A Companion to Philosophy of Religion

Second Edition

Edited by Charles Taliaferro, Paul Draper, and Philip L. Quinn



Contents

List	of Contributors	xiii
Ack	nowledgements	xviii
	oduction to the Second Edition I Draper and Charles Taliaferro	1
Par	t I: Philosophical Issues in the Religions of the World	3
1	Hinduism Jonardon Ganeri	5
2	Buddhism Paul J. Griffiths	13
3	Chinese Confucianism and Daoism Chad Hansen	23
4	African Religions from a Philosophical Point of View Kwasi Wiredu	34
5	Judaism Lenn E. Goodman	44
6	Christianity William J. Wainwright	59
7	Philosophy in the Islamic Context Aziz A. Esmail and Azim A. Nanji	67
Par	t II: Philosophical Theology and Philosophy of Religion in	
Wes	stern History	81
8	Ancient Philosophical Theology Kevin L. Flannery	83
9	The Christian Contribution to Medieval Philosophical Theology Scott MacDonald	91

CONTENTS

10	The Islamic Contribution to Medieval Philosophical Theology David Burrell	99
11	The Jewish Contribution to Medieval Philosophical Theology Tamar Rudavsky	106
12	Early Modern Philosophical Theology on the Continent Derk Pereboom	114
13	Early Modern Philosophical Theology in Great Britain Geoffrey Gorham	124
14	The Emergence of Modern Philosophy of Religion Merold Westphal	133
	t III: Philosophy of Religion and Religious Philosophy in Twentieth Century	141
15	American Pragmatism Nancy Frankenberry	143
16	Personalism Patricia A. Sayre	151
17	Process Theology David Ray Griffin	159
18	Phenomenology and Existentialism Merold Westphal	167
19	Wittgenstein John Hyman	176
20	Thomism Ralph McInerny	189
21	Natural Theology Brian Hebblethwaite	196
22	The Reformed Tradition Nicholas Wolterstorff	204
23	The Jewish Tradition Robert Gibbs	210
24	The Christian East Paul Valliere	217
Par	t IV: The Concept of God	225
25	Perfect Being Theology Mark Owen Webb	227

		CONTENTS
26	Holiness Jacqueline Mariña	235
27	Omnipotence Joshua Hoffman and Gary Rosenkrantz	243
28	Omniscience George I. Mavrodes	251
29	Omnipresence Edward R. Wierenga	258
30	Goodness Paul Helm	263
31	Simplicity Eleonore Stump	270
32	Eternity Brian Leftow	278
33	Necessity William E. Mann	285
34	Incorporeality Charles Taliaferro	292
35	Beauty Patrick Sherry	300
36	Divine Action Thomas F. Tracy	308
37	Creation and Conservation Hugh J. McCann	315
38	Immutability and Impassibility Richard E. Creel	322
39	Providence Thomas P. Flint	329
40	Pantheism Michael Levine	337
41	Religious Language Janet Soskice	348
Par	et V: The Justification of Religious Belief	357
42	Ontological Arguments Peter van Inwagen	359

CONTENTS

43	Cosmological Arguments William L. Rowe	368
44	Teleological and Design Arguments <i>Laura L. Garcia</i>	375
45	Moral Arguments C. Stephen Evans	385
46	Arguments from Consciousness and Free Will Stewart Goetz	392
47	Miracles George N. Schlesinger	398
48	Religious Experience Keith E. Yandell	405
49	Cumulative Cases Paul Draper	414
50	Pragmatic Arguments Jeffrey Jordan	425
51	Tradition Basil Mitchell	434
52	Fideism Terence Penelhum	441
Par	t VI: Challenges to Theistic Belief	449
53	The Presumption of Atheism Antony Flew	451
54	The Verificationist Challenge Michael Martin	458
55	Theism and Incoherence Michael Martin	467
56	Foreknowledge and Human Freedom Linda Zagzebski	474
57	The Problem of No Best World Klaas J. Kraay	482
58	The Logical Problem of Evil Michael L. Peterson	491
59	The Evidential Problem of Evil Graham Oppy	500
60	Divine Hiddenness J. L. Schellenberg	509

		CONTENTS
61	Naturalistic Explanations of Theistic Belief Kai Nielsen	519
Par	et VII: Religion and Science	527
62	Historical Perspectives on Religion and Science John Hedley Brooke	529
63	Theism and Physical Cosmology William Lane Craig	539
64	Theism and Evolutionary Biology William Hasker	548
65	Theism and the Scientific Understanding of the Mind Robert Audi	557
66	Theism and Technology Frederick Ferré	566
Par	rt VIII: Religion and Values	575
67	The Ethics of Religious Commitment Samantha Corte	577
68	Divine Command Ethics Janine Marie Idziak	585
69	Natural Law Ethics Robert P. George	593
70	Religion, Law, and Politics Paul J. Weithman	598
71	Theism and Toleration Edward Langerak	606
72	Sin and Original Sin Philip L. Quinn	614
73	Atonement, Justification, and Sanctification John E. Hare	622
74	Resurrection, Heaven, and Hell Jonathan L. Kvanvig	630
75	Reincarnation and Karma Paul Reasoner	639
Par	et IX: Current Trends and New Directions	649
76	Theological Realism and Antirealism Roger Trigg	651

CONTENTS

77	Wittgensteinian Philosophy of Religion John H. Whittaker	659
78	Continental Philosophy of Religion John D. Caputo	667
79	Reformed Epistemology Alvin Plantinga	674
80	Evidentialism Richard Swinburne	681
81	Feminism Sarah Coakley	689
82	Philosophical Reflection on Revelation and Scripture William J. Abraham	695
83	Philosophical Reflection on Mysticism Anthony Novak Perovich, Jr.	702
84	Religious Pluralism John Hick	710
85	Comparative Philosophy of Religion Paul J. Griffiths	718
Res	ources for Further Study	724
Index		726

6

Christianity

WILLIAM J. WAINWRIGHT

Christianity's complex relations with philosophy can be approached from three angles – by surveying the problems which Christian philosophy of religion must address, by examining Christian theism's impact on Western philosophy and the resources it provides for solving problems arising within that tradition, and by considering Christianity's ambivalent attitudes toward philosophy.

Philosophical Problems Associated with Christianity

Christian theism is a specification of more generic religious conceptions. At the most general level, it is an instance of William James' "religious hypothesis":

- 1 There is a higher universe.
- 2 We are better off if we believe this and act accordingly.
- 3 Communion with the higher universe "is a process wherein work is really done," and effects produced in the visible world.

James's "higher universe" can be interpreted in a number of ways, however, such as an impersonal power or force, as "emptiness," as cosmic law, and so on. Theists construe it as God – an omniscient mind, an omnipotent will, an unlimited love. Christians are distinguished from other theists by their understanding of the Godhead as both one and three, and by their belief that God has redeemed the world through Jesus of Nazareth.

Many philosophical difficulties which the literature associates with Christianity are problems for any religious worldview. Whether religious hypotheses are metaphysically otiose, for example, and naturalism sufficient. Or whether religious language is cognitively meaningful and (if it is) what kind of meaning it has (see Chapter 41, Religious Language). Or whether experience of the "higher universe" is genuinely possible. Of the remaining difficulties, most are problems for any standard form of theism – whether God's existence can be proved, whether and how omnipotence (see Chapter 27, Omnipotence) and other divine attributes can be defined, whether such properties as timelessness (see Chapter 32, Eternity) and providential activity are consistent, whether miracles are possible or likely, whether God's foreknowledge and human

freedom (see Chapter 56, Foreknowledge and Human Freedom) are compatible, and so on. The problem of evil is particularly acute for theists since they believe that an omnipotent and morally perfect God knowingly permits it (see Chapter 58, The Logical Problem of Evil; and Chapter 59, The Evidential Problem of Evil). (However, some form of the difficulty besets any religious worldview which maintains, as most do, that reality is fundamentally good.) Other problems are common to Christianity and to some but not all non-Christian forms of theism. An example is the tension between strong doctrines of grace such as those found in Christianity and (for example) Sri Vaisnavism or Siva Siddhanta, and human responsibility. Another is the "scandal of particularity" — the potential conflict between doctrines of God's justice and love, and the belief that salvation depends on a conscious relation to historical persons or events that are unknown (and thus, on the face of it, inaccessible) to large numbers of people. Thus, most of the philosophical problems associated with Christian theism are not peculiar to Christianity. But some are. Obvious examples are difficulties associated with the Trinity, the Incarnation or atonement, and original sin (see Chapter 72, Sin and Original Sin).

Christian theism may also provide unique resources for dealing with problems common to other theistic or religious systems. Marilyn Adams, for example, has recently argued that Christian theism furnishes materials for handling the problem of evil. Discussions of the issue typically assume that the system of rights and obligations connects all rational agents, and that a satisfactory solution of the problem must show that evils are logically necessary conditions or consequences of "religiously neutral" goods like pleasure, knowledge, or friendship. Both assumptions are suspect. God escapes the network of rights and obligations in virtue of God's transcendence. Furthermore, God and communion with God don't just surpass temporal goods; they are incommensurable with them. The beatific vision will therefore "engulf" any finite evils one has suffered. Adams also suggests that Christian theodicists should explore the implications of such goods as Christian martyrdom and Christ's passion. Suffering may be a means of participating in Christ, thereby providing the sufferer with insight into, and communion with, God's inner life. Adams's first suggestion is available to other theists, but her second is not.

Christian philosophers in the Middle Ages addressed all of these issues. Since Descartes, they have largely confined themselves to discussing generic questions. However, there are two exceptions. Since the early 1980s, Christian analytic philosophers have turned their attention to uniquely Christian issues. Richard Swinburne's work on the atonement, Thomas Morris' book on the Incarnation, and the essays collected in *Philosophy and the Christian Faith* are important examples. The other notable exception is Immanuel Kant's and G. W. F. Hegel's philosophical reconstructions of such peculiarly Christian doctrines as original sin and the Trinity.

Christian Theism and Western Philosophy

Some intellectual historians have claimed that Christian theism's encounter with Greek thought profoundly altered the course of Western philosophy. For example, Etienne Gilson has argued that the Christian notion of God as a self-existent act of existence that freely bestows actuality on created beings had revolutionary consequences. The

basic ontological dividing line was no longer between unity and multiplicity, or between the immaterial and material, as it was in Plato, Aristotle, and Plotinus, but between a God who exists necessarily, on the one hand, and created (and therefore contingent) being, on the other (see Chapter 37, Creation and Conservation). As a result, philosophy was forced to draw a sharp distinction between a thing's being and its being a certain kind of thing, i.e., between its existence and its essence. Philosophy no longer confined itself to asking, with the Greeks, "how is the world ordered, and what accounts for its order?" (see Chapter 8, Ancient Philosophical Theology). It also asked, "why does any world exist and not nothing?" The being of things as well as their order was problematized. Others contend that these themes had further consequences. Pursuing suggestions of M. B. Foster and A. N. Whitehead, Eric Mascall has maintained that Christian theism cleared a metaphysical space within which modern science became possible. Since the Christian God is a God of reason and order, any world God creates will exhibit pattern and regularity. But because God freely creates the world, its order will be contingent. The world's structures cannot be deduced a priori, then, but must be discovered by observation and experiment. Others have claimed that Christian theism's desacralization of nature also helps explain why modern science arose in the West and not elsewhere. Christian theism maintains that nothing contingent is inherently holy. Places (Sinai, Jerusalem), persons (prophets, priests, divinely anointed kings), artifacts (the ark), and so on aren't intrinsically holy; any holiness they possess is extrinsic - conferred upon them from without by God. Nature is no longer regarded as divine and therefore becomes an appropriate object for manipulation and detached observation.

However, while these claims may point to important truths, they are overstated. The conception of God in question is not peculiarly Christian, for Muslims and Jews share it. Nor is the desacralization of nature a uniquely Western phenomenon (it occurs in Hinayana Buddhism). Furthermore, that the created order is contingent is a consequence of at least one major form of Indian theism – Ramanuja's (1017–1137) Visistadvaita Vedanta. The world's "material" ("prakritic") substrate necessarily exists (for the world in either its latent or manifest form is God's body), but the phenomenal world or manifest universe does not. God is free to create it or not (i.e., God is free either to bring the world from an unmanifest to a manifest state or not to do so), and to give it any order God pleases.

Christian theism does appear to be largely responsible for the importance of the free will problem in Western philosophy. Neither Plato's nor Aristotle's philosophical psychology contains anything that precisely corresponds to the will. Augustine is the first to clearly recognize that some moral failures cannot be plausibly ascribed to imperfections of reason or desire, and to attribute them to a misuse of will. Again, while Aristotle's discussion of voluntary and involuntary action is quite sophisticated, he does not clearly ask whether human freedom and moral responsibility are compatible with universal causal determination. Christian theism's emphasis on the will, heightened sense of humanity's moral responsibility, and vivid awareness of God's sovereignty and causal universality made this problem acute. Works like Augustine's *On Free Choice of the Will* and his anti-Pelagian writings, Anselm's *On Freedom of Choice* and *The Fall of Satan*, and Jonathan Edwards' *Freedom of the Will* raise issues which aren't squarely addressed in ancient philosophy and discuss them with a sophistication and

thoroughness which are absent in their Indian counterparts. (Indian philosophy examines these issues in connection with the doctrines of karma and God's sovereign causal activity. But the discussions are brief and comparatively unsophisticated. Ramanuja, for example, argues that God's causal sovereignty is preserved because God is the free agent's existential support and because God "consents" to their free actions, i.e., allows them to be actualized. Ramanuja thus resolves the tension between human freedom and God's causal sovereignty by restricting the latter's range. This is to dissolve the problem, not solve it.) Arguably, both the distinctions drawn and the moves made in secular discussions of the free will problem, and the importance ascribed to it, have their ultimate roots in these theological discussions.

Some Christian philosophers believe that the resources of Christian philosophy can be used to "solve" or illuminate philosophical problems arising independently of theism. Two examples will suffice. First, if natural laws are no more than constant conjunctions (as David Hume thought), they will not support counterfactuals. That striking a match is always followed by its bursting into flame does not imply that if a match were struck in certain counterfactual situations, it would burst into flame. For the conjunction could be accidental. Of course, if laws of nature were necessary truths, they would support counterfactuals. But they aren't. What is needed is an account of natural laws that respects both their subjunctive character and their contingency. Jonathan Edwards regarded them as expressions of God's settled intentions with respect to the natural world, descriptions of his habitual manner of acting. Del Ratzsch has recently argued that views of this sort can provide a more adequate account of the subjunctive character of natural laws than non-theistic alternatives. Second, other philosophers have claimed that theism alone can adequately account for the objectivity and inescapability of moral value (see Chapter 45, Moral Arguments; and Chapter 68, Divine Command Ethics). Suppose that God is the standard of moral goodness, or that moral values are necessary contents of the divine intellectual activity, or that an action's obligatory character consists in God's having commanded it. Moral facts will then be objective in the sense that they are not human constructs. If God exists necessarily, then (on the first two views), moral truths are necessary. If God necessarily exists and necessarily commands that (for example) we tell the truth, then truth telling is necessarily obligatory on the third view as well. Views of this sort can also do a better job of accommodating two apparently conflicting intuitions: that moral values exist in minds, and that morality cannot command our allegiance unless it expresses a deep fact about reality. But whatever merit these solutions to wider philosophical problems have, they are not specifically Christian. For they are also available to other theists.

Christianity's Attitude Toward Philosophy

Christianity's attitude toward philosophy has been ambivalent. One strand of the tradition is openly hostile. Its seminal figure is Tertullian (155–222).

Tertullian does not deny that the writings of the philosophers contain truths. Nor does he deny that God can be (imperfectly) grasped without the aid of revelation. For God can be known from God's works and by the interior witness of our souls. Philosophy is nonetheless repudiated. "What indeed has Athens to do with Jerusalem? the Academy

and the Church? What concord is there between heretics and Christians? Our instruction comes from the porch of Solomon, who had himself taught that the Lord should be sought in simplicity of heart. Away with all attempts to produce a mottled Christianity of Stoic, Platonic, and dialectic composition. We want no curious disputation after possessing Christ, no inquisition after enjoying the Gospel" (Roberts and Donaldson 1950, vol. 3, p. 246). Tertullian's objection is threefold. First the introduction of philosophy among Christians has resulted in heresy. Second, whereas schools of philosophy have human founders, the school of the gospel is founded by God. Christianity is a *revealed* doctrine that demands obedience and submission. Philosophy, by contrast, relies on *human* wisdom and is an expression of self-seeking and of a fallible and corrupt reason. Finally (and most profoundly), the mysteries of faith *repel* reason. "The Son of God died; it is by all means to be believed because it is absurd. And he was buried, and rose again; the fact is certain because it is impossible" (Roberts and Donaldson 1950, vol. 3, p. 535). Christian philosophy is a contradiction in terms because Christianity's truths are impenetrable to reason.

Tertullian is by no means alone. In the Christian Middle Ages, Bernard of Clairvaux (1090–1153) claimed that those who "called themselves philosophers should rather be called the slaves of curiosity and pride." The true teacher is the Holy Spirit, and those who have been instructed by God can "say with the Psalmist (Psalm 119:99) *I have understood more than all my teachers.*" Commenting on this text, Bernard exclaims: "Wherefore, O my brother, does thou make such a boast? Is it because ... thou has understood or hast endeavored to understand the reasonings of Plato and the subtleties of Aristotle? God forbid! thou answerest. It is because I have sought Thy commandments, O Lord" (Gilson 1938, pp. 12–13).

This attitude persists and is especially prominent in the Protestant reformers and among the skeptical fideists of the sixteenth and seventeenth centuries (see Chapter 52, Fideism).

An equally important, and ultimately more widespread, attitude toward philosophy was expressed by Justin Martyr (105–65), Clement of Alexandria (150–215), and Origen (185–254). Philosophy is a preparation for the gospel. According to Clement, for example, it was "a schoolmaster to bring the Hellenic mind, as the Law, the Hebrews, to Christ" (Roberts and Donaldson 1950, vol. 2, p. 305). This positive attitude toward philosophy was supported in two ways. The first was the "loan" hypothesis: the truths in Greek philosophy were ultimately plagiarized from Moses and the prophets. The second was the Logos theory: all human beings participate in the Logos – God's eternal word or wisdom who became incarnate in Jesus Christ. The Greek writers were thus, as Justin says, "able to see realities darkly through the sowing of the implanted word that was in them." Since "Christ ... is the Word of whom every race of men were partakers, ... those who lived reasonably are Christians, even though they have been thought atheists; as, among the Greeks, Socrates and Heraclitus, and men like them" (Roberts and Donaldson 1950, vol. 1, pp. 193, 178). And both Clement and Origen believe that the Logos is the archetype of which human reason is the copy.

It is important to notice, however, that while these doctrines make a positive evaluation of Greek philosophy possible, they also imply philosophy's inferiority to revelation. The loan hypothesis implies that the truths found in philosophy are fragmented and mixed with error. Whatever authority they have depends on their origin. Only in

scripture can truth be found whole and undistorted. The Logos theory implies that Christians are better off than the philosophers. For, as Justin says, Christians "live not according to a part only of the word diffused [among men] but by the knowledge and contemplation of the whole Word, which is Christ" (Roberts and Donaldson 1950, vol. 1, p. 191).

Even so, philosophy isn't *just* a preparation for the gospel. Both Clement and Origen believe that our blessedness consists in knowing or understanding the Good, and that philosophy can be employed to deepen our understanding of the truths of scripture in which that Good reveals itself. The seminal treatment of this theme is Augustine's.

Revelation is a safer and surer guide to truth than philosophy. Any truths about God taught by the philosophers can be found in scripture as well, but unmixed with error and enriched by other truths. Reason and philosophy aren't to be despised, however. Reason is needed to understand what is proposed for belief and to make the divine speaker's claims to authority credible. Nor should reason be discarded once faith has been achieved. "God forbid that He should hate in us that faculty by which He has made us superior to all other living beings. Therefore, we must refuse so to believe as not to receive or seek a reason for our belief ..." (Augustine 1953, p. 302). The mature Christian will therefore use reason and the insights of philosophy to understand (to the extent possible) what he already believes. But faith remains a precondition of the success of this enterprise. For some things must first be believed to be understood. "Therefore the prophet said with reason: 'If you will not believe, you will not understand" (Augustine 1953, p. 302). Augustine is principally thinking, in this passage, of the Christian "mysteries" (the Trinity, Incarnation, and so on). Yet he clearly believes that sound faith is needed for any adequate understanding of God. (But it is not needed for grasping some truths about God. The "Platonists" lacked faith yet not only affirmed God's existence and the immortality of the soul but also that the Logos or Word was born of God and that all things were made by God.)

Augustine's attitudes toward philosophy are echoed by Anselm and dominate the Christian Middle Ages. Modern Christian attitudes toward philosophy are, on the whole, variants of those seminally expressed by Tertullian and Augustine.

Closer inspection reveals that the two views are not always as sharply opposed as at first appears. Consider, for example, the attitudes toward reason expressed by Puritan divines, on the one hand, and by the Cambridge Platonists who opposed their so-called "dogmatism" and "narrow sectarianism" on the other.

As good Calvinists, Puritans believed that while reason was competent in "civill and humane things," it was not competent in divine things. Because of the fall, "the whole speculative power of the higher and nobler part of the Soule, which wee call the Understanding ... is naturally and originally corrupted, and utterly destitute of all Divine Light" (Robert Bolton, quoted in Morgan 1986, p. 47). Francis Quarles therefore recommends, "In the Meditation of divine Mysteries, keep thy heart humble, and thy thoughts holy: Let Philosophy not be asham'd to be confuted, nor Logic blush to be confounded. ... The best way to see day-light is to put out thy Candle [reason]" (Patrides 1970, p. 9). The Cambridge Platonists sounded a very different note. "Reason is the Divine governor of man's life; it is the very voice of God" (Benjamin Whichcote, quoted in Powicke 1970 [1926], p. 23). According to John Smith, it is "a Light flowing from the Foundation and Father of Lights." Reason was given "to enable Man to work out

of himself all those Notions of God which are the true Ground-work of Love and Obedience to God, and conformity to him" (Smith 1978 [1660], p. 382). Scripture simply reinforces and clarifies what a properly functioning reason discerns.

Neither position, however, is as extreme as this suggests. Many Puritan diatribes against reason are expressions of Puritanism's emphasis on experience and not of a belief that reason's "notional" understanding of religion is invariably false. As Arthur Dent says, "The knowledge of the reprobate is like the knowledge which a mathematicall geographer hath of the earth and all the places in it, which is but a generall notion, and a speculative comprehension of them. But the knowledge of the elect is like the knowledge of a traveler which can speake of experience and feeling, and hath beene there and seene" (Morgan 1986, p. 59).

Puritans also insisted that God's word is *intrinsically* rational. "The Sunne is ever cleere" although we are prevented from seeing it because "wee want eyes to behold it" or because it is "so be-clowded, that our sight is thereby hindered" (Richard Bernard, quoted in Morgan 1986, p. 55). Furthermore, grace can cure our blindness and remove the clouds. *Regenerate* reason can unfold scripture and defend the faith. Puritan divines were therefore prepared, in practice, to ascribe a high instrumental value to reason and humane learning. As John Rainolds said, "It may be lawfull for Christians to use Philosophers, and books of Secular Learning ... with this condition, that whatsoever they finde in them, that is profitable and usefull, they convert it to Christian doctrine and do, as it were, shave off ... all superfluous stuffe" (Morgan 1986, p. 113). Even a radical Puritan like John Penry could insist that "the Lord doth not ordinarily bestowe [full comprehension of the Word] ... without the knowledge of the artes," especially rhetoric and logic, Hebrew and Greek (Morgan 1986, p. 106). Logic, indeed, was so important that the missionary John Eliot translated a treatise on it into Algonquin "to initiate the Indians in the knowledge of the Rule of Reason" (Miller 1961 [1939], p. 114).

The Cambridge Platonists' exaltation of reason must be similarly qualified. Because of the fall, reason is "but an old MS., with some broken periods, some letters worn out," it is a picture which has "lost its gloss and beauty, the oriency of its colours ... the comeliness of its proportions" (Powicke 1970, p. 30). As a consequence, divine assistance is now necessary. And God has provided it. Not only is there "an Outward revelation of God's will to men [scripture], there is also an Inward impression of it on their Minds and Spirits. ... We cannot see divine things but in a divine light" (Smith 1978, p. 384). "Right reason" is indeed sufficient to discern the things of God, but right reason is sanctified reason. Henry More speaks for all the Cambridge Platonists when he says, "The oracle of God [reason] is not to be heard but in his Holy Temple – that is to say in a good and holy man, thoroughly sanctified in Spirit, Soul and body" (More 1978 [1662], vol. 1, p. viii).

The dispute between the Puritans and Cambridge Platonists is typical of similar disputes in the history of traditional Christianity. Attacks on the use of reason and philosophy are seldom unqualified. (Tertullian himself was strongly influenced by Stoicism.) The reason which is commended, on the other hand, is what the seventeenth century called "right reason" – a reason that is informed by the divine light and is an expression of a properly disposed heart. Conflicting views on the relation between faith and reason or philosophy within traditional Christianity are, for the most part, less a matter of outright opposition than of difference in emphasis.

Works cited

- Augustine. *Letters*, 5 vols., trans. Sister Wilfred Parsons, SND; vol. 2, *Letters*, 83–130 (*The Fathers of the Church, vol. 18*) (Washington, D.C.: Catholic University of America Press, 1953).
- Gilson, E. Reason and Revelation in the Middle Ages (New York: Charles Scribner's Sons, 1938).
- James. W. The Varieties of Religious Experience (New York: Modern Library, 1902).
- Mascall, E. Christian Theology and Natural Science (London: Longmans, Green, 1956).
- Miller, P. *The New England Mind: The Seventeenth Century* (Boston: Beacon Press, 1961) (Original edn. New York, 1939.)
- More, H. A Collection of Several Philosophical Writings, 2nd edn., 2 vols. (New York: Garland Publishing, 1978). (Original edn. London, 1662.)
- Morgan, J. Godly Learning: Puritan Attitudes towards Reason, Learning and Education, 1560–1640 (Cambridge: Cambridge University Press, 1986).
- Patrides, C. A., ed. The Cambridge Platonists (Cambridge, MA: Harvard University Press, 1970).
- Powicke, F. J. *The Cambridge Platonists: A Study* (Westport: Greenwood Press, 1970). (Original edn. London, 1926.)
- Roberts, A., and Donaldson, J., eds. *The Ante-Nicene Fathers*, 10 vols. (Grand Rapids, MI: Eerdmans, 1950). (Original edn. Edinburgh and London, 1867–72.)
- Smith, J. Select Discourses (New York: Garland Publishing, 1978). (Original edn. London, 1660.)

Additional recommended readings

- Adams, M. "Praying the *Proslogion*: Anselm's Theological Method," in *The Rationality of Belief and the Plurality of Faith*, ed. Thomas D. Senor (Ithaca, NY: Cornell University Press, 1995), pp. 13–39.
- Kretzmann, N. "Faith Seeks, Understanding Finds: Augustine's Charter for Christian Philosophy," in *Christian Philosophy*, ed. Thomas P. Flint (Notre Dame, IN: University of Notre Dame Press, 1990), pp. 1–36.
- McCool, G. Catholic Theology in the Nineteenth Century: The Quest for a Unitary Method (New York: Seabury Press, 1977).
- Norris, R. A. God and the World in Early Christian Theology: A Study in Justin Martyr, Irenaeus, Tertullian and Origen (London: Adam & Charles Black, 1966).
- Stead, C. Philosophy in Christian Antiquity (Cambridge: Cambridge University Press, 1994).
- Tulloch, J. Rational Theology and Christian Philosophy in England in the Seventeenth Century, 2nd edn., 2 vols.; vol. 2, The Cambridge Platonists (Hildesheim: George Olms, 1966). (Original edn. Edinburgh and London, 1874.)
- Wainwright, W. J. "Religious Experience, Theological Argument, and the Relevance of Rhetoric," *Faith and Philosophy* 22 (2005): 391–412.
- Westphal, M. "Continental Philosophy of Religion," in *The Oxford Handbook of Philosophy of Religion*, ed. William J. Wainwright (New York: Oxford University Press, 2005), pp. 472–93.
- Wolfson, H. A. *The Philosophy of the Church Fathers*, vol. 1, 2nd edn. rev., part 1 (Cambridge, MA: Harvard University Press, 1964).
- Wolterstorff, N. "The Migration of the Theistic Arguments: From Natural Theology to Evidentialist Apologetics," in *Rationality, Religious Belief, and Moral Commitment: New Essays in the Philosophy of Religion*, eds. Robert Audi and William J. Wainwright (Ithaca, NY: Cornell University Press, 1986), pp. 38–81.

42

Ontological Arguments

PETER VAN INWAGEN

The History of the Argument

In his Proslogion (ca. 1080), St Anselm presented an argument for the conclusion that atheism – the thesis that there is in reality no "something a greater than which cannot be conceived" – is a self-contradictory position. (The relevant parts of the "historical" works cited or referred to in this article – by Anselm, Gaunilo, Thomas, Descartes, Leibniz, and Kant – can be found in Plantinga 1965.) For, Anselm argued, atheists, those who hold that such a "something" exists in the mind alone – and not in reality as well – are committed to a claim to be able to do an impossible thing: to conceive of something greater than something a greater than which cannot be conceived. All they would need to do to accomplish this impossible thing (if their belief that this "something" existed only in the mind were right) would be to think of that same "something" as existing in reality – for existence in reality is greater than existence in the mind alone: if x and y are alike in all respects save that x exists in reality and y exists in the mind alone, it follows that x is greater than y. Therefore, this "something" must exist, since it cannot consistently be thought of as not existing.

Anselm, it will be observed, was a sort of Meinongian: he believed that there *are* things that exist in the mind alone, and that it is possible for one to consider a thing that exists in the mind and to pose questions about it without knowing whether that thing exists in reality. Only someone who accepts something like a Meinongian ontology, therefore, can accept Anselm's argument. And Meinongians have generally rejected the argument. Meinong himself contended that the phrase "the golden mountain that exists (in reality)" denotes an object that does *not* exist (in reality). And – supposing him to have been willing to adopt Anselm's terminology – he would have said if a something a greater than which cannot be conceived exists in the mind alone (and if existence in reality is greater than existence in the mind alone, as Anselm supposed), then "a something than which no greater can be conceived" denotes an object that is less great than it would be if it existed in reality (see Marek 2008.)

Anselm's argument was immediately attacked by the monk Gaunilo, who maintained that Anselm's reasoning, if it were valid, could be used not only to prove the existence in reality of a "something *simpliciter*" a greater than which could not be conceived, but, for any kind, to prove the existence in reality of a "something *of that kind*"

a greater than which *of that kind* could not be conceived – an island a greater island than which could not be conceived, for example. Anselm wrote a lengthy reply to Gaunilo, but many of the crucial points in his reply are very hard to understand, and this is particularly true of his response to the "island" difficulty. About 200 years later, St Thomas Aquinas presented a refutation of Anselm's argument, but his refutation seems to be based on a misunderstanding of the argument, and it is in fact unlikely that he actually had access to the text of *Proslogion*. Nevertheless, the authority of Thomas was so great that his refutation of the argument became more or less standard in Catholic philosophy. It is therefore possible that the argument for the existence of God in Descartes' Fifth Meditation was influenced by Anselm's argument: Descartes may have encountered Thomas' statement of Anselm's argument in the lectures of his Jesuit schoolmasters.

The argument of the Fifth Meditation proceeds as follows. We begin with the concept of a supremely perfect being, that is, a being that possesses every perfection. [Cf. Anselm's "something a greater than which cannot be conceived."] But existence [Anselm's "existence in reality"] is a perfection. [Cf. Anselm: "Existence in reality is greater than existence in the mind alone."] Therefore, just as shape is a part of the concept of a body, existence is a part of the concept of a perfect being (we shall hereafter omit the qualification "supremely"): just as one cannot conceive of a body that lacks a shape, one cannot conceive of a perfect being that lacks existence. Therefore, a perfect being exists (see also Chapter 25, Perfect Being Theology).

Kant named this argument "the ontological argument," and claimed to have refuted it. (Critique of Pure Reason, A592 = B620 - A602 = B630.) He in fact presented two refutations of the argument, which he wrongly regarded as alternative statements of the same refutation. One of these refutations, the weaker of the two (the refutation that turns on the slogan, "Being is a logical, not a real predicate") immediately became the standard textbook "refutation of the ontological argument" and remained so for 200 years. The remainder of this paragraph is a statement of the other refutation – the one that should have become the textbook refutation of the argument (A595 = B623 - A596 = B624). Let us grant that Descartes' argument establishes that the idea of a perfect being that does not exist is an inconsistent idea (just as the idea of a body that has no shape is an inconsistent idea); from this it does not follow that a perfect being exists. That this does not follow is easy to see, for the idea of an X that does not exist is an inconsistent idea, no matter what X may be. The idea of a nonexistent unicorn, for example, is an inconsistent idea, for nothing could possibly be a non-existent unicorn. But that fact does not entail that there are unicorns, and neither does the fact that "non-existent perfect being" is an inconsistent idea entail that there is a perfect being. If Kant is right - and what he says is very plausible - Descartes' argument is logically invalid. (Kant's refutation of Descartes' argument is not applicable to Anselm's argument, owing to Anselm's quasi-Meinongian distinction between existence in reality and existence in the mind. To see this, suppose that Anselm had been invited to consider the following adaptation of Kant's refutation of the Cartesian argument to his own argument: "Your argument assumes that if the idea of an X that does not exist in reality is a self-contradictory idea, then an X exists in reality. But this assumption is wrong: the idea of a unicorn that does not exist in reality is selfcontradictory, and no unicorns exist in reality." Anselm would have agreed that his

argument rested on this assumption, but would have insisted that the idea of a unicorn that does not exist in reality was *not* a self-contradictory idea – since unicorns that do not exist in reality do exist in the minds of various people. And he would also have insisted that the idea of a something a greater than which cannot be conceived that does not exist in reality *is* a self-contradictory idea.)

The Modal Ontological Argument

Although Descartes' argument is invalid, there is an argument – the so-called modal ontological argument – that can be expressed in words very similar to those of Descartes' argument and is indisputably logically valid. The most precise version of the modal argument is due to Alvin Plantinga (1974, ch. 10). Some recent commentators claim to have found *two* versions of the ontological argument in Anselm's *Proslogion*, the argument discussed above and another (Malcolm 1960; Hartshorne 1962). It is interesting to note that the modal argument is in many ways very similar to the "second" argument these commentators ascribe to Anselm.

We may state the modal argument as follows. Say that a property is essential to a thing x if x could not exist without having it – if x's existing without that property is an intrinsically or metaphysically impossible state of affairs. It seems evident that not all the properties of a thing can be essential to it. (Properties of a thing that are not essential to it are said to be "accidental" to it.) The property "being a philosopher," for example, is not essential to Descartes, since he might have died in infancy. Because a property of an object may belong to that object only accidentally, it is plausible to suppose that Descartes was wrong to define a perfect being as a being that possesses every perfection. He should, rather, have defined a perfect being as a being that possesses every perfection essentially. Suppose, for example, that wisdom is a perfection. We should not want to count a being as perfect if, although it was wise as things stood, it might have been foolish: a perfect being must be one that is not only wise but one whose very nature is inseparable from wisdom. It is, moreover, implausible to suppose, as Descartes did, that existence is a perfection, for existence necessarily belongs to everything and is therefore consistent with any possible degree of imperfection. But it is not at all implausible to suppose that necessary existence is a perfection, for if a thing's non-existence is impossible, then the fact that it exists is a consequence of its nature alone, and is entirely independent of the actions of other beings and the accidents of history.

If we define a perfect being as a being that possesses every perfection essentially, and if we suppose that necessary existence is a perfection, the existence of a perfect being follows from a single premise: that a perfect being (so defined) is possible. (That is, that a perfect being is not intrinsically impossible, in the sense in which a round square or shapeless body is intrinsically impossible.) Or, at any rate, this conclusion follows given the set of rules for reasoning about possibility and necessity that logicians call "S5." There are weaker sets of rules on which this conclusion does not follow, but most philosophers and logicians regard it as at least extremely plausible to suppose that S5 comprises the correct set of rules for reasoning about possibility and necessity (in the sense of these terms that figures in the modal ontological argument). We shall show

that the existence of a perfect being follows from its possibility by an argument couched in terms of "possible worlds." The way we speak about the relations between possible worlds will, in effect, presuppose S5.

If a perfect being is possible, then a perfect being exists in some possible world. If a perfect being exists in some possible world, then in that world it is not only existent but necessarily existent – necessary existence being a perfection. Necessary existence, however, is the same thing as existence in all possible worlds. A being that exists necessarily in some possible world w, must, therefore, exist in this, the actual world – for if that being did not exist in this world, it would not be necessarily existent in w; that is, it would not be true in w that it existed in every possible world. This being, moreover, must not only exist in this world, but must have all perfections in this world – for if it lacked some perfection in this world, it would not have that perfection essentially in w. If, for example, wisdom is a perfection, a being that is wise in w and is unwise in this world would not be essentially wise in w. If, therefore, there is a possible world w in which there is a being that has all perfections essentially (necessary existence being one of the perfections) – that is to say, if a perfect being is possible – there must actually be a being that has all perfections. It is not difficult to show, by extending this line of reasoning, that this being must not only actually exist and actually have all perfections, but that it must actually be necessarily existent and actually have all perfections essentially. (For a rigorous proof of the validity of the modal argument – a proof in which no steps are omitted – see van Inwagen 2007.) In sum, if it is possible for a perfect being to exist, a perfect being does exist.

The Possibility of a Perfect Being: Leibniz

But what about the antecedent of this conditional? Is it true? Is it so much as possible for a perfect being to exist? Is "perfect being" a possible concept? (See Chapter 55, Theism and Incoherence; and Chapter 57, The Problem of no Best World.) Such questions, questions concerning the possibility of concepts remote from the concerns of everyday life, are not easy to answer. One way to see why this is so is to reflect on the fact that for any such concept, it is possible to find a second concept so related to that concept that it is demonstrable that exactly one of the two concepts is possible – and, in many such cases, neither of the two will bear any obvious mark either of possibility or of impossibility. This is certainly the case with the concept of a perfect being. For consider the concept of a "correct atheist," the concept, that is, of someone who denies that there is a perfect being and who is right in denying this. If the concept "correct atheist" is a possible concept, the concept "perfect being" is an impossible concept. (For if "correct atheist" is a possible concept, then in some possible world there is a correct atheist and hence no perfect being. But if "perfect being" is a possible concept - the modal argument shows - there is no world in which there is no perfect being.) And if "perfect being" is an impossible concept, "correct atheist" is obviously a possible concept, since in that case there are correct atheists. One of these two concepts is therefore possible and the other impossible.

But which is which? It seems that if the modal argument is to be convincing, it will have to be supplemented by a convincing *a priori* argument for the possibility of a

perfect being. Leibniz was probably the first philosopher to be aware of this, and he did offer such an argument. A second argument for this conclusion is due to Kurt Gödel. There have been no others.

Leibniz's argument proceeds from the premise that every property is either a "simple, positive" property or a "complex" property (roughly, a "truth-functional combination" of simple, positive properties). If two properties are mutually inconsistent, Leibniz argues, at least one of the two must be complex. (For example, if F and G are simple, positive properties, F is inconsistent with "not-F," and "F or G" is inconsistent with "not-F and not-G." It is *only* in this way that properties can be inconsistent with each other.) All perfections are simple, positive properties. Hence, any two perfections are consistent with each other, and the concept of a being that has all perfections is a consistent concept.

It will be noted that even if this argument is unobjectionable, it does not show that the premise of the *modal* argument is true. An additional premise would be required to establish that conclusion: "If F is a perfection, so is 'being essentially F,'" perhaps, or "If F is a perfection, then for some G, F is the property of having G essentially." And it is difficult to see how properties like, e.g., "being essentially wise" or "being essentially omnipotent" could be "simple" properties. In any case, the argument is *not* unobjectionable. Although the *names* of properties can be, in an obvious sense, positive or negative, it is not at all evident that properties themselves can meaningfully be said to be positive or negative. Consider, for example, the property names "being self-existent" and "not depending for its existence on another." Many philosophers and theologians have said that these are two names for one property. Suppose they are right. Is that one property positive or negative? (A similar point applies to "simple" and "having no parts.")

The Possibility of a Perfect Being: Gödel

We turn to Gödel's argument for the possibility of a perfect being. (The argument is presented in a note that was not published till after Gödel's death; see Gödel 1995. The argument that follows in the text is a very free paraphrase of Gödel's argument.) Call the property of being a perfect being "perfection." Define a *positive* property as a property that has no morally or aesthetically negative aspect. (Gödel's employment of the term "positive" was apparently intended as a sort of allusion to Leibniz's argument, but he uses the word in an entirely different sense.) Say that a property x entails a property y if it is (intrinsically or metaphysically) impossible for something that has x to lack y.

The argument has three premises:

- (1) Not all properties are positive.
- (2) Perfection is a positive property.
- (3) If x is a positive property and x entails y, y is a positive property.

It follows from (1), (2), and (3) that perfection is a possible property. (*Proof*: Suppose perfection is impossible. Then perfection entails all properties. But then, by (2) and (3), all properties are positive, which contradicts (1).)

It seems evident that there *are* properties that have a morally or aesthetically negative aspect: Being evil, for example, or being deformed. Premise (1) seems therefore to be true. It is plausible to suppose that perfection has no morally or aesthetically negative aspect. It is therefore plausible to suppose that premise (2) is true.

But what about premise (3) – sometimes called Gödel's principle? Should we accept it? A straightforward answer to this question is hard to come by, but we can do this much: we can show that a dilemma confronts anyone who accepts both premise (1) ("Not all properties are positive") and premise (3) (Gödel's principle). If, therefore, premise (1) is granted, this dilemma will confront anyone who accepts Gödel's principle. The dilemma may be stated as follows.

Consider these two properties:

Having constructed a time machine.

Having proved that a time machine is (intrinsically or metaphysically) impossible.

It is obvious that at least one of these two properties is impossible. If, in some possible world, something, some physicist perhaps, has either, it follows (in S5) that nothing has the other in any possible world. Both properties may for all we know be impossible (for all we know, time machines are impossible *and* it's impossible to prove this), but they certainly can't both be possible.

We note that both properties *seem* positive: when we hold them before our minds, we see no morally or aesthetically negative aspect in either. The second premise of each of the following two (valid) arguments therefore *seems* to be true.

Not all properties are positive;

"having constructed a time machine" is a positive property;

if x is a positive property and x entails y, y is a positive property;

hence, "having constructed a time machine" is a possible property.

Not all properties are positive;

"having proved that a time machine is impossible" is a positive property;

if x is a positive property and x entails y, y is a positive property;

hence, "having proved that a time machine is impossible" is a possible property.

But we know that at least one of these two properties is impossible. So at least one of the two arguments has a false premise.

We must conclude, therefore, that either Gödel's principle is false or all properties are positive (which certainly seems to be false), or there are properties we can carefully consider and not see any negative aspect in and which nevertheless have one – that is, there are properties that appear to us to be positive and aren't. And if there are properties that appear to us to be positive and aren't, how can we be sure, what reason have we to suppose, that perfection is a positive property?

If we insist that not all properties are positive, therefore, and if we insist that we can determine whether a property is possible "by inspection," we can only conclude that Gödel's principle is false. Reflection on the "time machine" dilemma, therefore, demonstrates that Gödel's argument for the possibility of a perfect being does not demonstrate its conclusion. There is, in fact, no known *a priori* argument – no argument that, like

Leibniz's argument and Gödel's argument, proceeds from first principles – for the possibility of a perfect being that can be said to demonstrate its conclusion.

The Rationality of Belief in a Perfect Being: Plantinga

Alvin Plantinga has conceded that no known *a priori* argument for the possibility of a perfect being demonstrates its conclusion, and that the modal argument therefore cannot serve as a means by which one can pass from not knowing whether there is a perfect being to knowing that there is a perfect being. He has, however, contended that the modal argument demonstrates that it *can be rational* to believe that a perfect being exists – since it can be rational to believe that a perfect being is possible (Plantinga 1974, pp. 220–1). The plausibility of this contention obviously depends on the following principle, or something very like it: If it can be rational to believe that p, and if it is demonstrable that p entails q, then it can be rational to believe that q. Let us call this the rationality principle (RP). Before we examine RP, let us ask why Plantinga holds that it can be rational to believe that a perfect being is possible.

Plantinga points out that there are lots of respectable, widely held philosophical positions for which there is no argument that is accepted by all (or even by most) competent philosophers. (One might cite the neo-Meinongian thesis that there are objects that do not exist, the thesis that there cannot be a private language, and the thesis that the rightness or wrongness of an act is solely a function of its consequences.) That a perfect being is possible is, Plantinga contends, one of these respectable, widely held philosophical positions. Many philosophers accept it, and various important philosophers have attempted to show that it is false - Sartre, for example ("Such a being would be an impossible amalgam of 'being-in-itself' and 'being-for-itself'") and J. N. Findlay ("A perfect being must be necessarily existent, and if there is a necessarily existent being, there are necessarily true existential propositions, which is impossible") (see Findlay 1948). And, Plantinga further contends, any respectable, widely held philosophical position is one that it can be rational for a philosopher to hold, even if there is no argument for that position that is accepted by all or most competent philosophers. His argument is *ad hominem*: philosophers had *better* believe this; philosophers who do not - and who do not wish to affirm theses that they themselves say cannot be rationally affirmed – will find themselves "with a pretty slim and pretty dull philosophy."

Let us not dispute this conclusion; let us stipulate that it can be rational to believe that a perfect being is possible. Does it follow that (given the validity of the modal argument) it can be rational to believe that there is a perfect being? The right answer to this question obviously depends on whether RP is true. And it would seem that it is not – not if it is true that any respectable philosophical position is a position that it can be rational to hold. A simple example shows this.

That there are universals is obviously a respectable, widely held philosophical position. Therefore, if Plantinga is right, it can be rational to believe that there are universals. Let us suppose that this possibility is realized: a certain philosopher, Alice, does believe that there are universals and this belief of hers is rational. Now suppose that someone presents Alice with a demonstration of both these propositions: every universal occupies some region of space; no universal occupies any region of space (note that

these two propositions are not logically inconsistent, and that there is therefore no logical barrier to there being a demonstration of each). Would it then be reasonable for Alice to believe that something both occupies some region of space and does not occupy any region of space? Obviously not: no one can rationally believe an obvious and straightforward contradiction. It is obvious that what Alice ought to do, in the situation in which she finds herself, is to withdraw her assent to "There are universals" - and in fact to assent to "There are no universals." And we therefore have a counterexample to RP: it is true that it can be rational to believe that there are universals (this is shown by example: Alice rationally believed that there were universals before she was aware of the demonstration that their existence implied a contradiction); it is demonstrable that the existence of universals implies a certain contradiction; it cannot be rational to believe that contradiction. The general lesson of the counterexample is this: It may (a) be true that someone can rationally believe that p, and (b) demonstrable that p entails q, and (c) false that anyone can rationally believe that q – because no one can rationally believe that q and one can rationally believe that p only if one is unaware that it is demonstrable that p entails q. For all Plantinga has said, therefore, it may be that, although it can be rational to believe that a perfect being is possible and demonstrable that the possibility of a perfect being entails the existence of a perfect being, it cannot be rational to believe in the existence of a perfect being – since it cannot be rational to believe in the existence of a perfect being and it can be rational for one to believe that a perfect being is possible only if one is unaware that the possibility of a perfect being entails the existence of a perfect being.

Plantinga's argument is therefore unconvincing. But even if the argument were convincing, even if it were wholly unobjectionable, it is not easy to see why it would be *necessary*. If one believes, as Plantinga does, that any respectable, widely held philosophical position is one that it can be rational to hold, why should one not apply this thesis "directly" to "A perfect being exists"? Why need one bother with an argument that appeals to "A perfect being is possible" and the modal argument and RP? "A perfect being exists," after all, is a thesis that has been affirmed by many respectable philosophers. If, moreover, one does for some reason think that an argument for the conclusion that it can be reasonable to believe that a perfect being exists that appeals to RP is preferable to one that does not, one will find it easy to construct "RP" arguments that appeal to entailments that can be demonstrated by reasoning much simpler than the reasoning contained in the modal argument. For example: "It can be rational to believe that some material thing has been created by a perfect being; 'Some material thing has been created by a perfect being a perfect being'; therefore, it can be rational to believe that there is a perfect being."

Summary

The Anselmian ontological argument presupposes the quasi-Meinongian thesis that "things that exist in the mind alone" are in some sense "there" and can stand in certain relations – the relation "x is a thing that is less great than y," for example – to things that "exist in reality." It is therefore no more plausible than that thesis. (Meinongians, moreover, have generally rejected the argument.)

The Cartesian ontological argument was refuted by Kant – although not in the way most philosophers have supposed.

The modal argument contains no logical flaw, but it depends on a premise – the possibility of a perfect being – that is logically equivalent to its conclusion, is no more plausible than that conclusion, and cannot be demonstrated.

Plantinga's contention that the validity of the modal argument demonstrates that belief in a perfect being is rational is unconvincing.

Works cited

Findlay, J. N. "Can God's Existence Be Disproved?" Mind 57 (1948): 108–18.

Gödel, K. "Ontological Proof," in *Kurt Gödel: Collected Works, vol. 3: Unpublished Essays and Lectures*, ed. S. Feferman, J. W. Dawson, Jr., W. Goldfarb, C. Parsons, and R. N. Solovay (Oxford: Oxford University Press, 1995), pp. 403–4.

Hartshorne, C. "What Did Anselm Discover?" *Union Seminary Quarterly Review* 17 (1962): 213–22.

Malcolm, N. "Anselm's Ontological Arguments," Philosophical Review 79 (1960): 41-62.

Marek, J. "Alexius Meinong," in *The Stanford Encyclopedia of Philosophy*, ed. E. N. Zalta, http://plato.stanford.edu/entries/meinong/, 2008.

Plantinga, A. The Nature of Necessity (Oxford: Clarendon Press, 1974).

Plantinga, A., ed. The Ontological Argument: From St Anselm to Contemporary Philosophy (Garden City, NY: Doubleday, 1965).

van Inwagen, P. "Some Notes on the Modal Ontological Argument," in *Metaphysik heute – Probleme und Perspectiven der Ontologie/Metaphysics Today – Problems and Prospects of Ontology*, ed. M. Lutz-Bachmann and T. Schmidt (Munich: Verlag Karl Alber, 2007), pp. 132–45.

Additional recommended readings

Johnson, D. "Closing Remarks," *Hume, Holism, and Miracles* (Ithaca, NY: Cornell University Press, 1999), pp. 98–100.

Plantinga, A. *God, Freedom, and Evil* (New York: Harper & Row, 1974), pp. 85–112. van Inwagen, P. "Ontological Arguments," *Noûs* 11 (1977): 375–95.

43

Cosmological Arguments

WILLIAM L. ROWE

Within philosophy of religion, a cosmological argument is understood to be an argument from the existence of the world to the existence of God. Typically, such arguments proceed in two steps. The first step argues from the existence of the world to the existence of a first cause or necessary being that accounts for the existence of the world (see Chapter 33, Necessity). The second step argues that such a first cause or necessary being has, or would very likely have, the properties associated with the idea of God. Cosmological arguments appeared in Plato and Aristotle, played a prominent role in Jewish, Christian, and Islamic thought during the medieval period, and were forcefully presented in the eighteenth century by Gottfried Leibniz and Samuel Clarke. In the modern period these arguments, particularly as presented by Thomas Aquinas, Leibniz, and Clarke, have been severely criticized by David Hume, Immanuel Kant, and others. In the last few decades of the twentieth century, however, there was a revival of interest in cosmological arguments, and several challenges to the major criticisms of these arguments have appeared.

Cosmological arguments may be divided into two broad types: those that depend on a premise denying an infinite regress of causes and those that do not depend on such a premise. Among the former are contained the first "three ways" presented by Aquinas, as well as an interesting argument, developed by Islamic thinkers, that the world cannot be infinitely old and, therefore, must have come into existence by the creative will of God (see Chapter 9, The Christian Contribution to Medieval Philosophical Theology; and Chapter 10, The Islamic Contribution to Medieval Philosophical Theology). An important difference between the arguments represented by Aquinas's first "three ways" and the Islamic argument is that while both reject an infinite regress of causes, only the latter bases the objection on the alleged impossibility of an infinite temporal regress. Unlike Bonaventure, who adopted the Islamic argument, Aquinas did not think that philosophy could show that the world had a temporal beginning. He rejected an infinite regress of essentially ordered causes (a non-temporal causal series), identifying God as the first cause in such a non-temporal series. Leibniz and Clarke, however, allowed an infinite regress of causes, arguing only that there must be a sufficient reason for the existence of such a series of causes. Thus the eighteenth-century arguments of Clarke and Leibniz do not depend on rejecting an infinite regress of causes. Appealing to the principle of sufficient reason, Clarke and Leibniz insist only that such a series could not be self-explanatory and, therefore, would require an explanation in

the causal activity of some being outside the series (see Chapter 12, Early Modern Philosophical Theology on the Continent; and Chapter 13, Early Modern Philosophical Theology in Great Britain).

Cosmological arguments relying on philosophical objections to an infinite temporal series of causes typically proceed as follows:

- (1) Whatever begins to exist has a cause.
- (2) The world began to exist.
- (3) Therefore, the world has a cause of its existence.

The philosophical argument for premise (2) is based on the alleged impossibility of an infinite series of past events. Why is such a series thought to be impossible? If we begin with some present event and consider further events proceeding endlessly into the future, such a series is *potentially infinite*. For at any future event in the series there will have actually occurred only a finite number of events between that event and the present event. But if we think of events receding endlessly into the past from the present, we would be thinking of an infinite series that has actually occurred, a series that is *actually infinite*. The claim is that while a series of events can be potentially infinite, it cannot be actually infinite. So, the world could not have always existed.

It must be admitted that it is difficult to imagine an absolutely infinite number of temporally discrete events having already occurred. But what is the philosophical objection to it? It is sometimes suggested that if the series of events prior to the present is actually infinite, then there must be events in the past that are separated from the present by an infinite number of events. However, this suggestion is mistaken. No past event is separated from the present by an infinite number of events. It is also sometimes suggested that if the past is actually infinite then new events cannot be *added* to the series, for the series thus added to would be the same size as the series before the addition was made. The response to this objection is that one can add to an infinite collection even though the number of entities in the collection before the addition will be the same as the number of entities in the collection after the addition. The fact that this is so does not prevent the old collection from being a proper subset of the collection composed of the old collection and the new member. For reasons such as these, most philosophers who have studied these matters remain unconvinced that an actual infinite series of past events is impossible.

In addition to the philosophical argument against the possibility that the world has always existed, some proponents endeavor to support premise (2) by appealing to scientific theories that imply that the world had a beginning. For example, they appeal to the big bang theory according to which the universe probably began to exist some 14 billion years ago. There is a growing body of literature that endeavors to assess the implications of such theories for this particular cosmological argument.

A good example of a cosmological argument based on a rejection of a *non-temporal* infinite regress of causes is Aquinas' second way. This argument may be summarized as follows:

- (1) Some things exist and their existence is caused.
- (2) Whatever is caused to exist is caused to exist by something else.

- (3) An infinite regress of (non-temporal) causes resulting in the existence of anything is impossible.
- (4) Therefore, there is a first cause of existence.

There are two major difficulties in assessing the third premise of this argument. First, there is the difficulty of understanding exactly what a non-temporal causal series is. Second, there is the difficulty of determining exactly why such a series cannot proceed to infinity. To resolve the first difficulty we must distinguish the *earlier* cause that brought some presently existing object into existence from whatever *presently existing* things are causally responsible for its existence at this very moment. The basic idea is that if A (a human being, say) now exists, A is right now being caused to exist by something else B, which may itself be simultaneously caused by C to be causing A to exist. Although A would not exist now had it not been brought into existence by something else that existed temporally prior to A (a temporal causal series), it is also true, so Aquinas thought, that A would not now exist were it not now being caused to exist by something else B (a non-temporal causal series). In such a non-temporal series of causes of A's present existence, Aquinas held that the cause of any member in the series either is the first cause in the series or is itself being caused to cause that member by some non-temporally prior cause in the series.

Although Aquinas allowed that it is theoretically possible for a temporal series of causes to proceed backwards to infinity, he thought it obvious that a non-temporal causal series must terminate in a first member, itself uncaused. Why is this supposed to be obvious? Presumably, the idea is that it is obvious that if *B* is right now causing *A* to exist, and *C* is right now causing *B* to be causing *A* to exist, then if *C* and every prior member in the series were to have the same status as *B*, no causing would be occurring at all. Or, to put it differently, if there were no first cause in this series it would be simply inexplicable that such a series of causings is actually occurring. But once the argument is put in this fashion it invites the skeptical challenge that the fact that such causing goes on may simply be inexplicable. Thus, understanding the third premise of this argument and determining exactly why it must be true has proved to be difficult. And, of course, it would be question-begging to simply *define* a non-temporal causal series as one that terminates in a first cause. As a result, many philosophers find the argument unconvincing.

As noted above, the cosmological arguments developed by Leibniz and Clarke do not depend on a premise that rejects an infinite regress of causes. What they do depend on is a rather strong explanatory principle according to which there must be a determining reason for the existence of any being whatever. If we think of a *dependent being* as a being whose determining reason lies in the causal activity of other beings, and think of a *self-existent being* as a being whose determining reason lies within its own nature, the first step of Clarke's cosmological argument can be put as follows.

- (1) Every being (that exists or ever did exist) is either a dependent being or a self-existent being.
- (2) Not every being can be a dependent being.
- (3) Therefore, there exists a self-existent being.

While the principle that there must be a determining reason for the existence of any being whatever immediately yields premise (1), it is difficult to see how it establishes premise (2). For if we allow for an infinite regress of dependent beings, each having the reason for its existence in some preceding member of the series, it is difficult to see how any being exists that lacks a reason for or explanation of its existence. Of course, if we view the infinite series of dependent beings as itself a dependent being, we might argue that unless there is a self-existent being there would be no determining reason for the existence of the series itself. But it does not seem right to view the succession or series of dependent beings as still another dependent being. So, as strong as the principle we are considering appears to be, it does not appear to be strong enough to do away with the supposition that every being that exists or ever did exist is a dependent being. To carry out this task the cosmological arguments of Clarke and Leibniz required a stronger principle, the principle of sufficient reason (PSR).

The explanatory principle we have been considering is restricted to requiring an explanation for the existence of individual beings. PSR is a principle concerning facts, including facts consisting in the existence of individual beings. But PSR also requires an explanation for facts about individual beings, for example, the fact that John is happy. In addition, PSR requires an explanation for general facts such as the fact that someone is happy or the fact that there are dependent beings. Leibniz expresses PSR as the principle "that no fact can be real or existent, no statement true, unless there be a sufficient reason why it is so and not otherwise" (Leibniz 1951 [1714], para. 32). And Clarke asserts: "Undoubtedly nothing is, without a sufficient reason why it is, rather than not; and why it is thus, rather than otherwise" (Clarke and Leibniz 1956 [1717], third reply).

If we understand a contingent fact to be a fact that possibly might not have been a fact at all, it is clear that Leibniz held that every contingent fact has a sufficient reason or explanation. And so long as we restrict ourselves to contingent facts concerning the existence of things, it is clear that Clarke held that all such facts must have a sufficient reason. If either view should be correct, it does seem that Clarke's premise (2) must be true. For if every being were dependent, it does seem that there would be a contingent fact without any explanation – the fact that there are dependent beings. If PSR is true, the fact that there are dependent beings must have an explanation or sufficient reason. So, given Clarke's convictions about PSR, it is understandable why he should hold that not every being can be a dependent being. For if every being that exists or ever did exist is a dependent being, what could possibly be the sufficient reason for the fact that there are dependent beings? It won't do to point to some particular dependent being and observe that it produced other dependent beings. The question why there are any dependent beings cannot be answered by appealing to the causal activity of some particular dependent being any more than the question why there are any human beings can be answered by appealing to Adam and Eve and their causal activity in producing other human beings. Nor will it do to observe that there always have been dependent beings engaged in causing other dependent beings. The question why there are any dependent beings cannot be answered by noting that there always have been dependent beings any more than the question why there are any elephants can be answered simply by observing that there always have been elephants. To note that there always have been elephants may explain how long elephants have been in existence, but it won't explain why there are elephants at all.

Should we conclude that Clarke's cosmological argument is sound? Not quite. For all we have seen is that his argument is sound *if* PSR is true. But what of PSR itself? Is it true? In its unrestricted form PSR holds that every fact has an explanation; in its restricted form it holds that every contingent fact has an explanation. Even if we take PSR in its restricted form, there are serious objections to it.

An explanation of one fact in terms of another fact that is a sufficient reason for it would be one in which the explaining fact entails the fact it explains. One objection to PSR is that it cannot avoid the dark night of Spinozism, a night in which all facts appear to be necessary. This difficulty was particularly acute for Leibniz. He explained God's creation of this world by this world's being the best and God's choosing to create the best. But what accounts for God's choosing to create the best, rather than some inferior world or none at all? God chooses the best because of his absolute perfection - being absolutely perfect he naturally chooses to create the best. The difficulty is that God's being perfect is, for Leibniz, a necessary fact. It seems, then, that God's choice to create the best must also be necessary and, consequently, the existence of this world is necessary. If we avoid this conclusion by saying that God's being perfect is not the sufficient reason of his choice to create the best we run into an infinite regress of explanations of his choice to create the best. For suppose we say that it is God's perfection in conjunction with his choice to exercise his goodness that constitutes the sufficient reason for his choice to create the best. What then of his choice to exercise his goodness? A similar problem would arise in providing a sufficient reason for it. And we seem to be off to the races, each reason determining a choice only by virtue of a prior choice to act in accordance with that reason.

A second and more serious objection to the restricted form of PSR is that it appears to be impossible for every contingent fact to have an explanation. Consider the huge conjunctive fact whose conjuncts are all the other contingent facts that there are. This huge conjunctive fact must itself be a contingent fact, otherwise its conjuncts would not be contingent. Now what can be the sufficient reason for this huge conjunctive fact? It cannot be some necessary fact. For the sufficient reason for a fact is another fact that entails it; and whatever is entailed by a necessary fact is itself necessary. The huge conjunctive fact cannot be its own sufficient reason since only a necessary fact could be self-explanatory. So, the sufficient reason for the huge conjunctive fact would have to be one of the contingent facts that is a conjunct of it. But then that conjunct would have to be a sufficient reason for itself, since whatever is a sufficient reason for a conjunctive fact must be a sufficient reason for each of its conjuncts. It follows, then, that the huge conjunctive fact cannot have an explanation. It thus appears that PSR is false.

In the above argument it is important not to confuse the huge conjunctive fact constituted by every other contingent fact with the general fact that there are contingent facts. The latter fact – that there are contingent facts – is not itself a contingent fact. It is a necessary fact. For every possible world contains some contingent fact or other. Consider the contingent fact that there are elephants. That there are elephants is a fact in the actual world. But if some possible world in which there are no elephants were to be actual, it would be a fact that there are no elephants. So, no matter what possible world is actual, either that there are elephants will be a fact or that there are

no elephants will be a fact. Thus, that there are contingent facts is itself a necessary fact. But the huge conjunctive fact described above is itself a contingent fact. Had some other possible world been actual, the huge conjunctive fact described above would not have been a fact.

Our conclusion concerning the eighteenth-century argument developed by Clarke is that its second premise – not every being can be a dependent being – has not been proved to be true. As opposed to Hume and many modern critics, we have defended Clarke's view that if every being were dependent there would be a fact – that there are dependent beings – that would lack a sufficient reason. But since PSR is the only reason given to reject the idea that every being could be dependent, and since PSR, even in its restricted form, is open to serious objections, we must conclude that the second premise of Clarke's argument has not been established. This does not mean that his argument is unsound. It only means that it has not been shown to be sound and, therefore, fails as a proof of the existence of a self-existing being.

As we noted at the outset, cosmological arguments involve two steps: proving that there exists a first cause or self-existent (necessary) being, and proving that such a being would possess the properties commonly associated with God – infinite power, wisdom, and goodness (see Chapter 27, Omnipotence; Chapter 28, Omniscience; and Chapter 30, Goodness). Since philosophers have been mainly concerned with assessing the first step, we have focused our attention on it. It is important to recognize, however, that even if some argument for the first step should be entirely successful, there remains the difficult task of establishing that the first cause or self-existent being is God (see Chapter 49, Cumulative Cases).

Works cited

Aquinas, T. Summa Theologiae (London: Eyre & Spottiswoode; New York: McGraw-Hill for Blackfriars, 1964).

Clarke, S. A Discourse concerning the Being and Attributes of God, 9th edn. (London, 1738).

Clarke, S., and Leibniz, G. *The Leibniz-Clarke Correspondence* (1717), ed. H. G. Alexander (Manchester: Manchester University Press, 1956).

Craig, W. L. The Cosmological Argument from Plato to Leibniz (London: Macmillan Press, 1980).

Hume, D. *Dialogues concerning Natural Religion* (1779), ed. N. Kemp Smith (Oxford: Clarendon Press, 1935).

Leibniz, G. Monadology (1714), in Leibniz Selections, ed. P. P. Wiener (New York: Charles Scribner's Sons, 1951).

Rowe, W. L. The Cosmological Argument (Princeton, NJ: Princeton University Press, 1975).

Smith, Q., and Craig, W. L. Theism, Atheism and Big Bang Cosmology (Oxford: Clarendon Press, 1993).

Additional recommendations by editors

Everitt, N. The Non-existence of God (London: Routledge, 2004).

Koons, R. Realism Regained (New York: Oxford University Press, 2000).

O'Connor, T. Theism and Ultimate Explanation (Oxford: Blackwell Publishing, 2008).

WILLIAM L. ROWE

Oppy, G. Arguing about Gods (Cambridge: Cambridge University Press, 2006).

Pruss, A. The Principle of Sufficient Reason (Cambridge: Cambridge University Press, 2006).

Reichenbach, B. "Cosmological Argument," in *Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta (Stanford, CA: Metaphysics Research Lab, Center for the Study of Language and Information, Stanford University, 2004).

Sobel, J. H. Logic and Theism (Cambridge: Cambridge University Press, 2004).

44

Teleological and Design Arguments

LAURA L. GARCIA

Teleological arguments make a case for the existence of God based on examples of apparent design or purposiveness in the natural world. These arguments are normally inductive in nature, taking as their starting point features of the world difficult to explain within a purely naturalistic model. Design arguments have appealed to such general features of the universe as its beauty, its orderly or law-like operations, the interconnectedness of its parts, and its intelligibility; or to more specific features such as its suitability for life, its providing the right conditions for moral growth, or its including conscious beings. Many find this evidential approach to the existence of God more persuasive than the ontological or cosmological arguments (see Chapter 42, Ontological Arguments; and Chapter 43, Cosmological Arguments); it appeals to concrete instances of order common to our experience, so that few are inclined to dispute the premises. Instead, discussion revolves around whether or not the examples of apparent design in nature are caused by an intelligent being or can be explained in some other way (e.g., by natural selection) or are simply a matter of chance.

Traditional Analogical Arguments

Early versions of the argument from design took the form of an *analogy* between human productions and the universe as a whole. Writing at the end of the eighteenth century, the English philosopher and theologian William Paley famously compared the universe to a watch, noting that "the contrivances of nature ... are not less evidently mechanical, not less evidently contrivances, not less evidently accommodated to their end or suited to their office than are the most perfect productions of human ingenuity" (Paley 1972 [1802], p. 14). Since Paley's examples of apparent purpose in nature, or means adapted to ends, were largely drawn from the biological realm (he was especially impressed with the human eye), they became less convincing after the advent of evolutionary theory. Darwin's theory provided an explanation of the adaptation of organisms to their environments and of organic parts to their functions that required no appeal to a designing intelligence or orderer. Purely random mutations and the process of natural selection might produce these same results, so a theistic explanation of the data, while possible, is not required to explain them. Darwin's theory also undermines Paley's analogy

between human artifacts, such as a watch, and natural, living organisms. Watches contain no internal principles of adaptation or variation, while organisms do (see Chapter 64, Theism and Evolutionary Biology).

Some defenders of the design argument respond to this criticism by viewing the entire evolutionary process as another instance of nature operating to achieve an end, since it results in organisms of increasing complexity and capacity. Richard Swinburne suggests that the theory of evolution shows the natural universe to be "a machine-making machine" (1979, p. 135). Alternatively, one might shift from the organic realm to focus on the motions of the planets in the solar system or the process of crystal formation or the way in which the universe as a whole has evolved to make life possible. Formulated as an analogical argument, one would start with similarities or *initial likenesses* between the two items (e.g., the planetary system and a clock) and conclude that they will probably be similar in a further respect as well, the *terminal likeness*. Analogical arguments are strongest when (a) there are few or no instances where the initial likenesses are found *without* the terminal likeness (so that the initial likenesses seem clearly relevant to the terminal likeness) and (b) the items being compared have few major *dissimilarities*.

The most notorious critic of the design argument, David Hume, focused especially on (b), finding many differences between products of human design and the universe as a whole – for example, the uniqueness of the universe, the epistemic inaccessibility of its origins, its apparent flaws or defects, and so on (see Hume 1980 [1779]). Those defending the analogical approach seek to minimize these differences or to show their irrelevance to the conclusion. Recently some have proposed that a better analogy might be between the universe and a work of art, rather than between the universe and a machine, since this would allow a greater appeal to the beauty of the universe and would avoid some of Hume's criticisms about the unsuitability of the universe for certain human purposes. It would also serve to blunt the objection that an intelligent and all-powerful being would not use a mechanism as inefficient as the evolutionary process to produce the universe. Works of art, especially those of narrative form, are evaluated by very different criteria than mechanical efficiency. Swinburne's reflections on what God's purposes might be in creating free, personal, embodied agents also undercut some of Hume's complaints about the unsuitability of the universe as a place for human flourishing. Similar points about the kind of universe most conducive to personal and moral growth appear in the work of F. R. Tennant (1930) and John Hick (1981).

Arguments to the Best Explanation

Most current versions of the design argument proceed not in terms of analogies between the universe and human artifacts, but as arguments to the best explanation of the data of our experience. They claim that the theistic hypothesis of an intelligent designer is a superior explanation of this data than is the naturalistic hypothesis that the features of the universe are due to the operation of blind natural forces. One advantage of the explanatory model of argumentation is that it allows for a cumulative case to be made in favor of the theistic hypothesis; distinct and apparently unrelated aspects of the

universe can be presented as evidence of intelligent purpose (see Chapter 49, Cumulative Cases). An important example of the cumulative case approach can be found in the work of F. R. Tennant early in the twentieth century. Tennant appealed especially to the fitness of the earth as a home for living and conscious beings, including the adjustment of the many physical variables required to make life possible. But he also emphasized the rational structure and intelligibility of the universe, its suitability as an arena for moral development, and its being "saturated with beauty" at every level, from the microscopic to the macroscopic (see Tennant 1930, vol. 2, ch. 4).

This approach finds greater precision in the recent work of Richard Swinburne (2004). Swinburne's cumulative case for God's existence is an argument to the best explanation, citing various pieces of data or evidence that are (a) relatively improbable on an assumption that theism is false, but (b) relatively probable if theism is true. One such datum is that our universe exhibits temporal order of a certain sort. (*Temporal order* or regularity differs from *spatial order*, an arrangement of parts that serves the purpose of a greater whole, as in an organism's suitability for its environment.) The universe is governed by simple, mathematically formulable physical laws. These fundamental regularities in turn result in regularity at the phenomenal level, which human beings and other higher animals can then use to further their goals. Let us call this sort of temporal order *causal order*. Since the fundamental regularities cannot be explained in terms of other regularities, theories of evolution that partially undermine the argument from spatial order leave the following argument from causal order untouched.

- (1) The universe exhibits causal order ("there [are] laws of nature at some level guaranteeing that things behave in largely predictable ways" [Swinburne 2004, p. 160]).
- (2) If there is no God, causal order is very improbable ("it is very improbable that there would be in a Godless universe laws of nature sufficiently simple for rational beings to extrapolate from past to future with normal success" [Swinburne 2004, p. 164]).
- (3) If there is a God, causal order is relatively probable ("Theism leads us to expect a world at some phenomenal level, simple and predictable" [Swinburne 2004, p. 165]).
- (4) Hence, God's existence is confirmed (its probability is increased) by the existence of causal order.

Naturalism (which Swinburne equates with physicalism) offers no explanation for the causal order of the universe (not to mention its existence); on naturalism causal order must simply be regarded as a brute fact. On the other hand, a personal being has reasons to produce causal order in the universe, due to aesthetic (order is more beautiful than chaos) and other value considerations (a universe with intelligent beings who can understand their world is preferable to a universe with no intelligent beings or with rational creatures whose attempts to "read the book of Nature" cannot succeed). Causal order combines with additional data that exhibit properties (a) and (b) above to support the further conclusion that theism is more probable than naturalism, even if the probability of theism is not greater than .5. Theism is the best available explanation of these data.

Of course, the (alleged) fact that the complexity or causal order of the universe increases the probability of theism is significant only if theism has some initial probability that can be raised or lowered by evidence. Critics point to the difficulty of assigning *a priori* objective probabilities to large-scale metaphysical theories. Swinburne is sensitive to this point, but he argues that both naturalism and theism have some level of initial probability (on *a priori* evidence alone) – though that level is very small simply because it is *a priori* very likely that nothing at all exists. Swinburne then argues that, with respect to comparing prior probabilities of competing hypotheses of equal scope like theism and naturalism, simplicity is the only criterion available for preferring one over the other. Since theism is a simpler hypothesis than naturalism, theism has the greater initial probability (Swinburne 2004, pp. 96ff).

Further scrutiny falls on Swinburne's conclusion, which posits only a personal cause, not a being that exists necessarily. But Swinburne claims that a necessary being cannot provide a complete explanation of finite, contingent beings, so positing a necessary being will not explain the existence of the universe. Still, considerations of simplicity lead us to posit only one person as the cause of the universe, a person with infinite knowledge and power who exists eternally. Any finite amount of power or knowledge, and any times in which the being does not exist, would require further explanation and so complicate the theistic hypothesis.

The above version of the teleological argument is just one part of Swinburne's cumulative case in favor of the greater probability of theism over naturalism. The wider case for theism draws strength from a variety of unrelated features of our universe that similarly (and independently) confirm theism and, in some cases, also disconfirm naturalism. Such features include the existence in the universe of consciousness and moral awareness in humans, as well as evidence of providence, divine revelation, miracles, and religious experiences. Swinburne considers the problem of evil as well, but concludes that evil and suffering do not disconfirm theism. The claim that they do stems "from a failure to appreciate the deepest needs of human beings and other conscious beings ... and the strength of the logical constraints on the kinds of world that a God can make" (Swinburne 2004, p. 267).

Arguments from the Sciences

While Swinburne's argument focuses on the rationality of the universe and its laws, a more recent strategy (that Swinburne adds to his arsenal of arguments in the second edition of *The Existence of God*) appeals to the so-called "fine-tuning" of the fundamental forces that make our universe capable of supporting life. Just as the earliest versions of the design argument drew much of their material and impetus from discoveries in the sciences, especially the study of anatomy and botany, so the argument has received new life from the vast expansion of scientific knowledge in the last 20 or 30 years concerning the origins of the universe and of life on earth. Many of these discoveries are summarized by M. A. Corey (1993) and brought together into a teleological argument for the existence of God. Drawing on the work of scientists such as Paul Davies (1982, 1984, 2007), Sir John Eccles (1970), Fred Hoyle (1993), and Robert Jastrow (1978), Corey argues that the numerous factors necessary to make life possible are

enormously varied and are causally independent of one another. Even minute deviations in any one of them would have rendered life impossible. Thus, either we are faced with a truly astonishing amount of lucky coincidence in our universe, or the universe was caused by a being who intended it to produce life.

Stephen Layman (2007, pp. 110–11) provides a helpful summary of this argument and responds to several common criticisms of it in a recent book defending God's existence:

- If the initial force of the big bang explosion had been slightly stronger or weaker by as little as one part in 10^{60} , then life would be impossible.
- There is an "almost unbelievable delicacy in the balance between gravity and electromagnetism within a star. Calculations show that changes in the strength of either force by only one part in 10^{40} would spell catastrophe for stars like the Sun" (Davies 1984, p. 242).
- If the weak nuclear force ... had been slightly stronger or weaker, heavy elements could not have formed. And heavy elements such as carbon are presumably necessary for life.
- If the strong nuclear force ... had been just 2 percent stronger (relative to the other forces), all hydrogen would have been converted into helium. ... If [it] had been 5 percent weaker, there would be nothing but hydrogen. Either way, life would presumably be impossible.
- If the electromagnetic force were 4 percent weaker, there would be no hydrogen. But hydrogen fuels the stars, including of course the Sun. If [it] were a little stronger, there would be no planets.

Data like these appear to offer strong empirical support for intelligent purpose behind the universe.

It is worth noting, however, that the fine-tuning argument presupposes that it is a good thing for a universe to be compatible with life – either physical life in general or intelligent physical life. Without this presupposition, it might indeed be highly improbable that the basic physical forces of the universe have the values they do, but it would not inspire the same kind of awe. Atheists who consider the fine-tuning argument often appear unimpressed by this data, replying that it is sheer hubris to assume human life has been a goal of the universe from its beginning, as opposed to being a random result that happens to be a lucky break for us.

Indeed, there is little reason to think that values in and of themselves impact physical forces like those involved in the big bang. Rather, values influence physical events by way of intelligent agents who have reason to foster the good. This connection explains why philosophers committed to naturalism are reluctant to characterize the kinds of data listed above as "tuning" of any sort, since that very term introduces notions of purpose and agency. On the other hand, naturalists may well lose sympathy if they insist (as they should) that a life-sustaining universe is nothing special *per se*.

It may seem that this dispute makes further discussion of fine-tuning arguments otiose, but that would be too hasty. After all, theism has a double advantage here, since it both endorses the widespread intuition that human life is an objective good and explains why the universe is constructed so as to realize this good. In other words, if

God exists, this is the kind of world one would expect God to create, one containing moral agents who are capable of compassion, self-sacrifice, and generosity. While theists have wrestled for centuries with the problem of evil, now atheists must confront an analogous problem – the problem of good. Why is our universe such as to result in the beauty, goodness, and moral value that exist even in our small part of it?

Setting this issue aside for now, can naturalists provide a plausible explanation for the fact that a life-sustaining universe, wildly improbable from a statistical point of view, happens to exist? Some responses claim that certain parameters in the fine-tuning examples are not independent of each other (and so are not separately tuned) and that some would not have to be as finely tuned as was initially believed; but these do little to diminish the problem, since several highly unlikely data remain unexplained. One proposal that seems to be gaining popularity among naturalists is the so-called many universes hypothesis. This theory posits a universe-generator of some kind that produces countless universes, each with fundamental physical constants (either the familiar ones or others) set at varying levels and giving rise to a wide variety of resulting worlds, some of which are life-sustaining. The goal of this proposal is to reduce the statistical improbability of a life-sustaining universe by multiplying the number of chances there are to produce such an outcome.

Theists (and some naturalists as well) raise numerous objections to the many universes theory. First among them is that it is not a scientific theory. Superstring theorist Brian Greene opines, "It will be extremely hard, if not impossible, for us ever to know if the multiverse picture is true" (1999, p. 122). Universes differing in their physical laws from ours and operating in causal independence of our universe (otherwise they would not be separate universes) are in principle empirically inaccessible. Further, depending on the properties of the universe-generator, it could still be highly unlikely that any of its products are life-sustaining. The multiverse theory has an air of the *ad hoc* about it and has so far failed to gain the universal support even of committed naturalists. On the other hand, the fine-tuning argument presupposes that life (or human life) is valuable, a premise that many committed atheists reject.

Historically, the argument from design draws its impetus from advances in the natural sciences. Evidence of teleology in nature made an impression on ancient philosophers as early as Aristotle, and application of the scientific method and new instruments in the modern period resulted in further discoveries of adaptation, mathematical elegance, and remarkable organization at every level of the natural world. The world of living things in particular provides numerous examples of complex physical structures that serve a particular purpose or function, and William Paley and others saw these as evidence for an intelligent maker. Charles Darwin's theory of evolution, introduced in the nineteenth century, appeared to provide a naturalistic explanation for these biological organs and organisms, provoking some premature jubilation on the part of naturalists who assumed it would be only a matter of time until naturalistic explanations could account for every purported instance of design in nature.

Recent versions of the design argument have similarly been fueled by scientific discoveries. While Swinburne's original argument makes little appeal to new scientific research, he bypasses Darwin's critique of earlier design arguments by looking to physics rather than to biology for evidence of rational agency. More recently, both Swinburne and Layman (among others) explicitly appeal to the fine-tuning argument,

drawing on recent work in physical cosmology. These developments suggest that the design argument for God's existence will continue to hold philosophical interest, and that the progress of science, once expected to bring about the death of design, will instead continue to uncover further intriguing instances of it.

Probability and World Hypotheses

Swinburne credits his argument from the orderliness of the universe with the status of *confirming* the existence of God, even if it does not by itself make the existence of God more probable than not. He reasons that the orderliness of the universe, while having some level of probability on the atheistic view, is much more likely on the theistic view, so the existence of a complex and ordered universe increases the probability of the theistic view over that of atheism. A similar strategy could be offered in defense of the scientific arguments advanced above. One must show that the level of cooperation among causally independent physical factors necessary to produce organized, living, conscious beings is (a) very unlikely from an atheistic perspective, and (b) quite likely (or at least not as unlikely) on the assumption of God's existence. Swinburne's effort to show that a designer would have good reason to make rational creatures is relevant to (b).

John Hick objects to any attempt to compare the probability of theism vs. naturalism, viewed as hypotheses which can explain all our knowledge and experience: "There can be no prior corpus of propositions in relation to which a total interpretation could be judged to be probable or improbable, since all our particular items of information are included within the totality which is being interpreted. There can, in other words, be no evidence in favor of one total interpretation over against another" (1970, p. 29). But later on Hick offers the existence of suffering in the world as evidence counting against the theistic hypothesis, while certain features of our moral experience count in its favor. Clearly, then, there are propositions common to both interpretations which can be used to evaluate the evidence under consideration. One such proposition would be that an all-powerful, all-knowing, perfectly good being would not allow the existence of gratuitous suffering. But another would be the claim found in Aquinas's Fifth Way: "Whatever lacks knowledge cannot move towards an end, unless it be directed by some being endowed with knowledge and intelligence" (Summa Theologiae, I.2.3).

One might also appeal to canons of scientific rationality, as does Swinburne in contending that the theistic hypothesis is superior on grounds of simplicity. Theism postulates one personal agent to explain the complex, ordered universe, whereas naturalism must postulate a variety of different basic entities with various powers and liabilities, with no apparent reason why there are just these and no others. Further, the agent posited by theists is the simplest sort of personal agent possible, says Swinburne – namely, one who has infinite knowledge and power, and who possesses these properties essentially. Otherwise, more complicated explanations would be needed of why there are exactly n deities, why and how they cooperate in their efforts, why they have exactly n level of power or knowledge, and so on (Swinburne 1979, p. 141). Unless its perfections are essential to it, we would also need an explanation of why the being has the perfections it does.

Critics of Swinburne contend that the kinds of simplicity he appeals to are more at home in the physical sciences and may not be relevant to metaphysical problems. In a more direct attack, J. L. Mackie argues that personal agency is not well understood by us, and that positing a disembodied spiritual being who acts on the material world by unmediated intentional states loses in plausibility whatever it gains in simplicity (Mackie 1982, ch. 8). If the postulated being is outside of time and yet acts in such a way as to affect the temporal order, the conceptual difficulties are even greater. Mackie also invokes the Humean claim that the organizing capacities of an infinite mind would be just as much in need of explanation as the organized material world that results from its activity. Swinburne could reply that while we experience the organizing capacities of minds in the case of our own activity, we do not experience a similar purposive operation in unconscious natural systems.

Mackie's final complaint is that since Swinburne posits only a *contingently existing* being behind the natural universe, he has simply pushed the need for explanation back a step (see Chapter 33, Necessity). The existence of this being will remain unexplained, so it will be a matter of preference whether to choose one unexplained element (God) in one's metaphysical picture of things or several (the most basic material particles). Further, for any theist committed to divine freedom, God's choice to create the universe itself requires an explanation. This means that theists must defend a notion of personal explanation that accepts intentions as explanations of actions even when there is no law-like or logically necessary connection between those intentions and the resulting actions.

In assessing the dispute between the world-hypotheses of theism and naturalism, John Hick argues that the choice is not between having an explanation (God) and having no explanation, but rather between rival explanations. "Since theism and naturalism can each alike lay claim to *prima facie* evidences and must each admit the existence of *prima facie* difficulties, any fruitful comparison must treat the two alternative interpretations as comprehensive wholes, with their distinctive strengths and weaknesses" (1970, p. 31). But it seems more accurate to see the choice in this debate as similar to that involved in the cosmological argument. To say that apparent design is a result of chance or coincidence is in fact to leave it unexplained. The question, then, is whether the human mind can rest in this sort of final inexplicability, or whether reason requires us to postulate a cause of the highest-order contingent facts of our experience.

Is the Designer God?

Since Hume it has been popular to dismiss the teleological argument on the grounds that even if it succeeds in its goal of showing that there is some sort of intelligence behind the orderliness of the universe, it can show little or nothing about the nature or even the present existence of the designer, including the number of beings involved in the creative effort. The most detailed reply to Hume comes from Swinburne's argument that considerations of simplicity would lead to the hypothesis of one intelligent being whose faculties are infinite and are held essentially.

As to the moral attributes of God, Swinburne argues both that omnipotence makes it likely that God is perfectly free in the sense that God's choices are not influenced by non-rational desires and that perfect freedom and omniscience together entail perfect goodness, given two plausible assumptions (for extended discussions of each of the divine attributes mentioned in this entry, see Part 4, The Concept of God). These are, first, that moral judgments are either true or false and, second, that free agents always act for a purpose and see their actions as aimed at a good. This implies that if the natural properties of the deity, including perfect freedom, are probable to a given extent, the moral properties will have at least that same level of probability. One might instead argue for the benevolence of God by noting various features of the world itself, including its fitness for the development of moral agents. Finally, some would look for elaboration of the nature of God to the cosmological or ontological arguments, since some versions of the former argue for a necessary being and the latter argues for a being with every perfection (including necessity).

Another advantage of the cumulative case approach, then, is that the emerging concept of God need not rest on one piece of evidence or one isolated proof. Instead, it emerges from a consideration of many different kinds of evidence, all of which point to a similar conclusion. These considerations may undermine some of Hume's complaints, but they do not fully overturn them. The presence of evil in the world does seem to count against the perfect goodness of the designer. However, Swinburne contends that the existence of evil in the world does nothing to disconfirm theism, but leaves its epistemic probability untouched (1979, ch. 11; see also Chapter 59, The Evidential Problem of Evil).

Since much of the current excitement surrounding design arguments has been generated by scientists, it is likely that the debate will center for the near future around the controversies in physics and biology over the evidence for purpose in nature (see Chapter 63, Theism and Physical Cosmology). More philosophical precision should be brought to bear on the kind of probability involved in the testing of metaphysical hypotheses, on the epistemic value of what Swinburne calls "confirming" arguments, and on the strength of the cumulative case strategy that draws on several distinct inductive-style arguments.

Works cited

Collins, R. "Design and the Many-Worlds Hypothesis," in *Philosophy of Religion: A Reader and Guide*, ed. W. L. Craig (New Brunswick, NJ: Rutgers University Press, 2002), pp. 130–48.

Corey, M. A. God and the New Cosmology: The Anthropic Design Argument (Savage, MD: Rowman and Littlefield, 1993).

Davies, P. The Accidental Universe (Cambridge: Cambridge University Press, 1982).

Davies, P. Superforce: The Search for a Grand Unified Theory of Nature (New York: Simon and Schuster, 1984).

 $Davies, P. \textit{Cosmic Jackpot: Why Our Universe Is Just Right for Life} \ (Boston: Houghton \ Mifflin, \ 2007).$

Eccles, J. C. Facing Reality: Philosophical Adventures by a Brain Scientist (New York: Springer-Verlag, 1970).

Greene, B. The Elegant Universe: Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory (New York: Norton, 1999).

Hick, J. Arguments for the Existence of God (London: Macmillan, 1970).

Hick, J. "An Irenaean Theodicy," in *Encountering Evil*, ed. S. T. Davis (Westminster: John Knox Press, 1981), pp. 39–52.

Hoyle, F. The Origin of the Universe and the Origin of Religion (Wakefield, RI: Moyer Bell, 1993).

Hume, D. Dialogues concerning Natural Religion [1779] (Indianapolis, IN: Hackett, 1980).

Jastrow, R. God and the Astronomers (New York: W. W. Norton, 1978).

Layman, C. S. Letters to Doubting Thomas: A Case for the Existence of God (New York: Oxford University Press, 2007).

Leslie, J. Universes (New York: Routledge, 1989).

Mackie, J. L. The Miracle of Theism (Oxford: Clarendon Press, 1982).

McMullin, E. "Fine-tuning the Universe?" in *Science, Technology, and Religious Ideas*, ed. M. H. Shale and G. W. Shields (New York: University Press of America, 1994).

Paley, W. Natural Theology [1802] (Houston, TX: St Thomas Press, 1972).

Plantinga, A. God, Freedom and Evil (Grand Rapids, MI: Eerdmans, 1977).

Swinburne, R. The Existence of God (Oxford: Clarendon Press, 1979).

Swinburne, R. The Existence of God, 2nd edn. (Oxford: Clarendon Press, 2004).

Tennant, F. R. Philosophical Theology (Cambridge: Cambridge University Press, 1930).

Additional recommended readings

Behe, M. J. Darwin's Black Box: The Biochemical Challenge to Evolution (New York: Free Press, 1996).

Dembski, W., and Kushiner, J., eds. Signs of Intelligence: Understanding Intelligent Design (Grand Rapids, MI: Brazos Press, 2001).

Ratzsch, D. Nature, Design and Science: The Status of Design in Natural Science (Albany: State University of New York Press, 2001).

Smart, J. J. C., and Haldane, J. J. Atheism and Theism (Oxford: Blackwell, 1996).

Stewart, R. B., ed. *The Future of Atheism: Alister McGrath and Daniel Dennett in Dialogue* (Minneapolis, MN: Fortress Press, 2008).

45

Moral Arguments

C. STEPHEN EVANS

Moral arguments for God's existence are, for lay people, among the most popular reasons for belief in God, though they have often been neglected by philosophers. The germ of this kind of argument is simple enough to be grasped by a child; it lies in the conviction that God is in some way the basis of morality, or, as Ivan put it in *The Brothers Karamazov*, "without God everything is permitted." However, this core intuition can be developed in multiple ways, with greater or lesser degrees of sophistication. Thus, there are probably even more different kinds of moral arguments for theism than there are different forms of the cosmological and teleological arguments (see Chapter 43, Cosmological Arguments; and Chapter 44, Teleological and Design Arguments).

Theistic Arguments in General

Before looking at moral arguments one must first think about the functions of arguments for God's existence in general. Few philosophers today would view a single argument for God's reality as a *proof*. This is partly because of a recognition that even good philosophical arguments rarely amount to a proof, and partly because of a recognition of the complexity of belief in God. "Theism" does not refer to a single proposition, but a complex web of assertions about God's reality, character, and relations with the universe. It is unreasonable to think that a single argument could establish such a complicated theoretical network. Rather, particular theistic arguments should be seen as providing a lesser or greater degree of support to segments of the network and therefore support for the web as a whole only indirectly.

Many common criticisms of theistic arguments seem not to appreciate this point. For example, the teleological argument is often criticized on the grounds that even if sound, it would only establish a divine designer and not a creator. However, no single argument can be expected to establish all the attributes of God. Similarly, it would be a mistake to reject moral arguments on the grounds that such arguments do not prove the existence of a God with all of the attributes of classical theism. Rather, such arguments will be useful in a "cumulative case" for theism if they increase the plausibility of belief in God by providing support for at least some elements of the theistic web (see the discussion of "distributive" cases in Chapter 49, Cumulative Cases).

Difficulties with Moral Arguments

As I have noted, moral arguments have not been discussed by philosophers as much as their popularity would suggest. This is likely due to a widespread sense that such arguments are vulnerable to devastating objections, even though a careful look reveals that these objections are not necessarily decisive. One problem is that many philosophers think such arguments are tied to "divine command" theories of morality, and that these theories are both philosophically and religiously flawed (see Chapter 68, Divine Command Ethics). A line of thought that stems from Plato's *Euthyphro* holds that an action is not morally wrong merely because God forbids it, or permissible merely because he does not forbid it. Would gratuitous torture be morally right if God commanded such actions to be done? Religious believers often hold that God commands certain actions because of their right character; that is partly why they see God as good and worthy of worship (see Chapter 30, Goodness). However, if this is so, then it is not the fact that those actions are commanded that makes them right.

These kinds of considerations certainly create difficulties for certain forms of divine command theories of morality. However, Philip Quinn (1978) has argued very powerfully that such objections, as well as several others commonly made against divine command theories, are by no means decisive. Even aside from whether the difficulties can be surmounted, there are, as we shall see below, types of divine command theories to which such objections do not apply. Furthermore, even though it is clear that a divine command theory of morality certainly can provide the basis for a moral argument, it is by no means the case that all moral arguments depend on a divine command theory of morality.

A second type of objection, also discussed by Quinn, stems from Immanuel Kant's doctrine of moral autonomy. Kant held that a person should be devoted to morality for duty's sake alone, but some philosophers believe that if morality is thought to depend upon God, then one's commitment to morality would not be unconditional. However, as the example of Kant himself shows, it is far from clear that a belief that morality is somehow linked to God necessarily violates autonomy. Even if connecting morality to belief in God creates a problem for autonomy in some senses, it is not obvious that autonomy in these senses is truly essential for the moral life.

Richard Swinburne, in an early book (1979, pp. 175–9), rejects moral arguments that start from the existence of moral truths for a very different reason. (Swinburne does, in the second edition of this book [2004], defend a moral argument of a different type, discussed below.) In his overall case for theism, he claims that basic moral principles are analytic in character and necessarily true. We have no need of any explanation of such truths, any more than we need to explain why a brother is a male sibling, and therefore no need of any theistic explanation. Swinburne argues that a world in which the basic moral principles do not hold cannot be coherently conceived.

However, Swinburne's view here is doubtful for several reasons. There are many people, moral nihilists and relativists, for example, who appear coherently to conceive of the world as one in which no objective moral principles at all hold, so it is hard to see how claims that such principles hold could be analytic. Even people who do agree with Swinburne about the basic principles of morality sometimes worry, after reading

such thinkers as Sigmund Freud and Friedrich Nietzsche, that such beliefs might be an illusion. Furthermore, even if Swinburne were correct that many moral principles are necessary truths, it would not necessarily follow that such principles are purely analytic. Swinburne appears to think that necessary truths must be analytic, but this is dubious. Many philosophers would argue that "water is H₂O" is a necessary truth, but it is hardly analytic. Furthermore, the fact that water is necessarily H₂O by no means rules out the need for an explanation for the structure of water. In a similar way a theist might hold that even if moral truths are necessary, they require explanation and such explanations might involve God. For example, it might be the case that "It is morally obligatory to obey the commands of a good God" is a necessary truth. If God exists necessarily and commands what he commands necessarily, then moral truths can still be necessary in this view (see Chapter 33, Necessity). However, even if this is so there is surely a sense in which God's commands would be part of what explains what is morally obligatory. Moreover, it also seems possible that some of God's commands might not be necessary; God might, for example, give a command that humans should rest for two days a week rather than one. In that case not all moral truths would be necessary truths. Moral arguments may fail, but there is no obvious reason to think they must.

Types of Moral Arguments

The most famous and influential moral arguments were those offered by Kant (1956 [1788]). However, the fourth of Thomas Aquinas's "Five Ways" is best understood as a type of moral argument, and this argument itself seems to rest on ideas traceable to Plato and Aristotle. Other philosophers and theologians who have developed or defended moral arguments include Cardinal Newman, Hastings Rashdall, W. R. Sorley, A. E. Taylor, Austin Farrer, and H. P. Owen. The moral argument presented by C. S. Lewis (1952), in his amazingly popular *Mere Christianity*, though of course not directed to a philosophical audience, is very likely the most widely-convincing apologetic argument of the twentieth century.

The most fundamental distinction to be drawn between types of moral arguments is that between theoretical and practical arguments. Theoretical arguments are aimed at showing that some propositions about God are true, or at increasing the likelihood or probability of their truth. Such arguments typically take some feature of morality or moral experience as data to be explained and try to show that God provides the best explanation of those data. For example, if one believes that people are sometimes obligated to act in certain ways, and one also holds a divine command theory of obligation, one might hold that the fact that people are under obligation is best explained by the fact that God issues certain commands.

Within the general category of theoretical arguments there is tremendous variety. Such arguments may vary by taking different features of the moral life as the data to be explained, by having different accounts of that feature of the moral life, or by offering different accounts as to how that feature is related to and thus explained by God. For example, a philosopher might begin with the sheer fact that some states of affairs have moral value, or the existence of obligations. Other arguments might cite the knowledge of moral obligations as the moral fact to be explained, or cite the special authority

morality seems to have for humans. Moral arguments could even begin with such concrete phenomena as conscience or guilt. Swinburne, though still rejecting a moral argument from the existence of moral obligations, now defends an argument that takes as its starting point the existence of moral awareness among humans (2004, pp. 215–218). Very different accounts of the nature of all these phenomena could be offered, as well as different theories as to how God is supposed to ground or provide an explanation of the feature in question. The overall project will likely include a defense of the reality or objectivity of the feature in question against the moral skeptic, as well as a critique of rival, secular explanations. Some contemporary versions of this type of moral argument will be examined below.

Practical moral arguments aim not at establishing the truth or probability of some propositions about God but rather at making evident the reasonableness of belief on practical grounds (see Chapter 50, Pragmatic Arguments). Some feature of my situation as a moral agent makes belief reasonable or perhaps even necessary for me. The conclusion of such an argument is not "(Probably) God exists," but something like "(Probably) I ought to believe in God."

Kant's Practical Moral Argument

Though the most famous proponent of a practical moral argument was Kant (1956 [1788]), at times he presents arguments of a more theoretical character as well. He rejected all theoretical attempts to show that God's existence could be known, but held nevertheless that a rational moral agent should believe in God. Kant believed strongly in autonomy and thus held that I as a moral being should seek to do my moral duty because of duty and not because of any particular end that I desire. An action is obligatory because of the formal maxim it expresses rather than the end the maxim enjoins. Nevertheless, whenever I act, and therefore whenever I act from duty, I necessarily seek an end.

Since Kant held that happiness is a good that all human beings seek, he believed that the supreme end of the moral life, the complete or highest good, is a world where people are both morally virtuous and happy, and where their happiness is proportional to their virtue. He claimed that one could not reasonably believe that such an end is attainable unless God exists. Empirically there is little reason to think that the world proportions happiness to virtue. However, if the world itself is the creation of a morally good being then there is a basis for hope that my efforts to bring about the highest good will not be wasted or completely ineffectual in the long run.

The heart of Kant's argument is the principle that "ought implies can." If I am obligated to seek to bring about the highest good, then the highest good must be attainable. If it is attainable only if God exists, then it is reasonable for me to believe that God exists.

Kant's argument is vulnerable at a number of points. Opponents have argued that the highest good in his sense is not really a required moral goal, and that even if it is, the possibility of its attainment requires only the possibility of God's existence rather than God's actual existence. Nevertheless, even if this particular argument of Kant is not successful, the core intuition that seems to underlie it retains force, and thus there

are other practical versions of the argument that can be formulated. (Kant himself develops the argument in a number of interesting ways.)

That intuition could be stated like this: If I am truly to live as a moral being, I must be able to believe that the world of which I am a part and in which I must act must in some sense be a moral world, even if all appearances are to the contrary. It is difficult for a moral agent to strive for moral ends in the world and at the same time believe that the world is fundamentally alien to those ends. To live the moral life I must believe that the causal structure of nature is such that progress toward certain ends can be achieved through moral struggle, but that in turn requires that I conceive nature itself as in some way containing a moral order. There may be various ways of conceiving such a moral order, but the theistic understanding of nature as the creation of a morally good being is surely one way of doing so.

It may be objected that such an argument is not purely practical in nature but also theoretical. This seems correct, since the argument really points out an oddity in the situation of a moral agent that can be resolved by thinking of nature in a particular manner. Nevertheless, conceiving of the argument as purely theoretical fails to capture some of its appeal; what is at stake is not merely the resolution of an intellectual puzzle but the possibility of moral action itself.

Other philosophers object to practical arguments on the grounds that such arguments are immoral or irresponsible in that they justify belief without justifying the truth of what is believed. Certainly such arguments should not be employed to evade evidence. Nevertheless, William James (1897) argued that where certain conditions are met, such a prudential or pragmatic argument is a reasonable basis for belief. For James, these conditions included the following: (1) the believer must find the proposition being considered believable yet find that the question cannot be decided on purely theoretical grounds; (2) the believer must be in a situation where some decision is practically required; and (3) the decision must involve some momentous good. Because of the last two conditions, agnosticism is not a practical option.

Some Contemporary Moral Arguments

Though moral arguments for theism have not been a major focus of philosophical discussion in the latter half of the twentieth century, there have been some interesting treatments. Robert Adams (1987, pp. 144–63) has developed both a theoretical and a practical form of the moral argument. His theoretical argument is closely linked to his defense of a "modified" divine command theory of ethical wrongness. According to this theory, in its final form (pp. 139–43), ethical wrongness is identical with the property of being contrary to the commands of a loving God. If there is no God, or if a God exists but is not loving, then nothing would be morally right or wrong. Adams' version of the divine command theory is not vulnerable to the objection that divine commands are arbitrary since they are rooted in God's loving character. Such a theory does not attempt to explain the whole of morality, but only the specific qualities of moral rightness and wrongness. It presupposes that some things, such as love, have value independently of God's commands.

C. STEPHEN EVANS

The strengths of this theory, according to Adams, lie in its ability to make sense of both the objective cognitive status of judgments about ethical wrongness, and in the fact that such judgments appear to state "non-natural" facts, a non-natural fact being one that cannot be completely stated in the languages of the natural sciences, including psychology. Some other meta-ethical theories, such as prescriptivism, capture the non-natural aspect of morality at the expense of cognitivity; others, such as hedonistic naturalism, make such judgments cognitive at the expense of reducing them to judgments about natural facts.

If Adams' divine command theory is true, then a sound moral argument can easily be constructed. If some actions are morally wrong, and moral wrongness consists in being contrary to the commands of a loving God, then there must be a loving God. If such a theory is not only true but plausible, then the corresponding argument must have some force as well. Actually, in order to mount a moral argument for God's existence on the basis of a divine command theory, it is not even necessary for such a theory to cover all moral rightness and wrongness. It will be sufficient if there are *some* moral obligations known to hold which depend on God's commands, and even those who reject a divine command theory of moral obligations in general may concede that some commands of God may create moral duties, just as the legitimate orders of a government or parent may create duties.

George Mavrodes (1986) has developed a theoretical version of the moral argument that does not rest on a divine command theory. Mavrodes' argument takes the form of an attempt to show that certain moral facts, specifically the existence of some moral obligations, would be strange and inexplicable in a naturalistic universe. He begins by describing what he calls a "Russellian universe," the kind of universe that a philosopher such as Bertrand Russell believed was the actual universe. In such a universe, everything that exists and occurs is ultimately the result of "accidental collocations of atoms," and there is no hope for life after death or any ultimate future for the universe.

Mavrodes argues that common naturalistic explanations of moral obligations fail, by trying to show that morality in a Russellian universe would be strange or absurd. For example, he argues that moral obligations cannot consist solely of feelings of obligation, because real obligations can be present where such feelings are absent, and feelings of obligation can exist even where no actual obligations hold. Naturalistic attempts to explain morality as a kind of enlightened self-interest fail as well. It may be true that it is in the best interests of everyone *collectively* for every individual to act morally, but it does not follow from this that it is always in every individual's interest to act morally. Even if it were true that it would be in the individual's interest to act morally if everyone else would do so, it is difficult to see how such a conditional claim could produce real obligations in the actual world, where it is certain that not everyone else will act morally.

Nor is it the case that morality can be explained in terms of evolutionary theory (see Chapter 64, Theism and Evolutionary Biology). Evolution could perhaps explain why certain creatures with moral beliefs and feelings have evolved if we assume that having such beliefs and feelings would have some survival advantage. However, such an explanation does not enable us to understand actual moral obligations. It would appear to explain, not moral obligations, but only the illusion that there are such things.

As Mavrodes sees it, the problem with all such naturalistic views is that they make morality ultimately a superficial, rather than fundamental, aspect of the universe, since what is ultimate in such a view is "accidental collocations of atoms." Morality makes much more sense in a universe in which things like persons, minds, and purposes are "deeper." A theistic universe is clearly one of the ways in which that might be the case. Insofar as moral obligations revolve around respecting the value and worth of persons and the creations of persons, it makes sense to say such obligations must be taken seriously. After all, such a universe is one where a personal God is the ultimate reality (see Chapter 16, Personalism). Theistic religious traditions have usually viewed the natural world as having value because it is God's creation, and human persons and human creations as having special value and dignity because they are created in God's image.

Works cited

Adams, R. M. The Virtue of Faith and Other Essays in Philosophical Theology (Oxford: Oxford University Press, 1987).

James, W. The Will to Believe and Other Essays in Popular Philosophy (New York: Longmans, Green, 1897).

Kant, I. Critique of Practical Reason (1778), trans. L. W. Beck (Indianapolis, IN: Bobbs-Merrill, 1956).

Lewis, C. S. Mere Christianity (London: Collins, 1952).

Mavrodes, G. I. "Religion and the Queerness of Morality," in *Rationality, Religious Belief and Moral Commitment*, ed. R. Audi and W. J. Wainwright (Ithaca, NY: Cornell University Press, 1986), pp. 213–26.

Quinn, P. L. Divine Commands and Moral Requirements (Oxford: Oxford University Press, 1978).

Swinburne, R. The Existence of God (Oxford: Clarendon Press, 1979).

Swinburne, R. The Existence of God, 2nd edn. (Oxford: Clarendon Press, 2004).

Additional recommended readings

Evans, C. S. Subjectivity and Religious Belief: An Historical, Critical Study (Grand Rapids, MI: Eerdmans, 1978).

Linville, M. D. "The Moral Argument," in *The Blackwell Companion to Natural Theology*, ed. W. L. Craig and J. P. Moreland (Oxford: Wiley-Blackwell, 2009), pp. 391–448.

Sessions, W. L. "A New Look at Moral Arguments for Theism," *International Journal for Philosophy of Religion* 18 (1985): 51–67.

Wainwright, W. J. Religion and Morality (Aldershot: Ashgate Publishing Company, 2005).

Wielenberg, E. J. Value and Virtue in a Godless Universe (Cambridge: Cambridge University Press, 2005).

46

Arguments from Consciousness and Free Will

STEWART GOETZ

While some philosophers have constructed arguments for the existence of God which begin with distinctive features of the external world (e.g., contingency or finiteness in the case of the cosmological argument [see Chapter 43, Cosmological Arguments] and order or complexity in the case of the teleological argument [see Chapter 44, Teleological and Design Arguments]), others have developed arguments which begin with distinctive features of the internal world of the self. For example, Kant (1956) argued that the existence of God was a necessary postulate of practical (moral) reasoning (see Chapter 45, Moral Arguments), and C. S. Lewis (2001) argued that the occurrence of reasoning or inference in which apprehension of certain mental contents (e.g., "All men are mortal" and "Socrates is a man") causes another apprehension of mental content (e.g., "Socrates is mortal") implies the existence of a mind which is non-natural (above nature or the natural order) and whose existence depends upon the existence of a necessary mind, or God, who does not reason but knows directly or without inference all that can be known.

If we confine ourselves to the internal world of the self, there are additional features which seemingly transcend the natural order and point toward or suggest the existence of God (cf. Adams 1987 and Swinburne 2004, ch. 9). For example, we are conscious beings. More than that, however, we are self-conscious beings. About what does the first-person awareness of ourselves inform us? Three data are particularly striking. First, the self or "I" seems to be a simple entity in the sense that it seems to be a substance that is not made up of other substances which are its parts. So striking is this fact that philosophers have termed this natural conception of the self the "simple view." Second, the self seems to make indeterministic, uncaused, simple choices in the sense that a choice is a simple event with no event parts and is ultimately and irreducibly explained teleologically by a purpose or reason. This natural conception of the self can be termed the "teleological view." Third, the self is the subject of seemingly intrinsically qualitatively simple experiences, like those of pleasure and pain, in the sense that these experiences are, like choices, events with no event parts. Philosophers refer to these intrinsically qualitative experiences as "qualia" (singular "quale"). An apt name for this natural conception of the self is the "qualitative view." Each of the simple, teleological, and qualitative views deserves elaboration.

The Simple View

The self of the simple view is often called a "soul" or a "mind." A soul, as a substance, has or exemplifies essential properties or characteristics that it cannot lose without ceasing to exist. These essential properties include powers to act and capacities (propensities) to be acted upon. When a soul exercises one of its powers, it is an agent, and when it has one of its capacities actualized, it is a patient. A soul has various essential psychological powers, including the power to think about, consider, or focus on different issues (e.g., think about the soul-body distinction) and the power to choose to act (e.g., choose to become a philosopher). Essential capacities of a soul include the capacity to experience pleasure and the capacity to experience pain, and the capacities to desire (e.g., to desire a drink of water or sex) and to believe (e.g., to believe that writing this essay is hard work or that God exists). Given this characterization of a soul in terms of its essential psychological powers and capacities, it is important to make two additional points.

First, one should recognize that while the power to think is an essential property of a soul, a soul need not continuously exercise this power in order to exist. Moreover, a particular soul, having a particular thought such as the Red Sox will win the World Series, might not have had that thought and yet would still be the same soul. Similarly, though a soul might choose, as a way of life, to forego performing certain kinds of action (e.g., smoking or using habit-forming drugs) as ways of fulfilling its desire for pleasure, it might also choose a different way of life. Whichever choice it makes, it would still be the same soul. The idea here is that particular exercisings of the powers of thought and choice are non-essential or accidental in nature, and it is because they are that we believe that a person could have thought and chosen different things and still have been the same soul. This point about the accidental nature of particular thoughts and choices accounts for the belief that while one chose to be a college professor, one might have chosen instead to have been a lawyer and still have been the same soul. Similarly, because particular thoughts, choices, and personality traits are accidental in nature, a person who enters prison as a bitter, cold-blooded killer can exit as a thankful, kindhearted individual who seeks to promote the well-being of others.

Second, one must be equally mindful of the fact that while a soul has multiple essential, psychological powers and capacities, these powers and capacities are not themselves substances (they are not substantive). Because they are properties and not substances, powers and capacities cannot be separated from and exist independently of a particular soul such that they are able (have the capacity) to become parts of other souls or substances. They are not substantive, separable parts of a soul in the way that a portion of the table on which I am writing (e.g., the top, a leg) is a substantive, separable part of the table which can exist independently of the table and become a part of another substance (e.g., a leg of a table can become a leg of a stool or a rung in a ladder). Thus, a table, unlike a soul, is a complex substance in virtue of the fact that it is made up of parts that are themselves substances (substantive parts). Physical scientists inform us that a table is actually a lattice structure of molecules bound together by attractive powers affecting appropriate capacities, and when this lattice structure is broken by a sufficient force, the table breaks. Unlike a table and material objects in

general, a soul is substantively simple in nature. While a soul is complex insofar as it has a multiplicity of properties, it is simple in so far as it has no substantive parts. Thus, complexity at the level of propertyhood is compatible with simplicity at the level of thinghood.

The Teleological View

A choice is an indeterministic, uncaused, simple exercising of the power to choose for a purpose or reason. It is important to distinguish between a choice that has no explanation and a choice that has no cause. The former kind of choice is necessarily random while the latter is not. Because an uncaused choice is made for one of the reasons constituting the agent's psychological make-up at the time of choice, it has an explanation. When an agent S chooses to act, she does so in order to accomplish or bring about a purpose (an end or goal). In general, a teleological explanation of a choice to perform an action involves an agent (1) conceiving of (or representing in the content of a propositional attitude such as a belief or a desire) the future as including a state of affairs that is a purpose to be brought about or produced for the sake of its goodness; (2) conceiving of or representing in a belief the means to the realization or bringing about of this end, where the means begin with the agent performing an action; and (3) making a choice to perform that action in order to bring about that purpose. Borrowing a term of art from discussions of the nature of propositional attitudes, teleological and causal explanations have different directions of fit. While a teleological explanation is future-topresent in character, a causal explanation is past-to-present in nature. In order to do adequate justice to this direction of fit, one must not only include the idea that a reason is a conceptual entity, an ens rationis or intentional object that is about or directed at the future, but also add that it is optative in mood. Thus, while a reason is not a desire or a belief, its optative character stems from its being grounded in the content of a desire or belief that represents a future state of affairs as good and something to be brought about by a more temporally proximate chosen action of the person who has the desire or belief.

To illustrate the optative, conceptual nature of a reason, consider the case of a businesswoman B who has conflicting reasons to act. She is on the way to a meeting that is important to her career when she observes an assault in an alley. An inner struggle arises out of a moral belief that she should stop to help the victim and a desire that she continue on to the meeting for the sake of her career ambitions. Let us assume that B chooses to return to help the victim. What is the explanation for her choice? Well, she believes that the victim's well-being is in jeopardy and that her returning to help the victim is morally right. In light of this belief, her reason or purpose for acting is *that she do what is morally right* (which, in terms of the first person, is *that I do what is morally right*), and the teleological explanatory relation is expressed by saying that she chooses to return to help the victim *in order to* achieve or bring about the purpose that she do what is morally right. If B had chosen to continue on to the meeting because of her desire that she further her career, the content of her reason for choosing would have been *that she further her career* (which, in terms of the first person, is *that I further my*

career). She would have chosen *in order to* achieve or bring about the purpose that she advance her career.

A final example will help. Assume that B is aware that her husband is ill and that she sends for a doctor. One might think that it is the husband's being ill, an actual state of affairs of the world, that is B's reason for sending for the doctor. On the teleological view, it is not the husband's being ill that is B's reason for sending for the doctor. Rather, her reason is the purpose that her husband be well, which is grounded in the content of a propositional attitude such as *her desire that he be well* (which represents a future, non-actual state of affairs). Therefore, if B chooses to send for the doctor, she does so in order to achieve or bring about the purpose that her husband be well.

The Qualitative View

To illustrate the nature of an experience or quale of pain, consider the following story about a hypothetical scientist named "Mary" (cf. Jackson 1982). For whatever reason, Mary has spent her entire life up until now locked in a room and somehow managed never to experience pain. While locked in the room, Mary has spent her time learning all the physical facts that can be known about pain, including that pain is produced by such-and-such physical objects that cause so-and-so neural happenings, which lead people to utter expletives, etc., etc. Her knowledge is exhaustive. One night, Mary is freed from the room and is invited to go bowling for the first time. As she picks up a bowling ball, she accidentally drops it on her foot and blurts out an expletive. She asks her host what it is that she has just experienced and he informs her that she has experienced pain.

Did Mary learn something new about pain? The obvious answer is "Yes." She learned for the first time what the intrinsic nature of pain is. While in the room, she only learned about extrinsic, relational features of pain. The point of the story about Mary is that there are more facts, namely, psychological facts, than the physical facts as disclosed in the physical sciences. Why couldn't Mary learn from her studies about the intrinsic nature of pain during the time that she was in the room? While part of the answer seems to be that the experiential nature of pain (for lack of a better word, the ouchiness of pain) can only be known from the first-person perspective which Mary lacked vis-à-vis pain, another part of the answer seems to be that physical explanations of the intrinsic natures of things/events about which Mary learned are typically given in terms of partwhole compositional and spatial terms. Take the solidity of a table on which a typical computer sits. The solidity of the table vis-à-vis the computer is explained in terms of a lattice structure of micro-parts held together by attractive bonds which are sufficiently strong to withstand pressures to be split apart that are exerted by objects such as a computer. Such explanations, however, won't work for an experience of pain because it is a defining characteristic of this event that it lacks an event structure. That is, an experience of pain is simple in nature in the sense that it is not made up of event parts. A baseball game is an event made up of a series of events (pitches, hits, catches, innings) and complex emotions like anger can be made up of parts such as the event of forming a judgment (e.g., that someone has wronged you) and the event of having certain feelings (e.g., one might feel an intense aversion), but a simple case of feeling pain is not a structure composed of sub-events. Hence, it cannot be understood in such terms.

Objections

The simple-teleological-qualitative view (STQV) of the self faces numerous objections. One kind of objection is invoked against all three components of STQV. It draws upon the distinction between the awareness of the absence of something and the failure to be aware of that something. In the case of the simple view, the objection is that no one is aware of the substantial simplicity of a self. While it is true that each of us fails to be aware of our self having any substantial parts, this does not support the view that the self lacks such parts. To understand why, consider the following example: Suppose one is asked whether an elephant is present in one's garage. If one looks around from where one stands and fails to see, feel, smell, etc., an elephant, one can justifiably conclude that no elephant is in the garage. This is because it is reasonable to assume that if an elephant were present, then all other things being equal (e.g., one's senses are in working order) one would be aware of it. Contrast this case with another where one is asked if there is a nail in the garage. If we assume that there are cars, bikes, mowers, trash bins, etc., in the garage, one could not justifiably conclude on the basis of one's failing to perceive a nail from where one stands that there is no nail in the garage. This is because it is unreasonable to assume that if a nail were there, then all other things being equal one would be aware of it. According to opponents of the simple view of the self, one's self is like the garage and one's relationship to substantial parts of it is like one's relationship to the nail and not to the elephant.

Now consider the teleological view. Here the objection is that no one is aware of making uncaused choices, though it is true that none of us is aware of our choices having causes. This lack of awareness does not support the view that those choices have no causes, unless one assumes that we are souls which perform mental actions the origins of which are transparent to us. But the objector has already questioned this. Far more plausible is the view that we are extremely complex information-processing systems which magnify small causes into large effects. Vast amounts of information arrive in the form of small amounts of energy. Because of the amplification powers of systems of switches, this information can ultimately be used causally to produce mental acts such as choices. The choices are observable macro effects of micro causes which are beyond the limits of our introspective powers. Therefore, from our failure to be aware of causes of our choices we cannot reasonably conclude that there are none. Our lack of awareness of the causes of our choices is to be expected and counts for nothing in support of their supposed absence. And if our choices have causes, a teleological explanation of them becomes both superfluous and dispensable.

Finally, there is the qualitative view. The objector who already denies the existence of the soul and the making of uncaused, teleologically explained choices typically *functionalizes* qualia, which means that he exhaustively analyzes them into causal inputs and outputs. For example, an experience of pain is no more than an instance of a kind of event which is caused by falling bricks, a hot burner on a stove, and so on, and which has the shaking of limbs and cries of woe as effects. It is only an informational event or

state whose nature is completely extrinsic in character. It is not also a quale with a simple nature that is intrinsically hurtful or *ouchy*. In response to the claim that there must be some intrinsic nature to an experience of pain which makes it capable of standing in cause-and-effect relations (that which stands in relationships is ontologically prior to those relations), the objector answers that there is a failure to be aware of what that intrinsic nature is because, after all, it is a micro informational state of which we see only its macro causes and effects.

Concluding Remarks

In order to construct an argument for theism based on STQV, it would be necessary to rebut the objections discussed above and establish the truth of STQV without appealing to the truth of theism. (Similarly, to use the falsity of STQV as evidence for naturalism, one would first have to establish the falsity of STQV without presupposing the truth of naturalism.) This is not easy to do, if our theories and in particular our worldviews very much influence what we take the relevant data to be. Suppose, however, that STQV can be established without presupposing the truth of theism. Then (assuming theism is coherent) it can easily be shown that STQV supports theism to some degree, at least relative to naturalism, because STQV is clearly more surprising given naturalism than it is given theism. (For further discussion of closely related issues, see Chapter 65, Theism and the Scientific Understanding of the Mind.)

Works cited

Adams, R. M. "Flavors, Colors, and God," in *The Virtue of Faith and Other Essays in Philosophical Theology* (New York: Oxford University Press, 1987), pp. 243–62.

Jackson, F. "Epiphenomenal Qualia," Philosophical Quarterly 32 (1982): 127–36.

Kant, I. Critique of Practical Reason, trans. L. W. Beck (Indianapolis, IN: Bobbs-Merrill Company, 1956).

Lewis, C. S. Miracles (San Francisco: Harper, 2001).

Swinburne, R. The Existence of God, 2nd edn. (Oxford: Clarendon Press, 2004).

Additional recommended readings

Dennett, D. Elbow Room: The Varieties of Free Will Worth Wanting (Cambridge, MA: MIT Press, 1984).

Flanagan, O. The Problem of the Soul: Two Visions of Mind and How to Reconcile Them (New York: Basic Books, 2002).

Goetz, S., and Taliaferro, C. Naturalism (Grand Rapids, MI: Eerdmans, 2008).

Moreland, J. P. Consciousness and the Existence of God (London: Routledge, 2008).

McCann, H. The Works of Agency (Ithaca, NY: Cornell University Press, 1998).

Nagel, T. The View from Nowhere (Oxford: Oxford University Press, 1986).

Parfit, D. Reasons and Persons (Oxford: Clarendon Press, 1984).

47

Miracles

GEORGE N. SCHLESINGER

What is a Miracle?

The word "miracle" originated from the Latin word for a wonderful thing or a surprise. However, to have religious significance, it is not sufficient that an event be merely wonderful. If the desk in front of me suddenly turned into a water buffalo, I would certainly be stupefied. But since such a fantastic metamorphosis would appear not to serve any divine purpose, the theist would not view it as a miracle.

In the Hebrew Bible a miracle is designated by the words *nes* or *oth*, both meaning "a sign." The major function of a miracle is to serve as a spectacular manifestation of God's direct intervention in promoting a divine plan, and thus to inspire religious sentiments (see Chapter 36, Divine Action).

There are some who think that there is an inherent contradiction in the very notion of a "miracle," since a miracle is commonly thought of as a violation of some of nature's laws. However, a regularity which may be broken fails by definition to be a law. Among the various replies to this objection, the one suggested by Richard Purtill is likely to be found fairly congenial. The United States, Purtill points out, has a large set of laws regulating human behavior, but occasionally exceptional procedures are introduced, like presidential pardons. A miracle may be compared to a presidential pardon, in that the origin of the pardon is outside the ordinary legal procedures. It is unpredictable, and plays no role in the maneuvering of a lawyer in the court, since it cannot be brought about by the means available to him during a court procedure. Similarly, the creation of miracles is not within the scope of a scientist's activities. Yet, a presidential pardon does not constitute a violation of the legal system: it is not illegal, it is *outside* the legal system. In a comparable manner a miracle does not violate, but is outside, the system of nature's laws (Purtill 1978, p. 70).

It is important to emphasize that in spite of the widespread belief to the contrary, an event may be the source of marvel and elicit genuine religious response, not only without violating any natural law, but even if all its details may be explained by known laws. As long as an event is genuinely startling and its timing constitutes a mind-boggling coincidence, in that it occurs precisely when there is a distinct call for it to promote some obvious divine objective, then that event amounts to a miracle. The promotion of a divine objective may take many forms: it could be a spectacular act of

deliverance of the faithful from the evil forces ranged against them, it might come as a highly unusual meteorological event through which the priests of Baal are discredited, or it might appear as a swift, clear, and loud answer to the prayers of the truly pious. However, whatever form the wondrous event takes, it should have a religious impact on its witnesses.

Hume's Challenge

Arguably, the most widely discussed challenge to the belief in miracles has been the ingenious, highly compact, epistemological objection by David Hume. A wise man proportions his beliefs to the evidence, says Hume. Wisdom therefore should teach us that "no testimony is sufficient to establish a miracle, unless the testimony['s] ... false-hood would be more miraculous, than the fact, which it endeavors to establish" (Hume 1748, sect. 10). It will be admitted by those of us lucky enough to have some exceptionally trustworthy friends, that none are so very reliable that any lie or erroneous statement escaping their lips would be no less of a marvel than, say, the sun standing still for Joshua. Thus, a rational individual will refuse to give credence to any miracle story.

For over two centuries many attempts have been made to blunt the sharp blow dealt by Hume to the credibility of miracle stories. Some have tried to counter Hume by saying that while he is right in claiming that "someone who has a strictly scientific view of the world ... can never be convinced of the truth of religion by testimony in favor of miracles" (Dawid and Gillies 1989, p. 64), an individual living in a religious cultural climate, in which the probability of occasional direct divine intervention in the physical world is not believed to be too small, is not prevented from entertaining the possibility of a miracle. It turns out then that Hume's argument might be circumvented by someone who allowed the possibility of religious knowledge as distinct from empirically based scientific knowledge (1989, p. 64).

This suggestion does not seem to help much. Recall that Hume said, "upon the whole we may conclude that the Christian religion not only was at first attended with miracles, but even at this day cannot be believed by any reasonable person without one" (Hume 1748, sect. 10). Clearly miracles occur not for the benefit of the converted but for those who are meant to be attracted to religious belief for the first time. Thus if an agnostic brought up in a secular cultural climate could indeed never be induced through a miracle to change his or her position, then Dawid and Gillies' argument has not succeeded in strengthening, but rather in destroying, the foundations of theism.

Price's Argument

A contemporary of Hume, R. Price, devised an argument showing that a fairly reliable individual's testimony is often accepted as adequate evidence even for the most improbable event. He argued that in the case of a lottery where, say, as many as 10^8 tickets have been sold, if an ordinary newspaper reports that ticket number n won the main prize, we believe it without a moment's hesitation. It seems to be of no concern to us

that the prior probability for ticket number n to land the biggest amount was negligibly small, that is, 10^{-8} (Price 1767, pp. 410–11).

Price's putative counterexample to Hume's argument does not work. Obviously, the newspaper's report has to be accepted: if it were legitimate to doubt it, we would be committed to the absurdity that we are capable of prophesying at any time before the draw takes place that all the papers will print false information concerning the winner! This follows from the obvious fact that someone is bound to win, yet no matter who is claimed to have done so we are obliged to disbelieve it.

The Case of the Church Choir

Let me cite an actual example which is likely to throw light on some important aspects of a miracle. Life magazine (March 27, 1950, p. 19) reported that all 15 members of a church choir in Beatrice, Nebraska, came at least 10 minutes late for their weekly choir practice that was supposed to start at 7:20 p.m. on March 1, 1950. They were astonishingly fortunate, because at 7:25 the building was destroyed by an explosion. The reasons for the delay of each member were fairly commonplace: none of them was marked by the slightest sign of any supernatural cause. However, nothing remotely resembling the situation in which all members were prevented from being on time on the same occasion had ever happened before. Furthermore, this singular event took place precisely when it was needed, on the very night on which they would otherwise have perished. Consequently, some people were inclined to see the incident as a clear instance of divine intervention and a compelling manifestation of God's care and power for everyone to see. How else should one explain such a spectacular coincidence which turned out to be the deliverance of people who were regarded as the most pious, and most intensely devoted to any church-associated work, and thus the most truly worthy to be saved, in a manner which (though it did not violate any law of nature) was too startling to be a mere happenstance?

First of all, let us note that even if the probability of any one member having a compelling reason to arrive late at the devotional activity of choir practice is as much as one in four, the probability that just 10 of them should have independent reasons for delay is $(1/4)^{10}$ which is less than one in a million, while for 12 people to have independent reasons for lateness is less than one in 16 million. Thus two important questions arise. First, why is it that practically nobody used Hume's famous argument to cast doubt on *Life*'s story? Second, why was the religious impact of this extraordinary event confined to only a very few people?

Through the answer to the first question, a fairly sound answer to Hume's famous objection will emerge. Some skeptics were reluctant to see a heavenly manifestation in what took place, since they were troubled by the fact that equally "deserving" individuals are only too often abandoned to their bitter fate. Why, then, should certain devout people in Beatrice, Nebraska, be singled out for such special treatment? Others, who assumed that it is inherent in the very nature of miracles not to observe any regularities, were not so much concerned by this, but instead by the problem that the deliverance of the 15 could in fact have occurred in many other ways. For instance, it

could have been that all 15 people arrived at the usual time, 7:20, and the explosion took place earlier, at 7:15. However, the church clock which was taken by everyone to be showing the right time was in fact running 10 minutes late. If any such account is correct, there is not that much room to marvel about the way the congregants escaped harm.

At the same time, the grounds for rebutting Hume should now become evident. If the choir members were inclined to give a fantastic account of their delivery, there is no limit to the number of stories they could have invented. They might have claimed that everyone arrived on time, but a few seconds before the explosion, a monstrous apparition frightened them so greatly that they all dashed outside just in time to be away from the explosion. Or they could have claimed that the support beams happened to fall precisely so as to form a fully effective shield against the falling debris, and so on, and so on. Clearly, no more than one account of their deliverance could be true, while there is an infinite scope for fictitious accounts. If the widely advertised story was not true then there is an exceedingly small probability that among the infinitely many possible stories, that particular fabrication (the purely chance synchronization of 15 people's tardiness) is going to be fed to the readers of Life. But if the printed story is true there was no choice about what to put in the magazine: there was no more than one true story. Thus here, as in the context of many other miracle stories, it is not the case that, as Hume claimed, we are confronted by a contest between two factors (one being more probable than the other), but between one adverse factor and two supportive factors. The credibility of the miracle story is supported first of all by the assumption that the witnesses are fairly reliable, but also by another very significant factor based on the principle that what has a larger probability is more likely to have happened than what has a smaller probability. Obviously, if the printed story was true and they wanted to make sure to give a truthful report, then the probability that it would be the printed report was one. However, if the reported story was false because the people chose to give a false report, then the probability that this particular story was going to be printed (rather than one of its million equally false and dramatic rival fabrications) was exceedingly small.

Acknowledging Miracles

There are many more powerful examples to show that no matter how great a miracle may seem to some, others who are bent upon denying it can always explain it away. For instance we read in 1 Kings 13:6 that the wicked king Jeroboam was about to strike the Prophet, and was instantaneously punished by having his outstretched arm paralyzed. This experience shook the king up so much that he suffered a sudden onslaught of piety manifested by his humbly beseeching the Prophet: "Entreat now the Lord ... that my hand may be restored to me." The king's request was granted, and yet in verse 33 we are told "Jeroboam did not turn from his evil way." But what about the sudden paralysis, occurring precisely at the moment when the king was about to strike the holy man, and the equally swift restoration of the king's arm due to the latter's temporary repentance? Was this not a conspicuous enough manifestation of divine

intervention? We are not given any account of the king's thought processes, but we know the human mind has sufficient resources to explain away any evidence that runs counter to what it is anxious to believe.

Thus the reasonable theist will acknowledge the existence of three types of individuals: the pious, whose belief is firm enough without being given any extraordinary signs; the pliable agnostic on whom the impact of a prima facie miracle may have a transforming effect; and those who will insist on explaining away any miraculous phenomenon.

Arguments for and Against

A source of serious puzzlement has been that if spectacular miracles like the splitting of the Sea of Reeds which was witnessed by over a million people and lasted for several hours are to be believed, why is it that for centuries nothing comparable has been recorded as having happened? It may be noted that this problem constitutes part of the pressure on theists to renounce their belief that such fantastic events are genuinely historical. And indeed in the last hundred years or so the denial of miracles has not been universally regarded as incompatible with theistic belief. No less a person than the Anglican bishop of Birmingham said that "miracles as they are narrated [in the scriptures] cannot in the light of our modern knowledge of the uniformity of nature, be accepted as historical." Obviously, therefore, this problem, like any other problem concerning miracles, is of interest only to believers who are not prepared to demythologize sacred literature (see Chapter 82, Philosophical Reflection on Revelation and Scripture).

Those theists (sometimes labeled "fundamentalists") who read the stories of the scriptures as literal reports of what actually took place may be able to meet the challenge just described. They could suggest that signs of a divinely ruled universe are evenly distributed throughout history. However those signs assume different forms, forms that are best suited to the prevailing cultural climate. This point merits elaboration.

In several papers, one of the greatest physicists of this century, E. P. Wigner, mentioned a number of phenomena which he called "miracles we neither understand nor deserve." It is only because the features of the universe he was referring to are so familiar that we fail to be astonished by them, but since they are unique in their usefulness, while their possible, unuseful alternatives are vastly more numerous, their actual presence is from an objective point of view very surprising. One of these remarkable features is that at distant places and remote epochs of time the same kind of experiments yielded the same results. Were it otherwise, the scientist's task would most likely lie beyond the powers of human intellect (Wigner 1967).

He also pronounced it simply "unreasonable," in that same famous lecture, that the imaginative creations of mathematicians, prompted by no practical need or purpose, virtually always turn out sooner or later to be of vital use to the empirical scientist. He produced some truly staggering examples, but I shall cite only the simplest one. It was known already in antiquity that the square root of +1 is both +1 and -1. Since there is no number which when multiplied by itself results in -1, mathematicians calmly

accepted the fact that -1 does not have a square root. Consequently, the Indian mathematician's assertion that an equation like $x^2 = -1$ is impossible to solve was universally agreed to. But then, in the sixteenth century, an Italian, Rafael Bombelli, said that though in reality there is no number to represent the square root of -1, let us *imagine* what would happen if there *was* a number *i* such that $i^2 = -1$. Thus began a new branch of mathematics dealing with imaginary numbers and their combinations with real ones, to be called "complex numbers." Within 300 years this fantasy-born branch of mathematics turned out to be a very important tool in different areas of physics. Is it not simply miraculous, Wigner asked, that ideas not rooted in any facts at all should turn out to be so much in harmony with the empirical features of the universe?

It seems natural that not everyone was thrilled with Wigner's arguments; his ideas would appear especially repugnant if "miracles" were interpreted in a religious sense, namely as divine manifestations. Michael Gullien, for instance, insisted that we should not read anything supernatural into the mathematician's imagination-spawned abstract results eventually turning out to be indispensable practical tools. He says, "The coincidence between the natural world and the mathematical world is not any more mysterious than the coincidence between the natural world and the auditory, tactile and olfactory worlds" (Gullien 1983, p. 71).

This argument rests on mistakenly regarding all our precious faculties as indispensable weapons in the struggle for survival. It is easy to see how vulnerable the human race would be to adverse forces without the capacity to hear. On the other hand, without the fascinating results of Euler, Gauss, Cantor, and other great mathematicians, though we would be much poorer intellectually and many of the fruits of advanced technology would not be available to us, the human race would still survive.

Conclusion

An inquiry into the nature of miracles is bound to illuminate some of the broader aspects of the nature of religious faith. Believers have found a great variety of supportive evidence for their position. Among them are ancient arguments like the argument from design and more recent ones like Pascal's wager. Miraculous events are merely one kind of factor a believer may cite as testifying to the credibility of his or her position. Each one of these factors may have an impact on those susceptible to it. However, none are compelling: anyone resolutely set against the idea of theism is able to resist the power of the best argument or the most wondrous features of the universe. Hence, it is not implausible for the theist to claim that in fact there is no radical difference between different epochs in history with respect to the availability of support for the existence of a perfect being, but the form it may take is bound to vary with the particular stage of development of the human race at any given time. Pascal's wager would have been of little use, say, a thousand years ago, when people's notions of the concept of probability and of expected utilities were still confused. The implications of the many exciting features of the physical universe would have been lost on an audience even as late as the sixteenth century, when modern science was at a very early stage. Thus the sources of religious inspiration are bound to vary with the varying stages of knowledge and cultural climates.

Works cited

Dawid, P., and Gillies, D. "A Bayesian Analysis of Hume's Argument concerning Miracles," *Philosophical Quarterly* 39 (1989): 57–65.

Gullien, M. Bridges to Infinity (Los Angeles: Tatcher, 1983).

Hume, D. *An Inquiry concerning Human Understanding* (1748), ed. T. L. Beauchamp (New York: Oxford University Press, 1999).

Price, R. Four Dissertations (London: Millar & Cadell, 1767).

Purtill, R. L. Thinking about Religion (Englewood Cliffs, NJ: Prentice-Hall, 1978).

Wigner, E. "The Unreasonable Effectiveness of Mathematics in the Physical Sciences," in *Symmetries and Reflections: Scientific Essays of Eugene P. Wigner*, ed. W. J. Moore and M. Scriven (Bloomington: Indiana University Press, 1967), pp. 222–37.

Additional recommendations by editors

Earman, J. Hume's Abject Failure: The Argument against Miracles (New York: Oxford University Press, 2000).

Fogelin, R. J. A Defense of Hume on Miracles (Princeton, NJ: Princeton University Press, 2005).

Sobel, J. H. "On the Evidence of Testimony for Miracles: A Bayesian Interpretation of David Hume's Analysis," *Philosophical Quarterly* 37 (1987): 166–86.

Sorensen, R. O. "Hume's Scepticism concerning Reports of Miracles," *Analysis* 43 (1983): 60. Swinburne, R., ed. *Miracles* (New York: Macmillan, 1989).

Voltaire, F. "Miracles," in *Philosophical Dictionary* (1764), trans. T. Besterman (London: Penguin Books, 1972). Reprinted 2002.

Ward, K. "Miracles and Testimony," Religious Studies 21 (1985): 134-45.