## **Book Review**

*Category Mistakes*, by Ofra Magidor. Oxford: Oxford University Press, 2013. Pp. xi + 171. H/b £32.50, P/b £16.99.

Category mistakes – sentences like 'Julius Caesar is a prime number', 'Colourless green ideas sleep furiously', or 'Saturday is in bed' – are theoretically interesting precisely because they are marginal: as by-products of our linguistic and conceptual systems lacking any obvious function, they reveal the limits of, and interactions among, those systems. Do syntactic or semantic restrictions block 'is green' from taking 'Two' as a subject? Does the compositional machinery proceed smoothly, but fail to generate a coherent proposition or delimit a coherent possibility? Or is the proposition it produces simply one that our paltry minds cannot grasp, or that fails to arouse our interest? One's answers to these questions depend on, and constrain, one's conceptions of syntax, semantics, and pragmatics, of language and thought, and of the relations among them and between them and the world.

A century ago, Russell inspired philosophers to wield the concept of categorical types as a big stick in pursuit of big philosophical game. Types were deployed negatively by logical positivists like Carnap and ordinary language philosophers like Ryle to dissolve long-standing metaphysical problems as nonsense thrown up by misuse of language. But they were also deployed positively by theorists like Russell, Strawson and Evans to construct or reveal syntactic and semantic structures that more transparently limned the bounds of conceptual and metaphysical possibility. Early Chomskians likewise encoded sortal categories as 'selection restrictions' on fully grammatical composition, or at least on semantic meaningfulness. (Indeed, some aspired to treat such recalcitrant phenomena as metaphor in grammatical terms, claiming that the composition of cross-categorial sentences like 'God is my rock' proceeds by algorithmic transformation of encoded selection restrictions.)

Despite, or perhaps because of, their intimate connection to such fundamental methodological and metaphysical issues, category mistakes have received little focused attention in the last few decades. When they are mentioned, it is usually in an offhand remark that because cross-categorial sentences are obviously meaningless, they cannot play a certain functional or argumentative role, with no attempt to justify this assumption or work out its implications. A sustained analysis of category mistakes is thus highly

welcome; and Ofra Magidor's agile analysis fills the bill in a way that exemplifies the best virtues of contemporary analytic philosophy.

In place of the grand theoretical constructions and destructions of earlier eras, Magidor presents a careful, even-handed consideration of the four main explanations one might offer for what is wrong with cross-categorial sentences: that they are syntactically ill-formed, that they are semantically meaningless, that they have meaning but lack truth-values, and that they are pragmatically infelicitous. Along the way, she synthesizes discussions from linguistics, logic, and the philosophy of language, abstracting away from a host of potentially overwhelming details to present key ideas clearly and accurately.

Prima facie, it might appear that a functional type-theoretic semantics, in a broadly Montagovian vein, would be a natural fit for implementing the view that cross-categorial sentences widespread are meaningless. (Depending on one's views about the relation between syntax and semantics, this might also support the view that they are syntactically ill-formed.) In particular, one might take ordinary predicates to denote functions from an appropriate sub-class of the overall domain of individuals to truth-values (i.e., to be of type <en, t>, where 'n' denotes a sortal category). Magidor argues that this appearance is an illusion. For one thing, many expressions, such as 'is interesting' or 'very', take semantic values that cross multiple categorial boundaries; so we either need to treat such terms as massively ambiguous, or posit highly gerrymandered, expression-specific semantic values for them – or else admit that category-crossing need not undermine meaningfulness (48-55). This problem is exacerbated by the extreme specificity of some of the operative categories: for instance, Hebrew has distinct verbs for picking grapes and picking dates, the cross-application of which generates a category mistake (35). For another, Magidor claims that clearly meaningful sentences like 'That is green' or 'The thing I am thinking of is green' can express category mistakes (for instance, when the noun phrase refers to the number two'), and that substitution of co-referring terms should not undermine meaningfulness.

Indeed, as Magidor argues, the problem here is much more general, because cross-categorial predications are systematically implicated within the compositional machinery in ways that make them difficult or impossible to excise: conjunctions, quantifier phrases, and propositional attitude constructions can all take category mistakes as constituents, and produce results that either are themselves intuitively meaningful, such as 'George dreamed that his toothbrush was pregnant' (59), or else can at least be used to generate clearly meaningful sentences via plausible compositional principles (57). Similar considerations push us to acknowledge that such sentences express at least partial propositions. But positing propositions that possibly or necessarily lack truth-values has high costs for classical logic, forcing us to deny plausible principles like 'Necessarily, the proposition that p is true if and only

if p' (87). Thus, Magidor concludes, we should accept that category mistakes are meaningful, and express truth-valued propositions, across the board.

Instead, Magidor proposes to explain category mistakes' infelicity as the result of presupposition failure. At an intuitive level, both category mistakes and presupposition failures produce a similar feeling of being stymied: of not knowing how to even start assessing or responding to the statement. In a more technical vein, they display markedly similar behavior in complex constructions. In particular, the infelicity of an 'atomic' category mistake typically projects up through negation, conditionalization, conjunction, and questions, but is blocked when the clauses are related by entailment in specific ways, as in 'If numbers are coloured, then the number two is green' (135).

These arguments for a presuppositional analysis are novel and compelling. But they also somewhat curtail the force of Magidor's arguments against truth-value gaps: after all, many people also have the strong intuition that statements with false presuppositions lack truth values; and leading accounts of presupposition, like Heim's, posit truth-value gaps. I think such intuitions are more variable, and merit less weight, than pro-gap theorists do. But one way to take Magidor's arguments is as showing that the debate should be waged at the (hotly contested) level of presuppositions in general, with her anti-gap arguments adding grist to the larger argumentative mill.

Magidor herself advocates a neo-Stalnakarian view of the relevant sort of presupposition failure, on which lexical meaning fixes which presuppositions are triggered, but 'whether or not they are taken for granted in context depends on the beliefs and assumptions of the participants of the conversation' (152). She describes this account as 'pragmatic', insofar as the presence of the infelicity she takes to be diagnostic for category mistakes depends on interlocutors' assumptions, rather than on what actually is true: thus, if the hearers falsely think the speaker is referring to a chair when she says '[That/the thing George talked about yesterday at noon] is green', they won't balk in the way they would if they knew the referent was the number two. The proponent of a more fully semantic presuppositional account is likely to respond that in such a case the hearer (and possibly speaker) merely fail to recognize what really is a category mistake. More compelling is her point that contextual variation in background assumptions can transform a category mistake into a true (or contingently false) sentence, as in 'Space is curved' in the context of modern physics, or 'This woman fathered my children' where the referent had transitioned their gender (151). This suggests that category-mistake-generating assumptions need not be written into the lexicon – or at least, that the boundary between changes in meaning and changes in empirical assumptions is not as sharp as the defender of a distinctively semantic account needs it to be.

Nonetheless, a strong intuition remains that *something* distinguishes category mistakes from more run-of-the-mill utterances involving

presupposition failure like 'Her husband adores her' said of an unmarried woman. Magidor explicitly disavows the project of characterizing the class of category mistakes (3), and says she suspects that informative necessary and sufficient conditions are not forthcoming (146). Instead, she restricts herself to explaining why that class, whatever its exact boundaries might be, produces the phenomenology of infelicity that it does. However, it is not obvious that category mistakes do exhibit a unified phenomenology: some classic cases, like Ryle's 'She came home in a flood of tears and a sedan chair', produce only a feeling of jokiness; while others, like 'Quadrilaterality drinks procrastination' or 'The book who is on the table is red', verge on ill-formedness. Nor is it obvious that the variation in phenomenology correlates with variation in the violated presuppositions' degree of contingency.

Magidor does offer a few, non-commital comments about the characterization question at the very end of the book. In previous work, she has argued that category mistakes trigger a presupposition, not just that the referent(s) of the subject term k possesses some feature G, but also that kbelongs to a category C, in a context in which it is taken for granted that Cs are not G (so, for instance, 'Two is green' violates the presupposition that two is a number where it is further assumed that numbers are not coloured) (147). She expresses skepticism about this view here, but without elaboration. I would have liked a more systematic survey of the range of possible characterizations and their main weaknesses. If anything, demonstrating the difficulty of positively characterizing the class of category mistakes would bolster Magidor's contention that the phenomenon is pragmatic. I also wanted to hear at least a bit about category mistakes in thought. Many theorists have taken concepts to exhibit parallel limitations on full combination; and at least some, like Evans, take the conceptual case as basic. I suspect Magidor's account can be extended to thought, but it is not obvious exactly how, or if so, what the appropriate order of explanation would be. Moreover, if it can be extended, this might temper the sense in which we should regard the view as pragmatic.

More generally, I wanted to hear more about the view's implications for the deeper methodological and substantive questions that motivated Russell and others to focus so much attention on category restrictions in the first place. My own sense is that the ambitious type-driven projects, both negative and positive, that animated philosophy in the early and mid twentieth century withered in significant part because the connections among syntax, semantics, reference, use, ontology, and possibility turned out not to be as robust or systematic as their proponents hoped. I take many of Magidor's arguments for a pragmatic analysis to provide indirect support for this diagnosis. But if so, what follows for our broader understanding of how language connects to the world? Of language as a guide to conceivability and possibility? These questions are inherently interesting; and even largely negative answers to them are likely to have important methodological consequences. I hope Magidor uses the careful,

illuminating groundwork she has accomplished here as a springboard to tackle these foundational issues in future work.

Rutgers University elisabeth.camp@rutgers.edu doi:10.1093/mind/fzw007 ELISABETH CAMP<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Thanks to Dan Harris for helpful discussion.