Douglas Ehring. *Tropes: Properties, Objects, and Mental Causation*. Oxford University Press 2011. 280 pp. $80.00 USD (Hardcover ISBN 9780199608539); $25.99 USD (Paperback ISBN 9780198703037).

Ehring's *Tropes* is an intellectual *tour-de-force*…of a kind. In reading it, that old story about a couple of admirers of Michaelangelo's *David* comes to mind—Q: 'How do you think he did it?' A: 'He took a chunk of marble and chipped away everything that didn't look like David.' Ehring uses the chisel of finely honed logic to hammer away on opposing ontological views. What's left? Natural Class Trope Nominalism [NCTN].

The book is divided into two parts. The first part, 'Tropes,' consists of five chapters. Chapter one purports to show that since universals (if there are any) cannot be clearly distinguished from particulars, any ontological theory that relies upon this distinction will be inadequate. Chapter two argues that the central reason for believing in tropes is that the concept of tropes solves certain ontological problems contending theories cannot. Chapter three discusses how tropes are individuated (as it turns out, numerically only). Chapter four considers bundle theory—the idea that objects are bundles of tropes and do not consist in a substratum or bare particular instantiating various properties considered as universals. Chapter five applies the lessons learned to the philosophical problems of mental causation.

The second part of the book, 'Natural Class Trope Nominalism,' consists of three chapters: an argument in favor of NCTN over competing theories; a discussion and refutation of classic objections to natural class trope nominalism; and a consideration of 'determination' objections.

In general, trope theory is an ontological position that distinguishes itself in denying universals—putative abstract 'entities' that can be multiply located in (and possibly outside of) space and time. Instead, trope theorists propose that the basic building blocks of reality are simple abstract particulars—abstract, in that tropes are not themselves entities; particular, in that a trope is a reality locatable at exactly one place and time (leaving the complexities of quantum reality to one side). Entities are composed of bundles of tropes; tropes are not composed at all.

Ehring's basic claims are that concrete particulars (things, objects) are wholly constituted by and are identical with complete bundles of compresent properties. Those properties are tropes, not universals. Bundles are neither sets nor 'states of affairs' (Armstrong), and 'compresence' is ireducible. Ehring addresses a series of possible objections to this general theory, including that this theory makes all properties of an object 'essential' and that it cannot adequately account for change in objects.

Ehring admits that NCTN 'does not currently enjoy a "live option" status among philosophers who work on the "problem of universals."' He confesses: 'I do not know of any other contemporary adherents to this view' (203). Ehring considers two alternative conceptions of tropes. Standard Theory [ST], following D.C. Williams and Keith Campbell, holds that the natures of tropes are 'identical to their particularity' and 'resemblance between tropes is determined by the nature of the tropes, not the other way around.' Resemblance Trope Nominalism [RTN] maintains that the natures of tropes are 'determined by their resemblance relations to other tropes, as are their membership in natural classes of tropes.' A key difference between ST and RTN is that, for the former, a trope just

is what it is and has a nature of its own (a view that parallels the essentialism found in the theory of universals), whereas for the latter, the 'nature' of a trope is a function of 'resemblance,' which is held to be primitive (175).

NCTN argues that it is the membership of a trope in a natural class that determines its nature. Membership of a trope in a natural class 'is not determined by resemblance relations among tropes' (175). Questions immediately arise: if the natural class determines the nature of its member tropes, what conferred membership in this particular natural class on some tropes rather than others in the first place? And what becomes of 'resemblance' if it is not a factor in natural class membership? Indeed, under this conception, it is difficult to understand what a 'natural class' might be and how tropes are to be individuated.

For instance, in chapter six, Ehring argues that on Campbell's conception of a trope's nature being identical with its particularity, a trope would not be simple (which tropes are supposed to be, by definition). Ehring reads 'a trope's having a nature' to mean that 'nature' is a 'constituent' of that trope. But each trope is a particular, numerically distinct from other tropes. Thus each trope would be constituted by both a 'nature' and a 'particularity,' meaning that tropes would not be simple. Suppose, then, that tropes are not simple, but complex, consisting of a 'thin' trope (the particularity component) and an intrinsic nature trope that is neither an instantiation of a universal nor relational. But then, argues Ehring, this would lead to an infinite regress. Why? Since that 'nature' component is, itself, a particular (according to Campbell, again, a trope's nature is identical to its particularity), it, too, must have both a 'nature' and a 'particularity' component. And so on (183-4).

Setting aside whether this is a fair reading of the implications of Campbell's position, we can ask: how does Ehring understand a 'nature'? In sum, a trope's nature is the *set* of all natural classes of which it is a member, but the trope is not identical to that set (i.e., a trope is *not* identical to its nature); a trope's nature is not a part or component of a trope. Would this imply that tropes are something like 'bare particulars'—making them very un-property-like? Ehring answers that tropes are nothing, so to speak, without regard to the classes of which they are a member. As members, they are properties, and bare particulars as traditionally understood are never properties (193ff.).

But the implication is that a trope *in itself* can offer no clue as to the character of a class. Class membership confers nature on the trope; the trope cannot confer 'nature' on a class. This is exceedingly puzzling. Why is *this* type of class different from *that* type of class? *Just because it is* (189 n.19; 198). Now Ehring notes that this same move is made in both standard trope theory and in the theory of universals. It is an inescapable fact that there must be primitives in any ontological theory. The question is where one decides to put one's foot down. That such fundamental problems appear insuperable likely accounts for the lack of enthusiasm for NCTN.

But Ehring is undaunted. Indeed, *Tropes* unleashes a barrage of arguments, sometimes directly in support of NCTN and its attendant 'bundle theory,' but more often to show that *at worst* NCTN is liable to no more devastating criticism than alternative views. Those arguments are carefully, perhaps punctiliously, reasoned with attention to nuance and sensitivity to even the most remotely plausible objections. Ehring seems diligent in having taken into account questions and criticism offered by the referees of his manuscript, and footnotes regularly contain Ehring's attempts to address the concerns. Unfortunately, there is too much of substance in these footnotes that might have been integrated into the main body of the discussion for the sake of clarity and argumentative

effectiveness. The sheer *density* of argumentation is somewhat infelicitous. Many of these arguments need room to 'breathe,' so to speak. There is a bit too much hair-splitting and not quite enough elaboration.

It is impossible to scratch even the surface of the large number of arguments Ehring puts forth in *Tropes*, nor to consider the important 'add-on' theories intended to buttress NCTN, e.g., three-dimensionalism (for considerations of property persistence, see 53ff.) and counterpart theory (to avoid commitment to modal realism, see 206ff.). The exposition does not build towards a comprehensive theory, and the book would have benefitted from a concluding chapter summarizing the findings.

Will *Tropes* win converts to NCTN? It is doubtful. First, it is questionable whether a one-category ontology of tropes is sufficient for understanding the world. Second, assuming that one-category trope ontology is deemed adequate, the *nominalism* of NCTN raises additional significant problems for a rich understanding of reality. Neither doubt is specific to Ehring's particular position, but when the troubles are combined as they are in NCTN, the prospects for the theory dim. NCTN's purported solutions to relevant philosophical problems may come at too high a price.

Still, for the philosopher engaged in this ontological work, *Tropes* is a valuable resource and it deserves serious consideration. Serving as a reference, it is a book to be returned to on many occasions by both engaged professionals and advanced students. This book is not for neophytes, despite any promise of generality its title might convey. Familiarity with much of the literature is taken for granted. There are some gaps in terms of the wider conversation on tropes, not the least of which are the significant arguments against the existence of (at least Campbellian) tropes (e.g., Levinson). But in the end, the book is essential reading, requiring ample time for digesting, for anyone interested in contemporary issues in ontology, particularly trope theory.

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