

former non-Christian philosophers when speaking about God as well as beyond other theologians who set out to elucidate the Trinity (for example, Hilary of Poitiers and Marius Victorinus).

Matthews's introduction pays special attention to the influence Augustine played on later thought. For example, *DT* 8 taught Anselm the interplay between faith and knowledge in theistic inquiry. Augustine here relies on mental representation to free the searcher from the problematic paradox of loving someone he has not yet met: even to be able to think of someone (for example, the Apostle Paul), is enough to "know" him enough to begin to love him. Descartes receives the most attention in the examination of Augustine's influence. Although he denies having first read Augustine's version of the *cogito* as found at *DT* 15—*si fallor, sum*—Descartes's reliance on the move from mental certainty to existential actuality is clearly Augustinian in formulation.

In picking up this work, two major problems quickly become obvious. Matthews's previous books and essays on Augustine have been as comprehensive as they have been illuminating but here he unfortunately limits his commentary to brief sound bites; in fact, his entire commentary is limited to only twenty-one pages. The reader is left wanting to hear more from him. Second, one wonders why Cambridge decided simply to reissue McKenna's 1963 translation as found in the Catholic University of America's *The Fathers of the Church* series. Matthews justifies this move by stating that other available translations are either "anti-quoted" or too free in their renderings (p. xxxi). Despite this criticism, however, Edmund Hill's *The Trinity* (Brooklyn: New City Press, 1991), with its extensive commentary and helpful notes, much better captures the language and intent of Augustine. There are not many philosophical projects greater than examining how the human person mirrors the divine and, as such, the Cambridge series is to be commended for including Augustine's *DT*, but this classic deserves more attention than they are apparently willing to give.—David Vincent Meconi, S.J., *University of Innsbruck*.

BUZAGLO, Meir. *The Logic of Concept Expansion*. New York: Cambridge University Press, 2002. xi + 182 pp. Cloth, \$55.00—Buzaglo offers a systematic account of nonarbitrary concept expansion in mathematics. Roughly, such expansion involves taking a concept, based upon its rules of application, to apply to objects beyond its intended domain. Buzaglo's book is directed primarily at philosophers of mathematics, though it should equally interest philosophers of science (themselves long concerned with the notion of concept expansion) and philosophers of language and logic. It should also interest logicians and mathematicians. Though Buzaglo does not always fully rebut opposing views, he is clear that his book is meant to lay the groundwork for a continuing research program. Graduate students and professional philosophers would profit from the book.

Buzaglo's introduction presents the notion of nonarbitrary concept expansion via examples: "The concept of square root was expanded to include the negative numbers; the concept of power, originally defined only for the natural numbers, was expanded to include zero, fractions, and real and complex numbers; the logarithm function, which was originally defined only for positive numbers, was expanded to the negative numbers" (p. 1). Regrettably "non-arbitrary concept expansion" is not defined until chapter 3. This detracts from Buzaglo's otherwise lucid exposition.

Chapter 1 sketches pre-Fregean debates concerning the legitimacy of concept expansion, pausing on a proposal by George Peacock, a nineteenth-century mathematician, that algebraic forms can "suggest" application beyond their domain.

Chapter 2 evaluates what Buzaglo takes to be Frege's three arguments against concept expansion. The first, from realism, is that concepts are unchanging. The second, from determinacy, is that concepts must be defined everywhere. Buzaglo takes most seriously Frege's third argument, from extensionalism: if a concept is expanded, then its extension changes, potentially changing the truth-value of a sentence containing it—a consequence that both Frege and Buzaglo reject.

Chapter 3 starts by asking how Frege explained alleged concept expansions. Buzaglo contends that Frege's explanation that concept expansion is really concept replacement needs refining, since the new concept is related to the old. Buzaglo proposes using Tarski's notion of truth in a model and the possibility of embedded models to ensure the stability of the truth-value of a sentence while explaining how concepts can be expanded. Nonetheless, this chapter largely details Buzaglo's formal analysis of concept expansion. Only chapter 3 presupposes a background in formal logic.

Rather than explicating chapter 3's conclusions, chapter 4 argues that nonarbitrary concept expansion is a rational process, claiming that an expansion that seems "forced" by rules governing a model is a "basic procedure in which human rationality is manifested" (p. 59).

Confusingly chapter 5 then explicates chapter 3. It does so by providing a theory of concepts for Buzaglo's formal analysis. Buzaglo explains that his analysis allows distinguishing *concepts* from *stages* of concepts, where a concept includes all its stages and a stage is an instance of a concept occurring between one expansion and the next. Instead of attributing a single truth-value to a sentence, Buzaglo would attribute a tree of truth-values, so that at different stages of a concept the truth-value of any sentence containing it can be different. Nonetheless, for Buzaglo, neither a concept nor a stage itself ever changes extension, thus avoiding Frege's third argument against expansion.

Chapter 6 examines the debate between Frege and formalists concerning the ontological status of the products of expansions. Buzaglo suggests that his analysis allows a compromise, though it seems doubtful that Frege could accept it.

Chapter 7, nonessential to Buzaglo's discussion, claims that Gödel was operating with the notion that expansions can seem forced by rules governing a model, and that this notion is connected to Gödel's claiming that concepts are real and in some sense perceivable.

Chapter 8 applies Buzaglo's analysis to the category of thought. Emending Frege's view that a sentence expresses either a complete thought or none at all, Buzaglo proposes the category of "inchoate" thought, corresponding to what is grasped before assigning a truth-value to a thought in a nonarbitrary expansion. Buzaglo claims that questions expressing inchoate thoughts (unlike questions concerning fiction, which, for Frege, express no thoughts) can be scientifically investigated.

Chapter 9 argues that the category of inchoate thought provides a better way of understanding paradoxes of set theory. Such paradoxes, Buzaglo claims, do not result from the nature of concept expansion generally but from the failure of these particular expansions to complete inchoate thoughts.

The epilogue suggests directions for further investigation.

The Logic of Concept Expansion is ambitious and innovative, and its proposed research program promising. Though some of its arguments are underdeveloped, its order of presentation sometimes confusing, and its central notion—nonarbitrary concept expansion—defined long after it should have been, anyone interested in the logic of concept expansion should read this book.—Nathaniel Goldberg, *Washington, DC*.

DUNAYEVSKAYA, Raja. *The Power of Negativity: Selected Writings on the Dialectic in Hegel and Marx*. Edited and Introduced by Peter Hudis and Kevin B. Anderson. Lanham: Lexington Books, 2002. xlii + 386 pp. Cloth, \$100.00; paper \$24.95—Dunayevskaya is a unique thinker for the twentieth century. She combines an involvement in freedom struggles with a very deep commitment to philosophical ideas and exploration. She served as secretary to Leon Trotsky in 1937–38, but then broke with him in 1939 during the Hitler-Stalin pact and developed a very sophisticated analysis of state capitalism. "She argued that Roosevelt's New Deal, Hitler's Germany, and especially Stalin's Russia represented varieties of a new stage of global capitalism" (p. xvii). This volume presents her life-long thinking, showing how influential her reading of Hegel was for her interpretation of how humanity works to make itself free. She used Marx and Hegel to think through how the movement of negation promotes human freedom. She explored "the positive within the negative, to express philosophically the yearning of women, children, and men to be whole human beings (p. xxix).

This volume is representative of the full range of Dunayevskaya's thought. The editors have selected from her published essays and articles and also from unpublished letters, lectures, and other works. The selections represent her range of styles and her ability to address many different audiences. Rather than begin with her first works, the volume begins with Dunayevskaya's last discussion of dialectics, written only a week before her death on June 9, 1987. Moreover, it focuses on the letters she wrote in 1953 where she breaks with Lenin and thinks through the importance of Hegel's work on the Absolutes for her understanding of Marxist humanism as distinct from capitalist forms of communism. She sees this thinking as a new beginning for herself and for Marxist