

Faith and Reason

Maria Rosa Antognazza

Abstract

This contribution discusses Leibniz's conception of faith and its relation to reason. It shows that, for Leibniz, faith embraces both cognitive and non-cognitive dimensions: although it must be grounded in reason, it is not merely reasonable belief. Moreover, for Leibniz, a truth of faith (like any truth) can never be *contrary to* reason but can be *above* the limits of comprehension of human reason. The latter is the epistemic status of the Christian mysteries. This view raises the problem of how it can be determined whether a doctrine above the full grasp of human reason does or does not imply contradiction. The notion of 'presumption' and the 'strategy of defence' are presented and discussed as Leibniz's way to tackle this issue. Finally, the article explores the 'motives of credibility' which, according to Leibniz, can and should be produced to uphold the credibility of a putative divine revelation, including his account of miracles.

Keywords: revelation, mysteries, miracles, prophesy, Biblical criticism, presumption, strategy of defence, confused cognition, motives of credibility

In the *Rectoratsrede* held on 28 February 1888 at the University of Rostock, the Lutheran theologian and university rector, August Wilhelm Dieckhoff (1823-1894), launched a critical assault on "Leibniz's position on revelation".¹ Although nominally a Lutheran, Dieckhoff scoffed, Leibniz did not really follow Luther at all. Instead, in direct contrast to the teaching of the Reformation, he sided with the medieval Scholastics and the "fundamental Pelagian

¹ August Wilhelm Dieckhoff, *Leibnitz Stellung zur Offenbarung* (Rostock: Stiller, 1888). Dieckhoff's *Rectoratsrede* marked the celebration of the local Grand Duke's birthday. Unless otherwise stated, translations are my own. My thanks to Howard Hotson for helpful comments on a draft of this chapter.

mistake of the Roman-medieval Church” according to which “the natural man can love God above all things”.² Instead of acknowledging that “faith finds its firm ground only in God’s revelation, not in the discernment of reason”, Dieckhoff opined, Leibniz reduced revealed theology to natural theology and subordinated revelation to reason. In so doing, the Rostock rector concluded, he paved the way to pantheism and materialism.³

Dieckhoff’s assessment was far from unusual: it was a standard interpretation of Leibniz which is still reflected in recent literature. Leibniz, to quote recent examples, should be saluted as an Enlightenment hero who fought the good fight of “introducing rationality” into religious questions. The *Theodicy* should be regarded as one of the works in which he appears most explicitly “rationalist” in his defence of the “supremacy of reason”,⁴ and in his “choice of a strong theological rationalism” or “an extreme rationalism of faith”.⁵ Leibniz’s theological rationalism, however, should be interpreted as an “overturning of Thomism and of scholasticism in general” due to its “apology of reason,”⁶ contrary to Dieckhoff’s diagnosis of its being the result of “Pelagian” scholastic tendencies.

At the opposite end of the spectrum, other recent contributions detect instead in Leibniz a “moderate fideism” anticipating contemporary “Reformed Epistemology”.⁷ Leibniz’s position, they claim, is similar to “Reformed Epistemology” insofar as it views religious beliefs as ‘properly basic’. According to this alternative interpretation, Leibniz “assigns to faith the role of a primary truth. For Leibniz, some religious propositions can be believed immediately and without an additional examination and evaluation by reason.”⁸ Unlike Locke, who requires that we should carefully examine and evaluate not only the

² Dieckhoff, *Leibnitz Stellung zur Offenbarung*, p. 15.

³ Dieckhoff, *Leibnitz Stellung zur Offenbarung*, esp. pp. 17-19.

⁴ Juan Antonio Nicolás, “Le mal comme limite du Principe de raison,” in *Lectures et interprétations des Essais de théodicée de G. W. Leibniz*, edited by P. Rateau (Stuttgart: Steiner, 2011), pp. 211-227 (here pp. 226-227).

⁵ Michel Fichant, “Vérité, foi et raison dans la Théodicée,” *Lectures et interprétations des Essais de théodicée de G. W. Leibniz*, edited by P. Rateau (Stuttgart: Steiner, 2011), pp. 247- 262 (here pp. 248-249).

⁶ Fichant, “Vérité, foi et raison dans la Théodicée,” pp. 261-262.

⁷ Cf. Vincent Delecroix, “Comment ne pas faire taire la raison après l’avoir fait trop parler: prémisses de la philosophie de la religion,” in C. Leduc, P. Rateau, J.-L. Solère (eds), *Leibniz et Bayle* (Stuttgart: Steiner, 2015), pp. 269-286 (see pp. 276-281, comparing Leibniz’s position to Alvin Plantinga’s proposal in “Reason and Belief in God,” in *Faith and Rationality*, edited by A. Plantinga and N. Wolterstorff (Notre Dame, Indiana: University of Notre Dame Press, 1983), pp. 29-34).

⁸ Michael Losonski, “Locke and Leibniz on Religious Faith,” in *British Journal for the History of Philosophy* 20/4 (2012), pp. 703–721 (here p. 703).

religious experience of others but also our own religious experiences, Leibniz is read as granting “immunity” “from further justificatory requirements” to first-person religious experiences.⁹ These direct religious experiences would ground, for Leibniz, first-person religious beliefs which can be held in an epistemically justified manner without any further evidence or rational evaluation.

In contrast to these two opposite interpretations, this chapter will argue that Leibniz is neither a proto-Deist who subordinates revelation to reason, nor a Reformed Epistemologist ante-litteram who borders on fideism. Instead, Leibniz develops a ‘middle way’ between a theological rationalism which denies any genuine epistemic space to truths above reason and a fideism which denies the need for religious belief to be rationally justified.¹⁰ This ‘middle way’ is deeply indebted to the scholastic tradition of philosophical theology -- both the classic medieval tradition and the Protestant Scholastics of Leibniz’s own time. While remarkably close to the Thomist conception of the epistemic space proper to faith, it is at the same time firmly anchored in Leibniz’s Protestant background. Notably, it significantly diverges from the intellectualistic conception of theology characteristic of the Thomist tradition by regarding theology as ultimately practical.¹¹

What is faith?

Before embarking in a discussion of the relationship between faith and reason, it is helpful to consider what Leibniz means by ‘faith’ and by ‘reason’. Leibniz’s conception of faith is richer than one might expect. It embraces both cognitive and non-cognitive dimensions, involving intellectual apprehension and rational appetite, intellect, and will.¹²

⁹ Losonski, “Locke and Leibniz on Religious Faith,” pp. 718-9.

¹⁰ I have argued for this interpretation in a number of publications, notably *Leibniz on the Trinity and the Incarnation: Reason and Revelation in the Seventeenth Century* (New Haven: Yale, 2007). A similar line of interpretation is defended, for instance, by Paul Rateau, “Sur la conformité de la foi avec la raison: Leibniz contre Bayle,” in *Revue philosophique de la France et de l'étranger*, 136/4 (2011), pp. 467-485.

¹¹ According to Aquinas, although “sacred doctrine” encompasses both speculative and practical aspects, it is speculative rather than practical. Cf. Thomas Aquinas, *Summa Theologiae, Textum Leoninum* (Rome 1886-87; now available online in *Corpus Thomisticum*), I, q. 1 a. 4 (hereafter *ST*). On Leibniz’s view of theology as ultimately practical, see the last section of the chapter on “Philosophical Theology and Christian Doctrines”.

¹² Paul Lodge and Ben Crowe, “Leibniz, Bayle, and Locke on Faith and Reason,” in *American Catholic Philosophical Quarterly* 76/4 (2002), pp. 575-600, show that Leibniz’s account of faith is not deflationary.

As it is generally the case with the intellect (the first of the two main faculties of our mental life), the cognitive or intellectual element of faith has truth as its object. This is, however, a specific kind of truth: not the truth which the human intellect can reach in a natural way, without the help of the supernatural light of faith, but “the truth which God has revealed in an extraordinary way.”¹³ The proper objects of faith are therefore truths “above reason”, that is, revealed truths which surpass the ability of the human intellect to discover and fully comprehend.¹⁴

In turn, considering not the object or content of faith but the ground or reason for assenting to this content, faith “can be compared to experience”. Faith, “as regards the motives which verify it,” depends “on the experience of those who have seen the miracles, on which revelation is founded, and on the Tradition worthy of credibility, which has transmitted them to us, both through the Scriptures, and through the report of those who have preserved them.” This is similar, Leibniz continues, to any belief based on testimony. For instance, we ground our beliefs about China “on the *experience* of those who have seen China, and on the *credibility* of their report, when we give credence [ajoutons foy] to the wonders which are narrated to us of that distant country”.¹⁵ This second aspect of faith captures faith as trust – more specifically, faith as trust in testimony that mediates divine testimony (or divine revelation) itself.

There is, however, a third component of faith which concerns the appetitive aspect of the human soul. As is generally the case with the volitional element of human life, its object is the good. The third aspect of faith is constituted by a longing for the good, which is desired and loved as our fulfilment and happiness. This striving for the good is informed or motivated by charity (the highest kind of love) rather than by rational motives, and is the fruit of the “internal movement of the Holy Spirit who takes possession of souls, and persuades them and brings them to the good, that is to say, to faith and charity, without always having need of motives.”¹⁶

Although faith, for Leibniz, must be grounded in reason, in its full sense it is not reduced to reasonable belief but also requires a supernatural infusion of grace.

¹³ *Theodicy*, “Preliminary Discourse”, § 1 (GP VI 49).

¹⁴ See for instance *Theodicy*, “Preliminary Discourse”, § 23 (GP VI 64).

¹⁵ *Theodicy*, “Preliminary Discourse”, § 1 (GP VI 49-50). See the section on “Motives of Credibility” for a more detailed discussion of this passage.

¹⁶ *Theodicy*, “Preliminary Discourse”, § 1 (GP VI 50). T. Allam Hillman, “Leibniz and Luther on the Non-Cognitive Component of Faith,” in *Sophia* 52/2 (2013), pp. 219–234, notes that Leibniz follows the Thomist

In sum, Leibniz's conception seems to capture the three traditional aspects of the act of faith, expressed by the Thomist formula *credere Deum* (to believe 'that God', or to believe some content about God); *credere Deo* (to believe God, that is, trust revelation); *credere in Deum* (to believe in God as fulfilling one's life, leading to happiness, and so on).¹⁷ Moreover, Leibniz stresses another traditional component of orthodox accounts of faith, namely, the role of divine grace. This is a role acknowledged by all main Christian confessions but especially emphasized by Protestants, who perceived the Roman Catholic Church as inclining instead toward Pelagianism. More specifically, Leibniz distinguishes between "human faith" and "divine faith": "human faith" is grounded in "explicable" reasons or rational "motives of credibility"; "divine faith", or faith in the full sense of the term, is grounded in "inexplicable reasons", that is, in a direct religious experience which comes from grace.

The *reasons* of our persuasion are of two kinds, those of one kind are explicable; those of the other kind are inexplicable. Those which I call *explicable* can be proposed to other people by distinct reasoning; but *inexplicable reasons* consist only in our conscience or perception, and in an experience of an interior feeling into which others cannot enter, if one does not find a way to make them feel the same things in the same manner. ... Now, those who say that they find in themselves a *divine internal light*, or a ray [of light] which makes them feel some truth, base themselves on some inexplicable reasons. And I see that not only the Protestants but also the Roman Catholic use this *ray [of light]*: since -- in addition to the *motives of belief or of credibility* (as they call them), that is to say, in addition to the explicable reasons of our Faith, which are nothing else than a collection of arguments of different degrees of force, and which even taken all together can only ground a *human faith* -- they demand a light of grace from heaven capable of producing a full conviction, and which forms what is called *divine Faith*[.]¹⁸

tradition rather than Luther in emphasizing love (*caritas*) as the non-cognitive element of faith *par excellence*. According to Luther, the key non-cognitive component of faith is trust in God's promise of mercy. Although trust is also present as an element of Leibniz's account of faith, it seems to be mainly intended as trust in human testimony mediating divine revelation.

¹⁷ *ST* II-II, q.2 a.2.

¹⁸ A I vi 76. Leibniz's use of this distinction is found in the context of his exchange with Paul Pellisson-Fontanier of 1690-1691. The distinction is found also in the *Examen religionis christianae (Systema*

In his virtual discussion with Locke in the *Nouveaux Essais*, Leibniz's spokesman (Theophilus) agrees with Locke's representative (Philaethes) that faith must be grounded in reason,¹⁹ but is keen to underscore that there is more to it than reasonable belief:

If you take faith to be only what rests on *motives of credibility* (as they are called) and detach it from the inward grace which immediately moulds our spirit to faith, all that you say, sir, is incontestable. It must be acknowledged that there are many judgements which are more evident than those which depend on these motives. Some people have advanced toward them more than others, and indeed there are plenty of people who have never known such motives, and even less weighed them, and therefore do not even have what could be regarded as a *motive of probability*. But the inward grace of the Holy Spirit makes up for this immediately in a supernatural manner, and this is what theologians call divine faith. It is true that God never bestows it unless what he is making one believe is grounded in reason -- otherwise he would destroy the means of knowing the truth, and would open the door to Enthusiasm – but it is not necessary that all those who have this divine faith know these reasons, and even less that they have them always before their eyes. Otherwise simple people and the feeble-minded, at least now, would never have the true faith, and the most enlightened people would not have it when they might need it most, since they cannot always remember the reasons for believing.²⁰

Leibniz's claim is not that there is no need for religious belief to be supported by rational arguments,²¹ but that not everyone needs to know what these arguments are, and no one is

theologicum), c. April–October 1686 (A VI iv 2362); the *Nouveaux Essais* (book IV, chap. xviii, § 9; A VI vi 497); and the *Theodicy* ("Preliminary Discourse", § 29; GP VI 67-98).

¹⁹ *Nouveaux Essais*, book IV, chap. xvii, § 24; A VI vi 494.

²⁰ *Nouveaux Essais*, book IV, chap. xviii, § 9; A VI vi 497. See also *Theodicy*, "Preliminary Discourse", §§ 40 and 52 (GP VI 73, 79).

²¹ See for instance *Nouveaux Essais*, book IV, chap. xvii, § 24; A VI vi 494: "wise people have always been suspicious of those who have maintained that there is no need to trouble with reasons and proofs when it is a question of believing – something which is indeed impossible unless 'believe' is taken to mean 'recite', or repeat and let it pass without taking any trouble over it"; *Examen Religionis Christianae*, A VI vi 2361: "In turn, revelation must be distinguished by certain marks (commonly called motives of credibility) from which it can be

required to remember them at all times in order to hold a rationally justified religious belief. Whether or not one knows or remembers them, the important point is that there *are* (and there must be) such arguments, and that they can be recalled by someone in the community if and when faith is challenged:

there can be faith even when one does not think, or perhaps never thought, of the grounds of persuasion sought from human reason. Indeed, the analysis of faith is neither always necessary, nor required from all, nor does everyone's condition bear the difficulty of this examination. In virtue of the very nature of true faith, however, it is necessary [necesse est] that those who, in the fear of God, examine the truth more attentively, should be able to put in place an analysis of its motives, when occasion requires. If it were not so, the Christian religion would have nothing to distinguish it from a false religion (*Examen Religionis Christianae*, A VI iv 2362)

In other words, the ability to produce rational arguments in support of the Christian religion is not needed for *salvation*. This fact, however, does not eliminate the need for reasons of credibility which can be presented to those who ask for them. Answering the objection that the “internal declaration of God is sufficient without rational arguments, for many people believe in accordance with the simplicity of their own heart, even if they know no rational reasons for believing,” Leibniz writes:

I agree that many people, with the singular benevolence of God adapting itself to the capacity of all, possess a true faith without having any convincing reasons for it, and that these people can be saved. But our religion would be wretched if it lacked persuasive arguments, and it would not be preferable to that of the Mohammedans or the pagans since no reason could be given to those who asked for one, nor could the faith be defended against impiety or even against the doubts which often make pious men anxious.²²

established that what is contained in it, and is shown to us, is God's will and not the illusion of an evil demon, or our sinister interpretation. And indeed, if any revelation is destitute of such marks, there is no obligation to submit to it”.

²² *Dialogus inter Theologum et Misosophum*, A VI iv 2215. Trans. by Lloyd Strickland in *Leibniz on God and Religion* (London: Bloomsbury, 2016), p. 98.

Thus to the objection that “we can be saved without logic”, Leibniz replies decisively: “I agree, for we can also be saved without reasoning ... Yet we are unable to grasp and uphold the foundations of faith without reasoning”.²³ In fact, according to Leibniz’s psychology of belief, *any* belief must be based on some reasons, although these reasons may well fall short of water-tight formal arguments: “it is obvious that nothing can be believed if one does not think that one has some proof or ground for it. Therefore it must be acknowledged that we all have need of some examination, otherwise religion would be arbitrary.” “In order to believe, faith must be presented in a credible way: otherwise there is no obligation to believe.”²⁴ Moreover, rational motives of credibility which support faith are important due to the very fact that they are “explicable,” that is, they can be communicated and shared with others. They constitute “public”, as opposed to “private”, marks of truth which are needed in religion as in philosophy.²⁵

On the other hand, these rational arguments do not provide the full foundation on which the Christian faith rests.²⁶ Rather, they constitute the preliminary checks on the trustworthiness of a witness or a messenger, whose testimony defies appearances and common experience:

the *motives of credibility* justify, once and for all, the authority of the Holy Scripture before the Tribunal of Reason, so that afterwards Reason surrenders to it, as to a new light, and sacrifices to it all its likelihoods. It is a bit like a new president sent by the Prince, who must show his Letters Patent in the Assembly where he will later have to preside.²⁷

Moreover, rational arguments are not sufficient to convince on their own. For the “full conviction” of true faith (that is, “divine” as opposed to merely “human” faith) the divine illumination of grace is needed. “Contrary to the Pelagians,” Leibniz writes in the *Nouveaux*

²³ *Dialogus inter Theologum et Misosophum*, A VI iv 2217. Trans. by Strickland in *Leibniz on God and Religion*, p. 101 (slightly modified).

²⁴ Respectively, A I vi 76 and 145. See also A VI vi 494.

²⁵ Cf. *Specimen Demonstrationum Catholicarum seu Apologia Fidei ex Rationi*, A VI iv 2323, 2327.

²⁶ Cf. A VI iv 2323.

²⁷ *Theodicy*, “Preliminary Discourse”, § 29; GP VI 67. See also *Examen Religionis Christianae*, A VI vi 2362.

Essais, “all three of the accepted confessions²⁸ ... agree in teaching that there is a supernatural grace in all who have faith” (A VI vi 502). Thus, “aside from human reasons for faith, or motives of credibility, a certain inward operation of the Holy Spirit is required to yield what is called divine faith, and to secure the mind in truth” (*Examen Religionis Christianae*, A VI iv 2362).

Most importantly, faith is not merely a cognitive state involving belief and the intellect. True faith involves also the will and our affective states (“the heart”):

Divine Faith itself, when it is kindled in the soul, is something more than an opinion, and does not depend upon the occasions or the motives that have given it birth; it goes beyond the intellect, and takes possession of the will and of the heart, to make us act with warmth and pleasure, as the law of God commands, without further need to think of reasons, or stop at argumentative difficulties that the mind may envisage.²⁹

What is reason?

Reason, in turn, is defined by Leibniz (at least in this context) as the “concatenation of truths, but especially (when it is compared with faith) of those truths that the human mind can attain naturally without being helped by the lights of faith.”³⁰ Defined in this way, Leibniz continues, reason cannot be faulted, contrary to those who argue (like Pierre Bayle) that human reason is a fallible instrument which often deceives us and which, therefore, cannot be trusted. To be sure, understood as the faculty of reasoning correctly, reason is not infallible. There are indeed plenty of cases in which we are deceived by the false appearance of sound reasoning as much as we are deceived by the appearances of the senses.³¹ The point is, however, that when the reasoning *is* sound, that is, when there is a sound “concatenation of

²⁸ Leibniz is referring to the Evangelical (or Lutheran), the Reformed (or Calvinist), and the Roman Catholic confessions.

²⁹ *Theodicy*, “Preliminary Discourse”, § 29; GP VI 67-68.

³⁰ *Theodicy*, “Preliminary Discourse”, § 1 (GP VI 49).

³¹ *Theodicy*, “Preliminary Discourse”, § 65 (GP VI 87): “If by Reason we mean in general the faculty to reason well or badly, I grant that this faculty could deceive us, and in fact it deceives us, and that the appearances of our understanding are often as deceptive as those of the senses.”

truths and objections in due form,”³² “it is impossible for reason to deceive us” (GP VI 87). In this sense of a concatenations of truths, human reason is as certain as God’s reason.

According to Leibniz, it is therefore mistaken to maintain, like Bayle, that revealed doctrines are conform to the “supreme and universal reason which is in the divine intellect, or to reason in general” but are not conform “to the portion of reason of which humankind makes use to judge of things.”³³

This portion of reason which we possess is a gift of God, and consists in the natural light which has remained in us in the midst of corruption. This portion is conform to the whole, and differs from the reason which is in God only as a drop of water differs from the Ocean, or rather as the finite differs from the infinite. Therefore mysteries may surpass it, but they cannot be contrary to it. Something could not be contrary to a part without being contrary to the whole. That which contradicts a proposition of Euclid, is contrary to the *Elements* of Euclid. (GP VI 84)

In brief, divine reason and human reason are in conformity. What is contradictory for one is contradictory (and therefore necessarily false) for the other. On the other hand, due to the limitation of human reason, there are infinitely many truths which God’s reason embraces but which surpass human comprehension.

Leibniz fully endorses, therefore, the traditional distinction between ‘contrary to reason’ and ‘above reason’.³⁴ A truth can never be contrary to reason (whether divine reason or human reason) but can be above *human* reason. ‘Contrary to reason’ is that which implies contradiction and is therefore logically and metaphysically impossible, that is, absolutely impossible. ‘Above reason’ is what goes against mere ‘physical necessity’, that is, against the necessity of the contingent laws of nature which God has chosen but which admit exceptions for reasons of superior order. This constitutes, for Leibniz, mere ‘moral necessity’ or ‘hypothetical necessity’, that is, the necessity of a choice determined by perfect wisdom and goodness, or the necessity which results from a set of pre-conditions which are not in

³² “A correct reasoning is nothing else than a concatenation of truths” (GP VI 86).

³³ *Theodicy*, “Preliminary Discourse”, § 61 (GP VI 84).

³⁴ See *Theodicy*, “Preliminary Discourse”, §§ 17, 23, 60, 63; *Nouveaux Essais*, book IV, chap. xviii, § 9; A VI vi 498-499.

themselves logically or metaphysically necessary. Thus truths above reason may clash with our experience, with likelihood, and with appearances, but can never imply contradiction:

The distinction that one commonly makes between what is *above reason*, and what is *against reason*, agrees quite well with the distinction that we just made between the two types of necessity [metaphysical necessity and physical necessity].³⁵ For what is against reason is against the absolutely certain and indispensable truths; and what is above reason, is only against what one commonly experiences or comprehends. That is why I am amazed to see that there are people of spirit who fight against this distinction, and that Mr. Bayle is among these. This distinction is certainly well founded. A truth is above reason when our spirit (or even every created spirit) cannot comprehend it: and such is, in my opinion, the Holy Trinity; such are the miracles reserved to God alone, as, for example, the Creation; such is the choice of the order of the Universe, which depends on the Universal Harmony, and on the distinct knowledge of an infinite number of things at once. But a truth will never be against reason, and in the case of a dogma fought and refuted by reason, very far from being incomprehensible, one can say that nothing is easier to comprehend nor more manifest than its absurdity. (GP VI 64)

As indicated in this passage, ‘above reason’ is (more generally) what cannot be comprehended by human reason because its explanation implies an infinite chain of reasons. In this general sense, not only the mysteries of faith are above (human) reason but also the comprehension of any individual substance or the perfect explanation of any truth of fact: “the comprehension itself of individual substances is impossible to the created mind because they involve the infinite. For this reason it is impossible to provide a perfect explanation of the things of the universe [Unde fit ut rerum universi perfecta ratio reddi non possit]. And nothing prevents certain divinely revealed dogmas from being so.”³⁶

Moreover, ‘comprehension’ is for Leibniz a technical term to be read against the backdrop of his account of the degrees of knowledge.³⁷ Our knowledge has increasing degrees of perfection depending on the extent to which we are able to know the properties or

³⁵ *Theodicy*, “Preliminary Discourse”, § 21, GP VI 63.

³⁶ *Annotatiunculæ subitaneæ ad Tolandi Librum De Christianismo Mysteriorum carente* (1701); Dutens V 147.

³⁷ See *Meditationes de Cognitione, Veritate et Ideis* (1684), A VI iv 585-592.

requisites which enter into the notion of something. “Knowledge is *clear*, therefore, when I have that from which I can recognise the thing represented, and this [clear knowledge] is in turn either confused or distinct. It is *confused* when I cannot enumerate one by one the marks which are sufficient to distinguish the thing from others”. On the other hand, it is *distinct* when I am able to distinguish something from everything else by the enumeration of sufficient marks or requisites, that is, when I have a definition. When “all that enters into a distinct notion is in turn known distinctly, that is, when the analysis is carried through to the end, knowledge is *adequate*”.³⁸

Comprehension implies adequate knowledge and adequate notions (or “ideas”). “I call comprehension,” Leibniz writes, “not merely when distinct ideas are involved, but when there are adequate ideas, that is, when we have not only a definition or analysis of the terms proposed, but any term involved in the definition is in turn analysed until we reach primitive terms, as in the case of numbers.”³⁹ Thus, as he explains in the *Theodicy*, “to *comprehend* something, it is not enough to have some ideas of it, but it is necessary to have all the ideas of everything that goes into its make-up, and all these ideas must be clear, distinct and *adequate*.” (GP VI 92). In the case of individual substances and contingent truths (or ‘truths of fact’), however, such an analysis involves an infinite process in which there is no end. Hence, in these cases, there is no possibility of adequate knowledge for the discursive reasoning of limited human beings (as opposed to the intuitive, non-analytical science of vision proper only to God). Most of our cognition is in fact confused cognition, or (at best) distinct but not adequate cognition, that is, cognition in which we have achieved an explanation and some degree of understanding, but these are far from perfect. “It is not necessary,” Leibniz concludes, “to require always what I call *adequate notions*, which contain nothing that has not been explained, since even sensible qualities such as heat, light, sweetness, do not supply us with such notions. So we agree that the mysteries receive an explanation, but this explanation is imperfect.” (GP VI 80).

The conformity of faith with reason

³⁸ *Meditationes de Cognitione, Veritate et Ideis* (1684), A VI iv 585-592 (here 586-7).

³⁹ *Annotatiunculæ subitaneæ*; Dutens V 147.

Truths of faith, or true revealed doctrines, as any other truths, can therefore be “above reason” but can never be “against reason”.⁴⁰ They can and should receive an explanation, but this explanation falls well short of comprehension. In brief, true faith, based on a genuine divine revelation, can only be in conformity with reason. Both reason and revelation are gifts of God: “their fight would be a fight of God against himself”.⁴¹

Granted that truths of faith must be free of contradiction as a condition *sine qua non* of their truth, the problem which confronts Leibniz at this point is how human beings can determine that this condition is met by the mysteries of the Christian revelation. How can human reason determine whether a certain doctrine is or is not free of contradiction if this doctrine is by definition above human reason? For truths above reason, a positive proof of possibility does not seem achievable. According to Leibniz, there are in fact two ways of knowing the possibility of something: *a priori* and *a posteriori*. An *a priori* proof would require an analysis “carried through to the end”. If the notions in question are completely analysed into all their elements, and no contradiction has appeared, their possibility is proved. As we have seen, such an analysis would correspond to adequate knowledge or comprehension. Adequate knowledge, however, is not possible in the case of truths above reason since by definition they are beyond human comprehension. An *a posteriori* proof, on the other hand, is based on experience since what we experience as existing is also certainly possible.⁴² Yes, as Leibniz admits, truths above reason such as the Christian mysteries clash with our experience.

In order to tackle these problems, Leibniz develops a ‘strategy of defence’ in which the notion of ‘presumption’ of possibility plays a central role. Inspired by juridical practice and by procedures well-established within the *ars disputandi*, he points out that for something which has not been (or cannot be) positively demonstrated to be possible (that is, non-contradictory), one can invoke a presumption of possibility which remains valid until the opposite (that is, contradictoriness) is proved. In other words, a thesis is innocent (i.e., a

⁴⁰ Note that this is a view already supported by Thomas Aquinas, who writes in the *Summa contra Gentiles* 1, 7: “The truth of reason is not contrary to the truth of the Christian faith. Although the truth of the Christian faith which we have discussed surpasses the capacity of human reason, nevertheless what reason is naturally endowed with cannot be contrary to that truth.” Leibniz is fond of mentioning the recommendation of the Fifth Lateran Council (1512-17) “to illuminate the truth of faith through sound reason” (A VI iv 2324). Cf. Grua 67 and GP VI 56.

⁴¹ GP VI 73. See also GP VI 67.

⁴² *Meditationes de Cognitione, Veritate et Ideis*, A VI iv 589.

presumption of possibility can be claimed in its favour) until proven guilty. Or, as Leibniz puts it in the *Nouveaux Essais*, “every time logical necessity is not demonstrated, one can presume in a proposition only physical necessity” (A VI vi 499). People, therefore, should not be too quick “to reject everything that does not conform to the order of nature, even when they cannot prove its absolute impossibility” (A VI vi 498). The burden of proof is on those attaching the thesis, not on those defending it. It is up to the attacker to prove that the thesis in question is contradictory; the defender of the thesis has merely the task of showing that the arguments presented by her adversary are not conclusive. As long as there is no demonstration of contradictoriness, something can legitimately be presumed possible.

This notion of presumption is introduced by Leibniz in defence of the Christian mysteries as early as his *Defensio Trinitatis* of 1669. In this youthful text, after his response to the charges of contradiction of the anti-Trinitarian Andreas Wissowatius, Leibniz writes: “Until the contrary has been more adequately proved, we will continue to maintain this statement: that the Son and the Holy Spirit are he who is the one God” (A VI i 520); “Anything is presumed [to be] possible until the contrary is proved” (A VI i 522). Toward the end of his life, in a text of 1702, Leibniz advances a similar claim as a general metaphysical thesis according to which presumption favors possibility, and the burden of proof therefore falls on those who deny this possibility:

any being must be judged possible, *donec probetur contrarium* [until the contrary has been proved], until it is shown that it is not [possible]. This is what is called *presumption*, which is incomparably more than a simple *supposition*, since the majority of suppositions should not be admitted unless they are proved: but all that has presumption on its side must be taken as true until it is refuted. ... possibility is always presumed and must be held as true until impossibility is proved. Thus this argument has the power to shift the *onus probandi in adversarium*, or of charging the opponent with the burden of proof.⁴³

The thought that presumption is stronger than supposition or conjecture is echoed both in the *Nouveaux Essais* and in the *Theodicy*, where Leibniz clarifies that “to presume” is not to accept without proof but to accept provisionally until a proof to the contrary is forthcoming:

⁴³ *Raisons que M. Jaquelot m’a envoyées pour justifier l’Argument contesté de des-Cartes qui doit prouver l’existence de Dieu, avec mes reponses*, 20 November 1702; GP III 444.

As for ‘presumption’, which is a jurists’ term, good usage by them distinguishes it from ‘conjecture’. It is something more than that, and which should be accepted provisionally as true until there is a proof to the contrary [...] In this sense, therefore, to *presume* is not to *accept before* the proof, which is not at all permitted, but to *accept in advance* but not without foundation, while waiting for a proof to the contrary.

Amongst lawyers that is called ‘presumption’ which must provisionally pass for truth in case the contrary is not proved; and it says more than ‘conjecture’.⁴⁴

In the case of the mysteries, a believer is epistemically justified “to *accept in advance* but not without foundation” (that is, for Leibniz, on the basis of motives of credibility) their possibility until the contrary is proved. Thus, “to *presume* is ... to hold something as certain until the opposite is proved.” (A VI ii 567)

Moreover, Leibniz stresses that improbability must be sharply distinguished from impossibility. Mysteries are improbable according to reason.⁴⁵ “At first glance,” they may even seem impossible.⁴⁶ It is granted from the very beginning that, precisely in so far as they are ‘mysteries’, they are against appearances and contrary to the verisimilitudes of reason. It is enough, however, that they are not absurd, and any alleged absurdity requires a positive demonstration of contradictoriness.⁴⁷ From their contrariety to experience follows in fact only improbability, not impossibility:

Merely the improbability of a thing is proved by induction from other examples, as when the Socinians say that in all of nature there is to be found no Being that is one in number which has three Subsistences; from this impossibility is not inferred, only improbability. Induction infers improbability, Demonstration impossibility. (A VI vi 553)

⁴⁴ Respectively *Nouveaux Essais*, book IV, chap. xiv, § 4; A VI vi 457 and *Theodicy*, “Preliminary Discourse”, § 33; GP VI 69.

⁴⁵ Cf. *Commentatiuncula de Iudice Controversiarum*, §§ 33-34 (A VI i 552-3).

⁴⁶ Cf. *De Demonstratione Possibilitatis Mysteriorum Eucharistiae* (A VI i 515).

⁴⁷ Cf. for instance *Theodicy*, “Preliminary Discourse”, § 28.

In sum, the problem of how human reason can check the contradictoriness or non-contradictoriness of a doctrine above its comprehension is solved by shifting from a positive argument to a negative argument, that is, from a proof of the possibility of the mysteries to a proof that their impossibility has not been proved. If a doctrine is a genuine divine revelation, it will always be possible to defend it against the charge of contradiction, since no true revelation could be against reason.⁴⁸

The next step of the ‘strategy of defense’ proposed by Leibniz is therefore to respond to objections against the mysteries. Leibniz is very clear that the burden of proof is on those who attack the mysteries, not on those who defend them.⁴⁹ It is up to the attacker to prove that a doctrine presumed true on the basis of a long ecclesiastical tradition is in fact false because it implies contradiction. The defender can limit herself to showing that the arguments presented by the objector are not conclusive (e.g. it is sufficient “to deny the universality of some proposition of the objection, or to criticize its form”),⁵⁰ without this involving any positive argument in favor of the thesis which is attacked. Those who uphold the mysteries, grant in fact from the outset that, being above human reason, their truth cannot be demonstrated.⁵¹ On the other hand, human reason can attain what is superior to it not by “penetrating it” but by supporting its possibility, “as we can attain the sky by sight, and not by touch”.⁵²

Motives of credibility

Presumption, however, does not discriminate on its own between competing and opposed religious doctrines which could also claim for themselves a presumption of possibility. In order to establish the greater credibility of its doctrines over competing religions, a religion must support such a claim in some other way. This is the role of the “motives of credibility”,

⁴⁸ See for instance *Theodicy*, “Preliminary Discourse”, §§ 22 – 25. The Latin translation of the *Theodicy* (revised by Leibniz) adds to § 58 of the “Preliminary Discourse” a reference to *ST I q. I, a. 8*, where Thomas Aquinas writes: “since faith is based on infallible truth, and it is impossible to demonstrate the contrary of truth, it is evident that arguments brought against faith are not demonstrations but arguments that can be answered”.

⁴⁹ Cf. for instance *Theodicy*, “Preliminary Discourse”, § 58 (GP VI 82); § 73 (GP VI 93); § 77 (GP VI 95-96); § 78 (GP VI 96).

⁵⁰ *Theodicy*, “Preliminary Discourse”, § 72 (GP VI 92).

⁵¹ Cf. for instance *Theodicy*, “Preliminary Discourse”, § 75 (GP VI 94).

⁵² *Theodicy*, “Preliminary Discourse”, § 72 (GP VI 91).

that is, the motives or reasons which can be produced to uphold the *credibility* of a putative divine revelation.

As we have already seen, the condition *sine qua non* of the credibility of any doctrine is, first of all, the lack of any proven contradiction. Polytheism, for instance, would not have for Leibniz any credibility since its falsity follows from the uniqueness of God, for which Leibniz argues, in turn, on the basis of the principle of identity of indiscernibles.⁵³ Secondly, in order for any religious doctrine to be credible, we must be able to grasp to some extent the meaning of the words which express this doctrine. “Faith,” Leibniz writes, “is believing. Believing is holding something to be true. Truth is not of words but of things; for whoever holds something to be true, thinks he grasps the thing according to what the words signify [Fides est credere. Credere est verum putare. Veritas est non verborum sed rerum; nam qui verum putat, putat sic rem se habere, ut verba significant], but no one can do this, unless he knows what the words mean or at least thinks about their meaning.”⁵⁴

Crucially, however, a confused degree of understanding is sufficient. Most of our cognition is indeed of this kind. It would be unreasonable to expect higher epistemic standards for the supernatural realm than those routinely accepted in our cognition of the natural world or in our grasp of many theoretical matters:

it is not always necessary for faith to know what sense of the words is true as long as we understand it, nor do we positively reject it, but rather leave it in doubt even though we might be inclined towards some other [sense]. Indeed, it suffices that we believe in the first place that whatever is contained in the meanings, is true, and this first and foremost in the mysteries in which the practice does not change, whatever the meaning may finally be. (§ 22.) Nonetheless, it is necessary that the intellect should not fall nakedly over the words, like a parrot,⁵⁵ but that some sense should appear before it, albeit a general and

⁵³ See A VI iii 396 and R. M. Adams, *Leibniz: Determinist, Theist, Idealist* (Oxford: Oxford University Press, 1994), p. 153. Cf. also *Il n’ y a qu’ un seul Dieu* (A VI iv 2211-2).

⁵⁴ *Commentatiuncula de Iudice Controversiarum*, § 20; A VI i 550.

⁵⁵ Ursula Goldenbaum, “Die Commentatiuncula de iudice als Leibnizens erste philosophische Auseinandersetzung mit Spinoza nebst der Mitteilung über ein neu aufgefundenes Leibnizstück,” in *Labora Diligenter*, edited by M. Fontius et al., (Stuttgart: Steiner, 1999), pp. 61-107, shows that Leibniz is directing here his criticism against Spinoza (see esp. pp. 80, 90-93; the comparison with the parrot is found in chapter XIII of Spinoza’s *Tractatus Theologico-Politicus*). See also Ursula Goldenbaum, “Spinoza’s Parrot, Socinian

confused one, and almost disjunctive, as the country fellow, or other common man, has of nearly all theoretical things. ... so this faith will be disjunctive, inclining nevertheless to one side. And this is in fact, if you pay attention, what many Christians do in practice.⁵⁶

Leibniz is keen to stress that this kind of “blind thinking [cogitationem caecam]” is sufficient to guide reasonable action. We rely on it in all sort of contexts, including in theoretical discussions in which (for instance) philosophers speak confidently of “matter”, “form”, and “cause”.⁵⁷ His conclusion is that, a fortiori, in matters concerning the supernatural realm, such confused cognition ought to be sufficient for the most important of all practical purposes, namely, salvation:

To anyone who maintains that a distinct cognition of the meaning of the mysteries of faith is necessary to Salvation, it will be demonstrated by me that hardly the thousandth of Christians ... ever have had it. And as a consequence, it suffices for Salvation to hold onto the formula expressed in the Holy Scripture, with a confused cognition of the meaning by the intellect, and with a kind of disjunctive assent or belief. (A VI i 552)

Equally importantly, “as regards the motives which verify it,” the Christian faith depends “on the experience of those who have seen the miracles, on which revelation is founded, and on the Tradition worthy of credibility, which has transmitted them to us” (GP VI 49-50). Before any assessment of the content of Scripture, Leibniz is well aware of the need to verify the authenticity and antiquity of the texts, using the philological and historical tools which would be employed for any other historical work. It is through these texts that the testimony about a putative divine revelation has reached us. As in any other case, their trustworthiness needs to be established “through reason and history,” independently of what the texts say of

Syllogism and Leibniz’s Metaphysics: Leibniz’s three Strategies for Defending Christian Mysteries,” in *American Catholic Philosophical Quarterly* 76/4 (2002), pp. 551-574.

⁵⁶ *Commentatiuncula de Judice Controversiarum*, §§ 21-22; A VI i 550-551.

⁵⁷ A VI i 551-552. The parallel between our cognition of the natural world and our cognition of supernatural matters is especially emphasized in Leibniz’s *Annotatiunculae subitaneae ad Tolandi Librum De Christianismo Mysteriorum carente* (8 August 1701); Dutens V 142-149.

themselves, since a self-testimony of authenticity would not do.⁵⁸ In clear terms, Leibniz states on 18 October 1678 in a letter to Pierre-Daniel Huet:

It must be demonstrated first of all that the sacred books we have are genuine and have come down to us uncorrupted in substance. No one can do this satisfactorily unless he understands the mysteries of the art of textual criticism and can explore the reliability of the manuscripts and unless he is familiar with the linguistic particularities, with the spirit of that epoch and with its chronology.⁵⁹

Far from fearing such an historical investigation, Leibniz is confident that “history renders service to piety and it is from history that the truth of our religion can be demonstrated, for it is in history that it is adumbrated in no uncertain way.”⁶⁰ Indeed, the recovery of a long and shared ecclesiastical tradition, attested not only in Scripture but also in the writings of the Church Fathers and authors acknowledged by all main Christian confessions, plays for Leibniz a fundamental role in the establishment of the truth of the Christian religion.

Ensuring that Scriptures “have come down to us uncorrupted in substance” is, however, only a first step. The question is still open of what we should make of the testimony about miracles and exceptional events contained in them. After all, even among those who witnessed the same events, some believed in them as signs of a divine revelation and some did not. Moreover, as Scripture itself warns, exceptional events of a miraculous kind are not by themselves signs of a divine origin. On the whole, Leibniz seems to want to minimize reliance on miracles.⁶¹ For him, the excellence of the doctrine and the test of charity take

⁵⁸ See *Commentatiuncula de Iudice Controversiarum*, § 16; A VI i 549-550. On Leibniz’s concept of Sacred History and his claim that it should be studied with the same acumen and tools employed in the study of any other kind of history, see Irena Backus, *Leibniz: Protestant Theologian* (Oxford: Oxford University Press, 2016), pp. 155-178. Cf. also Daniel Cook, “Leibniz: Biblical Historian and Exegete,” in *Leibniz’ Auseinandersetzung mit Vorgängern und Zeitgenossen*, edited by Ingrid Marchlewitz (Stuttgart: Steiner, 1990), pp. 267-276.

⁵⁹ A II i 641. Trans. by Backus in *Leibniz: Protestant Theologian*, p. 170.

⁶⁰ *Contemplatio de Historia Literaria Statuque Praesenti Eruditionis*, 1682 (A VI iv 468). Trans. by Backus in *Leibniz: Protestant Theologian*, p. 166.

⁶¹ This approach tallies, for instance, with Leibniz’s eagerness to stress that his doctrine of pre-established harmony explains naturally what occasionalism explains in a miraculous way, as well as his contempt for Newtonian theories requiring (in his view) miracles to explain natural events.

precedence as signs of genuine divine illumination over miracles, which appear to play at best a confirmatory role. In 1678-9, for instance, he argues:

A great deal of reasoning is required to prove miracles we have not seen; indeed, even if we see them with our own eyes, we still need to do a lot of weighing up to ensure we are not deceived. Besides, you know that the miracles of Scripture need another criterion in turn, namely doctrine, since the Antichrist too will conjure up signs which will deceive even the elect (if that were possible) [cf. Matthews 24.24]. Moses said that a prophet who teaches contrary to the law must not be believed, even if he give signs [cf. Deuteronomy 13.2-4].⁶²

In turn, on 20 December 1696, he notes: “the touchstone of true illumination is a great eagerness for contributing to the general good.”⁶³

On the other hand, the possibility of miracles is not denied. In particular, there is a kind of miraculous event which Leibniz regards as in principle trustworthy as a sign of divine inspiration: prophecy.⁶⁴ Prophecy has the peculiarity of being capable of authentication by history. “As *prophecy* is in effect the *history of the future*,” Leibniz writes to Sophie, “I believe that every prophet who could truly give us the history of the forthcoming century would without doubt be inspired by God.”⁶⁵ “It is true,” he notes in 1680,

that the devil can mimic some miracles. But there is a kind of miracle that the devil could not imitate, all powerful and all enlightened as he is, which is prophecy. For if a person can tell me many particular truths about general affairs which are due to happen, for example in a year here, I will hold it as certain that it is God who enlightens him.

⁶² *Dialogus inter Theologum et Misosophum*, A VI iv 2213-4. Trans. by Strickland in *Leibniz on God and Religion*, p. 97.

⁶³ A I xiii 399-400. Trans. by Howard Hotson in “Leibniz and Millenarianism,” in *Alsted and Leibniz on God, the Magistrate and the Millennium*, Texts edited with introduction and commentary by Maria Rosa Antognazza and Howard Hotson (Wiesbaden: Harrassowitz, 1999), pp. 187-188.

⁶⁴ See Daniel Cook, “Leibniz on ‘Prophets’, Prophecy, and Revelation,” in *Religious Studies* 45 (2009), pp. 269-287.

⁶⁵ A I vii 36. Trans. by Cook in “Leibniz on ‘Prophets’,” p. 276.

For it is impossible to anyone aside from God to see the general chain of causes which have to come together in the production of contingent things.⁶⁶

Notwithstanding this (parsimonious) endorsement of miracles, it is still necessary to ask in which sense there could be a miracle in the Leibnizian universe, given Leibniz's complete-concept theory and his conception of pre-established harmony.⁶⁷

Leibniz defines a miracle, strictly speaking, as something which “could not be explained by the natures of created things”.⁶⁸ The exceptionality or rarity of an event is not in itself proof of its being miraculous, as the generality of some kind of event is not in itself a proof of its being natural.⁶⁹ Further, a miracle is not some event which does not follow order, or does not follow any law.⁷⁰ Rather, a miracle is an event which does not follow a *natural* law, that is, one of the contingent laws of nature which God has chosen but which admit exceptions due to some reason which conforms to a superior order. Thus, miracles “are always in conformity with the universal law of the general order, although they are above subordinate maxims,” or laws of nature.⁷¹

It is in this sense that a miracle “could not be explained by the natures of created things,” that is, through natural laws which normally regulate created things and which provide the framework of what is ‘natural’ to them. The ‘nature’ of a created thing, intended instead as its individual essence, cannot but contain in itself also the explanation of any miracle which may affect that substance, that is, the explanation of any fact which does not follow a subordinate law of nature. This fact will still follow “the universal law of the general order” and will still be eternally included with its sufficient reason in the complete concept of that individual substance. Moreover, it will be mirrored in the essences of all the individuals which constitute the same possible world. Thus Leibniz writes that “the primitive laws

⁶⁶ A I iii 356. Trans. by Strickland in *Leibniz on God and Religion*, p. 195, slightly modified.

⁶⁷ An illuminating discussion of miracles is offered by Adams, *Leibniz*, pp. 81-102. See also Frédéric de Buzon, “Les miracles dans la *Théodicée*,” in *Lectures et interprétations des Essais de théodicée de G. W. Leibniz*, edited by Paul Rateau (Stuttgart: Steiner, 2011), pp. 263-281.

⁶⁸ *Theodicy* § 207 (GP VI 241).

⁶⁹ See *Theodicy* § 207 (GP VI 241) in which Leibniz refers to gravitation and occasionalism as theories which would require “perpetual miracles”. The generality of a theory does not ensure that it proposes a natural explanation.

⁷⁰ GP VI 241.

⁷¹ *Discourse on Metaphysics*, § 16; A VI iv 1554.

essential to the series, true without exception,” “contain the whole purpose of God in choosing the universe,” including “miracles.”⁷² In the *Theodicy*, he concludes:

It will also be said that, if everything is governed by rules, God could not make miracles. But one should know that the miracles which happen in the world were also included and represented as possible in this same world, considered at the stage of pure possibility; and God, who has since performed them, had decided to perform them when he has chosen this world. (GP VI 132)

By making space for miracles, Leibniz is able to include them among the “motives of credibility” that the Christian revelation must have to be distinguished from “those believing without foundation that their [spiritual] movements come from God.”⁷³

To conclude, paragraph 5 of the “Preliminary Discourse” of the *Theodicy* offers a clear summary of Leibniz’s position on “the use of Reason and Philosophy with regard to religion”. People should not “confuse *explain, comprehend, prove* and *support*”:

The Mysteries can be *explained* as much as is needed in order to believe them; but one cannot *comprehend* them, nor show *how* they arise; even in physics we explain several sensible qualities up to a certain point, but in an imperfect manner, for we do not comprehend them. Nor is it possible for us, either, to *prove* the Mysteries by reason: for everything that can be proved *a priori*, or by pure reason, can be comprehended. All that remains for us to do, therefore, after having given faith to the Mysteries on the basis of the proofs of the truth of Religion (what one calls the *motives of credibility*), is to be able to *support* them against objections; without which we would have no grounds for believing them”. (GP VI 52)

For Leibniz, faith must be grounded in reason not in the sense that it should be subjected to reason but in the sense that it cannot be irrational. Faith, however, is not merely a matter of believing true doctrines. For the purpose of salvation, the greatest sign of true faith remains for him “the love of God above all things.”⁷⁴

⁷² *De natura veritatis, contingentiae et indifferentiae*, 1685-1686; A VI iv 1518.

⁷³ *Nouveaux Essais*, book IV, chap. xix (“Of Enthusiasm”), § 16; A VI vi 505.

⁷⁴ Cf. the final section of the chapter on “Philosophical Theology and Christian Doctrines.”

Maria Rosa Antognazza is Professor of Philosophy at King's College London. Her publications include *Leibniz on the Trinity and the Incarnation: Reason and Revelation in the Seventeenth Century* (Yale University Press 2007); *Leibniz: An Intellectual Biography* (Cambridge University Press 2009; winner of the 2010 Pfizer Award); and *Leibniz: A Very Short Introduction* (Oxford University Press 2016).