

- May, Robert. 1991. Interpreting Logical Form. *Linguistics and Philosophy*. 12(3): 87–435.
- Puskás, Genoveva. 2002. On negative licensing contexts and the role of n-words. In *Approaches to Hungarian*, vol 8, ed. István Kenesei, Katalin É. Kiss, and Péter Siptár, 81–106.
- Puskás, Genoveva. 2012. Licensing Double Negation in NC and non-NC Languages. *Natural Language and Linguistic Theory* 30(2): 611–649.

**Gillian Catriona Ramchand.** 2018. *Situations and syntactic structures: Rethinking auxiliaries and order in English*. Cambridge, MA: MIT Press. Pp. vi+ 235

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This foundational book is concerned with important issues in natural language ontology, as well as with the nature of the syntax-semantics interface. A major goal is a more precise understanding of how compositional semantics can be integrated with the syntax and morphology of human languages. The empirical facts come from classical problems in the verbal domain, through a carefully worked-out examination of (modal) auxiliaries in the grammar of English. The investigation takes as its starting point an important observation related to the templatic organization of verbal material. With almost no exceptions, natural languages present an order in which tense and aspect are hierarchically outside the core verbal structure (including cause, process, and result phrases), and modality being yet outside aspect and tense. More generally, auxiliaries respect a strict ordering in English (as well as in other languages). As the author correctly points out this basic fact has to be stipulated in syntactic theories. The author's aim is to develop a semantics that can explain these patterns in a straightforward way: "If we wish to reduce syntactic stipulation and see explanations for deep typological generalizations in facts about cognition, then we need to adopt a semantic framework that is more sensitive to the patterns that syntax gives us." (p. 10)

In order to address these desiderata, the book first motivates a semantic model that goes beyond situational/event semantics. One of the main problems with current semantic models is raised by the *vP* domain, where a different "sort of beast" than situational descriptions is needed. As discussed throughout the book, to best capture the nature of this domain, as well as the ordering restrictions mentioned above, one needs to be able to represent force-dynamic descriptive content and relationship-to-participants *without recourse to temporal or world information*. Under most current models it is difficult to represent an event without "making reference to being in the world and, therefore, being part of a particular world and time." (p. 8). Following observations by Fine (2000) as well as Henderson (2016), it is proposed that a *quotational semantics* (Henderson 2016) framework can be extended to permit the grounding of event properties to generalized abstractions lacking temporal, worldly or locational properties. These are, instead, partial descriptions that reflect "essential" properties in Fine's (2000) terms. Thus, at the *vP* level only abstract entities are composed semantically. Above *vP* there are two other zones (see also

Wiltschko 2014), where these properties are instantiated in time (syntactically corresponding to the TP domain) and anchored to the world (syntactically corresponding to the CP domain). Thus, the semantic type of a constituent “varies systematically according to the particular zone it occurs in” (p. 159). A radical, new theory of semantic zones is developed and formalized based on these premises, also inviting far-reaching proposals and implications for other domains. Rethinking the nature and organization of events along these lines captures recalcitrant properties of the English progressive, perfect and modal morphology that have resisted principled analysis under various theoretical orientations.

The book is organized in seven chapters. Besides Chapter 1 which contains the introduction, and Chapter 7 which presents the summary, each of the chapters is dedicated to various pieces of aspectual/modal morphology in English. Chapter 2 examines the *-ing* progressive marker, while Chapter 3 analyzes the passive and the participle *-en/ed*. Chapter 4 studies the participle and the perfect. Chapters 5 and 6 are dedicated to the modal domain, in its interaction with spatiotemporal properties (Chapter 5) and generalized anchoring (Chapter 6).

As mentioned above, one of the novel approaches to  $\nu$ P semantics implemented in the book is to capture event-related properties without recourse to temporal or world information. Through a radical departure from the event/situation semantics, Ramchand builds on Fine (2000) as well as on Henderson’s (2016) quotational semantics to formalize an account that permits the conceptualization of an event without marking reference to its being part of a particular world and time. Event properties can thus be seen as “generalized abstractions” that “do not have any temporal, worldly or locational properties”. They are instead equated with partial descriptions that reflect the idea of “essential” properties or “event concepts” (p. 17). Lexical items, members of a first phase domain (labeled  $D_{\mu}$ ), are abstractions over space and time and invoke only those properties that are independent of instantiation. This type of reconceptualization in semantic ontology can derive the special properties of the inner  $\nu$ P, correctly setting it aside from the higher domains where instantiation becomes possible. Temporal information is not statable until special structure is merged at the edge of the first phase and integrated via the deployment relation.

Severing the *-ing* progressive from modal specifications explains many of its properties which have resisted a principled explanation under most formal accounts. In Chapter 2, *-ing* is seen as part of the first-phase domain, the  $\nu$ P area where event properties are “abstractions over temporal and worldly instantiations”. The progressive creates a derived event property within the first phase (labeled  $D_{\mu}$ ) zone of the clause (p. 40). The semantic part of the *-ing* morpheme is a “function from event descriptions to event descriptions such that the derived eventuality is an Identifying State for that event” (p. 58). This type of analysis captures the “modal” feeling of the progressive, while at the same time avoiding the problems raised by the Imperfective paradox in intensional semantics accounts.

Another topic discussed in detail is the nature of the present perfect morphology (Chapters 3 and 4). The proposal is that perfect realizes an intermediate evidential state; this state makes possible the inference of the existence and spatiotemporal location of  $s^0$ , the event built up by the Asp that the auxiliary *have* combines with. Thus,

the perfect participle spans all the way up to Asp(ect) in the functional sequence and includes the external argument, lacking only the uninterpretable syntactic features for tense and agreement found with the latter. The important observation Ramchand makes is that, although the present perfect spells out sub-portions of the verbal domain (just like the passive participle), it is built over situations and lacks temporal features seen with Asp. The conceptualization of the present perfect morphology as an inference-licensing evidential state in the domain of situations can explain the present perfect puzzle. It also derives other properties of this verbal morphology, such as lifetime effects and current relevance, sensitivity to the nature of the subject or holder of the present state, the evidential flavor and its discourse relevance.

Yet another very important contribution of the book is the reconceptualization of the semantics of modals (Chapters 5 and 6). Its radical proposal is that the various patterns of modal interaction with negation are not reducible to independently established semantic properties. The modal's behavior with respect to negation is, rather, due to syntactic selection under locality; this indicates that no movement for scope taking is allowed or even required. Moreover, whether a particular modal combines with a polarity-specified projection or not seems to be a matter of lexical specification at the level of *c*-selection. Based on these conclusions, the semantic differences are derived from the semantic properties of the complement of the modal, rather than via the binding of a contextual variable. In the same line, the various problems raised by a quantificational analysis of modals motivate a shift to the assumption that a notion of CHOICE is part of the central lexical content of the predicate itself. Existential modals are equated with a simple assertion that something is one/a choice for the individual; universal modals assert that something is the only or exclusive choice for that individual. Seeing modals as involving choice among live alternatives can explain away classic problems such as the weakness of universal modal meanings or the interaction of deontic modals with overt disjunction. With respect to epistemic modality in general, an analysis is motivated in terms of alternatives that are akin to Roothian alternatives, independently needed for focus meanings. This type of reconfiguration of the modal semantics (and its sensitivity to syntactic structure) is more economical, as it uses notions that are independently necessary, as opposed to introducing dedicated semantic machinery.

On the morpho-syntactic side, a Spanning version of the Elsewhere Principle is presented in detail and motivated for the analysis of the data. The discussion in Chapter 1 also outlines the differences between the formalization proposed in the book and similar semantic accounts (Gehrke and McNally 2015, Grimm and McNally 2015). Although the author does not address the nominal domain, one may wonder whether some of the reconceptualizations proposed for the structuring of events could be extended to nominals. For example, there are specificity/intensional interpretations of nominals that do not pass diagnostics for raising into a domain where world information is computed. One possible explanation to be explored could attribute such readings to a “generalized abstraction” layer that could also be present in nominals.

*Situations and Syntactic Structures* represents an important contribution to formal linguistics and, more specifically, to the relationship between syntax and

semantic interpretation. The radical reconceptualization of the nature and meaning of auxiliaries, as well as the wider implications of the detailed and very carefully laid-out analysis in this volume make it a must-read not only for scholars who specialize in these classic problems but also for advanced undergraduates, graduate students, linguists and other types of researchers who are interested in the study of human language within cognitive sciences.

#### REFERENCES

- Fine, Kit. 2000. Semantics for the logic of essence. *Journal of Philosophical Logic* 29(6): 543–584.
- Gehrke, Berit, and Louise McNally. 2015. Distributional modification: The case of frequency adjectives. *Language* 91(4): 837–870.
- Grimm, Scott, and Louise McNally. 2015. The *-ing* dynasty: Rebuilding the semantics of nominalizations. In *Proceeding of SALT 25*, ed. Sarah D'Antonio, Mary Moroney and Carol Rose Little, 82–102.
- Henderson, Robert. 2016. Pluractional demonstrations. Ms. Semantics archive. [https://semanticsarchive.net/Archive/Dc3NTA00/plurc\\_demo\\_paper\\_v2.pdf](https://semanticsarchive.net/Archive/Dc3NTA00/plurc_demo_paper_v2.pdf)
- Wiltschko, Martina. 2014. *The universal structure of categories: Towards a formal typology*. Cambridge: Cambridge University Press.