

Violeta Demonte and Louise McNally (eds.),
Telicity, Change, and State: A Cross-Categorical View of Event Structure

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Reviewed by NAGANO Akiko, Tohoku University

1. Introduction

This book is a collection of 11 papers that take different approaches to the study of event structure, which the editors, Demonte and McNally, define as “the formal characterization or representation (in whatever terms) of the different components of eventualities and the relations between them” (p. 1). The title and subtitle of the book reflect a clear division of its contents into two parts: Part I discusses the foundational concepts of event semantics and Part II addresses their relationship with morphology, syntax, and typology.

Part I includes four papers: J. Beavers’s “Lexical aspect and multiple incremental themes,” S. Rothstein’s “Another look at accomplishments and incrementality,” C. Kennedy’s “The composition of incremental change,” and E. Malaia and R. B. Wilbur’s “Telicity expression in the visual modality.” Part II includes seven papers: A. Koontz-Garboden’s “The monotonicity hypothesis,” A. Fábregas, R. Marín, and L. McNally’s “From psych verbs to nouns,” B. Gehrke’s “Passive states,” D. Lim and M. L. Zubizarreta’s “The syntax and semantics of inchoatives as directed motion: The case of Korean,” J. Mateu’s “Conflation and incorporation processes in resultative constructions,” W. Snyder’s “Parameter theory and motion predicates,” and M. L. Rivero and A. Arregui’s “Building involuntary states in Slavic.”

This review focuses on the book’s exploration of several important hypotheses concerning three facets of event structure: telicity (section 2), derivational morphology (section 3), and typology (section 4). I take this approach for two reasons. First, a paper-by-paper review is provided in the editors’ introduction. More importantly, I believe that a hypothesis-based review is more beneficial for readers; it allows them to apply each of the hypotheses to their own data and examine its validity and implications. Overall, I believe that because this book is a collection of papers by linguists of various theoretical persuasions, it is extremely useful for those who want to keep abreast of the developments in the field and those who are looking for new hypotheses and data to advance their research.

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2. Telicity

2. 1. Semantic and Structural Definitions of Telicity

The book under review presents two contrasting hypotheses about telicity, specifically about its underlying mechanism. Broadly speaking, Part I suggests that telicity can be reduced to purely semantic notions of incrementality or scalarity, while Part II regards telicity as a structurally defined concept.

First, the semantic approach builds on Krifka's (1989) analysis of incremental theme verbs, an example of which is given below (p. 103).

- (1) a. Kim drank a glass of beer in/??for an hour. *Telic*
 b. Kim drank beer for/??in an hour. *Atelic*

Krifka accounts for the variable telicity of a single verb illustrated above by assuming event-argument homomorphism, in which the part structure of the theme argument is homomorphically related to the progress of the event introduced by the verb.

Extending this analysis, Kennedy and Beavers claim that the event bears a homomorphic relation to a semantically defined scale or path. Kennedy demonstrates that variable telicity is exhibited by verbs without incremental themes, such as motion verbs and degree achievements, as in the following examples (p. 104):

- (2) a. Kim walked from the bank to the store in/??for an hour.
 b. Kim walked for/??in an hour.
 (3) a. The canyon widened 30 kilometers in/??for one million years.
 b. The canyon widened for/??in one million years.

These cases show that telicity is determined by the scale called measure of change function inherent in the verbs. Then, incremental theme verbs such as (1) are exceptional in that their measure of change function stems from their nominal argument. Kennedy argues that English nominals, like gradable adjectives (e.g. *wide*), incorporate measure functions as part of their meanings, and that incremental themes refer to nominals whose measure functions have been type-shifted to measure of change functions.

On the other hand, citing the following data (p. 39, 43), Beavers claims that telicity depends on the ternary relation between a figure (incremental theme), a path, and an event (Figure/Path Relation (FPR)):

- (4) a. Wine flowed for/??in one minute.
 b. The liter of wine flowed for/??in one minute.
 c. Wine flowed onto the floor for/??in five minutes.
 d. The liter of wine flowed onto the floor in/?for one minute.

The contrast between (4a–c) and (4d) reveals that a motion verb is telic only when the theme is quantized and its path bounded. Incremental theme verbs pose a challenge for this analysis, too, because their telicity is not necessarily correlated with themes with quantized reference (e.g., *John ate at least three apples in/for ten minutes* (p. 44)). In brief, the success of the semantic approaches to telicity depends on how they can deal with incremental theme verbs, the type they originally started from.

Many of the papers in Part II hypothesize that telicity is attributed to a complex event structure that consists of an activity or change and a result state. Formalizing this view involves answering another fundamental question concerning the relationship between event structure and syntactic structure. The lexicalist approach, taken by Koontz-Garboden and Gehrke, assumes that the event structure of a predicate determines its syntactic structure, making telicity a lexical property. In contrast, telicity is a syntactic property for neoconstructionists such as Mateu and Snyder, who share the assumption that the interaction between lexical roots and functional heads in syntax determines event structure.

Significantly, the paper by Lim and Zubizarreta, another neoconstructionist contribution, indicates a way to mediate between the semantic and structural approaches to telicity. The authors assume the following l-syntactic structure for the meaning of directed motion:



The complement *X* of the light verb *v* contributes a concrete or abstract path along which the theme participant moves. The authors demonstrate that as a spell-out of the *v*, the Korean auxiliary morpheme *-eci* can select both a spatial Path phrase and a Degree phrase [_{DegP} Deg AP] to yield deverbal and deadjectival inchoative verbs, respectively. They suggest that the same structure can be assigned to (2/3a) (pp. 219–225), while Ramchand (2008: ch.4) argues that incremental theme arguments such as the one in (1) qualify as Path arguments in (5).

2. 2. The Event Visibility Hypothesis

One unique merit of this book is that it encompasses both modes of human language: spoken language (the oral/aural mode) and signed language (the manual/visual mode). Data on the latter mode are especially relevant considering the finding from perceptual psychology that “the process of parsing continuous reality into discrete events is an automatic component of human visual perception” (p. 122). Specifically, Wilbur’s (2003) Event Visibility Hypothesis posits that the phonological composition of signed predicates

correlates with the physics of motion in the real world and predicts that the “semantics of telicity will be reflected in the kinematic features at the end of the predicate signs” (p. 124). Malaia and Wilbur verify this prediction in two experiments studying American Sign Language and Croatian Sign Language, in which the signers of both languages marked telic events by a more rapid deceleration at the end of the sign or by higher peak velocity within the sign than in verb signs denoting atelic events. Their data also suggest that telicity marking in Croatian Sign Language is more morphologized than in American Sign Language.

3. Event Structure and Derivational Morphology

3. 1. The Monotonicity Hypothesis

Koontz-Garboden’s Monotonicity Hypothesis (MH), which states that “[w]ord formation operations do not remove operators from lexical semantic representations” (p. 143), constrains event structure alternations caused by derivational morphology. For example, compare the semantics of the following paired adjectives (p. 149, 157):

- (6) a. Kim ate a *red* apple. *Property concept state*
 b. Kim ate a *reddened* apple. *Result state of temporal change*
 (7) a. I65 is *wide* at Lafayette city center. In fact, it’s the same width for its entire extent. *Property concept state*
 b. #I65 is *widened* at Lafayette city center. In fact, it’s the same width for its entire extent. *Result state of spatial change*

According to the MH, the semantic operation of the *-ed* deverbal adjectivization (stativization) cannot simplify the event structure of change-of-state verbs such as *redde*n and *widen*, which would give the adjectives in (6/7b) the same event structures as those of the adjectives in (6/7a). Rather, if the morphology indicates that *reddened* is derived from *redde*n (the assumption of Taking Morphology Seriously, p. 145), the event structure of *reddened* should retain all of the operators constituting that of *redde*n, as the following analyses indicate (p. 152):

- (8) a. *red*: $\lambda x \lambda s [\text{red}(s) \wedge \text{THEME}(s, x)]$
 b. *redde*n: $\lambda x \lambda s \lambda e [\text{BECOME}(e, s) \wedge \text{red}(s) \wedge \text{THEME}(s, x)]$
 c. *reddened*: $\lambda x \lambda s \exists e [\text{BECOME}(e, s) \wedge \text{red}(s) \wedge \text{THEME}(s, x)]$

Three points are worth mentioning. First, MH has far-reaching implications for morphological analysis beyond adjectivization. As the author himself mentions (pp. 160–161), anticausativization (exhibited by, say, reflexive clitics) cannot be analyzed by a CAUSE-deleting operation. Other derivational processes, such as nominalization,

verbalization, augmentatives/diminutives, and applicatives, should also be re-examined using the MH. The semantic analyses conducted by Fábregas, Marín, and McNally (nominalization of psych verbs), Gehrke (adjectival passivization), and Lim and Zubizarreta (deadjectival and deverbal inchoative verb formation) are consistent with the MH.

Second, the MH is sufficient for analyzing iconic word formation (Dressler 2005), as shown in (8), but may be inadequate to capture anti-iconic word formation in which semantics increases but morphology decreases. Consider, for example, the relationship between (a) *ghostwriter* and (b) *ghostwrite*. Taking Morphology Seriously involves deriving form (a) from form (b), but (b) means “work as a ghostwriter” and not “write as a ghost.” Then, anti-MH semantic analysis seems inevitable for this derivation.

Third, the MH makes it clear that states are not homogeneous (cf. Roy 2013). As shown in (8a, c), the event structures of non-derived and derived states differ in complexity. Although state as a Vendlerian eventuality type is commonly assumed to lack internal structure, it should be considered a property of non-derived state. In fact, the structural richness and variety of derived states are revealed by other papers in the book. For example, Gehrke claims that passive states (or adjectival “BE” passives) in German consist of V-based and VP-based types. In addition, Rivero and Arregui analyze involuntary states in Slavic as complex states derived from (High) Applicative phrases.

3. 2. The Aspect Preservation Hypothesis

Fábregas, Marín, and McNally examine state nominalization using the Aspect Preservation Hypothesis (APH), which states that the lexical aspect of a verb is preserved under semantically innocuous nominalization. They note that psych verb nominalization poses a potential problem for the APH because, while not all psych verbs are stative (e.g., *annoy*), all psych nouns are stative (e.g., *annoyance*). Extending Pesetsky’s (1995) Root-based analysis (e.g., *annoy*: [[*v*annoy *v*] Ø_{CAUS}], *annoyance*: [[*v*annoy *v*] -ance]), the authors claim that the derivation of psych nouns conforms to the APH because the bases are psych verb stems, which are stative. Using Spanish data, they show that psych verbs can derive nouns only when their stems are stative.

This paper will especially interest readers studying nominalization and those studying states. First, it elucidates a set of diagnostics to distinguish state nominals from event nominals (e.g., *His filming / operation took place in Barcelona* (p. 170)). Second, it is closely related to Maienborn’s (2005) semantic division of non-dynamic verbs into Davidsonian states, which allow place and manner modifiers, and Kimian states, which reject such modifiers. Fábregas and Marín (2012) reveal that in Spanish all state nominalizations, including psych nouns, behave as Kimian states, even when the verbal base is a Davidsonian state. Neoconstructionists should consider how this semantic subdivision of states can be reduced to the structural subdivision of states discussed above.

Third, the authors regard the APH as a subcase of the MH (p. 174, fn.8). If so, the existence of state nouns that are derivationally related to dynamic verbs (e.g., the pair

annoyance and *annoy*) indicates that state nominalization occurs at the earliest point possible in the verb's event composition process. For example, the event structure of *annoy* undergoes nominalization when it reaches the State level; if it reached the Process level, the nominalization would have to curtail the uppermost operator.

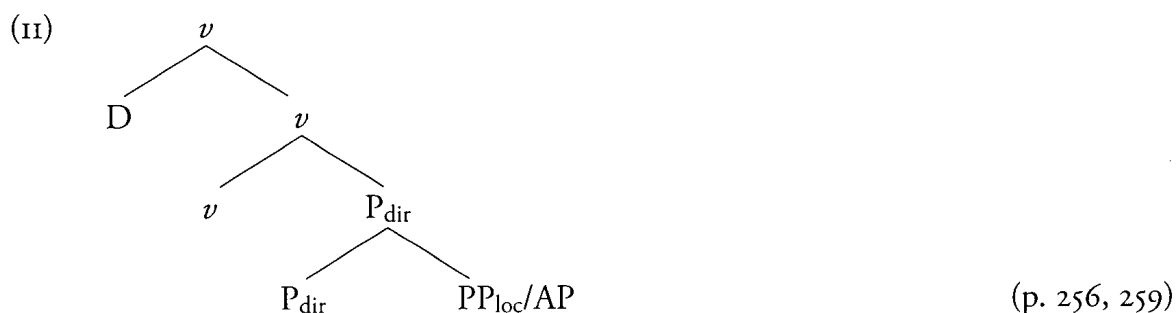
4. Event Structure and Typology

Snyder's (2001) The Compounding Parameter (TCP) hypothesizes that the availability of a particular syntactic construction (resultatives) depends on the availability of a particular morphological operation (endocentric root compounds). Mateu's and Snyder's contributions both attempt to capture surface typological variations of motion-verb constructions as well as resultative constructions by revising TCP.

Concretely, while English exhibits the following four patterns, French and Japanese allow only the patterns in (9/10a) (p. 257, 260):

- | | | | |
|------|----|--|---------------------------|
| (9) | a. | The bottle entered the cave (?floating). | <i>Path incorporation</i> |
| | b. | The bottle floated into the cave. | <i>Manner conflation</i> |
| (10) | a. | He wiped the table clean. | <i>Weak resultative</i> |
| | b. | The boy hammered the metal flat. | <i>Strong resultative</i> |

According to Mateu, all four patterns are based on the event structure of directed motion in (5), with X occupied by a Path PP:



Patterns (9/10a) are found cross-linguistically because they are formed by the head movement within this universally available structure from the Path PP into the *v*. In contrast, patterns (9/10b) are possible only in languages that allow a root to be compounded with a null verb ("conflation"); they result from merging the roots $\sqrt{\text{FLOAT}}$ and $\sqrt{\text{HAMMER}}$, respectively, directly with the null *v* in (11). Therefore, Mateu revises TCP through this specific type of verbal compounding and restricts its target to (9/10b).

In contrast, Snyder revises TCP as follows: The language {does / does not} permit Generalized Modification (GM) (p. 285). GM is a subtype-category-forming operation that underlies endocentric root compounding (e.g., *frog chair* denotes "a subtype of the 'chair'")

kind associated with the ‘frog’ kind”). Snyder claims that [+TCP] languages allow all four of the patterns in (9, 10) because (9/10a) represent the modification of a Path inherent in the head verb’s event structure and (9/10b) represent the modification or expansion of the head verb’s event structure by a small clause denoting result state. Because both English and Japanese are [+TCP], Snyder attributes the unavailability of (9/10b) in Japanese to its negative setting of two additional parameters ([±Incremental P] and [±Small Clause]).

Of the three versions of TCP—Snyder’s (2001) original version (TCP₁), his revised version (TCP₂), and Mateu’s revised version (TCP₃)—I find TCP₃ empirically superior to TCP₁ and TCP₂ and the latter two conceptually superior to the former. TCP₃ is correct in restricting the target of TCP to the typologically limited patterns in (9/10b). Although TCP₁ and TCP₂ claim that the availability of not only (9/10b) but also (9/10a) correlates with that of endocentric root compounding, this view is falsified by French and other Romance languages, in which (9/10a) are possible but endocentric root compounding is not (see, e.g., Fradin 2009). As Mateu argues, the patterns in (9/10a) are possible in any language with path verbs.

TCP₃, however, is conceptually less attractive than TCP₁ and TCP₂ because it merely restates Mateu’s theoretical analysis of (9/10b). The merit of morphological parameters should lie in giving language learners perceptually accessible clues to abstract systems of the grammar they are acquiring, as TCP₁ and TCP₂ do. A possible alternative to TCP₃ along this line is the Conversion Parameter, which divides languages into those that allow categorial change without formal change (e.g., English, Chinese) and those that do not (e.g., Japanese, French). Only the former allow what Mateu calls “manner conflation” and, therefore, the patterns shown in (9/10b).

5. Conclusion

This review focused on this book’s discussion of three types of hypotheses about event structure and critically assessed their significance. I strongly recommend interested readers to refer to the book itself for details necessarily omitted in this review. They will find a state-of-the-art debate about critical approaches to event structure.

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