

Kinds, things, and stuff: Mass terms and generics. Ed. by FRANCIS JEFFRY PELLETIER. New York: Oxford University Press, 2010. Pp. 248. ISBN 9780195382891. \$74 (Hb).

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Kinds, things, and stuff: Mass terms and generics is the edited proceedings of a 2006 international conference on the cognitive aspects of generics and mass terms. The general topic is the connection between psychological and linguistic studies. How are generics and mass terms represented in the mind? What concepts and psychological mechanisms are invoked in the comprehension and production of sentences containing them? How do children acquire these concepts? Some chapters also consider what psychological studies can tell us about the proper linguistic and semantic analyses of generics and mass terms. The book is divided into two parts, the first on generics, and the second on mass terms. Each part begins with a philosophical introduction by the editor Pelletier, which provides a clear picture of the key issues in each field. This is followed by several chapters in which the authors present their own research in a clear and engaging fashion.

The term ‘generics’ covers two main types of phenomena: (i) cases in which a noun phrase refers to kinds, as in *The dodo is extinct*, and (ii) cases where the sentence expresses a statement of generality, as in *Fred drinks whisky after dinner*. Both types often cooccur, as in *Potatoes contain vitamin C*, which expresses a general truth about the kind POTATO, which the bare plural *potatoes* refers to.

Now, psychological studies try to uncover the concepts and psychological mechanisms invoked in thinking and talking. By contrast, natural language semantics studies only under what objective conditions sentences are true or false. The perspectives and the object of investigations of the two disciplines are thus different. GREG CARLSON, in ‘Generics and concepts’, discusses whether the gap between them can be narrowed in the case of generics. As he shows, there are some interesting cases where natural language data seem to correlate well with a psychologically motivated distinction, namely the distinction between kind properties and statistical properties put forward by Prasada and Dillingham (2005). Compare the following sentences.

- (1) a. Dogs have four legs.
- b. A dog has four legs.
- (2) a. Madrigals are popular.
- b. #A madrigal is popular.

While both sentences in 1 can express a general truth, only the first sentence in 2 can. Working on the formal semantics of generics, Greenberg (2003) has suggested that in a generic sentence with a singular indefinite subject, there must be a ‘principled connection’ between the kind denoted by the subject and the property ascribed to it. The notion of ‘principled connection’ she uses seems to be much the same as that put forward by Prasada and Dillingham (2005). Moreover, Carlson suggests that this very notion is also involved in the work on generics by some other semanticists.

Presenting his experimental work with Dillingham, SANDEEP PRASADA, in ‘Conceptual representation and some forms of genericity’, suggests that people represent a principled connection between the type of thing that something is and some of its properties, which they call ‘principled’ or ‘k(ind)-properties’. Thus, the property of a dog having four legs is a principled property of dogs, which then enters into explanations (Fido has four legs because it is a dog) and into normative judgments (since Fido is a dog, it should have four legs). By contrast, other properties, such as the property of a barn being red, which are called ‘statistical’ or ‘t-properties’, do not enter into such explanations and judgments. The chapter further includes a discussion of the ASPECT HYPOTHESIS, according to which representing a principled connection between a kind and a property requires representing the property as one aspect of being that kind of thing. I must confess that as a nonspecialist of the work referred to in this chapter, I had some problems understanding what the aspect hypothesis really meant and hence following the discussion in detail.

In ‘Are all generics created equal?’, FRANCIS JEFFRY PELLETIER considers generic sentences such as *Birds fly*, *Most birds fly*, and *Birds usually fly*. He examines whether they have the same

meaning or information content by experimentally testing speakers' intuitions about 'default reasoning' arguments like that in 3, where premise 1 is replaced by a generic sentence like the ones above.

(3) Premise 1: ...

Premise 2: Tweety and Polly are birds.

Premise 3: Polly doesn't fly.

Conclusion: Therefore, Tweety flies.

Subjects find the argument more valid when the first premise is *Birds fly* than when it is *Most birds fly* or *Birds usually fly*. The combination of results obtained with different argument patterns suggests that these generic sentences do not have the same meaning.

JAMES A. HAMPTON, in 'Stability in concepts and evaluating the truth of generic statements', deals with the nature of human concepts and argues that they are organized as suggested in prototype theory. In particular, a concept is structured in terms of a cluster of attributes that are typically true of the members of the category. In a first set of experiments, Hampton examines vague concepts and the instability of semantic judgments. In a second set, he studies issues more related to genericity, such as the modifier effect. Several experiments show that on a rating scale, *Ravens are black* is judged more true than *Young ravens are black*. He concludes from this that the prototype of a modified concept (young raven) bears no direct relation to the prototype of the unmodified concept (raven). Such findings should be taken into account by semantic theories of generics.

SUSAN GELLMAN, in 'Generics as a window onto young children's concepts', studies how children learn language, in particular, when and how they learn to interpret generic sentences such as *Doggies poop* and *Elephants like hay*. She finds that by two and a half years of age, children spontaneously initiate generic talk, and that by four, they produce it as often as adults. They use form-class cues to identify generics, interpreting questions like *Do the birds fly?* as specific, and questions like *Do birds fly?* as generic. Moreover, three- and four-year-olds also use contextual cues to determine whether certain plural noun phrases should be interpreted generically or specifically. Based on her findings, she suggests that the generic interpretation is in fact the default one. The task of the child learning English is to discover the many different cues that can signal that a sentence is specific. Gellman's theory seems to make a prediction about children learning Mandarin. In Mandarin, the simplest sentence is of the form noun + verb (+ direct object). There is no inflection on nouns or verbs (except the optional marking of plurality for a restricted subclass of common nouns). Sentences containing bare nouns appear to be more frequent in Mandarin than in English. Given this, it seems children should take simple sentences in Mandarin, as well as many sentences where the noun occurs bare, to be generic by default. It remains to be seen whether this prediction is borne out.

The second part of the book focuses on mass terms. In many languages, including English, common nouns are divided into two morphosyntactic subclasses: mass nouns and count nouns. A defining characteristic of mass nouns—like *milk*, *gold*, and *furniture*—is that they are invariable in grammatical number, while count nouns—like *rabbit*, *bottle*, and *table*—can be used in the singular and in the plural. (This is the traditional and dominant view, although there are important dissenting voices.)

Extending earlier work done with Anna Wierzbicka, CLIFF GODDARD, in 'A piece of cheese, a grain of sand: The semantics of mass nouns and unitizers', suggests that there are in fact many subclasses of mass nouns. He focuses on concrete mass nouns, those that apply to concrete entities like *sand* or *silverware*. He argues that we have different ways of categorizing what they apply to, and that these categorizations determine seven different subclasses of concrete mass nouns. The relevant factors include whether the referent has recognizable parts and whether these are named (*grain of rice*) or not (as with *gravel*); and whether the noun can be combined with various partitive nouns such as *piece* and *lump*, and if so, with which nouns. The observations are interesting and very detailed. It seems that one can indeed attribute a common meaning (or 'categorization') to certain constructions (e.g. *grain of* + mass noun). Still, in my view, these ob-

servations do not challenge the traditional, syntactic division of common nouns into count and mass. What they show is that when one looks at extremely specific semantic phenomena, one can uncover various semantic regularities, which otherwise go unnoticed.

EDWARD J. WISNIEWSKI's 'On using count nouns, mass nouns, and pluralia tantum: What counts?' presents evidence in favor of the hypothesis that the mass/count distinction is to a large degree conceptually based, but not completely. He claims that, by and large, count nouns refer to individuals, while mass nouns refer to nonindividuated entities. This is understood as a cognitive claim: it is not the ontological properties of entities *per se* that are essential, but instead our apprehension of them in context, depending on our goals. Thus, in most contexts, a bench will be apprehended as an individual. But it can also be viewed as a nonindividual entity for certain communicative purposes (*Leave me more bench, please!*). Wisniewski discusses a number of experiments that support this view. In many languages, there are both count nouns and mass nouns that apply to 'aggregates', that is, multiple, relatively small, homogeneous constituents: *grapes* is count, while *sugar* is mass. One of the experiments shows that aggregates tend to be named by count nouns when their elements are easily distinguishable. Overall, the data and experiments discussed are very suggestive, ranging over a great many facts and exceptions. But I think the view advocated faces one difficulty: it seems rather hard to test its validity, since the author builds into it that other communicative functions can override it, without specifying precisely when this should or should not happen.

The second part ends with FEI XU's 'Count nouns, sortal concepts, and the nature of early words', which presents the results of several years of research on the formation of sortal concepts and the acquisition of count nouns by infants. Many or most count nouns seem to be sortal terms, that is, they provide criteria of individuation and identity. The experiments Xu discusses suggest that infants begin to represent sortal concepts by the end of their first year. They also indicate that there is a strong continuity between early and later word learning, contradicting the common idea that infants undergo very substantial conceptual change.

In conclusion, this volume is a nice collection of essays and gives the reader a detailed picture of how psychological and linguistic research can interact, first concerning generics, and second concerning mass terms.

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Introducing semantics. By NICK RIEMER. (Cambridge introductions to language and linguistics.) Cambridge: Cambridge University Press, 2010. Pp. xv, 460. ISBN 9780521617413. \$41.

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As Arthur C. Clarke memorably said, 'Any sufficiently advanced technology is indistinguishable from magic' (Clarke 1973 [1962]:21). One might equally well say, 'any sufficiently advanced vocalization is indistinguishable from magic'. It enables us humans to make things happen, to give the world meaning, and, most importantly, to gain access to each other's minds and to understand each other. Nick Riemer's introduction to semantics provides readers with a