

Précis of *Morality and Mathematics*

Philosophers have long associated morality and mathematics. Plato compared knowledge of the Good to geometric knowledge (*Meno*, 86e-87b; *Republic*, Book VII). Some have taken the comparison to show that moral realism and mathematical realism are of a piece. Moore writes, ‘if a man has to add up $5 + 7 + 9$, we should not wonder that he made the result to be 34, if he started by making $5 + 7 = 25$. And so in Ethics...we need not be disconcerted that those who have committed these mistakes do not agree with us. The only difference is that in Ethics, owing to the intricacy of its subject-matter, it is far more difficult to persuade anyone...that he has made a mistake... (1903/1922, 87).’ Putnam is explicit: ‘arguments for ‘antirealism’ in ethics are virtually identical with arguments for antirealism in the philosophy of mathematics; yet philosophers who resist those arguments in the latter case often capitulate in the former (2004, 1).’

Others have taken the comparison to count against moral realism. Harman writes, ‘In explaining the observations that support a physical theory, scientists typically appeal to mathematical principles. On the other hand, one never seems to need to appeal in this way to moral principles (1977, 9–10).’ Rosenberg claims that while ‘knowledge of mathematics...is a serious problem for all naturalistic epistemologies (2018)’, ‘the hypothesis that we are equipped to know moral truths... is very difficult to sustain (Rosenberg 2015).’¹ Pigliucci insists, ‘there is no such thing as a universal morality...[I]f by ‘universal’ we mean that morality is...like mathematical theorems... then forget it...[M]orality isn’t even in the Ballpark (2018).’ And Crisp holds, ‘In the case of mathematics, what is central is the contrast between practices or beliefs which develop because that is the way things are, and those that do not....The functions of...morality, however, are to be understood in terms of well-being, and there seems no reason to think that had human nature involved, say, different motivations then different practices would not have emerged (2006, 17).’

Who is right? Do moral realism and mathematical realism stand or fall together? Can one be a mathematical realist and a moral anti-realist? The question is of considerable interest for systematic philosophy. *Naturalism*, as that term is often understood, entails mathematical realism and moral antirealism. This is not an arbitrary use of the word. Belief in naturalism involves belief in the world delivered by science. But that world is up to its ears in mathematics. For example, Carroll, a self-proclaimed naturalist, and participant in this symposium, believes that, fundamentally, there is just a state vector rotating through its Hilbert space.² How could one believe that while not believing in vectors or vector spaces? On the other hand, as Harman notes, science has no need for moral values. So, if the conjunction of mathematical realism and moral antirealism is incoherent, then naturalism, as that view is commonly understood, is too.

¹ See also Rosenberg (2012, 95).

² See Carroll & Singh (2019).

Despite the question's significance, nobody knows whether one can be a mathematical realist and moral antirealist. So, nobody knows whether one can be a naturalist, as 'naturalism' is frequently conceived. While snap judgments are a dime a dozen, defenses are almost nonexistent. For example, Putnam asserts a systematic parity between arguments for moral and mathematical antirealism without argument. The problem is specialization. Metaethics and the philosophy of mathematics are mutually insulated fields, with little meaningful interface.

Morality and Mathematics aims to rectify this situation. It studies arguments for and against moral and mathematical realism, how they interact, and what they can teach us about areas of philosophical interest generally.³ The result is surprising. Our mathematical beliefs have no better claim to being self-evident or provable than our moral beliefs. Nor do our mathematical beliefs have better claim to being empirically justified than our moral beliefs. It is not even true that reflection on the genealogy of our moral beliefs establishes a lack of parity between the cases. In general, if one is a moral anti-realist on the basis of epistemological considerations, then one ought to be a mathematical anti-realist as well. But moral realism and mathematical realism do not stand or fall together, contra Putnam. Moral questions—or the practical ones stake in moral debate—are *objective* in a way that mathematical questions are not. Roughly speaking, they demand unique answers, while we can treat a disagreement over the Axiom of Choice like a disagreement over the Parallel Postulate – understood as a pure mathematical conjecture, rather than a hypothesis about physical spacetime. However, the sense in which practical questions are objective can only be explained by assuming practical anti-realism. One lesson is that the concepts of realism and objectivity, which are widely identified, are in tension.

The book concludes with a general metaphilosophical outlook. It suggests a partition of areas into those which are more like mathematics and those which are more like morality. In the former category are questions of modality (counterfactual possibility), grounding, essence, (meta)logic, and mereology. In the latter are questions of (normative) epistemology, political philosophy, aesthetics, and prudential reasoning. I argue that the former questions are like the Parallel Postulate question, qua a pure mathematical conjecture. They are verbal—but not because they are about words. They are verbal because reality is so rich as to witness any answer to them we might have proffered. While it is, say, metaphysically impossible that you could have had different parents, it is logically possible that you could have had different parents, and there is nothing more real about metaphysical than logical possibility. In general, while typical questions of modal metaphysics are not about the word 'possible,' they might as well be. All we learn in answering them is something about how we use words. By contrast practical – what to do – questions are immune to deflation. But the *reason* that they are is that they do not answer to the facts. So, their objectivity is not compromised if the facts are abundant. I conclude that the objective questions in the vicinity of questions of modality, grounding, nature, and so on are practical questions too. Although Carnap was wrong in the letter (thinking that we could 'step outside' of metaphysics), he was right in spirit. Practical philosophy should take center stage.

Bibliography

³ The remainder of this section draws on two paragraphs from § 0.3 of *Morality and Mathematics*.

Carroll, Sean M. and Ashmeet Singh. (2019) 'Mad-Dog Everettianism: Quantum Mechanics at Its Most Minimal,' in Anthony Aguirre, Brendan Foster & Zeeya Merali (eds.), *What is Fundamental?* Cham: Springer Verlag. pp. 95-104.

Crisp, Roger. (2006) *Reason and the Good*. Oxford: Clarendon Press.

Harman, Gilbert. (1977) *The Nature of Morality: An Introduction to Ethics*. New York: Oxford University Press.

Moore, G.E. (1907/1922) *Principia Ethica*. Cambridge: Cambridge University Press.

Putnam, Hilary. (2004) *Ethics Without Ontology*. Cambridge: Harvard University Press.

Pigliucci, Massimo. (2018) 'Is There a Universal Morality?' *The Evolution Institute*. Available online at <https://evolution-institute.org/is-there-a-universal-morality/>.

Rosenberg, Alexander. (2012) *The Atheist's Guide to Reality: Enjoying Life without Illusions*. New York, NY: W.W. Norton and Company.

———. (2015) 'Can Moral Disputes be Resolved?' *The Stone* (New York Times). July 13, 2015. Available online at <https://opinionator.blogs.nytimes.com/2015/07/13/can-moral-disputes-be-resolved/>.

Rosenberg, Alexander.

———. (2018) Interview for *What Is It Like to be a Philosopher?* February 23, 2018. Available online at <http://www.whatisitliketobeaphilosopher.com/#/alex-rosenberg/>.