TAKING PASCAL'S WAGER: FAITH, EVIDENCE AND THE ABUNDANT LIFE. By Michael Rota. Downers Grove, Illinois: IVP Academic, 2016. Pp. 248. Paper \$20.00, ISBN: 978-0-8308-5136-2.

Michael Rota has written a readable and well-argued book, which fills a gap between those aimed at a very broad audience and those intended for a philosophically sophisticated readership. Rota has skillfully crafted the book to appeal to an agnostic who is willing to consider the question of Christianity in practical terms, as a means to happiness and satisfaction and not merely as an academic exercise. Rota seeks to make the Christian faith not only intellectually plausible but also attractive as a way of life and admirable in its aspirations. In my opinion, Rota has largely succeeded in these aims, and this is a book I would give to non-believing friends who are not professional philosophers and who are open to reasonable persuasion.

Rota defends a form of "mere Christianity" (in C. S. Lewis's words) that avoids a precise definition in creedal terms. Such an approach has obvious advantages and disadvantages. He seeks to persuade his readers to "commit to God," an act of volition that can precede belief in the truth of Christianity. This commitment would consist in seeking a relationship with God, if there is a God, through conditional prayer, attendance at religious services, association with religious believers and seekers, reading and study of the Scriptures and Christian literature-leading, that is, as far as one can a Christian way of life. His strategy has two parts: to argue that the epistemic probability of Christianity is at least 50%, and to argue that Pascal's wager provides rationally compelling grounds for committing in this way to the Christian God, given the at-least-50% chance of Christianity's being true. Rota defends Pascal's wager in part one, argues for the probability of Christianity in part two, and concludes with three biographies of modern Christians (Dietrich Bonhoeffer, Jean Vanier, and Immaculée Ilibagiza) in part three.

Rota gives a clear explanation of Pascal's Wager, one that should make sense to those with no prior acquaintance with probability and game theory. One great strength of Rota's version of the Wager is his broad and humane conception of the values that are in play. In particular, he does not limit the payoffs of the decision matrix to matters of narrow selfinterest. Instead, he includes, among the benefits to be expected from pursuing a Christian form of life, on the assumption that Christianity is true, such things as: bringing joy to God, expressing gratitude toward God, being more likely to help others attain salvation, and becoming more aware of God's love. At the same time, Rota does not ignore such selfcentered values as increasing one's own chances of eternal happiness, and he convincingly defends the propriety and innocence of choosing partly on the basis of such considerations. He also appeals to the humility of God, as represented in Jesus' teachings, who is willing to accept self-interested seekers (even if He is not content to leave them in such a condition).

One dissatisfaction that I have with Rota's exposition is that he does not suf-

ficiently emphasize the *infinite* increase in value differentials that theological considerations elicit. If the difference between the value of knowing and enjoying God and not knowing Him is infinitely greater than the difference between any two constellations of merely mundane values, then the case for acting in light of what maximizes the theocentric values will always completely swamp any competing mundane values, so long as the probability of God's existence is finite, as I demonstrated in my 1993 paper, "Faith, Probability, and Infinite Passion" (Faith and Philosophy 10: 145–60). Given this fact, it is not at all clear that a genuine religious faith requires one's assigning a high subjective probability to the truth of Christianity, since the person so motivated will always act as if certain that Christianity is true.

As a consequence of this lack of emphasis, Rota spends a great deal of time arguing for the mundane value of religious faith (in terms of mental and physical health, longevity, and civic and personal virtues), and he postpones any consideration of such mundane negatives of Christian faith as persecution and martyrdom until page 58.

Rota's use of the Wager could be significantly enhanced by emphasizing the *epistemological* gains that are possible for the Christian form of life. Our capacity for acquiring a priori and purely theoretical knowledge in such areas as ethics, metaphysics, and natural science is much greater and more secure on theistic assumptions, as Plantinga convincingly argues in *Where the Conflict Really Lies* (Oxford: Oxford University Press, 2011) and in chapter 11 of *Warrant and Proper Function* (Oxford: Oxford University Press, 1993). If I act on the assumption of the truth of Christianity rather than on that of atheistic naturalism, I am more likely to invest my time and efforts in the rational pursuit of truth in such important areas, and thus more likely to enjoy epistemological rewards of great value (assuming that Christianity is true). In contrast, a life lived on the basis exclusively of mundane values in a naturalistic world would (if fully rational) necessarily center on narrow pragmatism: i.e., the sort of gains reliably obtainable by us on the assumption of unplanned natural selection.

Turning to part two, Rota's book includes a rigorous but accessible presentation of the cosmological argument from contingency. Rota marshals an impressive set of arguments in favor of the required principle of universal causation (i.e., the principle that all contingent things must be caused to exist). These arguments include an appeal to induction (we find many contingent things whose existence is caused), an appeal to the need to explain the apparent absence of the frequent appearance of uncaused entities, and an appeal to a priori insight. This case could be strengthened by pointing out that to deny the universality of causation is to fall prey to global empirical skepticism, as I argued in 2008 in "Epistemological Foundations for the Cosmological Argument" (Oxford Studies in the Philosophy of Religion: Volume 1, ed. Jonathan Kvanvig, Oxford: Oxford University Press, 105–33). As Rota points out, if uncaused contingent existences are possible, then there would be no ground for the unlikelihood of uncaused beginnings, since objective probabilities are grounded in the propensities of things to cause other things. Hence, we would have to take seriously the possibility that any given contingent thing came into existence without

a cause, including my current mental state, with all of its apparent sensations and memory-impressions. Uncaused sensations and impressions cannot be knowledge-conferring, so the denial of universal causality entails a complete lack of empirical knowledge.

It would have also been useful for Rota to mention, in discussing the design argument in chapters 6 and 7, the fact that the cosmological argument immunizes that argument against the infinite regress objection popularized by Dennett and Dawkins (i.e., the claim that an intelligent God would be in as much of need of a designer as an orderly universe would be).

Finally, I would argue that at least a brief discussion of the Kalam-style argument would be helpful, both because Kalam arguments are easily understood by non-philosophers and because recent work by Alexander Pruss and me has put the argument on a more secure basis: see my 2014 "A New Kalam Argument: Revenge of the Grim Reaper" (*Noûs* 48: 256–67).

In considering the design argument, Rota chose to focus exclusively on the evidence for the fine-tuning of the universe's constants and initial conditions for life, and, among the possible instances of fine-tuning, he places almost all of his attention on the fine-tuning of the cosmological constant. These are defensible choices: the scientific consensus in favor of the fine-tuning of the cosmological constant is strong, there are good grounds for setting the prior probability of the life-permitting range of the constant at an extremely low value (something in the neighborhood of one chance in 10^{42}), and it is quite hard to see how life of any kind could be possible in the sort of universes produced by too high a value (a highly dispersed hydrogen cloud) or too low a value (an extremely short-lived universe that quickly disappears into a black hole). However, there is significant cost to Rota's choices. An appeal to a somewhat broader empirical base, including especially the simplicity and elegance of the laws of nature, as emphasized by Swinburne in his 1979 *Existence of God* (Oxford: Clarendon Press), would sidestep entirely the multiverse response.

Rota provides good responses to many of the standard philosophical objections to fine-tuning, including the Star Trek objection (the fine-tuning argument fails to take into account the possibility of exotic forms of life), the merchant's thumb objection (something unlikely had to happen, so why not finetuning?), the simple anthropic objection (it can't be unlikely that the world be life-permitting, because we know that life exists), and the necessity objection (for all we know, the life-permitting parameters are metaphysically necessary).

Rota's chapter on the multiverse, however, was disappointing. He rightly points out that theism is consistent with the existence of a mutiverse. Consequently, he focuses on the relative probability of a theistic and an atheistic multiverse. He relies entirely on a single appeal to Bayesian reasoning: he assumes that the proportion of lifepermitting to life-forbidding worlds will be much higher on the theistic than on the atheistic hypothesis, and he argues that our observation that this universe is life-permitting thereby strongly confirms theism. This argument is vulnerable to two objections. First, it is not obvious that God has good reason to prefer a creation with a greater proportion of life-permitting zones, so long as the ab-

solute number and variety of life forms is maximized. We know that, in our own universe, God has permitted vast regions of cold, empty space, and long epochs of lifeless time. Second, the anthropic explanation is not in such a case obviously wrong (as it is in the case of reasoning about a single universe). What do I know when I observe that "this universe" contains life? That an arbitrarily chosen member of the multiverse permits life, or that an arbitrarily chosen member of the subset of universes containing intelligent observers like me permits life? One could make a plausible case for the second answer, in which case there is no confirmation of theism.

A better theistic strategy against the atheistic deployment of the multiverse idea is to divide and conquer. Some multiverse hypotheses rely on a specific hypothesis by which the multiverse is generated. All such multiverse-generating mechanisms must themselves be fine-tuned in order to produce enough universes with enough variety to explain the possibility of life. Other multiverse hypotheses are metaphysical in nature, postulating the actual existence of every possible world. These hypotheses are objectionable on epistemological grounds, since they provide a compelling ground for global skepticism. In a profligate

multiverse, the number of Boltzmann brains (duplicates of my current brain that appear spontaneously from thermodynamic chaos and immediately dissolve back into that chaos) vastly outnumber the number of brains whose internal representations are veridical.

Rota includes a well-written chapter on the problems of evil and divine hiddenness, drawing on recent work by Peter van Inwagen and Eleonore Stump. He also presents persuasive arguments for the historicity and credibility of Christ's bodily resurrection, making good use of N. T. Wright's scholarship in rebutting the theory that bodily resurrection was meant by the New Testament authors as a mere myth or allegory of deeper, "spiritual" truths. The book ends with three moving depictions of Christian lives well lived, highlighting the possibility of cheerfulness in the face of martyrdom (Bonhoeffer), of selfless devotion to those from whom one can expect no commensurate return (Jean Vanier's service to the mentally challenged), and of forgiveness to one's enemies (Immaculée Ilibagiza's response to the Rwandan genocide).

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