Sentence (6) falls under this generalization and thus is correctly ruled in. Sentence (7), on the other hand, is ruled out because the small clause *himself intelligent* has an individual-level predicate. Sentence (8) is also ruled out because the matrix predicate *kill* is telic in aspect. Sentence (9) is deviant because there is no progression in the seeing event. This approach, however, does not seem to the present reviewer to account for the grammaticality of a sentence like *I stared myself blind* and a marginally acceptable sentence like *I looked myself blind*, as pointed out to me by Brent de Chene. The proper distinction seems to be made by saying that the matrix predicate requires agentivity in this construction. This idea would also explain the ungrammaticality of a sentence like **It rained the street wet*, as Christopher Tancredi pointed out to me. This sentence should be good according to Hoekstra because the matrix verb is dynamic. Our idea, on the other hand, successfully rules out this sentence because no agency is felt in the raining event.¹

The eighth chapter "Raising in syntax, semantics and cognition" by Richard Hudson deals with the raising pattern where the subject of a subordinate clause is raised to act as the subject or object of the higher verb. Hudson claims that this raising pattern is also identified outside syntax, specifically both in semantic structure and in general cognitive structures.

¹ This idea, however, does not explain the ungrammaticality of a sentence like **John showed the letter dirty*, where we feel agency. Hoekstra proposes to analyze *show* as "CAUSE SEE" and the meaning of the non-dynamic verb *see* makes this sentence strange. It seems that verbs involving perception in many cases cannot enter into this construction. Thus a verb like *inform* cannot form the resultative form in question. See Van Valin (1990) for relevant discussion of unaccusativity.

The ninth chapter "Secondary predication as a diagnostic of underlying structure in Pama-Nyungan languages" by Mary Laughren describes and compares constructions involving nominal secondary predicates in the two Pama-Nyungan languages of Australia: Warlpiri and Arrernte. These two languages differ with respect to the realization of nominal/pronominal categories and anaphoric relations. She proposes to express these differences by using what she calls Morpho-syntactic Structure.

The tenth chapter is by Beth Levin and Malka Rappaport Hovav (L&R) on "The lexical semantics of verbs of motion." L&R argue that a lexical semantic characterization of the verb in terms of labels such as "agent," "theme," and "goal" is inadequate. Instead, they isolate three features/components of meaning in terms of which the verbs appear to subclassify: "direction," "manner," and "direct external cause." They demonstrate this point by discussing unaccusativity. The irrelevance of thematic roles like agent in identifying unaccusativity is seen in the Italian verb *cadere* "fall," which selects the unaccusative auxiliary *essere* 'be' even when used agentively.

- (10) Luigi *è* caduto apposta.
'Luigi fell on purpose.'

This is explained by the generalization that verbs whose meaning includes a specification of inherent direction are found in the unaccusative syntactic configuration. Unaccusativity is claimed to be tested by locative inversion in English :

- (11) Out of the house came a tiny old lady and three or four enormous people . . .

One of the problems is that this test allows too much. For instance, although a verb like *buzz* will be classified as unergative, it allows inversion as in *In the garden buzzed the bees*, as Yoko Sugioka pointed out to me. The other tests of unaccusativity are not reliable either. L&R note that intransitive telic aspect verbs are as a rule unaccusative. This criterion, however, makes a wrong prediction. For instance, L&R claim that when a verb takes a path PP which lacks an endpoint, it is understood as atelic. An atelic verb like *descend* can appear in the alleged unaccusative environment: *Toward the runaway descended the plane for ten minutes*. Thus telicity does not perfectly correlate with unaccusativity. We must conclude that the criteria L&R propose are not reliable for identifying unaccusativity.

Rita Manzini provides the eleventh chapter "The projection principle(s): a reexamination," arguing that the projection principle should be formulated as "a head associated with an obligatory assignment feature as a lexical property is associated with it in the syntax." Manzini also tries to unify the Projection Principle and the Extended Projection Principle.

The last chapter is by John Charles Smith on "Circumstantial complement and direct objects in the Romance language: configuration, Case and thematic structure." The past participles in several Romance languages normally exhibit agreement with a direct object. An exception can be found in what he calls M-complements, which are thematically related to measure phrases. Smith attributes the absence of agreement to the non-referentiality of M-complements.

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