IBN SĪNĀ'S 'BURHĀN AL-ṢIDDĪQĪN'

TOBY MAYER*

Institute of Ismaili Studies, London

INTRODUCTION

The proof of God given by the *Shaykh al-Ra'īs* (d. 429/1037) was used by *falāsifa* as well as non-*falāsifa*, and rendered with an agreed structure.[1] Despite its major profile in Islamic intellectual history and the continuing interest in such arguments in the philosophy of religion, recent interpretations of it vary widely. For example, in one detailed treatment H. A. Davidson has claimed that the proof is definitely cosmological in complexion: 'Avicenna does not regard the analysis of the concept *necessarily existent by virtue of itself* as sufficient to establish the actual existence of anything in the external world. He does not, in other words, wish to offer an a priori or ontological proof of the existence of God, but rather a new form of the cosmological proof.'[2] Other interpreters have with equal boldness

---

* Author's note: My thanks to Tony Street, Yahya Michot and Sajjad Rizvi.

[1] Shihāb al-Dīn Yaḥyā al-Suhrawardī (d. 587/1191) gives substantially the same proof but using 'Illuminationist' terminology. See Suhrawardī, *The Philosophy of Illumination*, ed. and trans. J. Walbridge and H. Ziai (Provo, Utah: Brigham Young University Press, 1999), 87. In the context of Twelver Shī'ī theology, there is a verbatim rendition of the proof in the creed by al-'Allāma al-Ḥillī (d. 726/1325), *al-Bāb al-Hādī 'Ashar*. See W. M. Watt, *Islamic Creeds* (Edinburgh: Edinburgh University Press, 1994), 98. In a Sufi context, see the argument given by 'Abd al-Raḥmān al-Jāmī (d. 898/1492) in his *al-Durra al-Fākhira*, which paraphrases Ibn Sīnā's proof: N. Heer, *The Precious Pearl* (Albany: SUNY 1979), 33. Though treated with respect in later Ash'arism, the proof was kept at arm's length mainly because omitting to use temporal incipience (*ḥudūth*) as the basis for proving God. On somewhat different grounds, Fakhr al-Dīn al-Rāzī (d. 606/1209) rejected a version of the proof starting from the 'basic notion of existence', but accepted one using the contingency of substances in the world. See Y. Ceylan, *Theology and Tafsīr in the Major Works of Fakhr al-Dīn al-Rāzī* (Kuala Lumpur: ISTAC, 1996), 80–81. The impact of the proof is quite obvious, however, in later Ash'arism, e.g. in the commentary on Nasafī's creed by Taftāzānī (d. 791/1390). See Mas'ūd b. 'Umar al-Taftāzānī, *A Commentary on the Creed of Islam*, tr. E. E. Elder (New York: Columbia University Press, 1980), 36.

[2] H. A. Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (Oxford: Oxford University Press, 1987), 281–310 (see especially 298). Other presentations of Ibn Sīnā's argument as cosmological are: L. E. Goodman, *Avicenna* (London: Routledge, 1992), 75;

typified Ibn Sīnā's underlying thinking as ontological. P. Morewedge in particular refers to 'Ibn Sīnā's ontological argument for the existence of God' and speaks of his 'ontological proofs, which are based purely on his analytic specification of this concept [the 'Necessary Existent']'.[3] Yet another approach to Ibn Sīnā's argument takes it to be cosmological overall, but containing an ontological aspect.[4]

Important for Morewedge's interpretation is his wider discovery (rooted in a careful study of the Persian work, the *Dānish Nāma-i 'Alā'ī*) of a distinction in Ibn Sīnā's metaphysics between 'being' and 'existence'. Being, or rather 'being *qua* being', is covered by the Persian term *hastī*, and existence by the Arabic term *wujūd*. Morewedge claims that for Ibn Sīnā being 'is more determinable and more extensive than both "existence" and "essence".'[5] His ontological interpretation of the proof of God is encouraged by this distinction, since it shows how Ibn Sīnā might posit a 'necessary' initially within *hastī*, which then, *qua* necessary, must also be affirmed as fully existent (*mawjūd*). The distinction thus helps explain how the seemingly unbridgeable gap between the conceptual and existential spheres is crossed by Ibn Sīnā—the difficult transition from the pure idea of God to the affirmation of His existence, negotiated in an ontological proof.

In all this, Kant's division of proofs into the ontological, cosmological, and teleological varieties is assumed. But Kant (d. 1804) lumped together many quite different arguments into

M. E. Marmura, 'Avicenna's Proof from Contingency for God's Existence in the *Metaphysics* of the *Shifā*' in *Medieval Studies* 42 (1980), 337; M. Saeed Sheikh, *Studies in Muslim Philosophy* (Pakistan: Sh. M. Ashraf, 1974), 116; S. Afnan, *Avicenna: His Life and Works* (London: George Allen and Unwin, 1958), 131; A.-M. Goichon, 'The Philosopher of Being', in *Avicenna Commemoration Volume* (Calcutta: Iran Society, 1956), 110.

[3] P. Morewedge, 'A Third Version of the Ontological Argument in the Ibn Sinian Metaphysics', in P. Morewedge (ed.), *Islamic Philosophical Theology* (Albany: SUNY, 1979), 188 and 193. Other presentations of Ibn Sīnā's argument as ontological are: 'A. Badawi, *Histoire de la Philosophie en Islam* (Paris, 1972), 2: 647; R. Munoz, 'La existencia de Dios en Avicena' in *Milenario de Avicena* (Madrid, 1981), 89–99; M. Cruz Hernandez, 'Introduccion al estudio del argumento ontologico' in *Revista di Filosofia* 11 (1952), 3–36; F. Rahman 'Ibn Sina' in M. M. Sharif (ed.) *A History of Muslim Philosophy* (Wiesbaden: O. Harrasowitz, 1963) 482; more recently, M. Legenhausen has described Ibn Sīnā's argument as ontological (paper at the World Congress on Mulla Sadra, Tehran May 23–27, 1999).

[4] S. A. Johnson, 'Ibn Sīnā's Fourth Ontological Argument for God's Existence', *Muslim World*, 74(3–4) (July–Oct. 1984), 161–71.

[5] P. Morewedge, 'Philosophical Analysis and Ibn Sīnā's 'Essence-Existence' Distinction', *Journal of the American Oriental Society*, 92(3) (July–Sept. 1972), 425–35 (see especially 432).

these three.[6] So even if it is ruled that Ibn Sīnā's argument is cosmological or ontological, it will remain to be answered *which kind* of cosmological or ontological argument it is. If it is an ontological proof, St Anselm of Canterbury (d. 1109) alone is now credited with two different versions.[7] Then, if the proof is read as cosmological, William Lane Craig has shown that there are three subordinate types of cosmological argument: the *kalām*, the Thomist, and the later Leibnizian type.[8] Arguments of the first type 'maintain the impossibility of an infinite temporal regress', those of the second 'maintain the impossibility of an infinite essentially ordered regress', and those of the third 'have no reference to an infinite regress at all'.[9]

   Though he does not refer to Craig's typology of cosmological arguments, H. A. Davidson (just quoted to the effect that Ibn Sīnā's proof was definitely cosmological) claims that Ibn Sīnā hit on an argument which could entirely dispense with reasoning from the absurdity of an infinite regress. This would mean that, in terms of Craig's typology, the *shaykh* had produced a cosmological argument directly foreshadowing the Leibnizian (or Spinozist) approach. However, Davidson surprisingly finds that Ibn Sīnā 'due to the influence upon him of other proofs of the existence of God … illogically forced his own proof into the mould of familiar cosmological proofs that do explicitly reject an infinite regress of causes.'[10] That is, after he had established that a series of contingents—even regressing to infinity—must depend on an intrinsically necessary being, Ibn Sīnā goes back on the accommodation of infinite regress, in that 'he goes on to infer, as a kind of corollary, that the series must also be finite.'[11] Davidson finds that only when Ibn Sīnā's argument was rehearsed by later thinkers such as Muḥammad b. 'Abd al-Karīm al-Shahrastānī (d. 548/1153) and Hasdai Crescas (?d. 1412), did it finally emerge

   [6] See Immanuel Kant, *Critique of Pure Reason*, trans. and ed. P. Guyer and A. Wood (Cambridge: Cambridge University Press, 1997), 559 ff.
   [7] This discovery was made by Norman Malcolm, 'Anselm's Ontological Arguments', *The Philosophical Review*, 49(1) (Jan. 1960), 41–62. Morewedge has associated Ibn Sīnā's argument with the version in Anselm's Responsio Editoris as opposed to the version in his Proslogion 2. In the former *necessary* existence is held to be a perfection, while in the latter *existence* as such is held to be a perfection. See Morewedge, 'A Third Version …', 190.
   [8] W. L. Craig, *The Cosmological Argument from Plato to Leibniz* (London: Macmillan, 1980), 282 ff.
   [9] Ibid. 282. Leibniz famously maintained that there is an infinity of simple substances, or 'monads'. For a presentation of his proof dispensing with the absurdity of infinite regress, see N. Rescher, *G. W. Leibniz's Monadology* (London: Routledge, 1991), sections 43–5, 150 ff.
   [10] Davidson, *Proofs*, 307.
   [11] Ibid. 302.

in its purity, without any reference to the impossibility of a beginning-less 'linear regress of causes'.[12] In other words, without recourse to the principle, *infinitum actu non datur*.[13]

In the following, an attempt will be made to pin down what in the overall proof qualifies for the classification ontological and what cosmological. Then, if cosmological thinking is in evidence, special attention will be paid to co-ordinate it with Craig's typology of cosmological proofs. One of Ibn Sīnā's attempts to prove God which was best-known to his medieval students stretches from *faṣl* 9 to *faṣl* 15 in *Namaṭ* 4 of the *Kitāb al-Ishārāt wa l-Tanbīhāt*. This presentation of his thinking seems a reasonable focus in re-assessing the proof since, aside from the *Ishārāt*'s importance to medieval Muslim students of Ibn Sīnā, the work was explicitly written without particular concern to fit in with received philosophical norms. Whether the account is accepted according to which it dates from Ibn Sīnā's closing years at Isfahan (as stated in the 'Longer Bibliography',[14] and recently affirmed by D. Gutas),[15] or this account is rejected in the light of Yahya Michot's impressive evidence giving it a rather earlier context in Hamadhan, the *Ishārāt* indisputably remains an intimate, high-fidelity rendering of the *shaykh*'s own ideas.[16] There can, for instance, be some confidence that were a superfluous premise using the principle *infinitum actu non datur* contained in the proof as given in the *Ishārāt*, its presence could not just be put down to Ibn Sīnā's indulgence of a wider, philosophically hidebound, audience—as may have been the case with the *Shifā'* or the *Najāt*.[17] The *Ishārāt* was famously designated by its author as

---

[12] Ibid. 307–8.

[13] 'An actual infinite is not given'.

[14] W. E. Gohlman, *The Life of Ibn Sīnā* (Albany: SUNY, 1974), 97.

[15] D. Gutas, *Avicenna and the Aristotelian Tradition* (Leiden: Brill, 1988), 123–4, and 140.

[16] In confirmation of information in certain manuscripts of Bayhaqī's *Tatimmat Ṣiwān al-Ḥikma*, stating that Ibn Zaylā would read from the *Ishārāt* during the renowned night-long sessions in Hamadhan, Michot has recently found that the *Ishārāt* is referred to by Ibn Sīnā in a correspondence with Bahmanyār in *Mubāḥathāt* I and III datable to the same 1015–1021 period. The work thus appears to have been originally composed with the disciples Bahmanyār ibn Marzubān and Abū Manṣūr ibn Zaylā in mind, and against the background of fierce rivalries for patronage at the Buyid court, pitting Ibn Sīnā against the likes of Ibn Miskawayh and especially Abū l-Qāsim al-Kirmānī. See J. R. Michot, 'La réponse d'Avicenne à Bahmanyār et al-Kirmānī', *Le Muséon*, tome 110, fasc. 1–2, 1997, 143–221.

[17] While it is now disputed that the *Najāt* is simply distilled from the highly public *Shifā'*, Ibn Sīnā makes it clear in the introduction of the *Najāt* that it was put together to provide the philosophical minimum needed to place someone above the commonalty (*al-'āmma*). See Ibn Sīnā, *Al-Najāt*, ed. Muḥyi al-Dīn Ṣabrī al-Kurdī

subject to careful withholding (*al-ḍann*) because of its private nature,[18] churned 'from the cream of the truth'.[19] Nevertheless, other works—especially the *Najāt*—will prove of use in pinning down the text of the *Ishārāt*, given the latter's characteristic concision and ellipsis.

ONTOLOGICAL REASONING IN THE DICHOTOMY OF EXISTENCE

In *faṣl* 9, Ibn Sīnā launches his proof of God as given in the *Ishārāt*:

Remark. Every existent, if you look at it in itself (*min ḥaythu dhātihi*), not looking at anything else, is either such that existence is necessary for it in itself (*fī nafsihi*), or it is not.

If [its existence] is necessary then it is God (*al-Ḥaqq*) in Himself, the Necessarily Existent in Itself—namely, 'the Self-Subsistent' (*al-Qayyūm*).

If it is not necessary, then it cannot be said that it is impossible in itself after it has been presupposed to exist. Rather, if a condition were attached in respect of its essence, such as the condition of the absence of its cause, it would become impossible; or [if a condition were attached in respect of its essence] such as the condition of the existence of its cause, it would become necessary.

If a condition is not attached to it—neither the occurrence of a cause nor its absence—then a third thing is left over for it in respect of its essence. Namely, contingency (*imkān*). And it is, in respect of its essence, a thing which is neither necessary nor impossible. Thus every existent is either necessarily existent in itself or contingently existent in itself.[20]

It will become clear that this crucial first *faṣl* of the argument has stubbornly ontological traits, contradicting those who, like Davidson, deny any such element in the proof. An important question to begin with is whether the 'existence' with which Ibn Sīnā's thinking starts, is known *a priori* or *a posteriori*. That is, is it meant to be known independently of experience, or does it depend on the experience of actual existents in the external world?[21] Admittedly, the opening

(Tehran: Murtazavi 1346 SH), 2; also Gutas, *Avicenna and the Aristotelian Tradition*, 112–14.

[18] Ibn Sīnā, *Al-Ishārāt wa l-Tanbīhāt maʿa Sharḥ Naṣīr al-Dīn al-Ṭūsī*, ed. S. Dunyā, 3 vols (Cairo, 1957–60; hereafter cited as *Ishārāt*) 2: 125: 'I restate my recommendation and repeat my request that what these parts contain be withheld completely (*an yuḍanna … kulla l-ḍann*).'

[19] Ibid. 3: 903: 'Brother! I have churned for you in these pointers, from the cream of the truth (*ʿan zubdati l-ḥaqq*).'

[20] Ibid. 3: 447.

[21] Throughout, *a priori* and *a posteriori* will be used in these senses.

expression 'every existent, if you look at it in itself'[22] suggests an
a posteriori approach. Moreover, Naṣīr al-Dīn al-Ṭūsī (d. 672/1274)
a little later in his commentary on *faṣl* 11 says of the regress of
contingents, 'on the assumption (*taqdīr*) of their existence'.[23] But lest
this deflect us, it should be recalled that for Ibn Sīnā existence
is amongst the primary intelligibles, ever inscribed (*tartasim*) on the
intellect. The status of existence as a primary intelligible seems clear
in the phrasing of the famous opening proposition of the proof of God
as given in the *Najāt*: 'There is no doubt that there is existence.'[24]
Significantly, when Ibn Sīnā's proof was rehearsed in later literature,
it was this proposition from the *Najāt* which was routinely given
first, not the parallel one from the *Ishārāt*.[25]

Next in the *faṣl*, existence is mentally subjected to a dichotomy.
Either it is necessary, or it is not necessary.[26] On the basis of the
first division, Ibn Sīnā seems immediately to proceed to infer the
actual, *extra-mental*, reality of God. As he says, the first division will
amount to 'God (*al-Ḥaqq*) in Himself, the Necessarily Existent in
Itself—namely, 'the Self-Subsistent' (*al-Qayyūm*)'. In this, the *shaykh*
makes the crucial ontological move from the idea of a 'necessary'
division in the dichotomy of existence (expressed by the technical term
wājib al-wujūd), to the affirmation of a particular instance of it
in reality, a divinity (expressed by the scriptural terms *al-Ḥaqq*
and *al-Qayyūm*).[27] Again, the *Najāt* is of assistance to us in weighing
this. For when this proposition ('If [its existence] is necessary then
it is God in Himself, the Necessarily Existent in Itself—namely, "the
Self-Subsistent"') is co-ordinated with the version of the proof in
the *Najāt*, the statement given at exactly the same point after existence

---

[22] Ibid.

[23] Ibid. 3: 449.

[24] *Najāt*, 235: *lā shakka anna hunā wujūdan*.

[25] But note that some interpretive translations of the proposition in the *Najāt*
manage to keep it *a posteriori*. For example 'There is no doubt that there are existents'.
See G. Hourani, 'Ibn Sīnā on Necessary and Possible Existence', *Philosophical Forum*
4 (1972), 74 ff., especially 81. This is also true of Davidson's translation: 'There is no
doubt that something exists' (*Proofs …*, 303). But Marmura, who like Davidson takes
the overall proof to be cosmological, nevertheless argues at length that the existence
which is the starting-point for the cosmological proof is *a priori*, and he translates
accordingly: 'There is no doubt that there is existence'. See Marmura, 'Avicenna's
Proof from Contingency …', 341 ff. and 350.

[26] That the dichotomy of existence is *mental* is made quite explicit in the *Shifāʾ*:
'The things which are included in existence are susceptible in the mind (*taḥtamilu fī
l-ʿaql*) to dichotomy into two divisions …' Ibn Sīnā, *al-Shifāʾ*, *al-Ilāhiyyāt*,
ed. I. Madkour (Cairo: Organisation Général des Imprimeries Gouvernementales,
1960), 37.

[27] E.g. Qurʾān 41.53 and 2.255.

has been dichotomized, is 'and if [existence] is necessary, then the existence of the Necessary proves true (ṣaḥḥa), and that is the [conclusion] aimed for.'[28] This better brings out the ontological character of Ibn Sīnā's reasoning in this part of the proof.

But as it stands, this quotation from the Najāt will, for some, still not be decisive evidence of ontological reasoning. For it has been interpreted by more than one of the scholars who emphasize the cosmological character of Ibn Sīnā's reasoning, to amount to the merely hypothetical claim that '*if* existence can be shown to include a necessary division, then the argument would be complete'. According to this interpretation, the fact that existence does indeed include such a division is then only brought out later, strictly on the basis of the contingent.[29] Clearly, this interpretation of the quoted proposition gives it an oddly superfluous role in the argument. But it also goes against what Ibn Sīnā says in other places. Elsewhere in the Najāt, for instance, Ibn Sīnā speaks in terms which powerfully support an ontological reading of this part of his argument: 'The Necessarily Existent is that existent which when hypothesized as *nonexistent*, an absurdity occurs thereby ('araḍa minhu muḥāl), while the contingently existent is that which when hypothesized as nonexistent or as existent no absurdity occurs thereby.'[30]

However, decisive evidence that we are at liberty to read the proposition in ontological terms seems to be at hand at the end of the Fourth Namaṭ of the Ishārāt itself. There, in faṣl 29, Ibn Sīnā turns back to try to bring out the superiority of his approach to metaphysics in the Namaṭ as a whole. First of all he refers to the approach of the commonfolk (qawm), quoting the words from the Qur'ān (41.53) 'We shall show them Our signs on the horizons and in themselves until it becomes clear that it is God.' Their approach thus depends on the contemplation of the cosmos and its data, 'the signs on the horizons and in themselves'. As Ṭūsī explains, this inductive procedure is typified by the scriptural theologians (mutakallimūn) and also the natural philosophers (al-ḥukamā' al-ṭabī'iyyūn), as exemplified by Aristotle's own kinematic proof.[31] It is the words in the Qur'ān which follow the above, which are next quoted in characterization of the quite different procedure of Ibn Sīnā and the lovers of truth (al-ṣiddīqūn), or as Ṭūsī says, the true metaphysicians (al-ilāhiyyūn): 'Does it not suffice that your Lord is witness to everything?' Thus, the

[28] Najāt, 235.
[29] E.g. Marmura, 'Avicenna's Proof from Contingency …', 345: 'There is no categorical assertion that both modes of existence are included among the existents.'
[30] Najāt, 224.
[31] Ishārāt, 3: 482.

ṣiddīqūn aim to prove everything through God Himself, or as Ibn Sīnā explains, 'they adduce evidence through Him (*yastashhidūna bihi*), not towards Him (*lā 'alayhi*)'.[32] The proof of God is at the forefront of the minds of both Ṭūsī and Fakhr al-Dīn al-Rāzī in their commentaries here, despite the fact that the *namaṭ* contains many other arguments—notably the one for God's unity—which could have been cited as 'adducing evidence through Him, not towards Him'.[33] The message is clear. It is understood that Ibn Sīnā's proof of God was taken as the example par excellence of the procedure in question. He was understood to have sought no evidence for God's existence outside of 'God', Himself.

COSMOLOGICAL REASONING AND THE ROLE OF '*INFINITUM ACTU NON DATUR*'

Morewedge has been one of the main defenders of the ontological character of Ibn Sīnā's thinking, yet he dismisses all ontological proofs: 'We deem these arguments logically unsatisfactory—valuable only for the pedagogical study of metaphysical concepts used in the argument itself.'[34] However, it would be precipitate of us to classify Ibn Sīnā's whole proof solely on the basis of the character of its preliminary propositions. The rest of *faṣl* 9 remains to be dealt with, and it is only the first of seven *fuṣūl* making up the total argument. Davidson's treatment of the overall proof as cosmological may turn out to be far from misleading, insofar as the greater part of it does not reason on the basis of the first division in the dichotomy of existence, the necessary, but on the basis of the second, the contingent. So throughout the rest of the proof Ibn Sīnā sets to one side the argument for God which simply uses the idea of necessity of existence, and instead tries to show in considerable detail that contingent existence can by no means stand alone, and presupposes the Necessary— a cosmological argument.

---

[32] *Ishārāt*, 3: 483.

[33] The issue of God's unity is discussed from *faṣl* 16 to 20. Though in *faṣl* 19 a supplementary proof using God's immateriality is given from Aristotle, Ibn Sīnā's main proof (running from *faṣl* 16 to *faṣl* 18) argues for God's unity on the basis of His absolute simplicity. The duplication of the Necessary Being produces two conceptually composite beings, each with an aspect held in common (necessity of existence) and an aspect not held in common (the two individuations). Contrast this with the *kalām* approach to this issue which argues for divine unity on the basis of the fact that there is a cosmos and not a chaos—using prooftexts such as Qur'ān 21.22: 'Were any gods in [heaven and earth] other than God, [heaven and earth] would be in chaos'.

[34] Morewedge, 'A Third Version …', 214.

We turn now to this part of the proof. Compared with the *Najāt*, in the *Ishārāt* Ibn Sīnā can be seen to be even more meticulous in his diaeretic approach to setting up his argument. In the *Najāt* he divides existence without further comment into the necessary and the contingent.[35] However, diaeresis demands that terms be arranged strictly according to the presence or absence of a given attribute. Here in *faṣl* 9, the necessity of existence is therefore carefully ranged against the exactly contradictory term, the *non-necessity* of existence: 'If [its existence] is necessary then it is God in Himself. If it is not necessary then … etc.'[36] Immediately, Ibn Sīnā goes on to show through elimination (*ḥadhf*) that non-necessity, in the diaeresis of existence, can only mean contingency. Thus, two things are pre-supposed for the subject of this division: that it is existent, and that it is not necessary. Though non-necessity technically covers impossibility as well as contingency, the subject cannot be intrinsically impossible (*mumtaniʿ bi-dhātihi*), since it has been presupposed to exist (*furiḍa mawjūdan*). The impossible is what cannot exist, so if the subject falls within existence it could not be *impossible* in status. In itself, this is enough to show that in the division of existence, necessity is complemented by contingency.

However, as can be seen from the translation above, Ibn Sīnā goes on to complicate matters. For he admits after all that an existent may in some sense be called impossible, namely, 'if a condition were attached in respect to its essence, such as the condition of the absence of its cause.' That is, if it potentially exists but is kept from existence through the lack of a cause. This is in other words an *extrinsic* kind of impossibility, as opposed to the intrinsic impossibility of something purely absurd. Correspondingly, if the same thing were to enter existence through the presence of its cause, it may equally well be described as 'necessary'. Again, the necessity with which it is ascribed is not the *intrinsic* necessity proper to the Necessary Being. It is instead an extrinsic and acquired necessity, but necessity nevertheless: *wujūb bi-l-ghayr*. Finally, insofar as the thing is treated as a pure quiddity, without any consideration of its cause's absence or presence, and fluctuating between impossibility and necessity, it is to be ascribed with contingency.

A motive can be found for this unexpectedly involved approach to determining contingency. Through it, Ibn Sīnā has managed to limit himself to things *within* the cosmos itself. This would be in line with the aim to proceed cosmologically and take the things of the world

---

[35] *Najāt*, 235: 'There is no doubt that there is existence, and all existence is either necessary or contingent'.

[36] *Ishārāt*, 3: 447.

as the starting-point of the argument in this part of the proof. In the end he manifestly avoids determining 'contingency of existence' *a contrario*, as simply that which is *not God*. Had he done so, he would have mired the lengthy cosmological part of his proof in circularity—proving a Necessary Being on the basis of that which is only determined by reference to It. In installing the contingent of existence in *faṣl* 9 Ibn Sīnā instead carefully makes reference only to necessity (and impossibility) within the cosmos and so supplies the cosmological part of his argument with a self-consciously cosmo-logical basis. He thereby seems to show an awareness that this aspect of his proof had to be distanced from the sheer apriority of the ontological part.[37]

In *faṣl* 10 Ibn Sīnā presents the characteristic of any contingent entity, which is essential to his thinking throughout the rest of the proof. This is the entity's characteristic of depending on what is outside it, in order to exist:

Pointer. What has contingency as its property in itself, does not become existent by itself. For its existence by itself is no more appropriate than its non-existence, inasmuch as it is contingent. And if one of them becomes more appropriate, it is due to the presence of something or its absence.

Thus, the existence of every contingent is from other than it.[38]

The understanding that anything contingent must get its existence from outside itself (*min ghayrihi*) is the crux of Ibn Sīnā's thinking henceforth in the proof. The absurdity of self-existentiation is presented here simply on the grounds that neither existence nor non-existence are more appropriate (*awlā*) for the contingent. To explain why one of these two prevails, reference must be made outside the contingent itself. Fakhr al-Dīn al-Rāzī makes the provocative claim that this fundamental premise in Ibn Sīnā's proof amounts to a mere assertion. It does not amount to an argument: 'to occupy oneself [with the thought] that the contingent is incapable of self-existence, is analogous to the statement that that which is not self-existent, is not self-existent—and this consists in what is useless!'[39] In other words, the proposition turns out to be tautologous (*mustaghnan*). Ṭūsī is

---

[37] However, note how Ibn Sīnā's careful use of the extrinsic necessity of existents within the world, as distinct from the intrinsic necessity of God, contributes indirectly to the ontological part of his argument. For presumably, if something with extrinsic necessity enters existence merely conditionally, then something with intrinsic necessity is in existence unconditionally, i.e. we must affirm its existence under all circumstances.

[38] *Ishārāt*, 3: 448.

[39] Ibn Sīnā, *Sharḥay al-Ishārāt*, ed. al-Sayyid al-Khashshāb (Cairo: al-Maṭbaʿa al-Khayriyya, 1325 AH; hereafter cited as *Sharḥay al-Ishārāt*), 195.

provoked by this to exhibit Ibn Sīnā's point in clearly synthetic terms. He therefore draws attention to the principle of preponderation (*tarjīḥ*). If it were affirmed that a contingent could do without any external factor in coming to be, then by implication, the basic absurdity for one of two equal things preponderating without some preponderator (*murajjiḥ*) would have been denied.[40] Yet, as Quṭb al-Dīn al-Rāzī (d. 766/1364) says in his gloss, for one of two equal things to preponderate without a *murajjiḥ*, is 'absurd in spontaneous intelligence (*fī badāyati l-ʿuqūl*)'.[41] Another explanation than preponderation, with the naïveté of its implicit imagery of equally-balanced scales, lies in what Ibn Sīnā says later in *Namaṭ* 4 of the *Ishārāt*, in *faṣl* 17. There he argues that since a quiddity *qua* quiddity lacks existence, it clearly cannot be responsible for its own transformation into an existent, i.e. for supplying itself with what it precisely lacks—existence.[42]

In *faṣl* 11 Ibn Sīnā moves on from contemplating an individual contingent, and starts to speak in terms of a series (*silsila*) or aggregate (*jumla*) which consist in nothing but contingents.

Remark. If that regresses to infinity, each individual of the series is contingent in itself, and the aggregate depends upon it. Thus it also is not necessary, and it becomes necessary by another. Let us supply this with an explanation.[43]

The final words refer to the following *faṣl* (12), in which Ibn Sīnā presents the same idea as here, using a longer disjunctive argument. The central point is that if the individual contingent which was the focus of attention in *faṣl* 10 is augmented by other contingents, the series which emerges will be subject to the same ruling as the original individual. Like any individual contingent, the series which consists in nothing but such individuals cannot be causally reflexive, and must depend on something outside it. Ibn Sīnā supports this with an *a fortiori* argument. The series cannot emerge into non-contingency, because its reality is simply derived from that of the individuals. If each individual is contingent, the series is *a fortiori* contingent.

However, the most important claim here remains as yet undiscussed: its first words, 'if that regresses to infinity'. Taking the full consequences of the ruling that a series of contingents is *a fortiori*

---

[40] *Ishārāt*, 3: 448.

[41] Ibn Sīnā, *al-Ishārāt wa l-Tanbīhāt*, with Ṭūsī's and Quṭb al-Dīn al-Rāzī's commentaries, 3 vols (Qum: Nashr al-Balagha, 1375 ꜱʜ), 3: 19.

[42] *Ishārāt*, 3: 460–62: '… It is not feasible that the attribute which is the existence of a thing be only due to its quiddity which does not consist in existence *(al-latī laysat hiya l-wujūd)* … since … there is nothing prior in existence to existence'.

[43] Ibid. 3: 449–50.

contingent, Ibn Sīnā insists that the series might be pushed back and back to infinity, such as to have no beginning. It will, for all that, remain contingent. When applied—as intended—to the world, this ruling is revealed to be a major fault-line in the intellectual topography of medieval Islam. The Avicennan claim that the world might lack any moment of creation but *not* thereby become 'uncreated' was argued against at length, most notably within Ash'arite *kalām*.[44] It is also noteworthy that many modern rejections of the cosmological argument are predicated on the idea that if the world can be shown to be beginningless (as in the case of the oscillating model of the universe, or S. Hawking's 'no-boundary condition' in which space-time is not delimited by any original singularity) the world would have emerged into the status of self-sufficiency, even though it contains nothing but contingent data.[45] In such perspectives, it is felt that if each successive contingent state in the universe is explained by one before it, and this process extends back without beginning, the presence of the universe is adequately explained.

Though Ibn Sīnā rejects such views as wrongheaded, Fakhr al-Dīn al-Rāzī maintains that a suppressed premise (i.e. *muqaddima khafiyya*) is at play in his rejection, only established by the *shaykh* much later at the beginning of *Namaṭ* 5. The premise in question is the existence of a special type of causation in which the cause is temporally co-extensive with the thing caused: '… he speaks here about the falsity of [infinite] regress, and he should have spoken before this section in explanation of the fact that the effective cause (*sabab mu'aththir*) may not be prior to the effect with a temporal priority. For were that allowed, it would not be impossible to attribute every contingent thing to the next one prior to it to infinity—that being not impossible in his opinion. For how [else] could it be ruled out, in proving the Necessary Existent?'[46]

So, to Rāzī's mind, it is only through this special, simultaneous, type of causation that Ibn Sīnā can escape from the infinite regress of

[44] For instance in the first discussion of Ghazālī's 'Incoherence of the Philosophers' and Ibn Ghaylān al-Balkhī's 'The Temporal Origination of the World'. See al-Ghazālī, *The Incoherence of the Philosophers,* trans. and ed. Michael Marmura (Provo, Utah: Brigham Young University Press, 1997), 12–46; also 'Umar Ibn Ghaylān and Ibn Sīnā, *Ḥudūth al-Ālam* and *al-Ḥukūmāt,* ed. M. Mohaghegh (Tehran: Institute of Islamic Studies, 1998). Also see the critique from a possibly Ismā'īlī angle by Abū l-Fatḥ al-Shahrastānī, *Musāra'a al-Falāsifa,* ed. S. M. Mukhtar (Cairo, 1976), 97 ff.

[45] See S. W. Hawking, *A Brief History of Time* (London: Bantam Press, 1988), 136.

[46] *Sharḥay al-Ishārāt,* 195.

caused causes through time. Since not only does this special causality allow him to extricate himself from the beginningless unfolding of the temporal series in the first place; in addition, it allows him to rule that the new 'tangential' series could not be beginningless, in contrast with the temporal one. The main point here is of course that the infinite regress of any series of causes is only avoidable if the series is present as a whole, or 'actual'. This follows from Aristotle's principle, *infinitum actu non datur*. The new, special type of causality involves the simultaneity of causes and effects in time, so produces the kind of regress which cannot be infinite, because it is actual. It thus seems clear that without the suppressed premise mentioned, an uncaused cause would never need to be reached.

But it can be argued that Rāzī's judgement is not fair. Scrutiny of the *faṣl* in fact suggests that Ibn Sīnā is not yet trying to reach a Necessary Existent, as Rāzī explicitly assumes, nor is Ibn Sīnā as yet trying to bring any regress to a limit. On the contrary, the *shaykh* is saying: let any regress of contingents have no beginning, and it will still in itself be contingent. Hence it presupposes *some external factor*—a relatively modest claim. For the moment, Ibn Sīnā appears to leave it open whether that 'external factor' is itself caused or not. Since he is not as yet out to bring any regress to a limit, he does not need to assume a special simultaneous kind of causation in this *faṣl*, via which he can make use of the principle *infinitum actu non datur*. Admittedly, he does want to step somehow *outside* the temporal regress of caused causes. This very 'stepping outside' seems to presuppose a special kind of causation, distinct from and tangential to that which unfolds in time. Yet even here, it can be argued that this new parallel dimension of causation is not so much a premise as a consequence of Ibn Sīnā's reasoning. For he clearly reasons on the grounds of the nature of contingency alone—its pointing to some external factor. If the contingent chain is without beginning, its depending aggregately on something external *ipso facto* takes us into this parallel dimension.

The next *faṣl* (12) is a 'commentary' (*sharḥ*) by Ibn Sīnā himself on all this, and should be read bearing the above in mind. Namely, that Ibn Sīnā is so far simply concerned with arguing that whatever only consists in things which are individually dependent on an external cause, *itself* must depend on an external cause. The external cause inferred is not as yet argued to be an *uncaused* cause, and we are simply asked to assent to the presence of some such factor.

Commentary. Every aggregate whose individuals are caused, requires a cause external to its individuals.

This is because, either it does not need a cause at all, so it would be necessary and not contingent. And how is this feasible—it being necessitated simply by its individuals?

Or else, it needs a cause which is the individuals all together, so it would be caused by itself, for this aggregate and 'all' are one and the same. As for 'all' in the sense of each individual—the aggregate is not necessitated by it.

Or else, it needs a cause which is one of the individuals, and none of the individuals is more appropriate than another for that since every one of them is an effect—in that its [immediate] cause is more appropriate for that.

Or else, it requires a cause external to all its individuals. And that is what is left over.[47]

A property will *a priori* hold for that which is subalternate, if it has been established for what is superalternant. Infinite series of contingents are a subordinate set of all series of contingents. So if any series composed only of contingents depends on something outside, this will hold for an *infinite* series of that sort too. This is surely the main point here.[48] Ibn Sīnā goes on to give four disjuncts, the fourth of which is what he wants to prove: any series of contingents needs some outside cause (*'illa khārija 'ani l-āḥād*). The other three disjuncts amount to ways in which a series of contingents might escape dependence on an outside cause, and all are absurd.

Firstly, the series might be supposed to dispense with any cause. It will then be necessary in status. This is ruled out on the old *a fortiori* basis—if it is made up of contingent individuals, it is *a fortiori* contingent. Secondly, it may be thought of as caused simply by all its contingent individuals. But 'all its individuals' are coterminous with it, itself—so this turns out to be a veiled claim of self-existentiation for something contingent. So much for causation by the collectivity of individuals *qua* collectivity, but what of the collectivity of individuals *qua* each single individual? Ibn Sīnā simply replies that the aggregate is not necessitated by any single individual in it, the explanation of which lies in practice in his elimination of the next disjunct. That is, thirdly, the collectivity might have a cause which is a single individual within it (*ba'ḍ* could also mean *some* individuals). The absurdity of

[47] *Ishārāt*, 3: 451–2.
[48] Fakhr al-Dīn al-Rāzī seems to miss this when he starts his explanation of the *faṣl*: 'If we supposed the dependence of every contingent on another contingent to infinity …' (*Sharḥay al-Ishārāt*, 197), i.e. he assumes that Ibn Sīnā is just talking about an infinite series. Ṭūsī however notes that in *faṣl* 12, Ibn Sīnā has 'made the proposition more inclusive (*fa-ja'ala l-da'wā a'amma ma'khadhan*), in that he imposed on every aggregate—equally whether it is finite or infinite—on condition that every individual of it is an effect, the need for something external' (*Ishārāt* 3: 451).

this lies in the fact that the *explanandum* is an aggregate of contingents. So everything within the aggregate, taken individually, by definition has a cause. And the latter is more qualified to be the explanation of the whole, yet since it still falls within it, must in its turn be caused.

The antepenultimate *faṣl* (13) is reached.

Pointer. Every cause of an aggregate is not something amongst its individuals. For it is firstly a cause for the individuals [themselves], then for the aggregate. If this were not the case: let the individuals *not* be in need of it! Then the aggregate, since it is brought about by its individuals, would not need it. Admittedly, there may be something which is a cause for one of the individuals instead of another—but then it would not absolutely be a cause for the aggregate.[49]

The role of this *faṣl* in the proof seems modest, even superfluous. *Prima facie*, Ibn Sīnā is yet again arguing for the externality of the cause of an aggregate of contingents. Fakhr al-Dīn al-Rāzī, for instance, sees it as returning to the elimination of the third disjunct in the last *faṣl* (12): that the cause of the aggregate of contingents might be one of the individuals within it.[50]

But this may be to underestimate the *faṣl*. The way Ibn Sīnā here eliminates the hypothesis that the cause might be one of the individuals, is thought-provoking. Namely, that the cause has direct responsibility for each single individual in the aggregate. Since the cause ultimately intended is God, this amounts to a deductive explanation of the divine omnipotence. But this is to run ahead. An unavoidable implication is that the aggregate's cause cannot merely get it started, i.e. initiate the series by bringing about the first individual of it. (To be sure, Ibn Sīnā assents to the possibility of this kind of secondary causation within the aggregate: 'there may be something which is a cause for one of the individuals instead of another'. But he insists that this kind of partial cause will not qualify, when the *explanandum* is 'the whole aggregate'). Instead, the cause's influence must be intimately at work throughout the whole.[51] This is critical, because if it were just partial, the cause might itself prove to have a cause to infinity. If instead it is directly responsible for each tiny component of the whole, it may not have a cause to infinity, because

---

[49] Ibid. 3: 453.

[50] *Sharḥay al-Ishārāt*, 197.

[51] This seems to militate against Ibn Sīnā's famous cosmogenetic principle, *ex uno non fit nisi unum* ('only one comes from one')—good evidence that Ibn Sīnā's thought must be approached in accordance with a tiered hermeneutic. The provisional viewpoint (*bi-wajhin mā*), must be distinguished from the higher and ultimate one (*fī l-ḥaqīqa*). I owe this distinction to Y. Michot.

the principle *infinitum actu non datur* applies. Since the cause is co-extensive with everything within the whole and the relation is thereby actual, the cause cannot be part of a new infinite series of its own. In support of this interpretation of *faṣl* 13, it can be noted that the principle *infinitum actu non datur* is explicit in Ibn Sīnā's argument for God in other works, and crucial to it.[52] Although the principle is not explicitly given here, this omission would be in keeping with the 'allusive' (i.e. *ishārī*) style of the *Ishārāt*, which intentionally contains enthymematic arguments[53] and non-standard-order syllogisms. The aim of this is to test the readers' alertness and philosophical acumen.[54]

Be that as it may, it is arguably also possible on the basis of this *faṣl*, to deny that the cause has a cause to infinity *without* resorting to this suppressed premise, the principle *infinitum actu non datur*, at all. There is good evidence that Ibn Sīnā here means to reach an uncaused cause without the principle in question. A substantially identical proposition to *faṣl* 13 is given in the proof of God in the *Najāt*, and the manner in which it works as an argument for the full necessity of the external cause, without using '*infinitum actu non datur*', is made explicit by Ibn Sīnā. The relevant words are emphasised:

The cause of the aggregate is a cause firstly for the existence of [the aggregate's] parts, and [yet] it is [absurdly hypothesized as] amongst them (wa minha huwa)! *So it would be a cause for the existence of itself.* This, aside from its impossibility, if correct, would be in a sense exactly what is sought. For whatever is sufficient in existentiating itself is necessarily existent. And [yet] it is not necessarily existent [since this aggregate is presupposed to contain nothing but contingents], which is contradictory. *So it is left over that it is [both] external to [the aggregate] and cannot be*

---

[52] In the Metaphysics of the *Shifā'* Ibn Sīnā argues for a first efficient cause by saying: 'You have understood that whatever has an order in nature (*kullu dhī tartībin fī l-ṭabʿ*) is finite—which is in the Physics' (*al-Shifā'*, *al-Ilāhiyyāt*, 329). Again, earlier in the Metaphysics of the *Shifā'*, Ibn Sīnā explicitly reasons on the basis of *infinitum actu non datur*. He indicates that it is not the impossibility of an infinity of causes per se, which entails a First Cause (*lā li-annahu dhāhibun ilā ghayri l-nihāyati fī l-ʿillali faqaṭ*). Rather, it is the impossibility of an *actual* infinity of them, since the series he has in mind does not exist in time *later* than what singles the whole series' existence out over its non-existence (*lam yūjad baʿda mā bihi yatakhaṣṣaṣu*) (ibid. 39). Again, at the outset of the proof in the *Najāt* Ibn Sīnā makes the impossibility of an actual infinite an explicit premise. Straight after the dichotomy of existence and the installation of the contingent, he says 'so we explain that the existence of the contingent leads ultimately to the Necessary of Existence. And prior to that we set up premises, amongst which is that it is impossible that there be for every essentially contingent thing, in a single time, infinite causes which are essentially contingent' (*Najāt*, 235).

[53] In the sense of enthymeme in logic (i.e. an argument omitting a premise), and not in rhetoric (i.e. an argument based on merely plausible premises).

[54] See Gutas, *Avicenna and the Aristotelian Tradition*, 225 ff., 307 ff.

a contingent cause. For, we have [already] combined every cause contingent in existence within this aggregate.[55]

That is, unless the cause of the aggregate of contingents is non-contingent, it proves to be one of the individuals within the very aggregate, for which it is responsible. It drops back into the *explanandum*. This innocuous-looking *faṣl* 13 thus proves crucial to the cosmological aspect of Ibn Sīnā's proof. It takes us from the externality of the aggregate cause argued up to now, to its full-blown non-contingency. And by co-ordinating it with the *Najāt*, it can hopefully be seen how Ibn Sīnā aims to achieve this without using the principle *infinitum actu non datur*.

In *faṣl* 14 Ibn Sīnā abruptly turns to consider a new type of series:

Pointer. For any aggregate arranged from causes and effects in succession, involving an uncaused cause, [the latter] would be a limit, since if it were in the middle it would be an effect.[56]

The *shaykh* explicitly mentions an uncaused cause here for the first time since the dichotomy of existence in *faṣl* 9. He is no longer considering a series which consists only in contingents, but has turned to consider a series which includes something non-contingent. Technically this *faṣl* is simply a premise for one of the propositions in the disjunctive argument in the conclusion in *faṣl* 15, namely, '… it is obvious that if there is in [the series] what is not caused, it is a limit and a terminus.' Nevertheless, through *faṣl* 14, the overall cosmological argument intended by Ibn Sīnā comes suddenly into full view. In it, he is seen to be considering two kinds of series in succession. First, any series made up only of contingents needs an outside cause. Then: let that outside cause be part of a new series. That is, let it in turn have a cause, and that cause have another, and so on. In that case, each cause will prove to have been *internal* to the total aggregate of contingents. So to say 'external' by turns implies a series which does not just consist in contingents. And the non-contingent which is reached sooner or later in the new series, will be a terminus of explanation for everything below it in any series. Doubtless the subtext of this argument lies in Avicennan cosmography. The *shaykh* is probably thinking of the temporally infinite sublunary domain, tangential to which is another series, consisting in a hierarchy of celestial agents. But it does not follow that his thinking fails without this framework.

---

[55] *Najāt*, 235.
[56] *Ishārāt*, 3: 454.

The concluding *faṣl* (15) brings all this together:

Pointer. It has become clear that every series composed of causes and effects—be it either finite or infinite—if there is nothing but what is caused in it, it needs a cause external to it.

However, it is connected by [that cause] to a limit for certain, and it is obvious that if there is in [the series] what is not caused, it is a limit and a terminus.

Thus every series terminates in the Necessarily Existent in Itself.[57]

To paraphrase: The series consisting only in contingents needs an external cause. The series might well be infinite, but the external cause cannot just be part of a new infinite series (or as Ibn Sīnā says, '[the series] is connected by [that cause] to a limit for certain'). The new series cannot be infinite because if each cause within it is by turns caused, it drops back within the *explanandum*, the contingent, which needs an outside cause. Put otherwise: true externality would never be attained, and mediacy never escaped. Thus unlike the first series, the new series cannot exclusively be comprised of contingents—and in the non-contingent, a terminus is reached. Ultimately, any series of contingents must be in a relation with this terminus, even if infinite.

EVALUATION

To emphasize: the real basis of Ibn Sīnā's cosmological proof here turns out not to be '*infinitum actu non datur*'. The argument is rather that the external cause of the aggregate of contingents cannot itself be contingent, on pain of dropping back within the very aggregate which it has been adduced to explain. That this is what Ibn Sīnā has in mind is apparently confirmed by the last lines in the proof as given in the *Najāt*: '… it is left over that [the cause] is [both] external to [the aggregate] and cannot be a contingent cause. For we have [already] combined every cause contingent in existence within this aggregate (*fa-innā jamaʿnā kulla ʿillatin mumkinati l-wujūdi fī hādhihi l-jumla*). So in consequence it is external to [the aggregate] *and* necessarily existent in itself. Contingents then have terminated in a cause [which is] necessarily existent.'[58]

The complete argument can now be evaluated. Morewedge and Davidson are both correct in that the proof as a whole is simultaneously ontological and cosmological. Ibn Sīnā initially

---

[57] *Ishārāt*, 3: 455.
[58] *Najāt*, 235.

divides existence into the necessary and the contingent.[59] Then: the necessary must be affirmed to exist, unconditionally. This is an ontological train of reasoning. On the other hand, the contingent only exists 'by another'. This means that aggregately—while it may comprise an infinity of individuals[60]—it cannot be self-sufficient. This is a cosmological train of reasoning.[61] That this is the underlying structure of the complete argument is confirmed in numerous texts. For instance, compare Fakhr al-Dīn al-Rāzī's rendition of it at the end of *Namaṭ* 4: 'There is no doubt that there is existence. And every existent is either necessary or contingent. And if it is necessary, the necessary has been proven. And if it is contingent, it is dependent on the necessary. So there must be the Necessary, whatever the case (*'alā kulli ḥāl*)'.[62]

In the cosmological part of the argument (tersely covered by Rāzī's phrase, 'if it is contingent, it is dependent on the necessary'), Ibn Sīnā has tried to explain at considerable length exactly *how* contingent existence must ultimately depend on God, notwithstanding its potential infinitude. In this part of the argument—in the naked form in which Ibn Sīnā presents it in the *Ishārāt*—while there is clearly a concern to end an infinite regress of explanations, the principle *infinitum actu non datur* appears to have been dispensable, and the regress is terminated purely on the basis of the causal irreflexiveness of contingency. This is in contrast to how Ibn Sīnā sets up the argument in more conventional contexts than the *Ishārāt*. For instance, though the proof in the *Najāt* runs parallel to the proof in the *Ishārāt* in many respects, it is noteworthy that in it Ibn Sīnā feels obliged to give *infinitum actu non datur* prominence as a premise, though the need for it as the *Najāt* proof runs its course is unclear.[63] In the *Ishārāt*, instead, Ibn Sīnā seems not even to nod at the principle in question.

[59] I leave open the question of Morewedge's *hastī–wujūd* distinction. At any rate, it does not seem to be represented in Arabic works, in which the subject of the dichotomy is simply '*al-wujūd*'.

[60] Ṭūsī dismisses the objection that it is contradictory to treat an infinite aggregately, as a set: 'As for the well-known objection, namely, that calling something infinite 'an aggregate' is incorrect—it is a verbal one (*lafẓī*), to the like of which one should not pay attention in objective investigations (*al-abḥāth al-maʿnawiyya*) …' *Ishārāt*, 3: 451. The transfinite mathematics of Georg Cantor (d. 1918) appears to give Ṭūsī qualified support in this, since it allows an infinite to be gathered into a set—at least in the mind. The question is not straightforward, however, since Cantor withheld 'set' status from 'inconsistent totalities,' or 'many's too big to be regarded as one's' (*sic*). See A. W. Moore, *The Infinite* (London: Routledge, 1990), 110 ff., especially 127.

[61] But note: existence itself remains a primary intelligible. In this sense, even in the cosmological part of the proof, no empirical starting point need be involved.

[62] *Sharḥay al-Ishārāt*, 214.

[63] See the end of note 52.

The deep intuition that the contingent, though potentially unlimited quantitatively, is intrinsically *self-limitative* explanatorily, is sufficient for him.

Recall Davidson's claim that Ibn Sīnā inconsistently admitted an infinite regress of contingents to begin with, only to deny it later. In this way Ibn Sīnā seemed himself unaware that he had discovered the Leibnizian/Spinozan argument which depends on the sheer juxtaposition of the contingent and the necessary. On scrutiny, the inconsistency is unreal. The admission that the regress of contingents might be unlimited in time does not contradict the judgement that contingent existence in other respects must be limited. Indeed, this is just as there is no contradiction in the 'Thomist' kind of cosmological argument, between the fact that contingents in the world might be temporally infinite and the fact that there cannot be an infinite 'essentially ordered' regress. Moreover, in the *Ishārāt* Ibn Sīnā turns out to impose the higher finitude on contingent existence in an eminently 'Leibnizian' way, in that he does not use the principle *infinitum actu non datur* at all, but the intrinsic absurdity of self-production for contingent existence. Via this, a terminus of explanation has to be reached, in a truly non-contingent kind of existence. And surely, even in the later arguments of Leibniz or Spinoza, an infinite regress is also terminated *implicitly*. For insofar as a non-contingent is affirmed at all, the explanatory regress is also firmly brought to an end.

Major questions remain, of course. The detailed co-ordination of the ontological part of Ibn Sīnā's proof with other ontological arguments is a desideratum. In the European milieu, the 'classical' argument had God's perfection as its basis, following Anselm's original formulation which takes it that God is *'aliquid quo nihil maius cogitari potest'*. Similarly Descartes speaks of 'un être souverainement parfait', in his proof. But Ibn Sīnā's approach has nothing to do with God's perfection. He appears simply to use 'necessity of existence', posited initially *in intellectu*, and then affirmed *in re*—on pain of contradiction. In view of this, the closest analogues of Ibn Sīnā's approach will not be based on the perfection of God, but some other consideration.[64]

---

[64] G. Oppy has recently provided an elaborate typology of ontological arguments, providing a detailed framework for classifying the ontological aspect of Ibn Sīnā's thinking parallel to W. L. Craig's typology for the cosmological aspect. Oppy's list is as follows: definitional ontological arguments; conceptual (or hyperintensional) ontological arguments; modal ontological arguments; Meinongian ontological arguments; experiential ontological arguments; mereological ontological arguments; and 'Hegelian' ontological arguments. Anselm's and Descartes' arguments for God's

The aetiological framework of the cosmological part of the proof must also be pinpointed. Though no special subtype of causation is necessarily presupposed by the argument (against Fakhr al-Dīn al-Rāzī's claim that efficient causation must be assumed), it does not follow that the argument lacks any aetiological framework at all. On the contrary, an argument based on the principle that anything caused in whatever sense, depends on something else, would seem to have precisely the *principle of causality* for its framework. An alternative would be the principle of sufficient reason.[65]

Finally, what is to be made of the way in which Ibn Sīnā argues in *faṣl* 10 and later 17 for this root-property of any contingent, its derivation *ab extra*? The pat language of preponderation nowadays suggests a counter-productive probabilism. For it implies that a contingent innately has a 50/50 chance of entering existence, and that the external factor simply tips the odds in favour of that eventuality. But Ibn Sīnā clearly is out to say that there is absolutely no possibility of a contingent entering existence in the absence of an external factor. Moreover, the statement in *faṣl* 17 that a quiddity *qua* quiddity is incapable of making itself enter existence, as well as the statement in 10 that existence and nonexistence are equiponderant for a contingent's quiddity, are fraught with questions. Namely, they appear fallaciously to treat existence as a real predicate, and they imply a crude realism in treating quiddity *qua* quiddity as having independent ontological status (*esse essentiae*). Is Ibn Sīnā's way of couching the matter in these statements indispensable to the proof, or is it just one of many ways one might try to capture the deep intuition that the derivation of the contingent can only be *ab extra*?[66]

At least one crucial consequence flows from framing the matter specifically in terms of the distinctness of existence from quiddity, and

existence from God's perfection, according to Oppy's scheme will be definitional. It is the modal categorization in Oppy's list which seems most likely to fit Ibn Sīnā's argument. See G. Oppy, *Ontological Arguments and Belief in God* (New York: Cambridge University Press, 1995), 65 ff.

[65] The principle of determination underlies the *kalām* argument; the principle of causality underlies the Thomist argument; and the principle of sufficient reason underlies the Leibnizian argument. (See Craig, *Cosmological Argument*, 283.) Insofar as Ibn Sīnā's argument is aligned with Leibniz's, it is implied that the principle of sufficient reason is involved. Fazlur Rahman ('Ibn Sīnā', 482) also has linked Ibn Sīnā's argument with Leibniz's.

[66] Note in this context that some recent philosophers, mainly analytic Thomists, have argued skilfully that existence *can* be a predicate, albeit a strange sort of predicate. See B. Miller, *A Most Unlikely God* (Notre Dame, 1996) especially chapters 2 and 3. Miller argues at some length that '… exists' can operate as a first-level predicable, i.e. it can be used meaningfully for individuals, as well as for the properties of individuals as a second-level predicable. Also see Oppy, Ontological Arguments …, 130–61.

the accidentality of existence to quiddity in the contingent. This is that, through contraposition, there is *no* accidentality of existence to quiddity in the non-contingent. That is, in Ibn Sīnā's 'necessary', the existence–quiddity distinction collapses and the quidditative aspect is eliminated.[67] This directly corresponds with what is expressed in Muslim scriptural theology in terms of God's transcendence of attributes (*al-tanzīh*). It is crucial insofar as it voids Kant's major criticism that cosmological arguments can at best yield some necessary terminus of explanation, but not of themselves yield an *ens realissimum* or *perfectissimum*: a divinity. For as we see, given how Ibn Sīnā frames contingency, his non-contingent must be a fully transcendent, 'supra-quidditative' being. This seems however to require that the accidentality of existence to quiddity is taken as eminently real, rather than just as a *façon de parler*.

That the proof retains a strongly enigmatic core is understandable in view of its convergence on the transcendent. As is amply attested within the *ḥikmat* philosophical tradition, treated with due respect the argument can trigger in the intellect a fathomless certitude in God's reality.

---

[67] A key idea of Ibn Sīnā's theology. E.g. *wājib al-wujūdi … laysa dhā māhiyya* (*Ishārāt*, 3: 480).