

Avicenna and Fakhr al-Dīn al-Rāzī on the Cosmic System:
The Rule of One, Efficient Causality, and Celestial Mediation

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To my parents and sister in gratitude

Abstract

This thesis discusses Fakhr al-Dīn al-Rāzī's (d. 606/1210) reception of Avicenna's principle that "only one may proceed from the one" (*lā yaṣṣduru 'an al-wāḥid illā wāḥid*). It pursues two lines of inquiry. First, I argue that this "Rule of One" (*qā'idat al-wāḥid*) belongs to a broader theory of efficient causality, which Avicenna developed in the *Ilāhiyyāt* of the *Shifā'*, and which was systematized in later works, such as *al-Ishārāt wa-l-tanbīhāt*, *al-Ta'liqāt*, and *al-Mubāḥathāt*. While Avicenna famously used the principle to show that only a single effect may proceed directly from the Necessary Being, it was also designed to operate beyond this local context of Divine "creation." Indeed, it was by complying to the Rule that Avicenna was able to deduce through *a priori* principles the triadic structure of celestial procession, the nature and capacity of celestial entities, and the doctrine of the Active Intellect as the governor of the sublunary realm. The second aspect of this thesis is to show how Fakhr al-Dīn al-Rāzī was the first thinker to recognize that the Rule of One is one of the defining aspects of his predecessor's metaphysics of the efficient cause. By critically examining its underlying theoretical principles, Rāzī attempted to show that the Rule is false on two counts: that it is based on a problematic conception of causality and that it proposes a very rigid account of causal relations that has little explanatory power. I offer a detailed analysis of Rāzī's arguments based on his early philosophical works, namely *al-Mabāḥith al-mashriqiyya*, *al-Mulakhkhaṣ fī al-manṭiq wa-l-ḥikma*, and his commentary on Avicenna's *al-Ishārāt wa-l-tanbīhāt*. Criticizing this pivotal principle of causation is a strategic maneuver on Rāzī's part. In one fell stroke, he intended to undermine the metaphysical basis of Avicenna's naturalism, the Peripatetic framework of scientific analysis underlying it, and the substantive content of his cosmology, from his theory of celestial mediation to his account of psychic action performed by sublunary souls. The result is a comprehensive revision of the Avicennian cosmic system from the ground up. Finally, I offer a preliminary reconstruction of Rāzī's picture of the cosmos that emerges in the wake of his criticism of the Rule of One, focusing on three doctrines: God as a voluntary agent, celestial mediation based on Hermetic astrology, and a monadic theory of soul.

Résumé

Cette étude traite de la réception de l'axiome avicennien que « de l'un ne procède que l'un » (*lā yaṣḍuru 'an al-wāḥid illā wāḥid*) dans l'œuvre de Fakhr al-Dīn al-Rāzī (m. 606/1210). Deux questions seront explorées. Premièrement, nous proposons que cette « règle de l'Un » appartient à une théorie plus vaste concernant la cause efficiente et développée par Avicenne (m. ca. 428/1037) dans l'« Ilāhiyyāt » de la *Shifā'* et systématisée dans ses œuvres tardives tels que *al-Ishārāt wa-l-tanbīhāt*, *al-Ta'liqāt*, et *al-Mubāḥathāt*. Bien qu'Avicenne a notamment employé ce principe pour démontrer que de l'Être Nécessaire seul un effet peut procéder, l'applicabilité de la règle dépasse le sujet de la « création » divine. En effet, c'est grâce à cette règle qu'Avicenne a pu déduire, sur la base de principes *a priori*, la structure triadique des émanations célestes, la nature et la capacité des entités célestes, et la doctrine de l'intellect agent en tant que gouverneur du monde sublunaire. En second lieu, ce mémoire cherche à démontrer que Fakhr al-Dīn al-Rāzī fut le premier à reconnaître que la « règle de l'Un » constitue une des caractéristiques déterminantes de la métaphysique de la cause efficiente de son prédécesseur. En examinant de manière critique les principes théoriques sous-jacentes à cette Règle, Rāzī tente de démontrer qu'elle est fausse pour deux raisons : elle est basée sur une conception problématique de la causalité et sa conception très rigide des liens causals a un pouvoir explicatif limité. Il s'agira ici d'étudier les arguments que Rāzī propose à cet égard dans ses premières œuvres philosophiques, notamment *al-Mabāḥith al-mashriqiyya*, *al-Mulakhkhaṣ fī al-manṭiq wa-l-ḥikma*, et son commentaire sur *al-Ishārāt wa-l-tanbīhāt* d'Avicenne. La critique de ce principe de causalité fondamental dans la pensée d'Avicenne est une décision stratégique de la part de Rāzī. Elle lui permet à la fois de saper la métaphysique à la base du naturalisme d'Avicenne, le cadre péripatéticien de l'enquête scientifique qui la soutient, et une grande partie de sa cosmologie, de la théorie de la médiation des corps célestes jusqu'à son compte des activités psychiques des âmes sublunaires. Cette critique entraîne une révision compréhensive de la cosmologie avicennienne. Finalement, nous offrons une reconstruction préliminaire de la conception de l'univers de Rāzī en fonction de sa critique de la « règle de l'Un ». Plus précisément cette reconstruction s'appuie sur trois doctrines de Rāzī : Dieu en tant qu'agent volontaire, la médiation céleste basée sur l'astrologie hermétique et sa théorie monadique de l'âme.

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Notes on Primary Sources

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Introduction

Of the many controversial philosophical issues debated by Islamicate thinkers, one of the most obscure and difficult was the question of how the many proceed from the one. For some, this question represented the very limit of rational inquiry. Figuring out precisely how the world in its fractal complexity relates to the transcendent oneness of the Divine Essence was seen by some as a fool's errand since the two appear to be utterly incommensurable. "Do you not see," Muḥyī al-Dīn Ibn al-ʿArabī (d. 638/1240) warns, "that Divine self-disclosure (*al-tajallī al-ilāhī*) is impossible in the face of [absolute] Oneness (*aḥadiyya*)?"¹ Other thinkers, by contrast, regarded the question as the summit of rational speculation and attempted to discover as much as they could through the philosophical tools at their disposal. The metaphysician has the responsibility to explain why the First Cause remains unblemished by any mark of contingency, such as passivity, materiality, and plurality despite its being responsible for the procession of contingent entities. If the metaphysician fails to prove this, he will have to accept that the First Cause stands in need of a cause, and another agent responsible for *its* existence must be posited, and so on *ad infinitum*. It is crucial, therefore, for him to propose a viable account of Divine "creation," one that preserves the immateriality, impassivity, and oneness of the First Cause.²

¹ *Al-Futūḥāt al-makkiyya* X, 397. He also writes, "[Absolute] Unity (*waḥda*) with respect to existention (*ijād*), existence, and the existent cannot be intellectually perceived except in [the testimony] 'there is not deity but He'" (*Futūḥāt* X, 394). The implication of both statements is that the interface between absolute Oneness and plurality cannot be an object of rational speculation. It can, however, be the object of direct witnessing (*shuhūd*): "Anything that the intellect (*al-ʿaql*) is independently capable of perceiving can be preceded by discursive knowledge (*al-ʿilm*) of it before its direct witnessing (*shuhūd*). The Essence of the Real, Most High is clearly absolved from this status (*ḥukm*), for the witnessing [of the Divine Essence] precedes knowledge of it. Rather, it is witnessed and never known, in the same way that Divinity (*al-ulūḥa*) is known and not witnessed. The Divine Essence is in opposition to (*tuqābilu*) [Divinity]" (*Futūḥāt* I, 188).

² The term "creation" is a translation of the Arabic term "*ibdāʿ*," which means "to cause the beginning (or origination) of something." It comes from the radicals of *bāʿ*, *dāl*, and *ʿayn*, which denotes "to begin anew," "to devise," "to introduce," "to be the first to do," etc. Avicenna uses the term *ibdāʿ* to refer specifically to the procession (*sudūr*) of the First Intellect (i.e., the first created entity) from the Necessary Being. To avoid assimilating Avicenna's conception of

The most influential and sophisticated practitioner of this speculative approach was *al-shaykh al-ra'īs* (“the Leading Master”) Abū ‘Alī al-Ḥusayn Ibn Sīnā, or Avicenna (d. ca. 428/1037). In his major works, but especially during the middle period when we wrote the *Ilāhiyyāt* of the *Shifā’*, Avicenna devised a method of inquiry that allowed him to show in precise terms how the many proceed from a single principle (*mabda’*). This approach relied on a principle of causation that later scholars called the “Rule of One” (*qā’idat al-wāḥid*), which holds that “from the one only one may proceed (*lā yaṣḍuru ‘an al-wāḥid illā wāḥid*).”³ Despite the generality of the terms, the Rule is chiefly remembered for its paradigmatic use in what Avicenna designates as “*ibdā’*” (absolute creation),

ibdā’ to that of the theologian’s creation *ex nihilo*, which he rejects, some authors prefer to avoid the term “creation” and use instead “origination,” or in French scholarship “instauration.” Other studies, however, have elected to use the term “creation” or “absolute creation” to refer to *ibdā’*, noting that Avicenna deliberately modified Neoplatonic theories of emanation to produce what he regards to be a philosophically robust account of the theological doctrine of creation *ex nihilo*, one that does not suffer the theoretical problems that emerge when interfacing the Absolute with temporality; see Jules Janssens, “Creation and Emanation in Ibn Sīnā,” in *Ibn Sīnā and His Influence on the Arabic and Latin World* (Aldershot, Hampshire, Great Britain; Burlington, VT: Ashgate, 2006), 455–77, and Rahim Acar, *Talking about God and Talking about Creation: Avicenna’s and Thomas Aquinas’ Positions* (Leiden; Boston: Brill, 2005). These qualifications in mind, I will use of the term “creation” to refer primarily to the procession of the First Intellect from the Necessary Being and secondarily to the procession of everything else by mediation of this First Creature. I do this to highlight Avicenna’s determined attempt to maintain a metaphysics of radical contingency despite the necessitarian implications of his theory of the Necessary Being. Avicenna believes that by devising the Rule of One as the causal principle through which Divine necessitation is enacted in the concrete realm he can show how a radically contingent being—i.e., that which in itself has no existence—can safely proceed from the Divine essence while maintaining (1) a strict ontological hierarchy between the efficient cause and its effect, (2) the absolute and unsurmountable transcendence of the agent, and (3) the strict necessity by which this process of causation unfolds. I discuss these themes in chapters 1.2 and 1.3. I will not deal with the question of whether Avicenna’s theory of *ibdā’* can *really* be called “creation” or whether it is nothing more than a necessitarian emanationist system dressed up in religious language. To do so from the outset would be to pre-judge the matter, since he offered the Rule of One precisely to reconcile the two systems. Indeed, a major goal of the thesis is to identify the basic theoretical structure of Avicennian “creation.” See further considerations of this question in pg. 52 *f* of this thesis.

³ The formula is explicitly invoked in the following works: *Ilāhiyyāt* IX.4, 326–334 (Cairo, 402–410); *Dānishnāma-yi ‘Alā’ī*, *Ilāhiyyāt*, 111–14; *K. al-Najāt*, 654–55, 663; *Ishārāt*, 153, 173. Note that these are works of the middle and later periods. Avicenna does not invoke this formula in earlier compendia such as *al-Ḥikma al-‘Arūdiyya* and *al-Mabda’ wa-l-ma‘ād*, although the basic idea is operative when discussing the emanation of the First Intellect: *al-Ḥikma al-‘Arūdiyya*, 161 and *Mabda’*, 78. Avicenna also mentions the principle in *Sharḥ Maqālat al-lām*, 44–45; but the Rule is simply mentioned and is not argued for systematically. In another surviving section of *Kitāb al-Inṣāf*, namely the commentary on the *Uthūlūjiyā* (*Theologia*) of Aristotle, the Rule is also mentioned, albeit in a slightly different formula: “The one, the simple can have no relation to the many in any manner, where [the many occur] simultaneously and without any arrangement therein” (*Sharḥ Uthūlūjiyā*, 50). In *al-Kawn wa-l-fasād* II, 89–90, Avicenna also mentions a variation of the principle, which is the statement that a plurality of acts must proceed from complex natures. The latter two texts are important for the argument of the thesis, because they contain passages showing that Avicenna explicitly applies the Rule of One beyond the cosmogonic act of origination. Finally, the Rule appears frequently in two late non-systematic works, *al-Mubāḥaṭhāt* and *al-Ta’līqāt*.

that is, the procession of the “first creature” (or the First Intellect) from the Necessary Being.⁴ He argues that if the Necessary Being is to act as the cause of existence, it must do so without compromising its absolute oneness. For Avicenna this means restricting its direct intervention in the created realm to a single effect. Had it produced two effects, the metaphysician would need to posit an additional causal factor in the Divine agent that would account for the procession of effect *A* as distinct from the procession of effect *B*. Since this would compromise the oneness of the First Cause, only a single effect may directly proceed from it—this effect being known as the First Intellect (*al-ʿaql al-awwal*). Thus, we arrive at the axiom that only a single effect may proceed from what is absolutely one in all respects.⁵

Since Avicenna usually invoked the Rule of One in his discussions of *ibdāʿ*, it was long regarded by later thinkers as a uniquely Avicennian or *mashshāʿī* (Arabic Peripatetic) account of Divine “creation,” one that rivals the doctrine of *creatio ex nihilo* (*ihdāth* and *khalq*) defended by the practitioners of *kalām*, the speculative theological tradition of Islam.⁶ The *kalām* doctrine of creation

⁴ *Ishārāt*, 153.

⁵ Whereas Avicenna uses the term *ibdāʿ* specifically for the “procession” (*ṣudūr*) of the First Intellect from the Necessary Being, he uses the term *ṣudūr* to refer to other instances of procession, such as the procession of the intellect, celestial body, and celestial soul from a Celestial Intellect and the procession of corporeal forms from the tenth Intellect. Thus, *ibdāʿ* is a special kind of *ṣudūr*. Given its broader usage, the term *ṣudūr* can also be translated as “emanation,” although this term is used often to translate another key Arabic term, namely *fayḍ* (“to issue”). Thus, whenever I use the term “emanation,” I use it as a synonym of procession, which in the Avicennian system is inclusive of *ibdāʿ* and other modes of Divine “creation,” namely, those that are indirect and require the intermediary of other entities. In chapters 1.2 and 1.3, I shall establish that the structure of “procession” or “emanation” is that of the efficient cause as Avicenna conceives it. That “procession” and “emanation” is reducible to efficient causality is a central claim of this thesis.

⁶ The scholarship on the difference between “creation” and “emanation” is extensive. I cite here the ones that are directly relevant to our understanding of Avicenna’s theological context: Cristina D’Ancona, “Emanation,” in *Encyclopaedia of Islam*, ed. Kate Fleet et al. (Brill Online, 2016); Olga Lizzini, “Causality as Relation: Avicenna (and al-Ġazālī),” *Quaestio* 13 (2013): 165–95; David B Burrell, *Creation and the God of Abraham* (New York: Cambridge University Press, 2010); Thérèse Bonin, *Creation as Emanation: The Origin of Diversity in Albert the Great’s on the Causes and the Procession of the Universe* (Notre Dame, Ind.: University of Notre Dame Press, 2001); Lloyd P. Gerson, “Plotinus’s Metaphysics: Emanation or Creation?,” *The Review of Metaphysics* 46, no. 3 (1993): 559–74; Cristina D’Ancona, “La doctrine de la création ‘mediante intelligentia’ dans le *Uber de Causis* et dans ses sources,” *Revue des sciences philosophiques et théologiques* 76 (1992): 209–33; David B. Burrell, “Creation or Emanation: Two Paradigms of Reason,” in *God and Creation*, ed. David B. Burrell and Bernard McGinn (Indiana: University of Notre Dame Press, 1990), 27–37; Ahmad Hasnawi, “Fayḍ (épanchement, émanation),” in *Encyclopédie philosophique universelle: les notions philosophiques* (Paris: Presses Universitaires de France, 1990); Michael Anthony Sells, *Mystical Languages of Unsaying* (Chicago: University of Chicago Press, 1994); Harry A. Wolfson, “The Identification of Ex Nihilo with Emanation in Gregory of Nyssa,” *The Harvard*

demands a strong commitment to Divine voluntarism; the adherent must affirm that no causal event is necessary in itself and that, as a result, counterfactuals must be metaphysically possible states of affairs. The reason why *this* world exists—and not another—has nothing to do with the nature of the world as such, but only with the choice (*ikhtiyār*) made by a transcendent God in view of other equally viable possibilities, which in His inscrutable wisdom He elects to withhold from existence. Although Avicenna adopts the language of creation, using such terms of *ihdāth*, *khalq*, and *ibdāʿ*, the practitioners of *kalām* claim that the Rule of One implies that only one world may possibly exist, namely, that which proceeds through the determination of His singular and indivisible Essence. Though Avicenna may claim that this world is the best possible world, and that God has knowledge of what He created (more on these points later), the restriction divests Him of the common-sense notion of choice (*ikhtiyār*) and will (*irāda*) that is affirmed unambiguously in the Quran. Such is the standard interpretation of his early critics, such as Abū Ḥāmid Muḥammad al-Ghazālī (d. 505/1111), Abū al-Faṭḥ Muḥammad al-Shahrastānī (d. 548/1153), and Sharaf al-Dīn al-Masʿūdī (d. ca. 600/1204).⁷

Theological Review 63, no. 1 (1970): 53–60; A. H. Armstrong, “‘Emanation’ in Plotinus,” *Mind* 46, no. 181 (1937): 61–66.

⁷ Ghazālī, *Tahāfut al-falāsifa*, 64–77; Shahrastānī, *Muṣāraʿat al-falāsifa*, 58–71; Masʿūdī, *al-Mabāḥith wa-l-shukūk ʿalā kitāb al-Ishārāt*, 275–78. This perspective is maintained in modern studies. See in chronological order Olga Lizzini, *Fluxus (Fayd): indagine sui fondamenti della metafisica e della fisica di Avicenna* (Bari: Pagina, 2011); Cristina D’Ancona, “Ex Uno Non Fit Nisi Unum: Storia e Preistoria Della Dottrina Avicenniana Della Prima Intelligenza,” in *Per Una Storia Del Concetto Di Mente II*, ed. Eugenio Canone (Firenze: L. S. Olschki, 2007), 29–55; Wayne Hankey, “Ab uno simplici non est nisi unum: The Place of Natural and Necessary Emanation in Aquinas’s Doctrine of Creation,” in *Divine Creation in Ancient, Medieval, and Early Modern Thought*, ed. Michael Treschow, Willemien Otten, and Walter Hannam (Leiden; Boston: Brill, 2007), 309–33; Hermann Landolt, “Khawāja Naṣīr al-Dīn al-Ṭūsī (597/1201–672/1274), Ismāʿīlism, and Ishrāqī Philosophy,” in *Naṣīr al-Dīn Ṭūsī: Philosophe et Savant du XIIIe Siècle. Actes du colloque tenu à l’Université de Téhéran (6–9 Mars 1997)* (Tehran: Presses Universitaires d’Iran; Institut Français de Recherche en Iran, 2000), 13–30; Arthur Hyman, “From What Is One and Simple Only What Is One and Simple Can Come to Be,” in *Neoplatonism and Jewish Thought*, ed. Lenn E. Goodman (Albany (N.Y.): State University of New York Press, 1992), 111–36; Herbert Davidson, *Alfarabi, Avicenna, and Averroes on Intellect: Their Cosmologies, Theories of the Active Intellect, and Theories of Human Intellect* (New York: Oxford University Press, 1992); Nicholas Heer, “Al-Rāzī and al-Ṭūsī on Ibn Sīnā’s Theory of Emanation,” in *Neoplatonism and Islamic Thought*, ed. Parviz Morewedge (Albany: State University of New York Press, 1992), 111–26; Alain De Libera, “Ex uno non fit nisi unum. La Lettre sur le Principe de l’univers et les condamnations Parisiennes de 1277,” in *Historia Philosophiae Medii Aevi, Band I*, ed. Burkhard Mojsisch and Olaf Pluta (Amsterdam; Philadelphia: B. R. Gruner, 1991), 543–60; Michael Marmura, “The Metaphysics of Efficient Causality in Avicenna (Ibn Sina),” in

When viewed exclusively from this perspective, the debate surrounding the Rule of One seems to amount to a theological controversy, pitting the Arabic Peripatetics such as Abū Naṣr al-Fārābī (d. ca. 339/950) and Avicenna on the one side and Ash‘arite thinkers on the other. But such a configuration obscures a more complex pattern of allegiances. Thinkers who were not affiliated with the practice of *kalām*, such as the philosopher of Jewish background Abū al-Barakāt al-Baghdādī (d. ca. 560/1165) and the stalwart Aristotelian Abū al-Walīd Muḥammad Ibn Rushd or Averroes (d. 595/1198), rejected the Rule of One.⁸ And some thinkers affiliated with the Ash‘arite school either affirmed the principle, such as Athīr al-Dīn al-Abharī (d. ca. 663/1264), or suspended judgment on the matter, such as Najm al-Dīn al-Kātibī al-Qazwīnī (d. 657/1276).⁹ The configuration also obscures how Avicenna, in his later works, such as *al-Ishārāt wa-l-tanbīhāt*, *al-Ta‘līqāt*, and *al-Mubāḥathāt* did not present the Rule of One as a doctrine of Divine governance, but as a law of nature. The proofs he adduced in later works no longer relied on conceiving of the Necessary Being as the cause of existence; rather, they arose from general considerations about the nature of efficient causality.

Several thinkers in the 6th/12th century recognized the broader relevance of the Rule of One in Avicenna’s philosophy. On their interpretation, the Rule regulates not only the initial

Islamic Theology and Philosophy: Studies in Honor of George F. Hourani, ed. Michael Marmura (Albany: State University of New York Press, 1984), 172–87; Mokdad Arfa Mensia, “Essai sur le principe de ‘L’un ne procède que l’un’ dans la philosophie islamique” (Paris, Université de Paris - Sorbonne, 1976); Henry Corbin, *Avicenne et le récit visionnaire* (Tehran: Société des Monuments Nationaux, 1952). Two recent studies on the Rule of One, however, do not maintain this restrictive interpretation. They hold that the Rule was conceived as a general principle of efficient causality. See Wahid M. Amin, “From the One, Only One Proceeds’: The Post-Classical Reception of a Key Principle of Avicenna’s Metaphysics,” *Oriens* 48 (2020): 123–55; Davlat Dadikhuda, “Rule of the One: Avicenna, Bahmanyār, and al-Rāzī on the Argument from the *Mubāḥathāt*,” *Nazariyat* 6, no. 2 (2020): 69–97.

⁸ I will discuss Abū al-Barakāt’s objection to the Rule of One in Chapter 2.2. Wahid Amin has argued that Abū al-Barakāt does not deny the principle (“From the One, Only One Proceeds’,” 134). However, this is not an accurate reading of his position; see Chapter 2.1. As for Averroes, he had initially accepted the Rule of One in the “epitome” of Aristotle’s *Metaphysics* (*Talkhīṣ mā ba‘da al-ṭabī‘a*), pp. 167–68; see also the translator’s notes in pg. 323. However, by the time he was writing *Tahāfut al-Tahāfut*, he reversed his position, rejecting it in strong terms; see pp. 104–09; 136–39; 148–50. The corresponding pages in Bouyges’ edition are: 173–183; 229–233; 249–253.

⁹ Abharī, *Hidāyat al-hikma*, 109–10. As for al-Kātibī al-Qazwīnī, see *Hikmat al-‘ayn*, 44–45 and *al-Mufaṣṣal fī sharḥ al-Muḥaṣṣal* II, 234–39. The latter work is a commentary on Rāzī’s *Muḥaṣṣal afkār al-mutaqaddimīn wa-l-muta’akhkhirīn min al-‘ulamā’ wa-l-hukamā’ wa-l-mutakallimīn*.

cosmogonic act of origination but is operative at every level of the Avicennian cosmos, from the First Intellect to the sublunary mixtures. In justifying this perspective, they attempted to show that Avicenna relied on the principle in areas where it was not explicitly invoked, such as the procession of sublunary forms from the celestial intellect governing the sphere of the earth, i.e., the “Active Intellect” (*al-‘aql al-fa‘āl*), the soul’s governance of its faculties (*quwā*) and activities (*af‘āl*), and the theoretical distinction between soul and intellect (*al-nafs wa-l-‘aql*). Thus, while the elegance of the formula “from the one only one may proceed” seems to clash with the sheer number and variety of celestial entities and the ever-changing nature of sublunary phenomena, the Rule still serves as their underlying causal principle, connecting both realms within a unified world-system.¹⁰

¹⁰ Gad Freudenthal has argued that Avicenna stands at the end of an interpretive tradition that sought to unify the Aristotelian universe into a single physical system. One of the defining aspects of Aristotle’s physics is that the celestial world and sublunary world are governed by two distinct and, in many respects, incommensurate physical principles. The first realm consists of immaterial principles and unchanging ether, which produces circular motion, while the second consist of the four elements and their mixtures, which produces linear motion. Aristotle in *De caelo* and elsewhere does not clearly establish how the two physical systems are related to each other. The attempt to provide this explanation began in earnest with Alexander of Aphrodisias, who adopted Stoic notions of providence to show that the celestial world interacts directly with the sublunary world as its governing principle. Avicenna’s theory of the Active Intellect further systematized this perspective and completed what Freudenthal calls the “astrologization of the Aristotelian universe.” See Gad Freudenthal, “The Astrologization of the Aristotelian Cosmos: Celestial Influences on the Sublunary World in Aristotle, Alexander of Aphrodisias, and Averroes,” in *New Perspectives on Aristotle’s De caelo*, ed. Alan C. Bowen and Christian Wildberg (Leiden; Boston: Brill, 2009), 239–82; and “The Medieval Astrologization of the Aristotle’s Biology: Averroes on the Role of the Celestial Bodies in the Generation of Animate Beings,” *Arabic Sciences and Philosophy* 12 (2002): 111–37. In my view, the term “astrologization” is ambiguous and does not accurately reflect the theoretical issues at stake. If the term simply refers to the minimal claim that the heavens influence the sublunary realm in a general manner, then this statement can be accepted. However, this is to assert a broad and trivial claim, because no one in the Ancient and Medieval worlds would dispute the influence of the celestial realm over the sublunary. If the term refers to the bold and more interesting notion that Avicenna adopted theories of celestial influences from the discipline of astrology, this would still be an inaccurate assessment. The theory of the Active Intellect is an explicitly anti-astrological theory of celestial influences. It restricts the procession of corporeal forms to a single celestial entity, namely, the Active Intellect. The celestial bodies (i.e., the orbs, fixed stars, and wandering planets) are responsible only for mixing the four elements, which in static, “controlled” conditions would have remained separated in their natural places (*Ilāhiyyāt* IX.5, 334–38). As for the other celestial intellects governing their respective heavenly strata, they interact with sublunary phenomena indirectly by serving as the final cause of celestial motion. These limitations effectively prevent any correspondence of sublunary natures to celestial natures, which is a foundational doctrine of the astrological sciences. Furthermore, since the effect of the celestial entities is limited to celestial motion and since the geometry of celestial motion is difficult to discern in its entirety and too complex to map out, it is foolish to attempt prognostication. See Yahya Michot’s study and edition of Avicenna’s refutation of astrology, *Réfutation de l’astrologie* (Beyrouth: Les Éditions Bouraq, 2006). Thus, I argue that Avicennian metaphysics cannot accommodate the most basic astrological intuitions.

This dissertation consists of two parts. The first is a study of the Rule of One as conceived by Avicenna. I intend to show the Rule's wide-ranging function as a general principle of efficient causality. This will allow us to shed new light on how Avicenna's theory of "emanation" works, and what purpose the Rule fulfills in the science of metaphysics, as he conceived it. The second part examines the interpretation and criticism of the Rule by the Sunnī theologian and polymath Fakhr al-Dīn al-Rāzī (d. 606/1210). Fakhr al-Dīn was one of the few philosophers who recognized that the Rule of One is a natural law that operates beyond the procession of the First Effect.¹¹ Although he was influenced by other thinkers, especially Abū al-Barakāt al-Baghdādī, he was the first to discuss systematically all aspects of the Rule, from its application to substantive issues, such as the theory of Divine governance, to its more abstract status as a general principle of efficient causality. Indeed, Rāzī presents it as one of the defining pillars of Avicennian philosophy. Since the Rule also has the unique status of being a metaphysical principle that is designed to facilitate speculation about the basic structure of the celestial and sublunary realms, denying it will imply redrawing how the many proceed from the one and how the various orders of existence interact with each other. It also affects more fundamental issues in metaphysics, such as the basic constituents of reality and the method through which these entities are discerned by the philosopher.

I argue that this comprehensive reconsideration of Avicenna's metaphysics, especially as it relates to cosmological issues, is precisely what Fakhr al-Dīn intended by criticizing the Rule of One. He believed that, in a single stroke, he could subject a whole cluster of metaphysical doctrines to scrutiny. Furthermore, since the Rule implies a certain structure of the universe, refuting it will

¹¹ Rāzī's broad interpretation of the Rule of One seems to have been widely recognized in the later tradition. Ṣadr al-Dīn al-Shīrāzī or Mullā Ṣadrā (d. 1045/1635–36) would accuse Rāzī and Abū al-Barakāt of offering an erroneous interpretation of the theory. The Rule of One, according to Ṣadrā, is a localized metaphysical principle pertaining only to what is "absolutely one", namely the First Cause; see *al-Hikma al-muta'aliya fi al-afsār al-'aqliyya al-arba'a* VII, 60–62, 64.

also open the possibility of alternative models of the macrocosm, models that he explicitly draws and later pursues throughout his works. Thus, examining Rāzī's criticism of the Rule of One affords a unique insight into his philosophical project: we are able to regard him not only as an independent interpreter of Avicenna's philosophy or as an Ash'arite thinker who interrogates metaphysical doctrines that contradict the tenets of revealed law (*sharʿ*), but also as a speculative philosopher and cosmologist in his own right.¹² No other issue so clearly captures the complexity and breadth of Rāzī's intellectual project as the Rule of One.

Although my general aim is to compare Avicenna and Fakhr al-Dīn's philosophical projects, I do so by comparing their respective inquiries into a certain subset of cosmological problems that concern the general structure of the universe as a self-sustaining whole. This aspect of cosmological speculation is not primarily meant to establish the ontological "facts" that make up the world, whether these consist of entities such as form, matter, and substances as in the case of Arabic Aristotelianism, or atoms and accidents as in the case of Ash'arite or Mu'tazilite *kalām*. Rather, it is grounded in the intuition that the Divine, celestial and sublunary realms are bound together as a unified "cosmic system" by a set of common metaphysical principles. Richard Frank, who coined this term in his study of Ghazālī's reception of Avicenna's metaphysics, is perhaps the first scholar

¹² The scholarship on Rāzī as a speculative cosmologist has grown in recent years: Michael Noble, "Sabian Astral Magic as Soteriology in Fakhr al-Dīn al-Rāzī's *al-Sirr al-makṭūm*," in *Islamicate Occult Sciences in Theory and Practice*, ed. Liana Saif et al. (Leiden; Boston: Brill, 2020), 207–29 and *Philosophising the Occult: Avicennan Psychology and "The Hidden Secret" of Fakhr al-Dīn al-Rāzī* (De Gruyter, 2020); Nora Jacobsen Ben Hammed, "As Drops in Their Sea: Angelology through Ontology in Fakhr al-Dīn al-Rāzī's *al-Maṭālib al-ʿāliya*," *Arabic Sciences and Philosophy* 29, no. 2 (2019): 185–206; Hisashi Obuchi, "Fakhr al-Dīn al-Rāzī and Occult Science as Philosophy: An Aspect of the Philosophical Theology of Islam at the Beginning of the Thirteenth Century," *Annals of Japan Association for Middle East Studies* 34, no. 1 (2018): 1–33; Samuela Pagani, "Esegesi coranica," in *Angeli. Ebraismo Cristianesimo Islam*, ed. G. Agamben and E. Coccia (Vicenza: Neri Pozza, 2009), 1645–1740; Kaoru Aoyagi, "Fakhr al-Dīn al-Rāzī's Interpretation of Mi'raj," *Bulletin of the Society for Near Eastern Studies in Japan* 42, no. 1 (1999): 53–66; Tony Street, "Medieval Islamic Doctrine on the Angels: The Writings of Fakhr al-Dīn al-Rāzī," *Parergon* 9, no. 2 (1991): 111–27. and "Angels in Medieval Islamic Theology: A Study in Fakhr al-Dīn al-Rāzī" (PhD, Canberra, Canberra University, 1988); Jean R. (Yahya) Michot, "Le commentaire avicennien du verset: 'Puis Il se tourna vers le ciel...' Edition, traduction, notes," *Mélanges de l'Institut Dominicain d'Études Orientales* 1980, no. 14 (1980): 317–28.

of Islamic philosophy and theology to present it as a framework of inquiry for exploring the complex interaction between *falsafa* and *kalām*.¹³ In this study, Frank argues that Ghazālī abandoned fundamental tenets of Ash‘arite ontology and occasionalism and embraced aspects of Avicenna’s cosmology, such as the reality of secondary causation, the role of celestial intermediaries in the operation of nature, and the idea of a clockwork universe. The depth of Ghazālī’s commitment to these doctrines was such that it constituted a “quasi-Avicennian vision of creation.”¹⁴ Although this interpretation has been contested, the view that Ghazālī had a distinct cosmology that was heavily influenced by Avicenna’s system seems to be more broadly accepted especially when we also recognize that this does not necessarily undermine his deep commitment to Ash‘arite theology.¹⁵

What is especially enduring about Frank’s study is the claim that Ghazālī was committed to “the intellectual vision of the whole, i.e., on the possession of an articulated theoretical understanding of the universal system [that is] an integrated system of entities and events bound together in an interlocking order of causes and intermediaries (*asbāb* and *wasā’it*).”¹⁶ This thesis holds true even if we subordinated Ghazālī’s commitment to secondary causality under the overriding authority of Divine habit (*‘ādat Allāh*) in order to produce what McGinnis has called a

¹³ Richard Frank, *Creation and the Cosmic System: Al-Ghazālī and Avicenna* (Heidelberg: C. Winter Universitätsverlag, 1992).

¹⁴ *Ibid.*, 37.

¹⁵ Michael Marmura wrote a critical review of Frank’s thesis in “Ghazālīan Causes and Intermediaries,” *Journal of the American Oriental Society* 115, no. 1 (1995): 89–100. Jon McGinnis and Frank Griffel responded to this debate in their respective studies: Jon McGinnis, “Occasionalism, Natural Causation and Science in al-Ghazālī,” in *Arabic Theology, Arabic Philosophy, From the Many to the One: Essays in Celebration of Richard M. Frank*, ed. James E. Montgomery (Leuven; Paris; Dudley, MA: Peeters, 2006), 441–63; and Frank Griffel, *The Philosophical Theology of al-Ghazālī: A Study of His Life and His Cosmology* (New York: Oxford University Press, 2009), 10; 12. Griffel’s work offers a reconstruction of Ghazālī’s philosophical cosmology through a more comprehensive selection of texts. For Ghazālī’s cosmology more generally, see also A. J. Wensinck, “On the Relation between Ghazālī’s Cosmology and His Mysticism,” *Mededeelingen Der Koninklijke Akademie van Wetenschappen, Afdeling Letterkunde* 75, Serie A, no. 6 (1933): 183–209; Kojiro Nakamura, “Imām Ghazālī’s Cosmology Reconsidered with Special Reference to the Concept of ‘Jabarūt,’” *Studia Islamica*, no. 80 (1994): 29–46; Olga Lizzini, “Causality as Relation: Avicenna (and al-Ghazālī),” *Quaestio* 13 (2013): 165–95.

¹⁶ Frank, *op. cit.*, 17–18.

“modified occasionalism.”¹⁷ As long as Ghazālī articulated a coherent picture of this “interlocking order of causes and intermediaries,” one that is consistent and discernible through rational speculation, he is committed to a theoretical model of a self-sustaining “living” universe that can be subject to philosophical and scientific inquiries. For this reason, the idea of a “cosmic system” as a distinct domain of cosmological speculation stands beyond the ontology of the microstructure, whether it consists of atoms and accidents or form and matter, or other conceptions of basic ontological units. In this framework, aspects of the Avicennian cosmos—or other models for that matter—can be rendered fundamentally consistent with the tenets of Ash‘arite theological doctrines.¹⁸

Adopting Frank’s conception of the cosmic system and reworking it into a distinct subset of cosmological inquiry in the manner suggested above provides us with a new perspective on post-Avicennian thinkers like Fakhr al-Dīn al-Rāzī. This is because Rāzī’s relationship to the *falsafa* or *ḥikma* tradition is similar to Ghazālī’s.¹⁹ Both thinkers regarded the philosophers (*falāsifa* or *ḥukamā’*) such as Avicenna as forming a distinct school of thought whose doctrines and methods are often opposed to authoritative religious doctrines, especially when these concern theological matters.²⁰

¹⁷ McGinnis, *op. cit.*, 13–15. See also Griffel’s discussion in *op. cit.*, 175 ff.

¹⁸ Other models include astrological theories of celestial mediation. See Robert G. Morrison, “Discussions of Astrology in Early Tafsīr,” *Journal of Qur’anic Studies* 11, no. 2 (2009): 49–71 and *Islam and Science: The Intellectual Career of Nizām al-Dīn al-Nisābūrī* (New York: Routledge, 2007). For studies that discuss the view that astrology and *kalām* are incompatible, see Alnoor Dhanani, “Rocks in the Heavens?! The Encounter between ‘Abd al-Ġabbār and Ibn Sīnā,” in *Before and After Avicenna: Proceedings of the First Conference of the Avicenna Study Group*, ed. David C. Reisman and Ahmed H. al-Rahim (Leiden; Boston: Brill, 2003), 127–44; George Saliba, “The Ash‘arites and the Science of the Stars,” in *Religion and Culture in Medieval Islam*, ed. Rishard G. Hovannisian and Georges Sabagh (Cambridge: Cambridge University Press, 1999) and “Astronomy and Astrology in Medieval Arabic Thought,” in *Les doctrines de la science de l’antiquité à l’âge classique*, ed. Roshdi Rashed and Joël Biard (Louvain: Peeters, 1999), 131–64.

¹⁹ Shihadeh discusses the place of Rāzī’s thought in the “Ghazālīan milieu” in “From al-Ghazālī to al-Rāzī: 6th/12th Century Developments in Muslim Philosophical Theology,” *Arabic Sciences and Philosophy* 15 (2005): 141–79. On Rāzī’s relationship to post-Ghazālīan *kalām*, see also Ayman Shihadeh, “Al-Rāzī’s Earliest Kalām Work,” in *Philosophical Theology in Islam: Later Ash‘arism East and West*, ed. Ayman Shihadeh and Jan Thiele (Leiden: Brill, 2020), 36–70.

²⁰ Frank Griffel has argued that around the 1150s, the preferred designation for the philosophical tradition associated with the Arabic Peripatetics was *ḥikma* rather than *falsafa*. He argues that by this time the term *falsafa* had pejorative connotations and was associated with a narrow elite, who were the object of Ghazālī’s criticism in the *Tahāfut*. *Ḥikma* had a more neutral connotation and included a broader spectrum of thinkers and schools of thought. See Frank Griffel, *The Formation of Post-Classical Philosophy in Islam* (Oxford: Oxford University Press, 2021), 78–159.

In their respective *kalām* works, they cast the *falāsifa* as opponents of the Ash‘arite school and criticized their controversial metaphysical doctrines.²¹ Rāzī, however, viewed the various sciences of the *falāsifa*—which was largely based on the Peripatetic model of the practical and theoretical sciences, consisting of politics, household management, and ethics on the one side, and logic, physics, and metaphysics on the other—as a legitimate dispensation of human knowledge, one that has been transmitted from the Ancients, such as Plato and Aristotle, to the scholars of his time.²² Although he did not attach himself to the scholarly community representing the contemporary scene, he contributed to the historical transmission of the disciplines associated with the tradition, which he consistently referred to “*ḥikma*.”²³ He achieved this by commenting on the works of important authorities, especially Avicenna, thereby ensuring the circulation and relevance of these

²¹ In the case of Ghazālī, we have, of course, *al-Tahāfut al-falāsifa*, *al-Iqtisād fī al-‘iṭiqād*, *Fayṣal al-tafrīqa bayna al-Islām wa-l-zandaqa*, and *al-Munqidh min al-ḍalāl*, though the latter is not strictly speaking a work of *kalām*. As for Rāzī, the following works feature extensive critical discussions on the metaphysical doctrines of the *falāsifa*: *Nihāyat al-‘uqūl fī dirāyat al-uṣūl*, *Kitāb al-Arbā‘in fī uṣūl al-dīn*, *al-‘Itiqādāt firaq al-muslimīn wa-l-mushrikīn*, *Muḥaṣṣal afkār al-mutaqaddimīn wa-l-muta‘akkhkhirīn min al-‘ulamā’ wa-l-ḥukamā’ wa-l-mutakallimīn*, *al-Khamsūn fī uṣūl al-dīn*, *al-Ma‘ālim fī uṣūl al-dīn*. Frank Griffel and Ayman Shihadeh have recently discussed the political context of Rāzī’s polemics against the *falāsifa*, especially those written during his patronage by the Ghūrīds (from the late-1190s to the mid-1200s). They argue that Rāzī’s role was to bolster the Ash‘arite and Shāfi‘ite credentials of his patrons. See respectively Griffel, *The Formation of Post-Classical Philosophy in Islam*, 286–91, and Shihadeh, “Fakhr al-Dīn al-Rāzī and Ghūrīd Self-Fashioning,” *Afghanistan* 5, no. 2 (2022): 253–92.

²² This perspective can be seen in his introduction to *al-Mabāḥith al-mashriqiyya fī ‘ilm al-ilāhiyyāt wa-l-tab‘iyyāt*, where he claims to be drawing from an ancient tradition of speculative inquiry that has been transmitted to his period (vol. I, pp. 88–89). He writes: “We endeavour to enumerate that which has reached us by way of their statements (*kalimātihim*) and that which we have attained by way of their discourses (*maqālātihim*).” The sources referred to here are the doctrines he found in the “books of the forebears” (*kutub al-mutaqaddimīn*) and the “divine writings” of the ancients (*zabur al-awwalīn*). Rāzī claims that his method (*manhaj*) is that of moderation and integrity, neither slavishly following the ancient authorities, nor criticizing the “leaders of the scholars and the grandees of the wise (*ru‘asā’ al-‘ulamā’ wa-l-‘uṣamā’ al-ḥukamā’*).” The same sentiments can be found in *al-Mulakhkhaṣ fī al-manṭiq wa-l-ḥikma*; see vol. I, 183–84 (Khān‘ūghlū I, 33–34). Rāzī’s awareness that *ḥikma* forms a distinct and authoritative body of knowledge is clearly expressed when discussing the status of the Divine names in the *Mabāḥith*. He argues that of the five major divisions of Divine names, the fifth refers to “the name that indicates the very essence [of the entity in question]. This [name] is possible with respect to the reality of the Necessary Being, for He possesses a specific reality (*ḥaqīqa makhṣūṣa*). It is possible, therefore, that [His Essence] possesses a name. As for whether this name exists, it is not for the art of *ḥikma* [to pursue] (*fa-laysa dhālīka min ṣinā‘at al-ḥikma*).” Presumably the source for this kind of knowledge is prophecy.

²³ This is in line with Frank Griffel’s thesis that Rāzī wanted to maintain a strict separation between his contributions to *ḥikma* and his contributions of *kalām* as two distinct disciplines (see *The Formation of Post-Classical Philosophy in Islam*, 13–16). Indeed, the developmentalist perspective advocated by earlier scholars of Rāzī, such as Muḥammad Zarkān, is no longer viable; see Zarkān, *Fakhr al-Dīn al-Rāzī: wa-‘ārā’uhu al-kalāmīyya wa-l-falsafīyya* (Beirut: Dār al-Fikr li-l-Ṭibā‘a wa-l-Nashr wa-l-Tawzī‘, 1963). The idea that Rāzī transitioned from being a rationalist to a more traditionalist scholar by the latter portion of his career does not capture the complexity and depth of his intellectual project.

texts among later generations of thinkers.²⁴ He also contributed to the *internal* development of *ḥikma* by composing original works that would prove influential in the tradition, such *al-Mabāḥith al-mashriqiyya fī ‘ilm al-ilāhiyyāt wa-l-ṭabī‘iyyāt* and *al-Mulakhkhaṣ fī al-mantiq wa-l-ḥikma*.²⁵ These original works, however, are distinct in that they do not replicate the conventional division of the theoretical philosophical sciences into logic, physics, and metaphysics. Rather, Rāzī conceived of a new way of presenting *ḥikma* whereby topics in physics and metaphysics are combined and reorganized based on the sparse ontology of the *kalam*, which consists of three basic entities: substances (*jawāhir*),

²⁴ Such as his commentary on Avicenna’s *al-Ishārāt wa-l-tanbīhāt* and *‘Uyūn al-ḥikma*. Robert Wisnovsky has shown that Rāzī is at once a critical but constructive commentator on Avicenna. This approach helped propel the prestige of the latter’s writings: “Avicenna’s Islamic Reception,” in *Interpreting Avicenna: Critical Essays*, ed. Peter Adamson (Cambridge; New York: Cambridge University Press, 2013), 190–213; “On the Emergence of Maragha Avicennism,” *Oriens* 46 (2018): 263–331; “Avicennism and Exegetical Practice in the Early Commentaries on the *Ishārāt*,” *Oriens* 41, no. 3–4 (2013): 349–78; “Towards a Genealogy of Avicennism,” *Oriens* 42, no. 3–4 (2014): 323–63. Ayman Shihadeh has placed Rāzī’s commentary within the broader trend of “aporetic” commentaries of the period, which engaged in a critical reading of authoritative texts. He also points out that Rāzī combined this aporetic method with an “exegetical” approach whereby the commentator is tasked simply with elucidating and clarifying the *lemma*. See Ayman Shihadeh, *Doubts on Avicenna: A Study and Edition of Sharaf al-Dīn al-Mas‘ūdī’s Commentary on the Ishārāt* (Leiden: Brill, 2016), 44–49, and “Al-Rāzī’s (D. 1210) Commentary on Avicenna’s Pointers: The Confluence of Exegesis and Aporetics,” in *The Oxford Handbook of Islamic Philosophy*, ed. Khaled El-Rouayheb and Sabine Schmidtke (New York, N.Y.: Oxford University Press, 2016), 296–235. For Rāzī’s influence on the later commentaries of the *Ishārāt*, see Hakan Coşar, “İslam Düşüncesinde Günümüzde Az Bilinen Bir Gelenek İşârât (Şerhleri) Geleneği,” *Dini Araştırmalar* 16, no. 43 (2013): 47–66; Hakan Coşar, “İşârât Geleneği İçinde Fahreddin er-Râzî Eleştirileri: Seyfeddin el-Âmidî Örneği,” in *İslâm Düşüncesinin Dönüşüm Çağında Fahreddin er-Râzî*, ed. Ömer Türker and Osman Demir (İstanbul: İsam Yayınları, 2011), 587–612.

²⁵ Both are early works and were written in quick succession. A later-career work, *al-Maṭālib al-‘āliya min al-‘ilm al-ilāhī*, can also be counted as a contribution to *ḥikma*, although it is a hybrid work that includes many of the conventions and discussions of *kalām*. Thus, I accept Griffel’s schematic distinction between Rāzī’s *kalām* and *ḥikma* contributions but with the following caveat: that we restrict this division to the *conventional* aspects of the two disciplines, that is, the *topoi* that are discussed by the tradition, how these are organized, and the standard repertoire of argumentative approaches used to examine a particular question (*The Formation of Post-Classical Philosophy in Islam*, 13–16). This schematic distinction does *not* hold true for substantive issues, since Rāzī always attempts to maintain a consistent doctrinal perspective across his *ḥikma* and *kalām* works, especially when these relate to fundamental metaphysical doctrines, such as the nature of God’s will. Of course, this does not prevent Rāzī from changing positions, whether from affirming *X* to denying it outright, or from affirming *X* with high certainty to affirming it but with weaker preponderance. One way to differentiate whether in a certain *ḥikma* work Rāzī is simply transmitting a standard doctrine of *ḥikma* or whether he personally assents to it is to determine his position on fundamental metaphysical doctrines (*uṣūl*) to which he is unambiguously committed. Related doctrines should then be reinterpreted in light of these *uṣūl*. The Rule of One is one such fundamental metaphysical principle. Once Rāzī rejected this doctrine, a cluster of related claims regarding efficient causality, such as a strict adherence to the metaphysical necessity of secondary causality, or of God as a necessitating agent (*al-fā‘il al-mūjib*), and the attending doctrine of the eternity of the world must be interpreted accordingly.

accidents (*ʿarāḍ*), and God (*Allāh*).²⁶ These three major topics are prefaced by an introductory section that discusses the most general metaphysical concepts, called *al-umūr al-ʿāmma* (“common matters”).²⁷ Within this revamped structure we still find all the major talking points of the received *ḥikma* tradition, especially as presented by Avicenna, such as the discussion of primary concepts (e.g., essence and existence, the necessary and the contingent), the Aristotelian categories, physical principles (e.g., motion, time, substantial and accidental change, the elements, and elemental mixtures), and special domains of physics like psychology, meteorology, and celestial dynamics.²⁸ The theological section of these works, called “pure *divinalia*” (*al-ilāhiyyāt al-maḥḍa*), mirrors the *ilāhiyyāt* sections of *kalām* works, as it begins with proofs for God’s existence, before proceeding to enumerate His negative and positive attributes (*ṣifāt*) and His actions (*afʿāl*), and concluding with a discussion of prophecy (*nubuwwa*). However, it also integrates aspects of Avicenna’s discussion of theological matters from his metaphysical works, such as the *Ilāhiyyāt* of the *Shifāʾ*.²⁹

²⁶ For a more comprehensive discussion of this “restructuring” of the Peripatetic sciences see Heidrun Eichner, “Dissolving the Unity of Metaphysics: From Fakhr al-Dīn al-Rāzī to Mullā Ṣadrā al-Shīrāzī,” *Medioevo* 32 (2007): 133–70, and “The Post-Avicennian Philosophical Tradition and Islamic Orthodoxy: Philosophical and Theological in Context” (Halle-Wittenberg, Martin Luther University Halle-Wittenberg, 2009). Bilal Ibrahim has attempted to examine the philosophical motivations for this restructuring; see “Freeing Philosophy from Metaphysics: Fakhr al-Dīn al-Rāzī’s Philosophical Approach to the Study of Natural Phenomena” (PhD, Montreal, McGill University, 2012), 204 ff. Jules Janssens has offered a critical analysis of Rāzī’s restructuring in relation to Avicenna’s works and his students, especially Bahmanyār, in “Ibn Sīnā’s Impact on Fakhr al-Dīn al-Rāzī’s *Mabāḥiṭ al-maṣriḥiyya*, with Particular Regard to the Section Entitled *al-Ilāhiyyāt al-maḥḍa*: An Essay of Critical Evaluation,” *Documenti e Studi Sulla Tradizione Filosofica Medievale* XXI (2010), 259–70.” Another recent contribution to this topic is Griffel, *The Formation of Post-Classical Philosophy in Islam*, 320 ff.

²⁷ Scholars have noted that Rāzī was also influenced by Bahmanyār’s organization of Avicenna’s philosophy. See Eichner, “Dissolving the Unity of Metaphysics,” and “The Post-Avicennian Philosophical Tradition and Islamic Orthodoxy”; Jules Janssens, “Avicennian Elements in Fakhr al-Dīn al-Rāzī’s Discussion of Place, Void and Directions in the *al-Mabāḥiṭ al-maṣriḥiyya*,” in *The Arabic, Hebrew, and Latin Reception of Avicenna’s Physics and Cosmology*, ed. Dag Nikolaus Hasse and Amos Bertolacci (Berlin; Boston: De Gruyter, 2018), 43–63 and “Ibn Sīnā’s Impact on Fakhr al-Dīn al-Rāzī’s *Mabāḥiṭ al-maṣriḥiyya*.”

²⁸ Janssens discussed the structure of psychology section of the *Mabāḥiṭ* in “Fakhr al-Dīn al-Rāzī on the Soul: A Critical Approach to Ibn Sīnā,” *The Muslim World* 102, no. 3–4 (2012): 562–79; and the structure of some parts of the physics section in “Avicennian Elements in Fakhr al-Dīn al-Rāzī’s Discussion of Place, Void and Directions in the *al-Mabāḥiṭ al-maṣriḥiyya*.”

²⁹ Especially in *maqāla* VIII. Janssens has offered a systematic analysis of the pure *divinalia* section of the *Mabāḥiṭ* in “Ibn Sīnā’s Impact on Fakhr al-Dīn al-Rāzī’s *Mabāḥiṭ al-maṣriḥiyya*.”

To be sure, Ghazālī also regarded the received tradition of *ḥikma* as a legitimate dispensation of human knowledge.³⁰ What is distinct about Rāzī’s project is the attempt to synthesize the methods and insights of the Avicennian tradition with other sources of metaphysical knowledge to produce a new style and template for carrying out philosophical inquiry. This allowed him to integrate aspects of the Avicennian system while also questioning those he deemed false. The Rāzian philosopher cannot be satisfied with simply transmitting the tradition, nor with producing a competing set of alternative doctrines to those he criticizes. If some of these objections relate to fundamental principles (*uṣūl*) in the sciences—whether general metaphysics, psychology, theology, etc.—then the framework of inquiry must also be reformulated to maintain a coherent philosophical perspective. This, in my view, is the reason why Rāzī decided to reorganize the Peripatetic sciences of physics and metaphysics into the novel structure we find in the *Mabāḥith* and *Mulakhkhaṣ*.³¹

Given the systematic character of Rāzī’s engagement with Avicenna, it is important that our study of his reception of the latter’s cosmology does not end up simply reproducing a list of problematic *falsafa* doctrines, on the one side, and their Rāzian alternatives, on the other. This schematic setup does not do justice to the complexity of Rāzī’s contribution to the internal development of Eastern *ḥikma*. In this regard, the “cosmic system” as a separate domain of metaphysical inquiry is well-suited to serve as our interpretive framework. Since it is concerned

³⁰ In his autobiography, *al-Munqidh min al-dalāl*, Ghazālī affirms the utility of the Peripatetic sciences, especially logic and physics. It is in metaphysics that he finds many errors.

³¹ My claim here is limited to explaining why Rāzī thought he had to restructure the philosophical sciences. I do not make a judgment on the specific form it eventually took, such as the invention of a separate section devoted to “common matters” (*al-umūr al-‘amma*). Bilal Ibrahim has offered an interpretation of this latter question, arguing that it had to do with Rāzī’s desire to provide a framework of metaphysical inquiry that is independent from specific ontological commitments, whether those of the Peripatetics or the practitioners of *kalām* (“Freeing Philosophy from Metaphysics,” 205 ff). Ibrahim develops the same position in “Beyond Atoms and Accidents: Fakhr al-Dīn al-Rāzī and the New Ontology of Postclassical *Kalām*,” *Oriens* 48, no. 1–2 (2020): 67–122. My discussion of Rāzī’s criticism of the Rule of One in his *ḥikma* works will confirm Ibrahim’s thesis.

with the general structure of the macrocosm and how the various orders of existents are interconnected through discernible laws of universal sympathy, using it as our framework encourages us to ask whether Rāzī's engagement with Avicennian cosmology is driven by an independent and systematic perspective. This hypothesis is especially important for analyzing Rāzī's early *ḥikma* works, such as the *Mabāḥith*, *Mulakhkhaṣ*, and his commentary on the *Ishārāt*, where the relevant discussions that contribute to a unified perspective are scattered and do not form a distinct subsection—unlike, for instance, Avicenna's discussion of Divine governance (*al-tadbīr al-ilāhī*) in *maqāla* IX and X of the *Ilāhiyyāt*. During this early period, Rāzī also authored a unique work on astrology and astral magic, *al-Sirr al-maktūm*, where he affirms several principles concerning the role of celestial bodies, souls, and intellects in the operations of nature.³² These scattered discussions together constitute a substantial body of cosmological doctrines that are theoretically consistent and, in many instances, mutually implicative. Using the cosmic system as a framework to analyze his early discussions of cosmology will allow us to determine whether this consistency and interconnectedness were deliberately conceived, that is, whether they arose from

³² The full title of this work has been variously attested as *al-Sirr al-maktūm fī mukhāṭabāt al-nujūm*, *al-Sirr al-maktūm fī asrār al-nujūm*, and other variations. See Ḥājī Khalīfa (Kātip Çelebī), *Kashf al-ẓunūn 'an asāmī al-kutub wa-l-funūn*, vol. 2, ed. Muḥammad Sharaf al-Dīn Yāltaqāyā and al-Kilīsī Rif'at (Beirut: Dār Iḥyā' al-Turāth al-ʿArabī, 199-), 989–90, 1525, 1720; Carl Brockelmann, *Geschichte der Arabischen Literatur (GAL) Suppl. I* (Leiden: Brill, 1996), 669; Carl Brockelmann, *Geschichte der Arabischen Literatur (GAL) Vol. I* (Leiden: Brill, 1996), 923–24; Fuat Sezgin, *Geschichte des arabischen Schrifttums*, (Leiden: Brill, 1967), vol. 4, pp. 42, 94; vol. 7, pg. 371; Manfred Ullman, *Die Natur- und Geheimwissenschaften im Islam* (Leiden: Brill, 1972), 340, 388–90; Anatoly Kovalenko, “Magie et Islam: les concepts de magie (*sihr*) et de sciences occultes (*ilm al-ḡayb*) en Islam” (Strasbourg, Université des Sciences Humaines de Strasbourg, 1979), 21–22, 49, 54, 492. Michael Noble has discussed this aspect of Rāzī's thought in several publications, including, *Philosophising the Occult: Avicennan Psychology and “The Hidden Secret” of Fakhr al-Dīn al-Rāzī*; and “Sabian Astral Magic as Soteriology.” See also Obuchi, “Fakhr al-Dīn al-Rāzī and Occult Science as Philosophy: An Aspect of the Philosophical Theology of Islam at the Beginning of the Thirteenth Century”; Živa Vesel, “Le *Sirr al-maktūm* de Fakhr al-Dīn al-Rāzī (m. 606H/1210) face à la *Ghāyat al-ḥakīm*,” in *Images et magie: Picatrix entre Orient et Occident*, ed. Jean Patrice Boudet, Anna Caiozzo, and Nicolas Weill-Parot (Paris: H. Champion, 2011), 77–94; and “The Persian Translation of Fakhr al-Dīn Rāzī's *al-Sirr al-Maktūm* (‘The Occult Secret’) for Iltutmish,” in *Confluence of Cultures: French Contributions to Indo-Persian Studies* (New Delhi; Tehran: Centre for Human Sciences; Institut Français De Recherche en Iran, 1994), 14–22. Cf., ‘Uthmān al-Nābluṣī, *Mawqif al-imām Fakhr al-Dīn al-Rāzī min al-sihr wa-daʿwat al-kawākib wa-radd takharruṣāt al-tayyimiyyah* (Jordan: al-Aṣḥayn li-l-Dirāsāt wa-l-Nashr, 2018); and Saʿīd Fūda, “Introduction,” in *Nihāyat al-ʿuqūl fī dirāyat al-uṣūl*, vol. 1, 4 vols. (Beirut: Dār al-Dhakhāʿin, 2014), 5–86.

a unified theoretical perspective rather than merely being haphazard or experimental.³³ Furthermore, since the cosmic system is primarily concerned with the general structure of the sublunary and celestial realms, we can offer a coherent picture of a Rāzian universe without having to settle lingering questions regarding his ontological commitments, such as whether he affirmed or rejected *kalām* atomism as opposed to Peripatetic hylomorphism, or questions of theological import, such as whether he believed in the immanent reality of causal relations or whether he rejected it in favour of a high-functioning occasionalism in the manner of Ghazālī.³⁴ While these questions are important in themselves, from the perspective of the cosmic system they are secondary issues (*furūʿ*) that can be pursued separately.³⁵ They do not make or break the universal system.³⁶

³³ In the late period of his career Rāzī would eventually offer a systematic account of the macrocosm in volume VII of *al-Matālib al-ʿāliya min al-ʿilm al-ilāhī*, which is devoted to the nature of sublunary and celestial souls. Thus, the question is not whether Rāzī offers a systematic account of the cosmic system—he obviously does; rather, the question is whether this was already developed in the early phase of his career.

³⁴ Whether Rāzī affirmed an atomistic ontology is still debated in the scholarship, as he seems to have offered different positions in different works. One of the latest and more interesting interpretations holds that Rāzī was content to leave the matter unresolved, since it pushes the limits of human knowledge. This neutral position is advocated by Osman Demir and Bilal Ibrahim (see below). For a sample of the scholarship, see Bilal Ibrahim “Beyond Atoms and Accidents”; Nora Jacobsen Ben Hammed, “As Drops in Their Sea”; Jules Janssens, “Avicennian Elements in Fakhr al-Dīn al-Rāzī’s Discussion of Place, Void and Directions in the *al-Mabāḥith al-mashriqiyya*”; Eşref Altaş, “An Analysis and Editio Princeps of Fakhr al-Dīn al-Rāzī’s Risālah: Al-Jawhar al-Fard,” *Nazariyat* 2, no. 3 (2015): 77–178; Alnoor Dhanani, “The Impact of Ibn Sīnā’s Critique of Atomism on Subsequent Kalām Discussions of Atomism,” *Arabic Sciences and Philosophy* 25, no. 1 (2015): 79–104; Osman Demir, “Fahreddin er-Râzî’de Cevher-i Ferd ve Heyûlâ-Sûret Teorileri,” in *İslâm Düşüncesinin Dönüşüm Çağında Fahreddin er-Râzî*, ed. Ömer Türker and Osman Demir (İstanbul: İsam Yayınları, 2011), 559–86; Adi Setia, “Atomism Versus Hylomorphism in the Kalām of al-Fakhr al-Dīn al-Rāzī: A Preliminary Survey of the *Matālib al-ʿāliyyah*,” *Islam & Science* 4, no. 2 (2006): 113–40.; Husayn Maʿšūmī Hamadānī, “Miyān-i falsafa va-kalām: baḥthī dar ārāʾ-i ṭabīʿī-yi Fakhr-i Rāzī,” *Maʿārif* 3, no. 1 (1986): 195–276; Carmela Baffioni, *Atomismo e antiatomismo nel pensiero islamico*, Instituto Universitario Orientale. Seminario di Studi Asiatici. Series Minor, v. XVI (Napoli: Istituto universitario orientale, 1982), 211–75.

³⁵ Bracketing these questions is not a purely pragmatic decision. It is consistent with Rāzī’s method in *ḥikma*. Bilal Ibrahim has pointed out that in the *Mabāḥith* and *Mulakhkhas*, Rāzī attempts to provide a frame of inquiry “that asserts neither the hylomorphism of *falsafa* nor the old, reductive atomism of *kalām*,” hence the title of the work “Beyond Atoms and Accidents.” See especially, the author’s reflections on Rāzī’s “philosophical alternative” on pg. 105 ff. If Ibrahim is correct, it is even more pressing that any inquiry into Rāzī’s metaphysics take into consideration his deliberate attempt to provide such a neutral framework of inquiry. In Chapter 3.3, I discuss how Rāzī’s criticism of the Rule of One in these works implies an uncompromising rejection of Avicenna’s theory of causality and Peripatetic hylomorphism and how a high-functioning occasionalism would still provide a coherent account of cosmic system.

³⁶ Of course, the idea of a universal system must entail some commitment to natural laws, whether these laws imply metaphysical necessity or (conventionally) as implying statistical regularity. A perspective that grants no stability to natural phenomena or asserts a radical skepticism concerning the possibility of knowledge cannot, by definition, sustain

Fakhr al-Dīn al-Rāzī viewed the Rule of One as one of the key principles of Avicennian metaphysics. His interpretation addressed the obvious theological implication of the principle, namely that God directly creates only a single entity and that everything else is created indirectly through the mediation of this First Effect. Like Ghazālī, Shahrastānī, and Sharaf al-Dīn al-Mas'ūdī, Rāzī rejected this doctrine of creation. For him, what Avicenna viewed as the necessary consequence of God's transcendent and perfect oneness is an arbitrary restriction to His power (*qudra*). However, Rāzī also regarded the Rule of One as the defining principle of the Avicennian cosmic system. It is responsible not only for the procession of the First Intellect, but also for the subsequent triadic structure of emanation that forms the architecture of the celestial world. It also underlies certain aspects of Avicenna's psychology, such as the theory of corporeal faculties and the distinction between intellect and soul. Thus, Rāzī criticized the Rule not only because it contradicted theological principles, but also because it fails as a principle of the cosmic system. The *a priori* restriction that only one effect may proceed from a single cause presents a very rigid model of efficient causality that cannot account for the observable complexity of the celestial and sublunary realms and the dynamic interaction between them. This rigidity is especially detrimental when new and more accurate empirical data come to light that require the metaphysician to adjust previously held theoretical models. These issues, together with the Avicennian theory of Divine creation, form what I refer to as the applied context of the Rule of One, since they deal with its function as a natural law of the cosmic system. However, Rāzī also questioned the viability of the Rule from within its theoretical context. This refers to the metaphysical considerations that justify

a cosmic system. The Ash'arite *kalām* tradition aggressively rejects both of these latter approaches, as its practitioners assume the fundamental intelligibility and order of the natural world as a necessary premiss for the proof of God's existence.

its status as a general principle of efficient causality. As much as Rāzī was concerned with the theological implications of the Rule, he was equally motivated by its failure to function as a governing principle of the cosmic system and by its flaws as a metaphysical doctrine.

Fakhr al-Dīn was the first post-Avicennian thinker to interpret and criticize the Rule of One on these two fronts: its applied context (as a theological doctrine of creation and a principle of the cosmic system) and its theoretical context (as a key element of the metaphysics of efficient causality). Previous thinkers focused only on the applied context, and of them only Abū al-Barakāt discerned the Rule's function as a general law of natural phenomena.³⁷ Rāzī's criticism of the underlying metaphysical principles was unprecedented and perhaps reflected a personal dissatisfaction with previous approaches that did not interrogate the deeper theoretical aspects of the Rule.³⁸ This approach also proved to be influential; later discussions of the Rule of One cited Rāzī's theoretical arguments as part of the standard repertoire of objections against the principle.³⁹ Furthermore, examining the issue in this manner allowed him to come up with a theory of efficient causality that is distinct to Avicenna's. Such a theory, in turn, would supply the metaphysical principles underlying a uniquely Rāzian cosmic system.

³⁷ I include among these forebears not only Ghazālī, Shahrastānī, and Mas'ūdī, but also philosophers who can be considered followers of Avicenna, such as Abū al-Ḥasan Bahmanyār (d. 458/1066) and Abū al-Abbās al-Lawkarī (d. ca. 517/1123). See respectively *K. al-Taḥṣīl*, 531 and *Bayān al-ḥaqq*, 345f. Abū al-Barakāt's interpretation was particularly influential for Rāzī and will be discussed in Chapter 2.2.

³⁸ Although Bahmanyār offers a critical examination of Avicenna's proof of the Rule of One in the *Mubāḥathāt*, which deals with some aspects of the Rule's theoretical underpinnings, his discussion is very short and focuses on the formal aspects of Avicenna's argument rather than its substantive content. See Bahmanyār, *K. al-Taḥṣīl*, 531. We will discuss Bahmanyār's response to this proof in Chapter 2.3.

³⁹ Later scholars recognized that Rāzī's theoretical dispute with the Rule of One was unique to his system. Al-Kātibī al-Qazwīnī in his commentary on Rāzī's *kalām* work, the *Muḥaṣṣal*, wrote that the author's dispute with the principle was not necessarily shared by other members of the Ash'arite school (*aṣḥābunā*) (*Muḥaṣṣal* II, 234–39). In both this commentary and in his famous *Ḥikmat al-ʿayn*, al-Kātibī did not decide which position he favours. He simply offered arguments for and against the principle; see *Ḥikmat al-ʿayn*, 44–45. When enumerating the position of those who reject the Rule, he cites only Rāzī's criticism. Naṣīr al-Dīn al-Ṭūsī also argues that Rāzī's opposition is not a necessary implication of adhering to Ash'arite ontology but is rather a unique feature of his system (*Talkhīṣ al-Muḥaṣṣal*, 238). Later Sunnī thinkers, such as ʿAḍud al-Dīn al-Ījī (756/1356), relied on Rāzī's interpretation and refutation of the Rule of One (*al-Mawāqif fī ʿilm al-kalām* IV, 128–42). This is further affirmed by al-Sayyid al-Sharīf al-Jurjānī (815/1413) in his commentary on Ījī's compendium; see especially *Sharḥ al-Mawāqif* IV, 133 ff.

Before understanding what a Rāzian cosmic system might look like, we must first understand the metaphysical and epistemic principles at stake. For this reason, the centrepiece of this thesis is not the applied context of Rāzī's criticism of the Rule of One, but the theoretical context.⁴⁰ Our goal is to analyze what, according to Rāzī, are the metaphysical issues at play and what motivated him to criticize the Rule from this perspective. To do this, I will focus on two early *ḥikma* works, the *Mabāḥith* and *Mulakhkhaṣ*, which offer a comprehensive inquiry into the theoretical context of the Rule of One. Rāzī neither changed his approach nor introduced new insights in later works where the same question was pursued, such as in the *Nihāyat al-ʿuqūl fī dirāyat al-uṣūl*, *Muḥaṣṣal*, and *Sharḥ ʿUyūn al-ḥikma*.⁴¹ As for his other major works, such as the *Sharḥ al-Ishārāt* and the *Maṭālib*, these only address the applied context of the Rule of One. As such, our inquiry will focus on the *Mabāḥith* and *Mulakhkhaṣ*, though I will also refer to other works when they clarify difficult points. Reading these two works in tandem is also necessary because together they paint a consistent and complete picture of Rāzī's early philosophical project.⁴² Though the *Mulakhkhaṣ* can be read as an epitome of the

⁴⁰ This aspect of his criticism has not been thoroughly examined in the scholarship, which has focused on the applied context of Rāzī's criticism of the Rule of One. Two recent contributions, however, deal with some aspects of the theoretical context: Amin, "From the One, Only One Proceeds" and Dadikhuda, "Rule of the One." However, they only focus on evaluating Rāzī's objections. Whether these objections relate to broader issues in Rāzian metaphysics especially regarding efficient causality is not explored their respective studies.

⁴¹ The *Mabāḥith*, *Mulakhkhaṣ* and *Nihāyat* are early-career works, completed by the mid-1180s when Rāzī was in his mid-30s and was patronized by the Khwarazmshāhs. The *Muḥaṣṣal* is a *kalām* work written at a later period, perhaps when the author was in his 40s, before he switched allegiances to the Ghūrids in the late 1190s. The *Sharḥ ʿUyūn al-ḥikma* is a late-career work written when Rāzī switched back to the patronage of the Khwarazmshāhs in the latter part of the first decade of the 13th century. For the chronology of Rāzī's works, I rely on Eşref Altaş, "Fahreddin er-Râzî'nin Eserlerinin Kronolojisi," in *İslâm Düşüncesinin Dönüşüm Çağında Fahreddin er-Râzî*, ed. Ömer Türker (Istanbul: İSAM Yayınları, 2013), 91–164. I also rely on Ayman Shihadeh, "Fakhr al-Dīn al-Rāzī and Ghūrīd Self-Fashioning," *Afghanistan* 5, no. 2 (2022): 253–92; Frank Griffel, "Al-Rāzī, Fakhr al-Dīn," in *Grundriss Der Geschichte Der Philosophie. Philosophie in Der Islamischen Welt. Band 2/1. 11. Und 12. Jahrhundert: Zentrale Und Östliche Gebiete*, ed. Ulrich Rudolph and Renate Würsch (Basel: Schwabe Verlag, 2021), 471–501, and "On Fakhr al-Dīn al-Rāzī's Life and the Patronage He Received," *Journal of Islamic Studies* 18, no. 3 (2007): 313–334; Ayman Shihadeh, *The Teleological Ethics of Fakhr al-Dīn al-Rāzī* (Leiden: Brill, 2006), 6–11; Hayri Kaplan, "Fahruddīn er-Râzî Düşüncesinde Ruh ve Ahlak" (PhD, Ankara, Ankara Üniversitesi Sosyal Bilimler Enstitüsü, 2001), 266–407.

⁴² Bilal Ibrahim's various studies of Rāzī's early philosophical project has shown that the two works must always be read in tandem. See his comments in "Beyond Atoms and Accidents: Fakhr al-Dīn al-Rāzī and the New Ontology of

Mabāḥith, it offers additional insights that introduce greater precision and clarity to previous arguments. In some cases, Rāzī even revises earlier positions and conveys his doctrinal commitments more explicitly. This was not necessarily due to greater maturity on Rāzī's part or due to his having changed his mind—though we cannot rule these factors out. Rather, we should keep in mind that Rāzī wrote the *Mabāḥith* with the express intent to transmit and digest key doctrines of the received *ḥikma* tradition, especially as transmitted by the Eastern tradition of Avicenna. In discharging this task, however, he does not always draw a clear line between reporting (*ḥikāya*) on authoritative opinions and critically evaluating them (*taḥqīq*).⁴³ The *Mulakhkhaṣ* is not burdened on this way, producing instead the author's distilled perspective while still remaining committed to the exposition of received opinions—though in significantly abbreviated form. Thus, although the *Mabāḥith* is a more comprehensive and detailed work, it helps to read it together with the *Mulakhkhaṣ* when examining a particular issue. Rāzī's criticism of the Rule of One is no exception. Not only did he rework his arguments to clarify and enhance his original points, he also revised certain claims he now deemed to be false. This resulted in a more authoritative perspective

Postclassical *Kalām*,” 105–08. See also “Causing an Essence: Notes on the Concept of *Jaʿl al-Māhiyya*, from Fakhr al-Dīn al-Rāzī to Mullā Ṣadrā,” in *Philosophical Theology in Islam: Later Ashʿarism East and West*, ed. Ayman Shihadeh and Jan Thiele (Leiden: Brill, 2020), 156–94; “Fakhr ad-Dīn al-Rāzī, Ibn al-Hayṭam and Aristotelian Science: Essentialism versus Phenomenalism in Post-Classical Islamic Thought,” *Oriens* 41, no. 3–4 (2013): 379–431; and “Freeing Philosophy from Metaphysics.”

⁴³ *Ḥikāya* and *taḥqīq* are terms Rāzī consistently uses in the *Mabāḥith* and *Mulakhkhaṣ* to distinguish two types of engagements with the received *ḥikma* tradition. The first is to provide a neutral account of authoritative opinions, which he often enhances with clarifications and emendations. The second is to critically evaluate their validity and cogency. Neither approach implies any doctrinal commitment on Rāzī's part whether in favour of an opinion or in opposition to it. In cases where he does *not* alert the reader that he is just offering a report (whether by using the term *ḥikāya* or by some other expressions), it is necessary to check it against explicit instances where he critically verifies (*taḥqīq*) related doctrines, especially when these fundamental metaphysical principles (*uṣūl*). This cross-referencing will help determine the true intention behind the inquiry. In cases where he criticizes an opinion, we must also check whether this criticism is consistently upheld in other sections of the work and whether Rāzī offers an alternative position that is also consistently upheld. We must also pay attention to the nomenclature of the discussion, whether he uses non-committal language, such as “someone may claim...” (*wa-li-qāʿil an yaqūla*), or some other expression that is more decisive, such as “according to me...” (*ʿindī*), “the reliable position is...” (*al-muʿtamad huwa*) or “my preferred position is...” (*al-mukhtār ʿindī*) before determining whether it represents Rāzī's positive doctrine. Furthermore, even if he explicitly affirms or rejects a position consistently in one work, we must always verify whether this is also upheld consistently in other works belonging to the same period in order to get a reliable picture of his considered opinion in a definite phase of his intellectual thought.

that exhibits greater consistency with other aspects of his metaphysics and theology. Readers who rely only on the *Mabāḥith* will limit themselves to a partial and relatively inchoate picture of Rāzī's investigation, one that does not reflect its true scope, depth, and doctrinal commitments.

Therefore, as much as this thesis is concerned with the Rule of One, it is also a study of Rāzī's philosophical project in his early *ḥikma* works, especially the *Mabāḥith* and *Mulakhkhaṣ*. Although he wrote other important works during this period, such as his commentary on Avicenna's *Ishārāt* and his major contribution to the discipline of *kalām*, *Nihāyat al-'uqūl*, they do not offer additional insights into his reception of the Rule of One. In *Sharḥ al-Ishārāt* Rāzī does not address the theoretical context of the Rule. Rather, he focuses on how the principle is applied in the doctrine of Divine creation and the triadic structure of emanation.⁴⁴ In the *Nihāyat* he simply reproduces the insights he had previously asserted.⁴⁵ Thus, despite being written during the spring of Rāzī's career, the *Mabāḥith* and *Mulakhkhaṣ* already exhibit a well-established perspective on the Rule of One. Focusing on these two works, therefore, will suffice to reveal the distinctive character of his early philosophical project, one in which the insights of both Ash'arite *kalām* and Avicennian *ḥikma* converge to produce a distinctly Rāzian perspective.

To understand why Rāzī focused on the theoretical context of the Rule of One, we need to place him within the context of post-Avicennian philosophy. Chapter 1, therefore, is devoted to the

⁴⁴ *Sharḥ al-Ishārāt* II, 125–27, 251, 256, 281, 419–20, 497–98.

⁴⁵ *Nihāyat* I, 466 ff. I should note, however, that the *Nihāyat* reveals a dimension of Rāzī's criticism of the Rule of One that we do not encounter in the *Mabāḥith* and *Mulakhkhaṣ*, namely that it is relevant to his criticism of the Baḥshamite theory of "states" (*aḥwāl*). This discussion is part of a broader concern with the nature of efficient causality and Rāzī does not explicitly draw the link between it and the Rule of One. Still, later commentators, such as Ṭūsī and al-Kātibī al-Qazwīnī were able to discern this link. They argued that his refutation of the Rule of One is also a Baḥshamite theory of "states" (*aḥwāl*), though they do not explicitly mention the term. See Ṭūsī, *Talkhīṣ al-Muḥaṣṣal*, 238; al-Kātibī al-Qazwīnī, *al-Mufaṣṣal fī sharḥ al-Muḥaṣṣal* II, 234–39. This link does not offer additional insight into Rāzī's reception of the Rule of One other than what has already been established in the *Mabāḥith* and *Mulakhkhaṣ*. Furthermore, since the focus of this study is on Rāzī's criticism of an Avicennian doctrine, discussing how it relates to the Baḥshamite theory of states is perhaps better explored in a separate study that considers Rāzī's own interpretation of Ash'arite attribute-theory and his complex relationship with Mu'tazilite *kalām*.

principle insofar as it is the brainchild of Avicenna. It discusses what I regard to be the original context of the Rule, namely the inquiry into Divine governance (*tadbīr ilāhī*), which deals with the doctrine of absolute creation (*ibdāʿ*), the triadic structure of emanation, and the procession of sublunary corporeal forms from the Active Intellect. All of Avicenna's early and middle works place the principle within this context, and of these the *Ilāhiyyāt* of the *Shifāʾ* (*maqāla* IX.4) provides the most extensive and canonical presentation. I am primarily concerned with the following questions: What motivated Avicenna to establish the axiom that only one effect may proceed from a single unitary cause, and how does he make use of the principle in the original context of its conception? I am also concerned with how the Rule of One relates to Avicenna's philosophical project in the *Ilāhiyyāt*. Which aspects of Avicenna's metaphysics does the Rule serve to advance? Finally, I investigate the metaphysical principles that underlie the Rule of One. I argue that despite its status as the paradigmatic principle of Divine governance, it is not strictly speaking a primary metaphysical doctrine. Rather, it is a corollary principle that derives from Avicenna's theory of efficient causality, on the one hand, and from his theory of the productive intellection (*al-ʿtaʿaqqul al-fāʿilī*), on the other. The theory of productive intellection refers to the idea that the contemplative activity (*taʿaqqul*) of essentially immaterial and perpetually actualized entities, like the Necessary Being and the celestial intellects, is essentially productive of some effect. I refer to this theory interchangeably as "celestial demiurgy" and "intellectual demiurgy." As for Avicenna's theory of efficient causality, I refer specifically to the theory of causal "correspondence" or "compatibility" (*munāsaba*), which he established most notably in *Ilāhiyyāt* VI.3. This theory holds that for every effect *A*, a distinct causal factor *X* inhering in the agent must be posited as its source or principle (*maṣḍar* or *mabdaʿ*). The specific notion of "compatibility" refers to the rule that the nature of the effect must, to some extent, conform to the nature of the causal factor enacting it.

Although I rely mainly on the *Ilāhiyyāt* to reconstruct the Rule of One as a corollary doctrine of these metaphysical principles, I also adduce evidence from later works such as the *Ishārāt*, *Mubāḥathāt*, and *Taʿlīqāt*, the last two of which clarify some difficult points regarding the theory of celestial demiurgy that are not found in previous works. This reconstruction seeks to advance a new interpretation of Avicenna’s theory of emanation based on the theoretical origin of the Rule of One and its function in Avicenna’s metaphysics. By showing that the Rule is part of a broader cluster of metaphysical principles related to Avicenna’s theory of efficient causality, I also want to highlight why the scope of Rāzī’s interpretation and criticism of the Rule was correspondingly broad.

In Chapter 2, I discuss two topics that form the immediate background to Fakhr al-Dīn’s criticism of the Rule of One. The first is the criticism of Avicenna’s theory of Divine creation and the triadic structure of emanation by two thinkers who were influential for Rāzī, namely Ghazālī in his *al-Tahāfut al-falāsifa* and Abū al-Barakāt al-Baghdādī in his *Kitāb al-Muʿtabar*. Although Ghazālī’s criticism was designed to refute without offering alternative positions, he was able to identify real problems in the theory and exploit them effectively. His critique was influential for later scholars such as Averroes—who upheld some of the objections in his commentary on the *Tahāfut*—and Abū al-Barakāt, who relied on similar arguments in his own work. I show that Ghazālī’s criticism relies primarily on showing the falsity of a test implication, that is, by assuming the truth of the proposition that “from a single cause only a single effect may proceed” and subsequently demonstrating that the implications are either contradictory, absurd, or do not correspond with empirical reality. Once the consequent is denied, the initial assumption must also be incorrect (i.e., *modus tollens*). Abū al-Barakāt in *Kitāb al-Muʿtabar* also uses this strategy. However, unlike Ghazālī, he broadened the scope of his inquiry and interpreted the Rule of One as a general principle of the cosmic system rather than as a localized principle of Divine governance. Abū al-

Barakāt discusses the principle in both the metaphysics and psychology sections of *K. al-Muṭabar*, an approach that would prove influential for Rāzī. I will first discuss why Abū al-Barakāt held that aspects of Avicennian psychology rely on the Rule and why this was problematic. I then discuss his criticism of Avicenna’s model of Divine creation and emanation. I show that while he was heavily influenced by Ghazālī, he refined and expanded his predecessor’s arguments. Furthermore, since Abū al-Barakāt also provided an alternative model of Divine governance that does not rely on the Rule of One, his inquiry served not only to refute but also to construct. This constructive approach influenced Fakhr al-Dīn.

The second portion of Chapter 2 returns to Avicenna’s conception of the Rule of One. This time, however, rather than focusing on the justification and refutation of the principle from the applied context, whether this be the localized context of Divine creation and celestial procession or the broader context of sublunary psychology, I now highlight its theoretical context. In his later works, Avicenna offered a different argument for the Rule of One, one that presented it as general principle of efficient causality. The *locus classicus* of this argument is in *Namaṭ* 5 of the *Ishārāt*. I refer to this argument as the *maṣdariyya* argument because it is based on the precept that for every effect *A*, a corresponding causal factor (*maṣdar*) or aspect (*ḥayth*) must be posited in the agent. By implication, the more effects that proceed from a single cause, a corresponding number of causal factors must also be posited in the agent. However, if the metaphysician is working with the premiss that the agent is one in all respects (*wāḥid fī kullī jihātīn*), then he cannot ascribe any causal factors to it above and beyond its own essence, for fear of compromising its oneness. This kind of agent must be that which acts solely through its essence (*fā’il dhātī*). Hence, we arrive at the postulate that “from the one only one may proceed.” I will show that the *maṣdariyya* argument is consistent with my reconstruction of the theoretical origins of the Rule of One in Chapter 1, namely that it relies on the principles of causal compatibility (*munāsaba*) and productive intellection (*al-ta’qqul al-fā’ilī*).

Avicenna simply reworked these insights and formulated them as a distinct theory of efficient causality. As we shall see in Chapter 3, the *maṣdariyya* argument is the platform from which Rāzī analyzed the theoretical context of the Rule of One. Thus, to understand why he thought the argument was problematic, we need to understand the metaphysical principles underlying it—especially those that Avicenna did not explicitly justify, but which are necessary in order for the argument to work.

Finally, in Chapter 3, I discuss Rāzī’s reception of the Rule of One as a general law of efficient causality. This involves to analyzing his interpretation and criticism of the *maṣdariyya* argument. I shall show that at the heart of Rāzī’s criticism are two metaphysical doctrines. The first is the claim, implicit in the *maṣdariyya* argument, that the causal factors (*haythiyyāt*) responsible for the procession of effect *A* as distinct from the procession of effect *B* must have extramental reality (*thubūt*). After all, these causal factors are metaphysical principles that intervene in the operations of the concrete realm. The second is the equally implicit claim that the essence of the agent—and essences in general—is discernible to the metaphysician or physicist. Against the first premiss, Rāzī attempts to show that causality (*mu’aththiriyya*) can be ascribed to the agent only *after* the fact, that is, only after the effect has taken place. Only then can the ascription have some basis in concrete reality. Otherwise, the term is simply an artifact of conventional philosophical-scientific language. Since the status of “being the cause of something” (*mu’aththiriyyat shay’in*) is a function of this observation, it cannot be ascribed to the agent *a priori* as an immanent feature of its essence. Furthermore, Rāzī also argues that, at any rate, the essence is fundamentally unknowable—at least to human beings. While the nature of the essence can be circumscribed by systematically identifying its external properties, it cannot be conceptually dissected to reveal some real constitution. This undermines any attempt to determine *a priori* qualities inherent in the agent that would account for the necessary procession of some effect. Since this is precisely what the Rule of One takes for granted

as the basis for its validity, any model of the essence that prevents it from being the object of speculative analysis will have no use for such a principle.

In addition to discussing Rāzī's criticism of these two premisses of the *maṣdariyya* argument, I also attempt to reconstruct Rāzī's theory of efficient causality. This theory is better described as a hermeneutic, because it is deliberately presented as a construct of conventional philosophical discourse, one that aims at accurately describing the inner workings of the extramental world, but which is conscious of the limits of metaphysical speculation. This hermeneutic, in turn, is based on a parsimonious distinction of entities into substance (*jawhar*) and accident (*ʿaraḍ*), which is of course lifted from *kalām* ontology. Rāzī, however, strips this distinction of its atomistic baggage and refashions it as a conceptual framework for the analysis of natural phenomena. Bilal Ibrahim has referred to this approach as an “attributive analysis” of natural phenomena.⁴⁶ I will attempt to identify some of the key features of this attributive framework, especially as it relates to efficient causality. Rāzī thinks that by using it, the metaphysician or physicist can offer a convincing account of causal relations, one that is theoretically coherent, capable of accurately describing the natural world, in possession of reliable predictive capacities, and flexible enough to accommodate new empirical observations.

I conclude Chapter 3 with a discussion of the implications of rejecting the Rule of One. I discuss three Rāzian doctrines that provide us with a preliminary but representative picture of Rāzī's cosmic system. The first is the well-known implication that God is no longer restricted to the production of a single effect. Without the Rule of One, God can intervene in the operations of the created order more freely. By opening this possibility, Rāzī does not intend to introduce

⁴⁶ Ibrahim's 2020 study of Rāzī's criticism of Peripatetic hylomorphism (“Beyond Atoms and Accidents”) is the first to demonstrate that this attributive analysis of natural phenomena is a unique aspect of the Rāzian philosophical project, one that places him at odds with both the hylomorphic ontology of the *falāsifa* and the atomistic ontology of the *mutakallimūn*.

unpredictability into the natural order. Rather, he is simply stipulating what is metaphysically *possible* for God. In fact, he offers a model of Divine intervention that corresponds to Avicenna's since it integrates God's acts within the operations of the cosmic system, which is what we experience of natural phenomena most of the time (*ʿāda*).

The second doctrine of the Rāzian cosmic system concerns the celestial intellects (*ʿuqūl*). Avicenna's triadic structure of emanation restricted the capacity of celestial demiurgy in both range and number. Each celestial intellect—except for the Active Intellect, it seems—can produce only three entities, and these must exist in the subsequent layer of the cosmic order and not beyond. However, if we deny the Rule of One and the theory of causal *ḥaythiyyāt* underlying it, such restrictions no longer hold. Since celestial intellects can theoretically produce more than three entities, their causal range may be effective beyond the heavenly soul and body that they immediately govern. Their simplicity and impassivity—which are already less pure than those of the First Cause—are not compromised by producing more than three effects.⁴⁷ By undoing these restrictions, Rāzī was able to appeal to models of celestial mediation other than those that Avicenna had proposed. One of these models was the astrological system of the so-called Sabians of Harrān, which he integrated with Quranic angelology. The third cosmological doctrine concerns the nature of the soul's governance of the body. By rejecting the Rule of One, Rāzī was able to offer a distinct model of psychic action that does not rely on the Avicennian theory of faculty differentiation. Since the many may now proceed from the one, the physicist can ascribe many corporeal actions directly to the single unitary soul without compromising its simplicity and immateriality. As such, it is no longer necessary to posit the existence of faculties that mediate the soul's governance of its

⁴⁷ We will discuss this issue in Chapter 1.3.

corporeal organs and prevent it from directly interfacing with them, as Avicenna had conceived.⁴⁸ Rāzī also adopts Abū al-Barakāt’s idiosyncratic doctrine that human beings are essentially heterogenous and that each type of human soul is governed by a distinct celestial principle.⁴⁹ This opposes Avicenna’s theory that human beings share a common nature as “rational animal” and are emanated from a single principle called the Active Intellect. The claim that distinct human souls may proceed from other celestial intellects is now a theoretical possibility, since the triadic structure of emanation and the restrictions it imposes on the cosmic system are no longer operative. Like Abū al-Barakāt, Fakhr al-Dīn also adopts the Hermetic theory of Perfect Natures (*al-ṭibā‘ al-tāmma*) to replace Avicenna’s Active Intellect as the governing principles of sublunary species. This outline of Rāzian cosmological doctrines is intended to be brief and preliminary. This reflects the nature of the sources, since Rāzī does not offer a systematic presentation in any of his early philosophical and theological works. In addition to the brief inquiries in the *Mabāḥith* and *Mulakḫḫaṣ*, I also draw from the discussions in *Sharḥ al-Ishārāt* and in the infamous treatise on astral magic and astrology, *al-Sirr al-maktūm*, both of which offer insights into Rāzī’s theory of the celestial-sublunary system not found in any other work of the early and middle periods.⁵⁰

Thus, we will see how, far from being confined to a theological agenda or a dialectical method, Rāzī’s criticism of the Rule of One was also motivated by a constructive philosophical perspective. This perspective was deliberately broad and systematic, as it touches all metaphysical principles at stake from theological doctrines to the physical theories of the natural world. The three cosmological doctrines which arise from denying the Rule of One relate to the three major divisions of the macrocosm: the Divine, celestial, and sublunary. Indeed, despite the brevity of my

⁴⁸ This approach to psychic action originated with Abū al-Barakāt. We will discuss this psychological aspect of the Rule of One in Chapter 2.1.

⁴⁹ We also explore the psychological dimension of the Rule of One in Chapter 2.2.

⁵⁰ I will often reference the late work on *divinalia*, *al-Maṭālib al-‘ālīya*, to show that many of these cosmological doctrines are later affirmed in a more systematic fashion, and so can be regarded as canonically Rāzian doctrines.

reconstruction, I hope to show that Rāzī's criticism is also inspired by a distinctive vision of the cosmic system

Chapter 1

The Rule of One in Avicenna's Metaphysics

This chapter is devoted to *faṣl* (chapter) 4 of *maqāla* IX of the *Ilāhiyyāt*, where Avicenna invokes the Rule of One when explaining the procession of the First Intellect from the Necessary Being. I argue that he invokes the Rule not only to show that only one effect may proceed from the Divine principle, but also to provide a demonstrative account of the basic structure of concrete existence. Invoking the Rule of One allows him to deduce from *a priori* principles the triadic structure of the celestial world, which consists of intellect, soul, and ethereal body, and to identify their basic characteristics. Unlike in chapters 2 and 3 of *maqāla* IX, where he establishes the existence of celestial intellects in regard to their role as the unmoved movers of the heavenly orbs, in chapter 4 he establishes their existence as the necessary effects of the First Cause and affirms their status as the true efficient causes (*al-ʿilal al-ḥaqīqīyya*) of lower orders of being.⁵¹ Thus, whereas the first inquiry arrives at the existence of the celestial intellects by examining the nature of their *effects* (i.e., celestial bodies and the circular motions they produce), the second inquiry arrives at their existence by examining the nature of their *causes* (i.e., the Necessary Being and other celestial intellects). By grounding the existence of these entities in these two distinct but complementary causal frameworks, Avicenna aims to fulfill the goal of the science of metaphysics, which is to produce a comprehensive account of the first principles of reality.⁵²

⁵¹ Cf. D'Ancona, "Ex Uno Non Fit Nisi Unum," where she argues that the Rule of One must be understood in the context of Avicenna's engagement with teleological analysis of *Metaphysics Lambda*. I will argue that this interpretation ignores the programmatic goal of *Ilāhiyyāt* IX.4, where the Rule is canonically presented.

⁵² Robert Wisnovsky, "Final and Efficient Causality in Avicenna's Cosmology and Theology," *Quaestio* 2 (2002): 97–124.

After explaining how the Rule of One contributes to the inquiry of *maqāla* IX of the *Ilāhiyyāt*, I shall then turn to its broader relevance as a principle of efficient causality. Here, I intend to show that the meaning of the formula, “from the one only one may proceed,” is best understood in the context of the discussion of efficient causality in *maqāla* VI of the *Ilāhiyyāt*. When viewed from this perspective, it becomes clear that what is meant by “the one” is not necessarily the individual entity that causes the effect (e.g., the Necessary Being or the First Intellect). Rather, what is meant by “the one” is the most basic unit of *essential* causal factors involved in efficient causality, which in *maqāla* VI.5 is designated as the *maʿnā* (pl. *maʿānī*).⁵³ Now, since for Avicenna the First Cause and celestial intellects are the ultimate essential causes (*al-ʿilal al-dhātīyya*) of existence, and since the primary state of these entities is their perpetual act of thinking, the *maʿānī* refer to the intentions that serve as their primary objects of thought, an act that is somehow productive of other entities (*al-taʿaqqul al-fīʿlī*).⁵⁴ Thus, we must discuss how the mere act of intellection leads to a procession of distinct species of beings. We shall see how the Rule of One governs the operations of intellectual demiurgy in such a way as to safeguard the impassivity and transcendence of these divine minds from the lower orders of being they enact.⁵⁵

⁵³ As we shall see, this usage of the term *maʿnā* to refer to “causal factor” is not strict but is conventional or functional. Other terms that Avicenna uses to describe the same idea are *ʿtibārāt* (consideration), *jīha* (aspect), *ḥukm* (status), concept (*mafhūm*). In this thesis, we will use the term *maʿnā* as the umbrella term designating the efficient causal factor.

⁵⁴ On essential causes, see *Ilāhiyyāt* VI.2.8–9, 202–03 (Cairo, 265–66); VI.3.8–11, 207–08 (Cairo, 270–71). We will discuss these passages in detail in Chapter 1.3 of this thesis.

⁵⁵ Unlike the Greek Neoplatonists, Avicenna does not directly deal with Plato’s conception of the Demiurge. By demiurgy, I refer roughly to the Neoplatonic interpretation of the original concept in the *Timaeus*, namely the world-generating principle that produces both the intellectual and sensible realms and which is ultimately derived from the First Principle. For an overview of the Neoplatonic reception of the Platonic demiurge see Carl Séan O’Brien, *The Demiurge in Ancient Thought: Secondary Gods and Divine Mediators* (Cambridge: Cambridge University Press, 2015), 290–303. See also J. Opsomer, “Deriving the Three Intelligible Triads from the Timaeus,” in *Proclus et la Théologie platonicienne: actes du Colloque international de Louvain, 13–16 mai 1998, en l’honneur de H. D. Saffrey et L. G. Westerink*, ed. Alain-Philippe Segonds and Carlos Steel (Leuven: Leuven University Press, 2000), 351–72; John M. Dillon, “The Role of the Demiurge in the Platonic Theology,” in *Proclus et la Théologie platonicienne: actes du Colloque international de Louvain, 13–16 mai 1998, en l’honneur de H. D. Saffrey et L. G. Westerink*, ed. Alain-Philippe Segonds and Carlos Steel (Leuven: Leuven University Press, 2000), 339–49.

1.1. *Ilāhiyyāt* IX.4: Avicenna's deduction of the celestial hierarchy from the First Cause

From the mid-point of his intellectual career onwards, Avicenna would explicitly invoke the Rule of One when discussing the question of the First Governance (*al-tadbīr al-awwal*) of the cosmos. In the central document of this period, the *Ilāhiyyāt* of the *Shifā'*, the Rule appears in *maqāla* IX, specifically in Chapter 4, where he discusses the procession of the First Effect from the First Cause, a cosmogonic event he describes as *ibdā'* or absolute creation.⁵⁶ Here, the Rule is stated negatively: that it is impossible that more than one thing proceeds from the Necessary Being. This is because “the aspect and status (*al-jihā wa-l-ḥukm*)” that may lead to any causal influence on the part of the Divine Essence is no more than a single property, namely His primary act of self-intellection.⁵⁷ If more than one thing proceeds, two causal factors must be posited that would account for the distinct procession of effect *P* from that of effect *Q*. Since the Necessary Being is impassive, being completely unaffected by other things, these two factors must be internal to the Divine Essence; yet if this were the case, “His Essence [would be] divisible in intention (*munqasima bi-l-ma'nā*),” and this violates the principle of Divine simplicity.⁵⁸ Note, however, that a detailed evaluation of this argument will have to take into consideration Avicenna's conception of the Divine Essence and the related doctrine of His self-intellection, an aspect of the theory that I intend to discuss later on in

⁵⁶ Definition of *ibdā'* in the *Ilāhiyyāt*: “giving of existence to a thing after absolute nonexistence” (VI.2.9, 203; Cairo, 266); see also *Ishārāt*, *namaṭ* 5, 153.

⁵⁷ *Ilāhiyyāt*, IX.4.5, 328 (Cairo, 403–04): “The aspect and status (*al-jihā wa-l-ḥukm*) in His essence from which this thing necessarily proceeds are not the aspect and criterion in His essence from which necessarily proceeds (*alladhī fī dhātihī yalzamu 'anhu ḥādḥā al-shay'ū*), not this thing, but another. If either two things differing in subsistence or two different things from which one thing comes to be—for example, form and matter—proceed necessarily from Him, both would proceed necessarily from only two different aspects (*jihatayn*) in His essence (*fī dhātihī*). And, if those two aspects are not in His essence but are necessary concomitants of His essence, the question remains regarding their being necessary concomitants of [His essence] so that they would be from His essence. His essence would then be divisible in meaning (*munqasima bi-l-ma'nā*). But we have disallowed this earlier, showing its falsity.”

⁵⁸ *Ilāhiyyāt*, IX.4.5, 328 (Cairo, 403–04); *Ishārāt*, *namaṭ* 5, 153.

this Chapter. Suffice to state for now that this argument for the procession of the First Creature is the original context of the Rule of One.

In the same discussion, Avicenna would again make use of the Rule of One, this time to show that the subsequent stage of emanation occurs through the mediation of the First Intellect, rather than flowing directly from the Necessary Being. He argues that if only one thing may proceed from what is essentially one, then for a plurality of effects to proceed, the cause cannot be essentially one, but must contain some manner of plurality in its essence. This internal plurality is what grounds the emanation of the many.⁵⁹ Thus, Avicenna derives from the Rule of One two corollary cosmogonic doctrines. The first is the principle of mediation in the unfolding of the created order, namely that if the many is to proceed from the One, then we must posit intermediary causes between the Divine Essence and the realm of multiplicity. The second is the Rule of Many, namely that for the many to proceed, a corresponding plurality must somehow exist in the essence of the cause. This native plurality existing in the cause is the basis for the procession of many effects from a single agent. The Rule of Many is the flip side of the Rule of One and is responsible for the existence of all creatures other than the First Intellect.

However, while Avicenna marshals the Rule of One to establish the position that the First Cause produces only a single effect and to arrive at the corollary principle that the procession of multiplicity must therefore originate from an intermediary being that is likewise multiple in essence, his use of the Rule is not yet exhausted. He further deploys it to explain the later stages of the cosmogonic process, namely how multiplicity proceeds from the First Effect:

⁵⁹ “The intermediary cannot be a pure unity, having no duality. For you have known that from the one inasmuch as it is one, only one proceeds. Hence, it is only right that [the body] proceeds from the first innovated things (*mubdaʿāt al-uwal*) by reason of a duality or a plurality—in whatever form—that must necessarily be *in* them (*fīhā*)” (*Ilāhiyyāt*, IX.4.10, 329–30; Cairo, 405; emphasis mine). By “first innovated things,” Avicenna intends the celestial intellects.

Now we do not prevent [the possibility] that from a single thing a single essence proceeds, and that a relational plurality obtains thereafter as a necessary consequence thereof, one that neither existed in the first instance of [the cause's] existence, nor included in the principle of its subsistence (*wa-lā dākhila fī mabda' qiwāmihi*). Rather it is possible that from one thing another single thing proceeds necessarily, and that from the latter follows a status (*ḥukm*), a state (*ḥāl*), an attribute (*ṣifa*), or an effect (*ma'lūl*), *which would also be one*. Then, another thing is necessitated from this governing [or state, or attribute or effect] in participation with the [initial] necessitated thing, and from this a multiplicity follows, *all of which is consequent upon its essence* (*talzamu dhātahu*). Thus, it is necessary that this kind of multiplicity is the cause for the possibility of the existence of multiplicity in [these consequent effects] [that is] derived from the first effects. If it were not for this multiplicity, it would be impossible that what is existentiated from it is more than a single thing, in which case it would have been impossible that a body is existentiated from it. Multiplicity in this situation would be impossible except in this manner only.⁶⁰

In this passage, Avicenna seems to elaborate on the corollary principle established earlier, namely the Rule of Many. Recall that this rule states that the many may proceed from a single cause only when a corresponding multiplicity can be found in its essence. The Master now argues that what he means by this multiplicity is something that can be described as “a status (*ḥukm*), a state (*ḥāl*), an attribute (*ṣifa*), or an effect (*ma'lūl*).” However, as Avicenna carefully notes above, only one effect may derive from each one of these attributes in a one-to-one correspondence. In other words, these effects and their corresponding causal factors must form separate causal units, all of which are

⁶⁰ *Ilāhiyyāt* IX.4.11, 330 (Cairo, 406); translation and emphasis mine. See also *Ishārāt, namaṭ* IV, 142–43: “It is possible for the quiddity of the thing to be a cause for one of its attributes, and for this attribute to be a cause of another attribute, such as the *differentia* [being the cause of] the *proprium* (*al-khāṣṣa*).”

ultimately attributed to the single entity that is their cause. Thus, the Rule of Many is ultimately based on the Rule of One. As a result, the latter should be glossed in the following manner: that from a single causal factor attributed to the cause, only a single effect may proceed.

We must note, however, that Avicenna's description of the causal factors inherent in the agent—as “criterion,” “aspect,” and “attribute”—is consistent with his usage of the same terms and of “meaning” (*maʿnā*) when describing how the First Intellect emanates from the Necessary. Together these terms refer to the causal factors inherent in the agent. What is more, in the passage above Avicenna describes these causal factors, as well as their corresponding effects, as entailments of the essence (*lawāzīm al-dhāt*). This shows that the ontological relationship between the cause and the effects is necessary and asymmetrical. The mere existence of the cause will automatically entail the existence of the effect; but as a necessary concomitant, the effect is existentially dependent on the cause and stands outside the inner structure of the latter's essence.⁶¹

Let us now examine how the Rule of many regulates the procession of many effects from a single entity. At this stage of the discussion in *Ilāhiyyāt* IX.4, we arrive at Avicenna's famous discussion on how the rest of the celestial entities proceed successively from the Necessary Being and how this procession is triadic in its basic structure. Regarding the First Intellect, Avicenna holds that it is a simple entity that is likewise impassive, since it is a purely immaterial and perpetually actual being. However, he argues that it is not simple in the manner that the Necessary Being is absolutely simple.⁶² It possesses some kind of plurality, but one that is restricted to the fact that unlike its cause, its essence is not identical to its existence. Rather, when considered in terms of its own essence, it is only possible of existence; and when we consider the fact that it has a cause

⁶¹ The effect's status as the necessary entailment (*lāzīm*) of the essence of the cause is unique to the operation of efficient causality. We will discuss this aspect of Avicenna's theory in Chapter 1.3–4 of this thesis.

⁶² *Ilāhiyyāt* IX.4.11, 330 (Cairo, 405–406).

that has enacted its existence, it is necessary of existence. Furthermore, given the fact that the First Creature is also an actual intellect—being a function of its immateriality—it perceives not only itself in these two modes of existence, but also its cause.⁶³ Thus Avicenna discerns three distinct meanings (*ma'ānī*) in the First Intellect that necessarily follows its essence: (1) the fact that it contemplates its possibility of existence, (2) the fact that it contemplates its necessity of existence, and (3) the fact that it contemplates its cause. These *ma'ānī* would constitute the essential causal factors for the procession of respectively the first celestial body (i.e., the outermost orb), the first celestial soul governing that body, and the second celestial Intellect governing the next celestial body (i.e., the orb of the fixed star).⁶⁴ Furthermore, this basic triadic structure would be replicated at every successive stage of emanation.⁶⁵

In this paradigmatic example of the Rule of One—namely the successive triadic emanation of celestial entities that follows the initial cosmogonic event—we see how the Rule of One remains operative. As Avicenna writes in the passage above, it is possible “that from one thing [i.e., the Necessary Being] another single thing [i.e., the First Intellect] proceeds necessarily, and that from the latter follows a status (*ḥukm*), a state (*ḥāl*), an attribute (*sifa*), or an effect (*ma'lūl*), *which would also be one*. Then, another thing is necessitated from this governing [or state, or attribute or effect] in participation with the [initial] necessitated thing.” Thus, no more than one effect may proceed

⁶³ *Ilāhiyyāt* IX.4.7–9, 328–329 (Cairo, 404–406). In Chapter. 1.3, we shall see why being an intellect is a function of immateriality rather than the other way around, at least from a logical point of view, given the Necessary Being's eternity.

⁶⁴ *Ilāhiyyāt* IX.4.11, 330 (Cairo, 305–306); IX.4.12, 331 (Cairo, 406–407).

⁶⁵ Note that despite this sequential reproduction of the basic triadic structure, Avicenna maintains that we cannot always deduce the nature and number of celestial and sublunary entities with absolute certainty (*Ilāhiyyāt* IX.4.12, 331; Cairo, 407). Though the intellectual principles share the three essential activities mentioned above, they are distinct in species. As a result, each may possess a unique set of concomitant attributes that are not shared with others. Thus, it is not necessary that the effects are also identical and that the same triadic structure is reproduced indefinitely. Avicenna is particularly concerned with the last of the celestial intellects, the so-called Active Intellect, which governs the sublunary realm. This entity is responsible for the emanation of many forms that constitute the complex biosphere of the earth. Furthermore, Avicenna is also aware that the celestial topography displays a diversity of species at every stratum. We shall examine this important qualification in the final section of this Chapter where we discuss the limits of Avicenna's deductive method in Chapter 1.5 of this thesis.

from a single causal factor (i.e., governing rule, or aspect, or *ma'nā*). From the principle of contingency (i.e., the First Intellect as contingent being) Avicenna deduces the existence of the principle of potency, namely celestial matter in the form of the outermost orb; from the principle of conditioned necessity (i.e., “necessary existence through another”), he deduces the perfection or actuality of the celestial body, namely the first celestial soul; and from the fact that the First Intellect has a cause that it actively contemplates, he deduces the existence of a celestial intellect that governs the next stratum of the celestial realm, namely the orb of the fixed stars.⁶⁶ As a result, Avicenna’s use of Rule of One is not restricted to the initial cosmogonic context, regulating only the procession of the First Effect; rather, it is responsible for the triadic structure of procession that forms the architecture of the celestial hierarchy.

The account in *Ilāhiyyāt* IX.4, however, does not fully capture the full breadth of Avicenna’s emanation theory. It does not address implicit premisses to the theory that are dealt with elsewhere in the *Ilāhiyyāt*. Why, for instance, would the divine minds’ act of contemplation lead to the production of other entities in the first place? What is the ontological status of these *ma'ānī* and how do they acquire their causal function? Since answering these questions requires us to examine other aspects of Avicennian metaphysics, such as efficient causality, the nature of the Necessary Being and other active intellects, and the essence-existence distinction, we will discuss them separately at a later section of this Chapter.

My aim above is simply to show why Avicenna needed to take recourse to the Rule of One in *Ilāhiyyāt* IX.4. We have seen how he used the principle to arrive at three interrelated insights. The first is to show how the First Cause—given its absolute simplicity and impassivity—produces only

⁶⁶ *Ilāhiyyāt* IX.4.12, 331(Cairo, 406). Note that this process is guided by a rather enigmatic principle that “the most excellent (*al-afḍal*) follows the most excellent in a variety of aspects.” We will have the chance to discuss this notion once we discuss idea of the divine minds’ “productive intellect” later in Chapter 1.4, beginning at pg. 63.

a single effect. The second is to derive from this fact the corollary principle of mediation, namely that if the many is to proceed from the One, we must posit the existence of intermediary principles that are directly responsible for the unfolding of multiplicity. The third is to show how a plurality of effects proceed from these intermediary principles, that is, the Rule of Many. In this extended application, “the one” refers to the individual causal factors inherent in the agent in question, which I have designated with the umbrella term *maʿnā*. By restricting the causal influence of each of these causal factors to a single effect, Avicenna arrives at the triadic structure of emanation that underlies the celestial hierarchy. Thus, the scope of the Rule of One is unexpectedly broad. By means of it, he can deduce the existence not only of the First Intellect, but also the subsequent host of the created order. In doing so, he relies solely on *a priori* propositions obtained from his doctrine of the Necessary Being.

In my view this method of reasoning from *a priori* principles is consistent with the goal of Avicenna’s inquiry in *Ilāhiyyāt* IX.4, which is to offer an account of the very origins of the world—a cosmogony. The consequence of this commitment is that he cannot take recourse to *a posteriori* conditions of the world as premisses in his reasoning. Doing this would obviously beg the question, because the existence of the world is the conclusion he wants to reach. In this framework, the Rule of One functions as a tool of *a priori* analysis that allows the metaphysician to securely arrive at knowledge of the effect solely from knowledge of the cause. This is why he relies on previously established doctrines on the nature of the Necessary Being to establish the existence of the First Creature. This “discovery” in turn allows him to demonstrate the existence of the outermost orb, the celestial soul governing it, and the celestial intellect that oversees the following stage of cosmogenesis.

However, in the Peripatetic tradition, knowledge of the first principles can already be gained by investigating the essential states of the observed world, specifically the circular motion of the

celestial bodies. In *Metaphysics Lambda*, Aristotle has shown that by using the framework of teleology, the metaphysician can arrive at certain knowledge of the Unmoved Movers, identify their status as Intellects, and discern the basic structure of the celestial realm. In fact, Avicenna offers his own version of *Metaphysics Lambda* in *Ilāhiyyāt IX.2–3*. Why then did he feel compelled to supplement this account with the inquiry in *Ilāhiyyāt IX.4*? What is gained in the science of metaphysics from a cosmogonic account of the First Principles and the attending theory of celestial demiurgy?

According to Avicenna, the task of every science is to provide a systematic account of their respective subject-matters (*mawḍūʿāt*). This involves investigating the various aspects of the subject-matter as it appears within certain predefined domains of existence. Bodies, for instance, can be examined in terms of their existence in the celestial realm, or in terms of their existence in the sublunary realm. The task of the philosopher-scientist is to ascertain the various conditions that pertain to the subject-matter within a single ontological domain and to determine which of these are essential and which are accidental. Since philosophy aims at stable and universal knowledge, priority must be given to providing a comprehensive account of the essential aspects of the subject. And where accidents must be accounted for, only those that are necessarily entailed by the essence are prioritized as objects of the inquiry. The success of a scientific endeavour depends on whether the philosopher can establish the essential and accidental aspects of the subject-matter on secure and demonstrable grounds.

The science of metaphysics has the unique status of having as its subject-matter the most abstract and unconditioned (*ghayr shartī*) category of existence, which is “the existent inasmuch as it exists (*al-mawjūd bi-mā huwa mawjūd*).”⁶⁷ Thus, its domain of inquiry is the existing thing (*al-mawjūd*) in its most primary division and in regard to its necessary entailments or attributes (*aḥwāl* or *al-*

⁶⁷ *Ilāhiyyāt I.1.17*, 6 (Cairo, 9).

ʿawāriḍ al-khāṣṣa).⁶⁸ Bertolacci has shown in detail how Avicenna systematized the Aristotelian categories (*maqūlāt*) as not only that of which “the existent” is predicated, but also as a primary division of the existent that is akin to a genus being divided by species.⁶⁹ This division adheres to the doctrine of *pros hen* homonymy that privileges the category of substance (*jawhar*) as the primary sense of being, in relation to which all other divisions acquire a secondary sense of “existence.”⁷⁰ Examining the various divisions of being is one of two main goals of the science of metaphysics, the pursuit of which allows the metaphysician to identify and define the major domains of reality that would then serve as the subject-matters of the other sciences. Viewed in this way, metaphysics is the founding science that governs all scientific disciplines.⁷¹

Our present concern, however, is primarily regarding the second goal (*maṭlūb*) of metaphysical inquiry, which is to arrive at knowledge of the concomitant attributes that necessarily accompany existing things at every ontological domain. These attributes come in pairs of contradictory terms, such as the necessary and the contingent; the potential and the actual; the prior and the posterior; the one and the many; the universal and particular; the cause and the effect.⁷² Though the existent

⁶⁸ Avicenna writes: “this science investigates the states of the existent (*aḥwāl al-mawjūd*) and the things that belong to it that are akin [to being] divisions and species (*ka-l-aqsām wa-l-anwāʾ*) until it arrives at a specialization with which the subject of natural science begins, relinquishing to it this speciality; [and at a] specialization with which the subject matter of mathematics begins, relinquishing to it this speciality; and so on with the others” (*Ilāhiyyāt* I.2.17, 11; Cairo, 15). See also *Ilāhiyyāt* I.2.12–13, 10; Cairo, 13: “The primary subject matter of this science is, hence, the existent inasmuch as it is an existent; and the things sought after in [this science] are those that accompany [the existent,] inasmuch as it is an existent, unconditionally. Some of these things belong to [the existent] as though they were species—as, for example, substance, quantity, and quality. For, in undergoing such a division, the existent does not require, [as is] required by substance, [a] prior division into many divisions, where it must [for example] be divided into human and not human. Some of these are akin to proper accidents (*al-ʿawāriḍ al-khāṣṣa*), such as the *one and the many, the potential and the actual, the universal and the particular, and the possible and the necessary*. For, the existent, in accepting these accidents and in being prepared for them, does not need to become specified as natural, mathematical, moral, or some other thing” (emphasis mine).

⁶⁹ Amos Bertolacci, *The Reception of Aristotle’s Metaphysics in Avicenna’s Kitāb al-Shifāʾ: A Milestone of Western Metaphysical Thought* (Leiden: Brill, 2006), 149–49.

⁷⁰ Aristotle, *Metaphysics* IV, 1003a33–1003b10. For a discussion on *pros hen* homonymy in the Peripatetic tradition and Avicenna’s reception of it, see Robert Wisnovsky, “On the Emergence of Maragha Avicennism,” *Oriens* 46 (2018): 263–331.

⁷¹ For an extended discussion on metaphysics as the foundation for the other sciences, see Bertolacci, op. cit., 267–72.

⁷² See Avicenna’s listing of these terms in the passage from *Ilāhiyyāt* I.2, 12–13. The list of concomitant attributes in

as such is never bereft of any of these primary attributes, some are more obscure than others and are wont to be misunderstood by those uninitiated in philosophy. Furthermore, the technical definitions of these terms used in specialized circles (*al-khāṣṣ*) are often confused with the vulgar meaning by non-specialists (*al-‘āmm*). This potential equivocity often leads less gifted thinkers to incorrect metaphysical doctrines.⁷³ Hence, one of the tasks of the metaphysician is to clarify the precise meaning of these terms from the absolute (i.e., metaphysical) point of view, as opposed to their particular applications that are constrained to certain domains of existence. Among these concomitant attributes of being, two stand out as being particularly relevant to the inquiry into Divine governance in *Ilāhiyyāt* IX, namely the existent insofar as it is either a cause (*al-‘illa*) or an effect (*al-ma‘lūl*), which are “among the things that attach (*min al-lawāḥiq allatī talḥaqu*) to the existent inasmuch as it is an existent.”⁷⁴

For Avicenna, the importance of investigating cause and effect insofar as they are the concomitants of being cannot be overemphasized. This is because in his conception of metaphysics, the inquiry into the First Principles of existence is not something that oversees the inquiry into being *qua* being. Doing so would have compromised the status of metaphysics as a foundational science and rendered it into a circular enterprise. Rather, since “being a cause” and “being an effect” are simply attributes that accrue upon the existent, the inquiry into the First Causes of existence—which is a particular species of cause—is simply an offshoot of the primary inquiry into being *qua* being. Avicenna writes:

this passage is not exhaustive. The complete list of such attributes can be gleaned from the contents of *maqālāt* IV-VII of the *Ilāhiyyāt*.

⁷³ For instance, non-philosophers would conceive of priority and posteriority (*al-taqaddum* and *al-ta’akhkhub*) primarily in temporal terms. But the metaphysician understands that logical or essential priority and posteriority is the more basic conception of the term. The same attempt at disambiguation can be seen in Avicenna’s discussion on the terms potency (*al-quwwa*) and actuality (*al-fi‘l*); see *Ilāhiyyāt* IV, 124–47 (Cairo, 163–95).

⁷⁴ *Ilāhiyyāt* VI.I.1, 194 (Cairo, 257).

Someone, however, may say: If the existent is made the subject matter of this science, then the principles of the existents cannot be established in it, because, in every science, investigation is of the things that follow its subject, not of its principles. *The answer* to this is that theoretical inquiry of the principles is also an investigation of the things that occur as accidents to this subject (*‘awāriḍ hādhā al-mawḍū’*). [This is] because the existent’s being a principle is neither [something] that gives it its subsistence [i.e., genus or differentia] nor [something] impossible in it; but, with respect to the nature of the existent (*tabī‘at al-mawjūd*), [it] is something that occurs accidentally to it and is one of the accidents that is specifically associated with it (*al-‘awāriḍ al-khāṣṣa bihi*). For there is nothing more general than the existent [that would allow a principle] to attach to [some] other [thing] in a primary way. Neither does the existent need to become natural, mathematical, or some other thing in order to be subject to the occurrence of being a principle. Moreover, the principle is not a principle of the existent in its entirety. For, if it were a principle of the existent in its entirety, then it would be a principle of itself. On the contrary, the existent in its entirety has no principle, a principle being a principle only for the existent that is caused. The principle is thus a principle of part of the existent. Thus, this science does not investigate the principles of the existent absolutely but investigates only the principles of some [of the things] in it, as in the case of the particular sciences. For, although these [latter] do not demonstrate the existence of their common principles (since they have principles common to everything toward which each moves), they [nonetheless] demonstrate from the things within them the existence of that which is a principle [for the science] posterior to them.⁷⁵

⁷⁵ *Ilāhiyyāt* I.2.14–15, 10–11 (Cairo, 14); Marmura’s translation modified; emphasis mine.

Here, Avicenna argues that the subject-matter of metaphysics, which is being *qua* being or “the existent in itself,” is not something that is caused by a principle. What is caused by a principle is always a specific kind of existent that is conditioned by a nature or quiddity and possesses the necessary attributes entailed by this nature. Conceived in this way, the metaphysician does not end up having to inquire about the existence of unconditioned being, which is already posited as the subject-matter of the science. This resolves the problem of circularity. He also avoids assuming the need for a prior science to establish the existence of its subject-matter as though unconditioned being is a kind of existent that can be caused. This resolves the problem of the non-foundationality of metaphysics. Rather, when the science proceeds to establish the existence of certain causes, i.e., First Principles such as the Necessary Being and the celestial intellects, it does so as the natural outgrowth of its inquiry into the basic facts of unconditioned being, which includes the concomitant attributes of “cause” and “effect,” as well as a host of other attributes that are relevant to the conception of “principle” (*mabda*), such as “necessary” and “contingent,” and “prior” and “posterior.” Thus, the investigation into cause and effect as concomitant attributes of being allows Avicenna to uphold the coherence of the Peripatetic conception of metaphysics as an inquiry into being *qua* being as well as the First Principles (*mabādi*) of existence.

Furthermore, Avicenna also maintains the priority of general ontology relative to the inquiry into the First Principles, this time from a more procedural perspective. That is to say, the inquiry into First Principles can proceed only after the metaphysician has elucidated the meaning of more basic categories of existence. Only after he had defined and systematized key terms such as the “existent”, “thing”, “substance”, “species”, “genus”, “one” and “many”, “prior” and “posterior”, “cause” and “effect”, “actual” and “potential”, “universal” and “particular”, “finitude” and “infinite”, and finally (and most importantly) “necessary” and “contingent,” can he proceed to

discuss the First Cause.⁷⁶ This is because only by using these terms can the metaphysician demonstrate the existence and essential traits of the Necessary Being from properly metaphysical grounds without recourse to arguments based on empirical phenomena.⁷⁷ If one looks at the structure of the *Ilāhiyyāt* up to *maqāla* VIII, we can see that this is precisely Avicenna's procedure. This is another reason why he would regard this inquiry into the First Principles as the culmination and fulfillment of general ontology.

However, the question remains, why is the inquiry into the First Principles an essential aspect of metaphysics? Why does he claim that the highest goal of the science is to gain knowledge of the First Cause, i.e., the Necessary Being, and of the host of celestial intellects? For Avicenna, the study of being *qua* being, especially in relation to its focal meaning as substance (*jawhar*), would have to eventually deal with the principle of substances in terms of their very existence—both in the mind (*dhihnī*) and in concrete reality (*fī al-ʿyān*), not only in terms of their logical constituents. If the metaphysician dealt only with abstract categories of existence without taking into consideration how existing things come to be in the first place, this would undercut the promise of metaphysics as the science that deals with being *qua* being in all its primary aspects.⁷⁸ Since the First Principles are responsible for the totality of existing things, and are therefore existentially prior to them, there is an inherent priority in the metaphysician's inquiry into the manner of their existence.⁷⁹

⁷⁶ Stephen Menn, "Avicenna's Metaphysics," in *Interpreting Avicenna: Critical Essays*, ed. Peter Adamson (Cambridge; New York: Cambridge University Press, 2013), 146–149.

⁷⁷ See the *a priori* proof for the Necessary Being in *Ilāhiyyāt* VIII.1.28.

⁷⁸ By "abstract categories of existence" I am referring to the metaphysician's analysis of "proper existence" (*wujūd khāṣṣ*); by "existing things" I am referring to "affirmed existence" (*wujūd iḥbātī*); see Menn, "Avicenna's Metaphysics," 149–50.

⁷⁹ "[Metaphysics] is *first philosophy*, because it is knowledge of the first thing in existence (namely, the First Cause) and the first thing in generality (namely, existence and unity). It is also *wisdom*, which is the best knowledge of the best thing known. For, it is the best knowledge (that is, [knowledge that yields] certainty) of the best thing known (that is, God, exalted be He, and the causes after Him). It is also knowledge of the ultimate causes (*al-asbāb al-quṣwā*) of the whole [of caused things]. Moreover, it is knowledge of God and has the definition of *divine science*, which consists of a knowledge of the things that are separable from matter in definition and existence. For, as has become clear, the existent inasmuch as it is an existent, and its principles and the accidental occurrences [it undergoes] are all prior in existence to matter, and none of them is dependent for its existence on [matter's] existence" (*Ilāhiyyāt* I.2.18, 11–12; Cairo, 15).

Thus, when Avicenna begins to discuss the First Principles of existence, beginning with the Necessary Being in *maqāla* VIII of the *Ilāhiyyāt*, he is effectively initiating a new phase of metaphysical inquiry. From the primary categories of being the inquiry now shifts to the conditioned domains of existence where the existent exists concretely as an individual. However, in the same way that the inquiry into being *qua* being privileges the primary aspects of the existent and the concomitant attributes entailed by it, the theological section also deals with the primary aspects of the “essential cause” (*al-‘illa al-dhātīyya*)” that bestows existence (*mufīd al-wujūd*) and its most immediate and necessary entailments.⁸⁰ The “essential cause” refers to the First Cause and the hierarchy of celestial intellects, while the “entailments” refer to the celestial souls and bodies, as well as prime matter. Together, this inquiry deals with the cosmic system insofar as it forms the theatre of Divine governance (*al-tadbīr al-ilāhī*). For Avicenna, the key idea that secures this transition from abstract categories of being *qua* being to the supervening realm of concrete existence is the status of the necessary being as the First Cause of all existing things, whose existence he establishes solely through *a priori* concepts.

Furthermore, the inquiry into Divine governance is central to Avicenna’s project in the *Ilāhiyyāt* not only because it establishes the existence of the First Cause and the celestial hierarchy, but also because of the manner by which the metaphysician achieves this task. The Master writes in I.3:

You ought to know that, in itself (*fī nafs al-amr*), there is a way to show that the purpose in this science is to attain a principle without [requiring first] another science. For it will become clear to you anon, through an intimation, that we have a way for proving the First Principle, not through inference (*lā min tarīq al-istidlāl*) from sensible things, but through universal,

⁸⁰ In Chapter 1.3 I will discuss the idea of “essential causes” and their status as “the givers of existence.” See, however, the canonical definition of efficient cause in *Ilāhiyyāt* VI.1.2, 194–195 (Cairo, 257–258); VI.1.5, 196 (Cairo, 259); VI.5.38–39, 231 (Cairo, 295–296)

rational premises [(a)] that necessitate [the conclusion] that there must be for existence a principle that is necessary in its existence; [(b)] that renders [it] impossible for [the latter] to be in [any] respect multiple or changing; and [(c)] that necessitate [the conclusion] that [this principle] is the principle of the whole [of the other existents] (*mabda' li-l-kull*) and that [this] whole is necessitated [by the principle] according to the order [possessed by] the whole ('*alā tartīb al-kull*). Due to our inability (*li-'ajz*), however, we are unable to adopt this demonstrative method (*al-ṭarīq al-burhānī*) which is a method of arriving at the secondary [existents] (*al-thawānī*) from the [primary] principles and from the cause to the effect—except in [the case of] some aggregates of the orders of existence (*fī ba'd jumal marātib al-maxjūdāt min-hā*), [and even then] not in detail (*dūna al-tafṣīl*).⁸¹

What is important for us to clarify here is not Avicenna's claim regarding the need for arriving at knowledge of the First Principle without recourse to empirical premises. This is a well-known aspect of his metaphysics. Instead, I would like to draw our attention to the last sentence of the passage. Here, Avicenna cautions that while the ideal method in arriving at knowledge of the first principles is demonstration (*al-ṭarīq al-burhānī*) rather than inference (*ṭarīq al-istidlāl*), the metaphysician is incapable of pursuing this method in such a way as to account for every order of existence. He is capable only of deducing the most general but primary orders of being. The famous triadic structure of emanation speaks only to this limited scope of the demonstrative method; it is not the sum of the Master's picture of the celestial realm.⁸²

What does this deductive method entail? Avicenna has in mind a specific procedure to carry out this task, which involves a method of inquiry that “bestows certainty acquired from the cause

⁸¹ *Ilāhiyyāt*, I.3.11, 16 (Cairo, 21); translation slightly modified.

⁸² We will elaborate on the limits of the *burhānī* method in Chapter 1.5 of this thesis.

(*yufīdu akhdhuhu al-yaqīn al-muktasab min al-‘illa*).⁸³ In *maqāla* I.3, he describes the goal of this method as the acquisition of a “true” principle or starting-point (*mabda’*) within the metaphysical science—and by extension, within the enterprise of science or philosophy as a whole.⁸⁴ The primary objects of inquiry (*maṭlūbāt*) consists in the ultimate “essential causes” of the world, namely the celestial intellects and God. But instead of inferring their existence from the effects they produce, the most obvious of which is the visible geometries of celestial motion, Avicenna attempts to derive knowledge of their existence from their ultimate cause, which is the Necessary Existent. This method should produce greater certainty regarding the existence and nature of the object of inquiry because it is based on what he considers to be the more primary, immutable, and necessary metaphysical doctrine, namely the nature of the First Cause. Avicenna calls this procedure as *burhān lima*, “demonstration of the why” or “reasoned fact.”⁸⁵ This type of demonstrative proof is distinct from the method of *Ilāhiyyāt* IX.2–3, which uses inferences from empirical premises, *viz.*, celestial motion, to gain knowledge of the existence of the celestial intellects *qua* unmoved movers. This latter approach arrives at knowledge of the *hypothetical* necessity of the essential causes in relation to their effects. Avicenna calls this type of argumentation as *burhān inna*, or “demonstration of the fact.” From one perspective, this method is inferior to the *burhān lima*, because while the effects might be prior to the cause in the order of scientific inquiry, they are existentially posterior to the cause in the order of concrete reality.⁸⁶ The existence and characteristics of an artifact may lead us to knowledge of the skill of the artisan, but we would be in a better position to learn of the artistic process and of the nature of the artifact itself were we acquainted in the first place with the motivations, knowledge, and craftsmanship of the artisan himself. From this point of view,

⁸³ *Ilāhiyyāt* I.3.8, 15 (Cairo, 20).

⁸⁴ *Ibid.*

⁸⁵ *Burhān* I.7. 78–84; III.3, 202–09. See also *Ilāhiyyāt*, I.3.9, 16 (Cairo, 20).

⁸⁶ However, from another perspective *burhān lima* is inferior to *burhān inna*. We shall further develop this idea in Chapter 1.5 of the thesis.

metaphysical inquiry should not only rely on the hypothesis of what *should* be the case given certain states of affairs. Rather, it aims to secure knowledge of these states of affairs by demonstrating how they are necessarily entailed by their causes in the first place.

Furthermore, Avicenna holds that this entailment is not a mere logical necessity. Since in *Ilāhiyyāt* IX, the artisan in question is an entity whose essence *is* existence—which, as we shall see in Chapter 1.4, implies a superabundance and overflow of existence—no chasm separates the logical necessity of its entailments and their very existence. Such is the consummating role of Avicenna’s doctrine of the Necessary Being. It is both the fruit of the metaphysician’s inquiry into the most primary categories of being and the root of the tree of concrete existence.

Thus, within the framework and aim of *Ilāhiyyāt* IX.4, the Rule of One serves as a precept that allows Avicenna to deduce the basic structure of concrete existence from systematic knowledge of the first principles. However, we have seen how the validity of this procedure depends on the following claim: that the formula “from the one only one thing may proceed” can be glossed as “from one causal factor (*maʿnā*) inherent in the agent only a single effect may proceed.” This statement alone seems to guarantee the necessity of the process. In *Ilāhiyyāt* IX.4, however, this premise was not so much argued for as it was assumed. To gain a deeper understanding of the Rule of One and Rāzī’s critical reception of it, we need to turn to its conception in Avicenna’s general theory of causality in *Ilāhiyyāt* VI.3.

1.2. The Rule of One as the governing principle of efficient causality

In the previous section we have seen how Avicenna uses the Rule of One to arrive at three doctrines regarding Divine governance: that the Necessary Being produces only a single effect; that everything else emanates from it by mediation of this First Effect; and that the basic structure of the celestial realm is triadic. The fact that the Rule also governs the procession of the celestial

entities shows how it operates beyond the initial cosmogonic event and serves as a general principle of causality. We now take up the question in earnest: what are the general principles underlying the Rule of One and how does it offer a causal framework for the procession of the many from the one?

In *Ilāhiyyāt* IX.4 Avicenna examines the Necessary Being and the celestial intellects insofar as they are the First Principles of existence.⁸⁷ What is meant by existence is, in the first instance, that of the celestial entities.⁸⁸ However, it also refers to the existence of sublunary entities insofar as these proceed from the celestial realm at the final phase of emanation.⁸⁹ As such, when Avicenna writes that the Necessary Being and the intellectual principles are causes of existence, he means to say that they are the causes of the totality of existing things—not only those of the concrete realm, but also of the realm of mind.⁹⁰ Since he is concerned with their status as the causes of existence, he is in effect concerned with their status as efficient causes; for he defines the efficient cause (*al-ʿilla al-fāʿiliyya*; or agent, *al-fāʿil*) as that which is the “principle and giver of existence.”⁹¹ He alludes to this status when opening the discussion in *Ilāhiyyāt* IX with the statement, “on the attribute of agency (*fāʿiliyya*) of the First Principle.” This does not imply that the causal influence of the Necessary Being and the intellects is limited to this designation; for they are also the final causes of celestial motion. However, the final cause is the goal for the sake of which a certain effect exists in the first place. What is sought-after in teleological inquiry is the existence and nature of the cause;

⁸⁷ *Ilāhiyyāt* IX.4.4, 327 (Cairo, 403). The cause or giver of existence is primarily the Necessary Being since He is the cause of the separate intellects that are burdened with the task of emanating prime matter, souls, and forms. Sometimes, Avicenna would designate the pleroma of intellects as first principles, in relation to which celestial souls are designated as “intermediary” causes; see *Ilāhiyyāt* IX.3.14, 322 (Cairo, 398), and IX.5.7, 336 (Cairo, 412–13). See also previous sections of the *Ilāhiyyāt*: I.1.9, 3 (Cairo, 5); VI.1.2, 195 (Cairo, 257).

⁸⁸ This forms the inquiry of *Ilāhiyyāt* IX.4.

⁸⁹ This forms the inquiry of the following chapter, i.e., *Ilāhiyyāt* IX.5.

⁹⁰ Insofar as mental existence derives from the perception of external objects or, in the case of universal ideas, from the Active Intellect.

⁹¹ *Ilāhiyyāt* VI.1.2, 194 (Cairo, 257).

what is assumed is the effect whose existence is taken for granted.⁹² By contrast the efficient cause is the principle of the effect's very existence. What is sought-after in *burhān lima* is the existence and nature of the effect; what is taken as the premiss of the inquiry is the prior existence of the cause. Since we have seen that in *Ilāhiyyāt* IX.4 Avicenna uses the Rule of One to deduce the nature and existence of the effects solely from his knowledge of the cause, the Rule operates within the broader framework of efficient causality.⁹³

However, in what sense does the efficient cause enact the existence of its effect? In *Ilāhiyyāt* VI.3, Avicenna writes that this is achieved by enacting the effect as “a species and essential quiddity.”⁹⁴ It means that the proper object of the true efficient cause is the core attributes of a thing's essence that constitute its species (*muqawwimāt*). In a secondary sense, the efficient cause also enacts the necessary entailments (*lawāzīm*) of the effect's essence, insofar as these concomitants are inseparable from it.⁹⁵ What is excluded from the matrix of efficient causality is the accidental

⁹² Robert Wisnovsky, “Notes on Avicenna's Concept of Thingness (*ṣay'īyya*),” *Arabic Sciences and Philosophy* 10, no. 2 (2000): 181–221.

⁹³ This aspect of efficient causality in Avicenna's metaphysics is yet unexplored. See the scholarship on Avicenna's theory of efficient causality: Eman Allebban, “Conservation and Causation in Avicenna's Metaphysics” (PhD, Montreal, McGill University, 2018); Kara Richardson, “Avicenna and the Principle of Sufficient Reason,” *The Review of Metaphysics* 67, no. 4 (2014): 743–68; *ibid.*, “Avicenna's Conception of the Efficient Cause,” *British Journal for the History of Philosophy* 21, no. 2 (2013): 220–39; *ibid.*, “The Metaphysics of Agency: Avicenna and his Legacy” (Toronto, University of Toronto, 2008); Robert Wisnovsky, “Final and Efficient Causality in Avicenna's Cosmology and Theology,” *Quaestio* 2 (2002): 97–124, and “Towards a History of Avicenna's Distinction between Immanent and Transcendent Causes,” in *Before and After Avicenna: Proceedings of the First Conference of the Avicenna Study Group*, ed. David C. Reisman and Ahmed H. al-Rahim (Leiden; Boston: Brill, 2003), 49–68; Jean Jolivet, “La répartition des causes chez Aristote et Avicenne: le sens d'un déplacement,” in *Lectio Varietates. Hommage à Paul Vignaux (1904 - 1987) (Et. Philos. Med., LXV)* (Paris: Vrin, 1991), 49–65; Michael Marmura, “The Metaphysics of Efficient Causality in Avicenna (Ibn Sina);” *ibid.*, “Avicenna on Causal Priority,” in *Islamic Philosophy and Mysticism* (Delmar, N.Y.: Caravan Books, 1981), 65–83.

⁹⁴ *Ilāhiyyāt* VI.3.8, 207 (Cairo, 270); Marmura's translation slightly modified.

⁹⁵ “The concomitant is that which must be said of a thing after its essence has been established, given that fact that it is something that is entailed by the essence, and not because it is something internal to the reality of [the thing's essence [...]] The constitutive elements of the essence (*al-muqawwim*) and the concomitant (*al-lāzīm*) are common with regard to the fact that neither of them are separable from the thing [of which they are predicated]” (*Maṭīq al-mashriqīyyīn*, 14); see also the definitions of the “concomitant,” the “constitutive,” the “essential” (*al-dhātī*) and the “accidental” (*al-ʿaraḍī*) in the *Ishārāt*, 7–9.

attributes that may be separated from the essence without undoing its integrity, such as colour is to a natural body.

In the previous discussion on *Ilāhiyyāt IX*, we have seen how Avicenna regards the Necessary Being and the celestial intellects as the First Principles of existence. Although efficient causality is often ascribed to sublunary entities such as human souls, these do not strictly speaking produce the species; they simply perpetuate it by producing individuals, resulting in a perpetuity of the species, rather than a perpetuity of individual members of that species. Indeed, in *Ilāhiyyāt VI.2* Avicenna explains how fire, a builder, and a father are not strictly speaking “true causes” (*al-‘illa al-ḥaqīqiyya* or *al-‘illa bi-l-ḥaqīqa*).⁹⁶ When setting fire to something moist, for instance, fire is responsible only for drying it up by removing its “disposition to receive or sustain the watery form.” Once the moist is removed, the fiery form may now inhere in the material substrate. The cause of this fiery form is a “separable” (*mufāraqa*) entity. The builder and the father are likewise conceived as “helpers” (*mu‘īnāt*) in the production of their respective effects. The builder brings together already existing material based on some architectural blueprint. However, he is not responsible for the very existence and nature of these materials, which are responsible for the continued existence of the building after its construction. The same holds for the father, who only assists in the preparation of the seed.⁹⁷ Instead, the form-giving entity responsible for the existence of these natures—not just their preparation—is the “separable cause” (*al-mufāraqatu al-fā‘ilatu li-l-ṭabā‘i*).⁹⁸ Avicenna does not directly say that these “separate” causes are celestial intellects; but he has excluded three kinds of

⁹⁶ *Ilāhiyyāt VI.2.4–5*, 202 (Cairo, 264–265).

⁹⁷ “The cause of [the error] of the one who thinks that the son [as the effect] continues to exist [independently of a cause] after the father [as the cause], that the building continues to exist after the builder [has built it], and that the warmth continues to exist after the fire [is removed] is a confusion resulting from the ignorance of the true nature of the cause. For the builder, the father, and the fire are not, in reality, causes for the subsistence of these effects. For the builder, the one mentioned as the maker [of the building], is neither the cause for the subsistence of the mentioned building nor, moreover, of its existence” (*Ilāhiyyāt VI.2.1*, 201; Cairo, 264).

⁹⁸ *Ibid.*

sublunary agents from being the “true efficient cause” of existence: the agents of non-voluntary natures (fire), of artifacts (the builder), and of voluntary souls (the father). No other agents exist in the sublunary realm other than these three. Thus, it is safe to conclude that he is referring to the celestial intellects, specifically the one governing the sublunary realm, which in its cosmological function is referred to as the Giver of Forms (*wāḥib al-suwar*).⁹⁹

Now we must keep in mind the following qualification: an agent is designated as a true efficient cause not only because it enacts the existence of the effect-as-species, but also because it does so *qua* species. What this means is that when the efficient cause acts, it acts as a necessary entailment (*lāzim*) of its essence, rather than through some accidental circumstance that accrue upon its essence. Such is the primary meaning of agency (*al-fāʿiliyya*). Avicenna alludes to this point in the passage quoted above, saying that an essential efficient causal relation is one where “the natures in the effect and its own species (*nawʿiyya*) and essential quiddity (*māhiyyat al-dhātiyya*) necessitate that,

⁹⁹ See also the discussion in *al-Samāʿ al-ṭabīʿī* I.1.24, where Avicenna distinguishes the *true* efficient cause and the efficient cause “as far as issues related to physics are concerned.” The canonical discussion on the Giver of Forms is in *Ilāhiyyāt* IX.5.3, 335 (Cairo, 410–411) and *al-Kawn wa-l-fasād* 14, 189–194. The term “Giver of Forms” refers to all celestial intellects, not just the last one; see *Ilāhiyyāt* IX.5.4, 335 (Cairo, 411). In the context of noetics and psychology, this entity is known as the Active Intellect. Kara Richardson has argued that Avicenna holds a unified theory of efficient causality that includes not only active intellects but also artisans and natural agents (e.g., fire); see “Avicenna’s Conception of the Efficient Cause.” I do not think that this was ever an issue in the scholarship, nor is it a source of tension in Avicenna’s works. Avicenna would readily accept artisans and natural agents as “efficient causes” but not in the absolute sense, rather, insofar as they produce the existence of some motion or some physical quality. The point Avicenna is making in the passages above is that the “true” efficient cause must enact the existence of a thing not *qua* individual—which is what artisans and natural agents may only produce—but *qua* species. Furthermore, the efficient cause achieves this act *qua* the species that it is and not *qua* individual. These two criteria exclude both individual builders and bodies of fire and include only the Necessary Being and the celestial intellects. Only these latter entities can produce existence *qua* species, i.e., as a necessary entailment of their essences, since each individual intellect is a species unto itself. Richardson does not discuss this central aspect of Avicenna’s theory of efficient causality. As long as these conceptual distinctions are consistently defined, and the difference between the subject-matter of metaphysics and physics respectively is also kept in mind, this presumed equivocity of the term “efficient cause” does not necessarily lead to a lack of “conceptual clarity,” as Richardson charges (222). In fact, Avicenna readily admits that many technical terms in physics are not univocal; rather they are “modulated” (*dalālatuhā dalālatu al-tashkīk*) (*al-Samāʿ al-ṭabīʿī* I.3.9, 31). He includes among the list of modulated term “existence” or “being” (*wujūd*). With this in mind, all that is required for a “unified theory of efficient causality” is to claim that the term “existence” in the definition of efficient causality as “that which bestows *existence* upon the effect” modulated in terms of the priority of the species and the posteriority of its accidents. Physics is concerned with one aspect of being, which is bodies insofar as they are subject to change (i.e., having a nature). Since modulated terms express a focal meaning, as long as this meaning is consistently maintained, clarity is not sacrificed; see the famous passage in *Maqūlāt* I.2, 10 on modulated terms (*al-asmāʿ al-mushakkaka*).

in its existence, it is an effect of a nature or natures (*tabīʿa aw ṭabāʿi*).¹⁰⁰ These causal “natures” must pertain to the agent, since the Master defines the efficient cause or agent as that which “bestows from its essence (*an dhātihi*) an existence that the effect did not possess.”¹⁰¹ He puts it clearer still in the following passage:

What [the effect] has essentially from the agent is existence; [also,] the existence it [now] possesses is due only to the [fact] that the other thing [that causes it] is of a sort from which there must ensue an existence for another, *derived from its [own] existence, which belongs to it essentially*.¹⁰²

Conceived in this way, the relationship between the agent and the effect must be asymmetrical. Not only must the effect be essentially dependent on the agent for its existence, the two entities must also be distinct in nature or species. This distinction, however, does not preclude the possibility that the agent and the effect occupy the same substrate, as in the case of the physician healing himself. This is because the status of the physician as the efficient cause of health is formally distinct from his status as the patient of health.¹⁰³ As a result, the metaphysician, as well as the natural philosopher, must privilege knowledge of the agent’s *essence* as a distinct species when

¹⁰⁰ *Ilāhiyyāt* VI.3.6, 207 (Cairo, 270).

¹⁰¹ *Ilāhiyyāt* VI.1.6, 196 (Cairo, 259); Marmura’s translation slightly modified.

¹⁰² *Ilāhiyyāt* VI.1.8, 197 (Cairo, 260); emphasis mine. The last clause of the passage—“derived from its [own] existence, which belongs to it essentially”—does not necessarily refer to the Necessary Being. The context of the passage makes clear that Avicenna is speaking about true efficient causes in general. He wants to show that from the agent, only the existence of the effect is enacted; the efficient cause does not enact non-existence; nor is “existing after having not existed” the proper object of causation. By the concluding clause, he means to say that the essence of the agent *qua* agent must already be existing. Unlike the agent, the effect *qua* effect does not possess its existence by itself, but only potentially in reference to something external, which is the cause. Cf. *Ilāhiyyāt* VI.3.26, 213 (Cairo, 267), where he writes that the efficient principle “exists by itself (*ẓujūdahu fī-nafsihi*), whereas the patient’s existence with respect to the reception of that action is acquired from [the former].” The same use of “*per se* existence” as referring to the efficient cause in general (rather than exclusively to the Necessary Being) can be seen in *Ilāhiyyāt* VI.3.30, 215 (Cairo, 277–78). Later in this chapter, we will discuss how this general usage of the term links up Avicenna’s discussion of modulated terms in the *Maqūlāt* I.2, 10–11 to the realm of concrete existence.

¹⁰³ As Aristotle first pointed out in *Physics* II.1.192b, 23–32. See Avicenna’s use of the same example in *al-Samāʿ al-ṭabīʿi* I.10.23, 64–65. Of course, the human physician is never a “true efficient cause” in the first place but is only the cause of motion in the body.

pursuing knowledge of its proper effect.¹⁰⁴ For it is only in reference to the essence of the cause that the necessity of the effect is established.¹⁰⁵ Anything less than the ascertainment of this necessity would fail to constitute scientific knowledge, but would yield a mere description (*rasm*) of the object of inquiry.¹⁰⁶

What then is entailed in the metaphysician's knowledge of the essence of the efficient cause, and how can he use it to deduce the nature and existence of its proper effects? Avicenna does not address these questions head on. We can, however, piece together elements of the theory from his discussion in Chapter 3 of *Ilāhiyyāt* VI, where he discusses the idea of *munāsaba*, i.e., “correspondence,” “compatibility,” or more strongly “isomorphism,” between the cause and the effect. Avicenna's main goal in the Chapter is to argue for the ontological superiority of the cause over the effect.¹⁰⁷ Having established in the previous two chapters that the efficient cause is that which “bestows existence from itself,” Avicenna wants to ensure that this statement does not blur the hierarchal relationship between the cause and the effect. More specifically, he intends to

¹⁰⁴ However, if the effect is already known, and it is the agent that is the object of inquiry, they must still aim at knowledge of the cause *qua* species. This requires them to arrive first at systematic knowledge of the essence of the effect, before proceeding to infer the nature of its proper cause. As we have seen in the previous chapter, this procedure is known as *burhān inna*, and relies on teleological analysis. In the present discussion, we are primarily concerned with *burhān lima*, which relies on systematic knowledge of the efficient cause to deduce the nature of the effect.

¹⁰⁵ Avicenna writes: “There would belong to the essence of a cause a consideration (*naẓar*) in terms of which it becomes necessary and which does not pertain to the essence of the effect, but in terms of which the cause itself becomes necessary, the effect being still not noticed. The essence of the effect is only possibly and must only be regarded with respect to the cause. Thus, the cause will have an exclusive claim to necessity, the effect having nothing more than possibility with regard to this exclusive claim. If necessity belongs to the effect, it would have belonged to the cause first; otherwise, the cause would then still be possible—its existence not having become necessary—when the existence of the effect has become necessary. The [effect] would not have become necessary through the essence of the cause; and this is impossible” (*Ilāhiyyāt* VI.3.29, 214; Cairo, 277). As a result, if the metaphysician's aim is to reach certain knowledge about a certain causal event, he must place his efforts first in understanding that aspect of the agent's essence that bestows its status as cause, since this is where the necessity of the causal nexus is primarily located. This passage will also be relevant to the discussion on the *ma'ānī* (causal factors) of causality below.

¹⁰⁶ Recall for instance how in the previous discussion on *Ilāhiyyāt* IX.4, Avicenna's inquiry into the agency (*fā'iliyya*) of the Necessary Being begins with summary of its essential features of unity, simplicity, impassivity, and self-sufficiency. Recall also how he describes both the procession of the First Intellect and the procession of the Second Intellect, the first celestial soul, and the first celestial body as the necessary entailment or concomitant of their respective efficient causes.

¹⁰⁷ *Ilāhiyyāt* VI.3.1, 205 (Cairo, 268).

maintain a strict ontological distinction between the Necessary Being and the realm of contingent being.¹⁰⁸ It seems to me that Avicenna is anticipating a possible misinterpretation of his doctrine of efficient causality, which can be construed as implying a “spilling-over” of the inner nature of the cause upon that of the effect. Perhaps he has in mind both critics and proponents of *falsafa* who may be seduced by the metaphorical language of its foundational texts, such the evocative term *ḥayḍ* (“overflowing,” “inundation,” “pouring forth,” and more conventionally, “emanation”) and the famous light analogy of the *Uthūlūjīyā*.¹⁰⁹ Indeed, this engagement with false doctrines of causation is a running theme throughout the first three chapters of *Ilāhiyyāt* VI.¹¹⁰

¹⁰⁸ That the object of this inquiry is the God-world relation is explicitly stated at the end of the Chapter: *Ilāhiyyāt* VI.3.30, 215 (Cairo, 277–278).

¹⁰⁹ In the *Taʿlīqāt* Avicenna offers a technical description of *ḥayḍ* as follows: “‘Emanation (*ḥayḍ*) is used only with respect to the Creator and with respect to the intellects, nothing more. This is because the procession of existents from Him is by way of necessitation of concomitants (*lawāzīm*), not by a will that follows some goal, rather on account of His essence, and their procession from Him is perpetual without obstruction or burden that attaches in this [act]. It proper [then] to call this emanation” (*Taʿlīqāt*, 271). This definition relies on the absolute distinction between the inner constituents of an entity (*muqawwimāt*) and its necessary but external entailments (*lawāzīm*). As for the light analogy, Avicenna would explicitly reject it in *Ilāhiyyāt* VIII.7.2, 291 (Cairo, 363). However, in his commentary on the *Uthūlūjīyā*, which was written before the *Shifāʾ*, Avicenna is more conciliatory. He simply argues that (pseudo-) Aristotle’s analogy of light to describe the divine act of creation can be easily misunderstood as implying a naive pantheism (*Uthūlūjīyā*, 51.7–12). The light analogy can be accepted, but with the condition that the reader remove any implication of participation in the essence. He therefore interprets the appellation, “the First Light,” as referring to essence of the Necessary Being, which is unique and not shared by anything else: *Sharḥ Uthūlūjīyā*, 56.18–57.1: “[The First’s] essence (*ḥuṣūṣiyya*) is light insofar as it is its essence. This is because as long as it is the Necessary Being, which is the essence of the First Truth, it is beauty, perfection, and remoteness from mixture with matter, non-being, what is in potency, and all else that disfigures and lowers the existence of a thing.” The diffusion of the First Light as the source of all existing things is simply another expression for the Necessary Being’s role as the first efficient cause. It “reaches (*yaṣīlu*) every receiver through the revelation (*tajallī*) of its essence to its essence, by means of a connection that [is enacted] through its essence” (*Sharḥ Uthūlūjīyā*, 57.5–6). What this means is that the First Cause’s act of bestowing existence does not involve the emanation of its essence unto other things, since its essence belongs solely to itself. Rather, the First Light’s act of causation is achieved by means of intermediary principles. Avicenna offers additional insight on light and emanation in his commentary on the Light Verse; see Avicenna, “Tafsīr āyat al-nūr,” in *Twenty Philosophical-Mystical Texts in Persian and Arabic*, ed. Ali Muhaddis (Uppsala: Uppsala Universitet, 2008), 195–202.

¹¹⁰ For instance, in Chapter 1 of *Ilāhiyyāt* VI, Avicenna argues that temporal priority of a cause to its effect is an accidental feature of the causal nexus. Rather, the priority of the cause over the effect is primarily a priority of essence, since the fundamental (metaphysical) perspective considers the cause and effect *qua* essences or species rather than *qua* individuals that may be bound by space-time. Temporality, therefore, is an accidental feature of causation. What is essential to the causal act is the fact that a certain entity is, by definition, the necessary cause of some effect. Of course, it is the task of the metaphysician and physicist to determine whether a certain entity by its nature produces a certain effect. But once this fact has been established—for instance, that fire burns—then the effect must already take place by mere necessity of the existence of the fire, except when circumstances accidental to the burning effect of fire obtain, such as excessive moisture. In Chapter 2, he argues as a corollary of essential causation that the true cause and its proper effect must coexist. Since, as we have seen, the true causes of existence are the Separate Intellect and the First Principle, both of which are eternal beings, the world is consequently eternal. For Avicenna, the principle of sufficient

In the course of establishing the principle of correspondence to uphold the cause's ontological superiority to its proper effect and its essential differentiation from it, Avicenna pries open the inner workings of efficient causality. The key concept, as we have alluded to above, is *ma'nā* (pl. *ma'ānī*), which in this context refers to the inner aspects of the agent's existence that serve as the basis for the procession of effects. However, as in the case with *Ilāhiyyāt* IX.4, Avicenna's use of the term *ma'nā* in *Ilāhiyyāt* VI is often interchangeable with such terms as *ḥukm* (status), aspect (*jīha*), consideration (*ʿtibār*), and point of view (*naẓar*).¹¹¹ Avicenna would use these terms to designate the various ways through which the metaphysician can describe the quiddity relative to its nature, as well as its ontological status, whether as lesser or greater; cause or effect; matter or form; species or individual; agent or patient; necessary or contingent; self-sufficient or indigent; prior or posterior.¹¹² The aim is to enumerate the various aspects pertaining to the cause which renders it unequal (*ghayr musāwīn*) and superior or more deserving (*awlā*) of existence than the effect it necessitates. In the following illustrative passage, Avicenna argues that even in the case where the cause and effect share the same species of existence, such as fire in one material substrate causing fire in another, and assuming that the intensity of the fire does not degrade but remains equivalent, the cause is still superior to the effect and is more deserving of existence:

reason is fulfilled in the very fact of their existence, rather than in the exercise of will as distinct from the essential act of being. Of course, the opponent here is the practitioner of *kalām* (*mutakallīm*), whose model of divine agency must be consistent with the non-eternity of the world.

¹¹¹ These terms are commonplace in Avicenna's writings and do not in themselves possess a technical meaning. However, when used in certain metaphysical inquiries, they come to acquire special significance that demand careful attention. This is especially the case regarding the important issue of the "modulation" or "ambiguity" of being (*tashkīk al-wujūd*); see Damien Janos, *Avicenna on the Ontology of Pure Quiddity* (Berlin; Boston: De Gruyter, 2020), especially Chapter II where he discusses the terms *ʿtibār* and *ma'nā* to discuss the various aspects of quiddity. As we shall see, the term *ma'nā* in our inquiry into the Rule of One will include its use as a differentiating factor in modulation. However, for our purposes, it shall primarily designate what I have termed "the causal factor inherent in the agent."

¹¹² For the meanings of "lesser or greater," "agent and patient," and "form and matter" see *Ilāhiyyāt* VI.3.4–5, 206; for "cause or effect," "prior or posterior," see VI.3.5–6, 206–07; for "prior and posterior," "self-sufficiency and reliance," "necessity and possibility," and "cause and effect," see VI.3.27–28, 213–14. In all these passages, Avicenna uses the same complex of terms interchangeably.

If we concede these opinions until we find out their [true] state of affairs, it becomes permissible for us to say: If the meaning (*ma'nā*) in the effect and in the cause is equal (*mutasāwīyan*) in strength and weakness, then essential priority (*al-taqaddum al-dhātī*) would inescapably belong to the cause inasmuch as it is a cause, with respect to this meaning. The essential priority which it has with respect to that meaning is [itself] a meaning that does not exist for the second, being part of the state of that [original] meaning. This meaning would then be equivalent to the first, if it is taken according to its existence and the states that belong to it with respect to its existence, which is prior to the second. Absolute equality thus ceases, because equality remains in the definition; both are equal by way of having that definition, neither of them being either the cause or the effect. But, inasmuch as (*min jihat mā*) one of them is a cause and the other an effect (*aḥaduhumā ʿillatun wa-l-ākharu mā lūlun*), it is clear that considering (*bi-ʿtibār*) the existence of that definition for one of them has the greater claim, since it belonged to it first [and did] not derive from the second, the second deriving [the definition] only from [the first]. From this it becomes obvious that, if this meaning is existence itself, then it is not possible at all for [cause and effect] to be equal in it, since one of them can be equal to [the other] only with respect to definition (*bi-ʿtibār al-ḥadd*) but would excel [the other] with respect to the deserving of existence (*istiḥqāq al-wujūd*). However, the deserving of existence is of the very same genus as the deserving of definition (*istiḥqāq al-ḥadd*), since this meaning has taken [unto itself] existence itself. It is thus evident that [the effect] cannot be equal to it if the meaning is identical with existence itself. Hence, that which bestows a thing's existence (*fa-mufīd wujūd al-shayʾ*) inasmuch as it is existence has the greater claim to existence than the thing.¹¹³

¹¹³ *Ilāhiyyāt* VI.3.6, 206 (Cairo, 279–70); Marmura's translation slightly modified.

Note how Avicenna uses the terms *maʿnā* (meaning), *jihā* (aspect), and *iʿtibār* (consideration) to refer to the various aspects of the entity in question, whether its definition (that is, the species and its constituents, i.e., the genus and differentia); its status as cause or effect; its status as prior or posterior in terms of existence; its relative strength and weakness; and its necessary existence *qua* agent of some effect its contingent existence *qua* effect of some cause. If we examine closely Avicenna's use of these terms, we see that they designate a common notion, namely the various aspects of an entity through which the metaphysician may appraise its ontological status. The reason for this inquiry is to examine whether absolute equality exists in the case of a cause and effect that share the same species, namely fire. Avicenna argues that despite this equality "in definition" as well as "in strength and weakness," the cause remains categorically distinct and transcendent from the effect it enacts. If the efficient cause enacts a thing's existence, and this existence is none other than the latter's very definition or species—a definition that, as we saw above, is something that the agent already possesses as part of its essence—then the cause has "a higher claim" to this existence-*cum*-definition than the effect. Thus, Avicenna seems to think that the differentiating factor between one existing thing from another is not restricted to the essence or quiddity of a thing, but also includes a host of other considerations regarding how a thing exists relative to another, whether in terms of strength and weakness, priority and posteriority, or as necessity and contingency. The considerations of priority-posteriority and necessity-contingency, however, are particularly relevant when the definitional factors of the entities in question, as well as their relative strength and weakness, are equal.

Avicenna affirms the importance of these two considerations when dealing with a species of causation that is characterized by a native inequality (*ghayr musāwīn*) between the cause and the effect in terms of species. Furthermore, the causal influence exerted by this kind of cause is not the transmission of some essential quality on a pre-existing substrate, like fire causing heat and burning

on another body. Rather what this cause enacts is the very existence of the effect. As discussed above, Avicenna refers to this species of agency as the “true efficient cause.” In this case, the problem faced by the metaphysician is not whether the cause and effect can be differentiated, since the distinction in species is embedded in the very definition of the causal process. Rather, the problem is whether the *existence* of the true efficient cause is in any manner distinct from the *existence* of the effect it produces. He articulates the problem as follows:

[In] the case of the agent and the principle whose recipient of action does not participate with it in either species or matter participating in it only in some manner in the idea of existence, where it is not possible to consider within it the meaning [i.e. the species] pertaining to the existence [of the agent] (*ḥāl al-ma'nā alladhī lahu al-wujūd*)—since the two do not participate in this [single meaning]—and what therefore remains is the state of the consideration of existence itself (*ḥāl i'tibār al-wujūd nafsihī*) (everything else by way of equality and excess having been ascribed to the active principle)—if one then returns to considering the state of existence, the active principle would [still] be unequal to [the patient]. [This is] because [the active principle] exists by itself (*wujūdahu bi-nafsihī*), whereas the patient's existence with respect to the reception of that action is acquired from [the former]. Further, existence inasmuch as it is existence (*al-wujūd bi-mā huwa al-wujūd*) does not vary in terms of strength and weakness and is not receptive of what is less and what is more deficient. It only varies in terms of several [modes] namely, priority and posteriority, absence of need and need, and necessity and possibility. As for priority and posteriority, existence, as you have known, belongs first to the cause (*illa*), secondly to the effect (*ma'lūl*). As for absence of need and need, you have known that in existence the cause does not need the effect but exists either by itself or by some other cause. This meaning is close to the first, even though it differs from it in the way it is considered. As for necessity and possibility, we know that, if there is a

cause which is a cause of everything that is an effect (*li-kulli mā huwa maʿlūl*), then its existence is necessary in relation to the whole in terms of all the effects, and absolutely. If, [on the other hand], there is a cause of some effect (*maʿlūl mā*), then its existence is necessary in relation to that effect, while that effect in itself, in whatever manner it occurs, is [something whose] existence is [only] possible.¹¹⁴

In this passage, Avicenna argues that even in terms of *per se* existence (*wujūd bi-naḥsihi*, or *wujūd bi-mā huwa wujūd*), the cause is superior to the effect. This is distinct from the concern of the previously quoted passage, where he intends to establish the superior existence of the cause in terms of its definition or quiddity. However, in the same way that he resorted to the considerations of priority-posteriority and necessity-possibility to show that the cause is existentially superior in *definition*, he now uses the same categories to show that the cause is existentially superior in terms of *mere existence*. The goal is to show that the cause must be superior to the effect in every aspect of the causal relationship. *Per se* existence is not excluded from this rule. Since the efficient cause—whether in the general sense that includes physical phenomena like fire or the “true” sense that is restricted to the Necessary Being and the celestial intellects—imparts upon the effect something that it must already possess essentially, establishing the superiority of the cause over the effect implies taking into consideration the essential aspects both entities have in common. In the case of physical phenomena, it is the essential qualities that are imparted to the effect; but in the case of the true efficient cause, it is *per se* existence. If Avicenna were to ignore the question of mere existence, he would be excluding an important species of cause from the metaphysical inquiry into cause and effect. Furthermore, since “true efficient causes” are none other than the Necessary Being and the celestial intellects, establishing the hierarchy of priority and posteriority, necessity and contingency,

¹¹⁴ *Ilāhiyyāt* VI.3.27, 213–14 (Cairo, 276–77); Marmura’s translation slightly modified.

and self-sufficiency and reliance with respect to *per se* existence affirms the transcendent status of the First Principles in terms of their concrete existence, not only in terms of their logical priority.

By introducing these distinct modes of existence, Avicenna is now able to show that the agent remains transcendent from the effect and is unaffected by it, despite the existential contiguity implied in the definition of the efficient cause as “that which bestows from its essence the existence of the effect.” In the specific case of true efficient causes, no existential “spillover” is implied between the cause and the effect that would blur the distinction between them. Rather the effect *qua* effect is permanently tainted with some measure of unreality, whereas the cause *qua* cause is already necessarily existing. This necessity of existence is not absolute in the manner that is restricted to the Necessary Being. Rather it is necessary in the sense that it is already existing by a set of causal circumstances that had occurred to it before it acquired the role of being a cause to some effect.¹¹⁵ Conceived in this manner, the cause is completely indifferent to the effect. Yet the effect *qua* effect cannot be indifferent to its cause. This transcendence and existential priority of the cause applies to all instances of efficient causality, even those involving physical agents. For instance, the fire that causes another fire is “more deserving” of the definition or nature of “fireness.” However, it applies pre-eminently to the “true efficient causes” that are the First Cause and the celestial intellect. Arguing for their transcendence *via* the modes of priority, necessity, and self-sufficiency is the ultimate goal of Chapter 3 of *Ilāhiyyāt* VI.¹¹⁶

¹¹⁵ This priority is primarily logical, not temporal. Avicenna expresses this point in the following way: “There would belong to the essence of a cause a consideration (*naẓar*) in terms of which it becomes necessary and which does not pertain to the essence of the effect, but in terms of which the cause itself becomes necessary, the effect being still not noticed. The essence of the effect is only possibly and must only be regarded with respect to the cause. Thus, the cause will have an exclusive claim to necessity, the effect having nothing more than possibility with regard to this exclusive claim” (*Ilāhiyyāt* VI.3.29, 214; Cairo, 277). Naṣīr al-Dīn al-Ṭūsī’s view that the term *al-mawjūd bi-dhātihī* in the famous *Maqūlāt* 1.2 passage on modulation refers to the cause while *al-mawjūd bi-ghayrihī* refers to the effect is consistent with Avicenna’s argument thus far in *Ilāhiyyāt* VI.3. For a discussion on Ṭūsī’s interpretation, see Wisnovsky, “On the Emergence of Maragha Avicennism,” 293.

¹¹⁶ Therefore, Avicenna concludes the Chapter with the following statement regarding the Necessary Being: “[there] belongs to the cause a necessity with respect to itself and inasmuch as it is not related to the effect-the effect still

It should be clear that Avicenna's argument for the superiority of the cause is heavily dependent on the doctrine of the modulation of existence (*tashkīk al-wujūd*).¹¹⁷ Without modulating the existence of the cause relative to the effect through the modes of priority, necessity, and self-sufficiency, Avicenna would not have been able to show that true efficient causes are superior in existence from their proper effects. If existence were univocally predicated of things, and the "true efficient cause" has been defined as that which bestows *per se* existence upon the effect, then no distinction may obtain between their respective existences. However, this inference would be unacceptable in regard to an entity whose essence *is* existence, namely the Necessary Being. For in this case, the existence that contingent entities receive from the Necessary Being would be the very existence that is predicated essentially and uniquely of this First Cause. Univocity between the essential being of God and the contingent being of the created order would blur the distinction between them and could imply a kind of pantheistic universe. Univocity also runs against the intuition that whatever is necessarily *P* is "more deserving" of being *P* than something that is only

remaining within the dictate of its possibility, since the cause does not become necessary by it but either in itself or in relation to something else, [but] not [in relation] to [the effect]. Inasmuch as the cause is not yet related to the effect, the effect's existence is not necessary, its existence only becoming necessary inasmuch as the cause is related to it. For these three reasons, then, the cause is more worthy of existence than the effect. The cause is thus truer than the effect. And because [it is the case that,] when absolute existence has produced the existence of something, [the latter] becomes true, it is clear that the principle that bestows the reality in which things participate has the greater claim to truth. Hence, if it is true that there is here a first principle—namely, the one that gives reality to others—it becomes true that [this principle] is the Truth in Himself, and it becomes true that knowledge of Him is knowledge of truth absolutely. If knowledge of Him takes place, then this would be absolute, true knowledge in the way it is said of knowledge that it is true—namely, in relation to the object known" (*Ilāhiyyāt* VI.4.30, 215; Cairo, 277–78; translation slightly modified).

¹¹⁷ Note that Damien Janos has recently argued that the passage of *Ilāhiyyāt* VI.3.27, 213–14 is a key source for Avicenna's doctrine of the modulation of existence (*tashkīk al-wujūd*). Specifically, he argues that the passage supports the view—first articulated by Alexander Treiger—that Avicenna conceives the modulation of existence to be relevant beyond the predicamental level to include concrete entities, specifically the Necessary Being and the successive order of contingent entities. Janos' argument is based on the observation that the "modes" of existence identified in the passage (i.e., priority and posteriority, self-sufficiency and reliance, necessity and contingency) match with Avicenna's canonical list of such modes in other works, such as the famous passage in the *Maqūlāt* I.2, 10–11. Since the list of modes in *Ilāhiyyāt* VI.3 occurs within an "ontological context," this amounts to a clear application of the theory of predicables in the *Maqūlāt* to the realm of existence; see Damien Janos, *Avicenna on the Ontology of Pure Quiddity* (Berlin; Boston: De Gruyter, 2020), 443. Treiger also cites the passage when arguing for transcendental modulation; see "Avicenna's Notion of Transcendental Modulation of Existence (*tashkīk al-wujūd*, *analogia entis*) and its Greek and Arabic Sources," *Documenti e studi sulla tradizione filosofica medievale* XXI (2010): 165–98 (reprinted in *Islamic Philosophy, Science, Culture, and Religion: Studies in Honor of Dimitri Gutas*, ed. Felicitas Opwis and David Reisman (Leiden: Brill, 2012), 327–63).

contingently so—whether this be in terms of *per se* existence or in terms of species. While Avicenna has in mind the Necessary Being as the main paradigm of efficient cause, whose ontological superiority and transcendence is at stake, we have seen that the same insight is applicable to other efficient causes, physical cases included.¹¹⁸

I do not intend to wade into the scholarly discussion on Avicenna’s theory of modulation in earnest, but only insofar as it relates to his theory of efficient causality.¹¹⁹ What I hope to have shown is that by using the various modes of existence to establish the claim that the cause has “a greater claim to reality (*wujūduhu aḥaqqu*)” than the effect, Avicenna implicitly affirms that these modes contribute to the overall causal factors that determine the nature of the effect. This is because these modes are not simply mental categories or “perspectives” that the metaphysician imposes on the entity in question. Rather, along with the quiddity they express the inner structure of its concrete existence and define the specific ontological domain it inhabits.¹²⁰ This structure has

¹¹⁸ Thus, in my view, understanding why Avicenna would want to modulate existence in the concrete realm would require us to take his project in Chapter 3 of *Ilāhīyyāt* VI into consideration. For it is in his attempt to solve the dilemmas of efficient causality, as that which “bestows from its essence the existence of the effect,” that the Master takes recourse to the idea that existence is predicated of things in an ambiguous way (*bi-l-tashkīk*), rather than in a univocal way. Of course, Avicenna may have had a separate reason why he would not want to view existence in a way, namely, to maintain the unity of the subject-matter of metaphysics and its integrity as a science. Note that the present debate on whether Avicenna intended the theory of modulation of existence to include concrete existents such as the Necessary Being and contingent entities—beyond the predicamental level—is whether he explicitly affirms it, or whether the decisive step was taken by later figures of Avicennian tradition. For an argument supporting the latter position, see Robert Wisnovsky, “On the Emergence of Maragha Avicennism,” *Oriens* 46 (2018), 292–96.

¹¹⁹ The scholarship on the modulation of existence in Avicenna has grown considerably in the past few years; see Treiger, “Avicenna’s Notion of Transcendental Modulation of Existence”; Wisnovsky, “On the Emergence of Maragha Avicennism”; Rosabel Pauline Ansari, “The Ambiguity of ‘Being’ in Arabic and Islamic Philosophy” (PhD, Washington D.C., Georgetown University, 2020); Janos, *Avicenna on the Ontology of Pure Quiddity*; Fedor Benevich, “The Necessary Existent (*wājib al-wujūd*): From Avicenna to Fakhr al-Dīn al-Rāzī,” in *Philosophical Theology in Islam: Later Ash‘arism East and West*, ed. Ayman Shihadeh and Jan Thiele (Leiden: Brill, 2020), 123–55; Francesco Omar Zamboni, “Is Existence One or Manifold? Avicenna and his Early Interpreters on the Modulation of Existence (*taškīk al-wujūd*),” *Documenti e studi sulla tradizione filosofica medievale* 31 (2020): 121–49; Damien Janos, “Avicenna on Equivocity and Modulation: A Reconsideration of the *asmā’ Mushakkika* (and *tashkīk al-wujūd*),” *Oriens* 50, no. 1–2 (2022): 1–62; Rosabel Ansari and Jon McGinnis, “One Way of Being Ambiguous: The Univocity of ‘Existence’ and the Theory of *Tashkīk* Predication in Rāzī and Tūsī’s Commentaries on Avicenna’s *Pointers and Reminders*,” *American Catholic Philosophical Quarterly* 96, no. 4 (2022): 545–70.

¹²⁰ “Inner” is relative to external accidents that are not necessitated by the essence. Of course, in relation to the quiddity itself, the modulating factors of priority and posteriority, necessity and contingency, self-sufficiency and reliance are “external” insofar as they are concomitant attributes of the essence.

two aspects: the aspect of quiddity and the aspect of existence. Where quiddity consists of the of genus and differentia, existence is modulated by the three sets of modes mentioned above.¹²¹ Thus, when Avicenna claims that it is impossible for the effect to have “more of [what it receives] from the cause by way of meaning,” he includes in the term “meaning” not only the genus and differentia that make up the quiddity, but also the factors that modulate the existence of the entity in question.¹²² We have seen how in the course of establishing the superiority of the cause over the effect, Avicenna considers both the quiddity and existence of the two entities, whether they are equal or unequal. It turns out that in the case of physical efficient causes (such as fire) as well as “true efficient causes” (i.e., the Necessary Being and the celestial intellects), the cause is superior to the effect, despite the possibility that the cause imparts the same nature to the effect (e.g., fire causes fire) and despite the possibility that the cause imparts an existence that is predicated of it essentially (i.e., the true efficient causes). However, what is implied in this analysis of cause and effect is the following insight: that whatever “meanings” the effect may have, these derive from and are predetermined by those already existing in the cause. The species-form of the cause as well as the various concomitant properties of priority, self-sufficiency, necessity are not only facts that describe the ontological status of the cause and effect; rather they are causal factors that determine and limit the effective variations that an effect may possess from its true cause. As a result, nothing comes into existence without having been anticipated by some predetermined set of causal principles existing in its proper agent.¹²³ The seed of an olive tree (i.e., the essence *per se*) does not produce

¹²¹ Avicenna lists other necessary concomitants of existence, such as potency and act, one and many, universal and particular, etc. However, since these do not modulate existence, especially when this modulation is based on the relationship between cause and effect, they do not seem relevant aspects of the causal process.

¹²² *Wa-ammā kawnu al-māʾūl azyad fī al-māʾnā alladhī huwa min al-ʾilla fa-huwa alladhī yurā annahu lā yumkinu albattata* (*Ilāhiyyāt* VI.3.5, 206; Cairo, 269).

¹²³ Only material accidents seem to lay “outside” the purview of the efficient cause. Interaction with matter, which Avicenna refers to as “disposition” (*istiʿādā*) may serve as a further rule of differentiation; see *Ilāhiyyāt* VI.3.12–13, 208–209 (Cairo, 271–272). However, the influence exercised by matter are limited to the accidental features of the effect.

grapes, and a contingent being does not produce an essentially necessary being. Furthermore, as we shall discuss in detail in the following subchapter, a principle of necessity residing in the cause produces an effect of the same existential mode; and a principle of contingency produces an effect whose basic nature is to be in potency. Avicenna's theory of the triadic structure of celestial emanations is an application of this principle. Thus, the various combinations of these essential and concomitant *ma'ānī* serve as the rule of differentiation through which a certain effect, and not another, proceeds from its agent. In my view this is what Avicenna intended by the "rule of compatibility" (*munāsaba*) between the cause and effect, which is the main subject of inquiry of *Ilāhiyyāt* VI.3.¹²⁴

In the hands of a metaphysician, the rule of compatibility is relevant not only for determining the transcendence and superiority of the efficient cause from its effects. Rather, since it limits the effective range of a given cause to a finite set of causal factors that are localized to the essential aspects of its essence, it guarantees the stability and coherence of the causal process. The absence of this principle would be tantamount to accepting that efficient causality is grounded by an inconsistent set of causal principles. Furthermore, since the native effective capacities of the agent would prove insufficient to establish the *necessity* by which a particular effect (and not another) is existentially, this would render the entire process unintelligible to the human mind. Both hypothetical situations violate the deep intuitions of Avicennian metaphysics. Furthermore, by

This is because, given the rules of efficient causality mentioned above, any *ma'ānī* that are not linked directly to the species-form of the agent and its modulated existence cannot directly participate in the *existential* of the effect in terms of what it is essentially.

¹²⁴ The rule of compatibility affirms shows that Avicenna adheres to the Neoplatonic version of the "transmission theory of causation," one that posits the principle that the cause is always greater than the effect; see A. C. Lloyd, "The Principle That the Cause Is Greater than Its Effect," *Phronesis* 21, no. 2 (1976): 146–56. Quoting Aristotle, Lloyd defines the transmission theory of causation as involving the transference of a property possessed by the cause to the effect, given the principle that the latter is potentially what the former is in actuality. A certain isomorphism or correspondence must therefore exist between the natures of the two entities. In this framework, the cause is at least equal to or greater than the effect. Lloyd further argues that it was the Neoplatonists who insisted that this theory implies the stronger claim that the cause must be greater than the effect.

localizing the causal factors necessary for the procession of an effect to the efficient cause, and revealing the inner structure of efficient causality, Avicenna lays the groundwork for the possibility of inferring the very nature of the effect solely through knowing the nature of the cause.

Let us return to our discussion of the Rule of One. Our inquiry into Avicenna's theory of causality in *Ilāhiyyāt* VI is intended to show that the formula “from the one only one [thing] proceeds” is best understood as being part of his theory of efficient causality. In Chapter I.2 of this thesis, we saw how by “the one” he intends not only a single entity (like the Necessary Being), but also includes a single unit of *essential* causal factors—*viz.*, *ma'ānī*—existing in the agent. It is on the basis of these *ma'ānī* that the procession of its proper effect(s) takes place. In the present chapter, we have seen how Avicenna regards the species-form of the agent as well as the necessary concomitants that modulate its existence as the constitutive factors determining the effective capacities of the efficient cause—this is the metaphysical framework of the rule of compatibility (*munāsaba*). As in *Ilāhiyyāt* IX.4, Avicenna designates these causal factors with the umbrella term *ma'ānī*. This coincidence of terms notwithstanding, the main point I intended to show is that both sections of the work describe the same theory regarding the inner workings of efficient causality. But where *Ilāhiyyāt* VI.3 establishes the rule of compatibility as a key metaphysical doctrine, *Ilāhiyyāt* IX.4 assumes that very rule and uses it to deduce the number and nature of the celestial entities based purely on knowledge of their respective causes. This deduction relies on the principle that only a single effect may be produced from a single unit of causal factors existing in the agent—that is, the Rule of One.

Thus, the *ma'ānī* that function as causal factors in efficient causality are the basis for real occurrences in the realm of concrete existence. However, what is the nature of their existence? Are they abstract concepts that the metaphysician deploys in his scientific discourse about the world? Or do they also have some real existence beyond the constructions of the human mind?

Furthermore, what exactly constitutes as “a single unit of efficient causality” upon which the Rule of One, as I have interpreted, is based? In the following section, I shall argue that these *ma‘ānī* refer to the intellectual structure of the cosmic system. This structure exists in the first instance and as an undifferentiated whole in the Divine Mind, before it is progressively articulated, as a necessary entailment of God’s act of being, in the various orders of reality. The first of these orders is the hierarchy of celestial intellects (*al-‘uqūl al-mufāraqa*). Since these entities are also in active intellects, they too possess a distinct set of *ma‘ānī* that serve as the primary objects of their eternally actualized thought. Furthermore, since these divine acts of contemplation are essentially productive, their actuality and perfection impart existence upon the lower orders of reality as a necessary entailment thereof (*lawāzīm*). Avicenna conceives this “act of benefaction” on the part of the benefactor (*ifādat al-mufīd li-ghayrihi fā‘idatan*) as being nothing less than the bestowal of existence.¹²⁵ This involves the successive “imprinting” (*irtisām* or *intiḳāsh*) of the *ma‘ānī* possessed by higher intellectual beings upon the recipient of their acts of causation. It is no surprise that already in *Ilāhiyyāt* VI.5, Avicenna describes efficient causality as the procession of “meaning” (*ṣudūr al-ma‘nā*), although the cosmological basis for this doctrine will only be established in *Ilāhiyyāt* IX.4.¹²⁶

Thus, understanding how intellectual “meanings” residing in active intellects can lead to the existentiation of concrete entities requires us to analyze aspects of Avicenna’s theory of celestial demiurgy in *Ilāhiyyāt* VIII and IX. Turning our attention to this aspect of the Rule of One allows us to clarify how the *ma‘ānī* function as causal factors of efficient causality and how the metaphysician may use them to deduce the nature of the effect. It also allows us to clarify an

¹²⁵ *Ilāhiyyāt* VI.5.38–39, 231 (Cairo, 396). Here, Avicenna describes the bestowal of existence as “the escape from potency to actuality in terms of a *meaning* (*ma‘nā*) that gives the benefit of existence or the permanence of existence” (translation and emphasis mine).

¹²⁶ *Ilāhiyyāt* VI.5.44, 232 (Cairo, 297).

important term in the famous maxim: what does it mean for a single effect to “proceed” (*yaṣḍuru*, *ṣudūr*) from a single unit of causal *maʿānī*?

1.3. Cosmogony and demiurgy: the productive intellection of the divine minds

We have established that the theoretical framework of efficient causality revolves around causal factors inherent in the essence of the agent. However, while these *maʿānī* ground the stability and intelligibility of the causal process, they do not explain how the effect proceeds from the cause. For this, we must turn our attention to the nature of the agent itself.

Given the primary role of active intellects as the efficient causes of existence, our inquiry will begin by examining the first and pre-eminent of them, namely the Necessary Being. In the *Ilāhiyyāt*, Avicenna first establishes the link between Necessary Being and efficient causality in *maqāla I faṣl* 6. In this context, he is mainly concerned with the first-order notions related to existence—in this case the modal categories of the necessary, possible, and impossible of existence—and that among these the necessary is the primary notion that renders the possible and impossible intelligible to the mind.¹²⁷ Along with the essence-existence distinction, the modal categories and the primacy of the Necessary Being constitute the underlying conceptual framework for Avicenna’s ontology. This section also implicitly establishes efficient causality as a principle in metaphysics. This is because the necessary is related to the possible as the cause of the latter’s existence.¹²⁸ But while the necessary of existence is immediately apprehended by the mind as a primary division of the subject-matter of metaphysics, its status as the *cause* of existence is something that is sought-after (*maṭlūb*) in the science. Avicenna would pursue this question in earnest when discussing the nature of the

¹²⁷ For a discussion this point, see Amos Bertolacci, “‘Necessary’ as Primary Concept in Avicenna’s Metaphysics,” in *Conoscenza e contingenza nella tradizione aristotelica medievale*, ed. Stefano Perfetti (Pisa: ETS, 2008), 31–50.

¹²⁸ Michael Marmura, “The Metaphysics of Efficient Causality in Avicenna (Ibn Sina),” 178–183.

Divine Essence in *Ilāhiyyāt* VIII.¹²⁹ What was previously an ontological division of being is now conceived within a theological context as a deity adorned with the attributes of divinity espoused by the *kalām* tradition and the apophatic theology of the *Neoplatonica Arabica*.

In *Ilāhiyyāt* VIII.4, Avicenna establishes how the Necessary Being as God acquires the role of being the First Cause of existence, namely through His status as Pure Intellect. This fundamentally negative attribute stands above the cataphatic attributes of Power (*qudra*) and Will (*irāda*) as the ground of God's creative act. I shall argue that while for Avicenna the act of knowing on the part of the Necessary Being is a function of a negative state, namely the Necessary Being's immateriality and impassivity, it is nonetheless productive of some effect. This productivity, however, occurs as a secondary entailment of the primary intention of the act, which is God's contemplation of the Good that is Himself. The same operating principle applies, *mutatis mutandis*, for the rest of the celestial intellects. Once the necessary connection between divine demiurgy and the act of intellection has been established, we shall see how existence is nothing but the successive articulation of the Divine Mind in concrete realm. We shall also see how through the "impetus" of divine thought the aforementioned causal factors (*ma'ānī*) are activated as principles of differentiation by which the celestial intellects produce the many out of the one.

Avicenna affirms the relatively uncontroversial position that while the Necessary Being is utterly distinct from all existing things, He is the ultimate origin of their existence. However, he asserts the seemingly paradoxical view that it is precisely due to the absolute incommensurability of the Divine Essence—as that whose essence *is* existence—and the negative condition this implies in

¹²⁹ The other context where Avicenna establishes the Necessary Being as efficient cause is of course in *Ilāhiyyāt* IX.4, as we have discussed earlier in this chapter. Here Avicenna focuses on the idea of the Necessary Being as the First Cause of existence.

regard to all positive attributions that He stands as the origin of all things.¹³⁰ In the theological section of the *Ilāhiyyāt*, Avicenna writes:

It has become clear, then that the First has no genus, no quiddity, no quality, no quantity, no ‘where,’ no ‘when,’ no equal, no partner, and no contrary—may He be exalted and magnified—[and] that He has no definition and [there is] no demonstration for Him. Rather, He is the demonstration of all things; indeed, upon Him [is established] clear evidential proofs and that, if you ascertain the truth about Him, [you will find] that, after [the fact] of His individual existence (*al-anniyya*), he is only described by means of negating all similarities of Him and affirming to Him all relations. For things are from Him, and He shares nothing in common with what [proceeds] from Him. He is the principle of all things, and He is not any of the things that are posterior to Him.¹³¹

To show how negative descriptions of the Necessary Being are consistent with the affirmation of “all relations” to Him, Avicenna proceeds to enumerate several divine attributes that serve a double function. Not only do these describe the preeminent uniqueness and transcendence of the Divine Essence, they also imply the possession of some positive relation with other things. The attribute of the Good (*al-khayr*) describes how the Necessary Being is both the object of desire and that which bestows perfection. The attribute of Perfection (*al-tamām*) describes how He is self-sufficient in His essence, requiring nothing external to constitute Himself or to subsist in existence. But this attribute also implies that He is Above Perfection (*fawqa al-tamām*), in the sense that His self-sufficiency entails that He is never jealous of what He possesses absolutely, namely existence.¹³² Thus, He bestows existence upon other things out of pure generosity. The attribute of Truth (*ḥaqq*) also implies two

¹³⁰ *Ilāhiyyāt* VIII.5, 283 (Cairo, 354).

¹³¹ *Ilāhiyyāt* VIII.5.14, 283–84 (Cairo, 354); Marmura’s translation slightly modified.

¹³² On the Neoplatonic background to Avicenna’s discussion on the Necessary Being as “above perfection” (*fawqa al-tamām*) and its significance in his metaphysics, see Robert Wisnovsky, “Final and Efficient Causality in Avicenna’s Cosmology and Theology.”

meanings: both the certain and necessary reality of the Necessary Being, the connection to which the relative obscurity and unreality of contingent beings attain their own existential solidity.¹³³ One attribute in particular, however, stands apart as suggesting both a negative state and an *activity* on the part of the Necessary Being, one that initiates the procession of the created order, namely Intellect (*al-ʿaql*) or Knowledge. The importance of God's status as Pure Intellect can be seen in how Avicenna devotes the bulk of the discussion in *Ilāhiyyāt* VIII.6–7 to the transitive aspect of this attribute. By contrast, the transitivity of perfection, goodness, and truth seems to designate a state that is consequent upon a negative description, rather than an activity that sets off the emanation of the created order. For Avicenna, knowledge, and more specifically self-knowledge, reveals a dynamic aspect of the Divine Essence that cuts through the monadic and faceless divinity of apophasis. As we shall see, it also imbues meaning to the positive attributes of Power, Will, and Life through which a metaphysical principle, the Necessary Being, attains godhood.

For Avicenna, the attribute of Intellect refers to the fact that God's essence is completely disassociated (*mufāraq*) from matter.¹³⁴ Since matter is the principle of potency *par excellence*, being completely removed from materiality would entail that His essence is always in a complete and perpetual state of actuality as Intellect. Having no barrier that would obscure His essence from Himself, He is always imminently present to Himself, activating a situation that Avicenna calls “intellectual perception” (*ʿaql* or *taʿaqqul*).¹³⁵ He writes:

[That] which is free of matter and [its] attachments [and is] realized through existence separate [from matter] is an intelligible for itself (*maʿqūl li-dhātihī*). Because it is in itself an

¹³³ *Ilāhiyyāt* VIII.6.1–5, 283–284 (Cairo, 355–356).

¹³⁴ “The Necessary Existent is pure intellect because He is an essence disassociated from matter in every respect. You have known that the cause that prevents a thing from being apprehended intellectually is matter and its attachments, not [the thing's] existence. As for formal existence, this is intellectual existence through which, if it resides in a thing, intellectual comprehension of the thing comes about” (*Ilāhiyyāt* VIII.6.6, 284; Cairo, 356).

¹³⁵ When Avicenna uses the term *ʿaql* to denote intellectual perception he uses it in as a verbal noun. His use of this term and *taʿaqqul* is interchangeable.

intellect, being so intellectually apprehended by itself, it is intelligible to itself [...] Inasmuch as one considers that its essence is for itself an individual existence (*huwiyya*) that is separate from [matter], it [is capable of] intellecting itself.¹³⁶

Understood this way, intellectual knowledge comes about as a function of the Necessary Being's essentially intelligible existence (*ma'qūl bi-dhātih*). That this knowledge consists primarily and in the first instance of self-knowledge does not detract from the fact that the Necessary Being is a knower in the real sense of the term. This is because for Avicenna "the intelligible (*al-ma'qūl*) is that whose quiddity denuded [of matter] is (the object of knowledge] for some thing, and the one who intellectually apprehends (*al-āqil*) is the one who has [as an object of knowledge] a quiddity denuded [of matter, being an object of knowledge] for some thing."¹³⁷ The implicit definition of intellectual perception is therefore the presence of the quiddity of the object of knowledge in the essence of the percipient agent. Furthermore, since the percipient agent grasps an object of knowledge that is likewise immaterial, universal, necessary, and true, it belongs to the genus of perception that is "intellectual" (*ʿaqlī*); and since the act is nothing but a function of its essential state of being, the percipient agent is a "pure intellect" and possesses an "intellectual existence."¹³⁸

Avicenna cautions, however, that although we may detect the spectre of otherness in His status as "the act of intellect, the agent of intellect, and the object of intellection" (*al-ʿaql, al-āqil, al-ma'qūl*), these terms mutually imply each other at a conceptual level (*al-nisba wa-l-idāfa al-mafrūda fī al-dhihn*) and do not describe a real division within the Divine Essence.¹³⁹ Furthermore, the perfection of this act consists in the fact that God requires no object of knowledge other than the Good, the Perfection, and the Truth that are Himself. If knowledge of other things were necessary for His

¹³⁶ *Ilāhiyyāt* VIII.6.7, 285 (Cairo, 357); Marmura's translation slightly modified.

¹³⁷ *Ibid.*

¹³⁸ *Ilāhiyyāt* VIII.6.6, 284 (Cairo, 356); on God's status as having "intellectual existence", see VIII.7.13, 296 (Cairo, 367).

¹³⁹ *Ilāhiyyāt* VIII.6.10, 286 (Cairo, 358); see also VIII.6.12, 286–287 (Cairo, 357).

acquisition of the attribute, this would entail that the actuality and subsistence of His knowledge depends on the prior subsistence of other things. This would undermine His status as Necessary Being. Thus, the perfection of Divine knowledge is already fulfilled in the act of self-knowledge.

Despite the elegance of Avicenna's formulation of Divine knowledge as a function of the Necessary Being's negative state of immateriality, it is not immediately obvious how "that whose essence pertains to itself is essentially an intellect."¹⁴⁰ Underlying Avicenna's conception of Divine knowledge is a theory of intellection (*ta'qqul*) and perception (*idrāk*) that he establishes in the psychology sections of his various works, in particular *Kitāb al-naḥs* of the *Shifā'*.¹⁴¹ In this work, Avicenna argues that the act of perception, including intellectual perception, consists of an interaction between two essences (*dhātayn*)—i.e., the agent of perception and the proper object of perception—in the percipient faculty of the agent. This interaction leads to a qualitative change (*istiḥāla*) occurring in the essence of the percipient agent in the case of intellectual perception, or the psychic faculty and the pneumatic substrate it uses in the case of sensible and imaginative perception. The exact modality of this change conforms to the native structure of the object of knowledge in question, whether sensible, imaginative, or intellectual. This "moulding" of the substrate by the received object is what Avicenna means when he speaks of the "impression" (*irtisām*) of forms in the percipient substrate. This theory allows Avicenna to maintain a real connection between soul-action that drives the act of perception and the object perceived in the outside world. By showing that external objects in their manifold aspects are reproduced within the percipient faculties and organs of the agent in a way that affects the very "matter" of their existence, Avicenna is able to claim some measure of an ontological contiguity between concrete

¹⁴⁰ "Wa-'lladhī huwa la-hu dhātuhu huwa 'aql bi-dhātihī" (*Ilāhiyyāt* VIII.6.6, 285; Cairo, 356–57).

¹⁴¹ *K. al-naḥs* II.2, 58–67.

entities and their mental “representation” in the percipient faculties.¹⁴² When the object of perception are the sensible qualities of things existing in outside world, this impression amounts to a simulacrum produced in the pneumatic structure of the percipient organs of the agent.¹⁴³ When the objects of perception are the essential and universal features of a concrete thing, what is produced is not a simulacrum, but the conceptualization (*taṣawwur*) of the quiddity (*māhiyya*) into a universal form (*al-ṣūra al-kulliyya*), one that is received in the theoretical intellect. Furthermore, given Avicenna’s adherence to the Peripatetic view that the theoretical intellect is the substrate of universal knowledge, it must accept to the universal form that it perceives.¹⁴⁴ This entails that, at the moment of intellection, the “coordinates” of the intellect must conform to those of the universal form. If the reverse were the case, and it is the intelligible object that must conform to the native structure of the percipient faculty, the former would be “moulded” by the subjective pre-configuration of the percipient faculty. This would lead to a loss of the universal aspect of its intelligible content.

For Avicenna, then, knowledge involves the presence of the object of knowledge *in* the percipient subject. This substantive-representationalist conception of knowledge entails that for most classes of perception a qualitative change is required of the agent, whether in terms of the pneumatic structure of the percipient faculty in the case of *sensibilia* or in terms of successive assimilation of the theoretical intellect into the coordinates of universal forms in the case of

¹⁴² This is the substance of Avicenna’s criticism against three other models of perception outlined in *K. al-naḥs*, II.2, 63–65.

¹⁴³ “[The] forms that are impressed (*munṭabīʿa*) in the bodily matter obtain only as simulacra (*ashbāh*) of particular entities that are divisible, and that each part of the [sensible forms] has a relation, whether in actuality or in potentiality, to the part of [the divisible bodily matter]” (*K. al-naḥs* V.2, 214).

¹⁴⁴ For the famous Aristotelian doctrine see *De anima* 3.5, 430a10-25. As Avicenna puts it succinctly in the *Taʿlīqāt*, 579: “The senses (*al-hiss*) refers to sensible perception, intellect (*al-ʿaql*) refers to intellectual perception, that is, the impression of the intelligible form in the intellect, which is the very act of perception (*naḥs al-idrāk*), in the same way that the impression of the object of the senses in the senses is the very act of perception. Thus, if something is conceptualized in the intellect, then its very realization in the intellect is the intellect itself (*naḥs al-ʿaql*).”

intelligibilia. As for purely immaterial entities whose intellects are in perpetual actuality, no additional form subsisting in their essences is needed for them to acquire the status of being an intellect. This is because by the simple fact of their existence, they already possess an object of knowledge—namely themselves—whose presence in their essences automatically activates the event of intellectual perception. Furthermore, unlike human intellects, which acquire abstract and universal forms in successive order through the process of abstracting sensible and imaginative forms, immaterial and separate entities are already abstract forms that are essentially intelligible (*maʿqūlatan bi-dhātihī*). Thus, they never transition to *acquire* the status of being an intellect. They are essentially intellectual beings. As Avicenna writes in the *Najāt*:

Anything that is essentially separate from matter and accidents is essentially intelligible. The First is separate from matter and material accidents. Thus, insofar as it is a being (*huwiyya*) that is separate [from matter], it is an intellect (*ʿaql*); insofar as we consider it in terms of its individual existence that is essentially separate, it is an intelligible (*maʿqūl*); insofar as we consider its essence (*dhāt*) as possessing a separate individual existence, it is an agent intellecting (*ʿāqil*) itself.¹⁴⁵

By the statement that “anything that is essentially separate from matter and accidents is essentially intelligible,” Avicenna intends to emphasize the possibility that an abstract form may be intelligible to other percipient agents as well as to itself. Nothing necessitates that an abstract form be intelligible only to something other than itself—although the latter is certainly the more common understanding (*mashhūr*) of the act of intellection.¹⁴⁶ However, when the abstract entity in question already possesses an individual existence (*huwiyya*) in concrete reality and consequently does not need to inhere in a separate percipient subject for its subsistence, it automatically has itself as an

¹⁴⁵ *Najāt*, 587. See the parallel source-passage in *Ilāhiyyāt* VIII.6.9–11, 285–86 (Cairo, 358).

¹⁴⁶ *Najāt*, 588; *Ilāhiyyāt* VIII.6.9–10, 285–86 (Cairo, 357–58).

object of intellection (*maʿqūl*), for the conditions for the emergence of self-knowledge has already been fulfilled. Furthermore, since such an entity has itself as an object of knowledge, it is essentially an intellect in act (*ʿaql bi-l-fiʿl*), and this implies that it is also essentially an agent of intellection in act (*ʿāqil bi-l-fiʿl*). These three aspects of simultaneously being an object, subject, and activity of intellection form a self-sustaining cycle of reciprocity that is distinct and divisible only in conception, but not in reality.¹⁴⁷ And since the class of entities that are perpetually actual and separate from matter include not only the Necessary Being but also the celestial intellects, these too possess an “intellectual existence” and are likewise designated as Active and Pure Intellects.¹⁴⁸

There is another reason why Avicenna thinks that the primary mode of intellection on the part of the Necessary Being and celestial intellects consists of self-knowledge. In Avicenna’s substantive-representationalist conception of knowledge, the perception of other things in their essential or accidental features—that is, as *intelligibilia* or *sensibilia*—would require that the substance of the percipient faculty be impacted and transformed in accordance with the representational content of object of knowledge. Thus, to gain knowledge of something is *prima facie* to be in a state of passivity and potency; passivity because the agent is impacted by the impression of forms through which the event of perception arises; potency because prior to the acquisition of the form, the agent is not yet perceiving since the object of knowledge has yet to stir the pneumatic or intellectual structure of the percipient faculty. This species of knowledge is what Avicenna designates as “passive knowledge” (*al-ʿilm al-infīʿālī*).¹⁴⁹ However, in the case of purely immaterial entities that are unattached to matter, perception must occur in such a way as to preserve their impassivity,

¹⁴⁷ *Najāt*, 590; *Ilāhiyyāt* VIII.6.12, 286 (Cairo, 358).

¹⁴⁸ *Taʿlīqāt*, 285: “[The Creator and Intellects] are intelligible (*maʿqūl*), because they are not perceived by means of an organ. When the intelligible is realized in a thing, that thing becomes an intellect. Now the Creator and the Intellects are perpetual of existence, thus anything that it intellects would be perpetual of existence, because it is [now] a form that belongs to their [perpetual] act of intellection.” On the same point, see also *ibid*, 202 and 276. On the idea “intellectual existence,” see *ibid*, 205–206.

¹⁴⁹ *Taʿlīqāt*, 12–13, 168, 583–84.

simplicity, and pure actuality. As we have seen, self-knowledge fulfills these conditions: neither does it imply divisibility and changeability in the percipient agent, nor does it imply the *acquisition* of knowledge that would, in turn, imply a prior state of potency on the part of the divine minds. Finally, and in the specific case of the Necessary Being, self-knowledge banishes any semblance of dependency upon external objects as the source of this knowledge. These implications, especially the last, would otherwise compromise God's status as the Necessary Being.

As for other immaterial and separate entities whose essence is not existence, namely the celestial intellects, this requirement of self-sufficiency is not an absolute one, because they owe their existence to an external cause, the Necessary Being. Their contingent status relative to their cause implies some manner of plurality in their existence, one that diminishes the simplicity of their knowledge. First, unlike the Necessary Being, their self-knowledge does not consist of a single act of intellection. Avicenna argues that they perceive themselves in two different aspects: as that which is contingent in itself (*mumkin bi-dhātihī*) and also as that which is necessary through another (*wājib bi-ghayrihī*). Furthermore, since knowledge of themselves as necessary through another entails the perception of an external entity that governs their existence, and since this entity is already intelligible in itself (*ma'qūl bi-dhātihī*), they must also possess this entity as an object of their intellectual contemplation. However, despite this contingency on the part of the celestial intellects, and the plurality it implies with regard to its existence, the modality of their act of cognition must still occur in such a way as to preserve their status as divine entities endowed with an essence that is simple, impassive, and perpetually active.¹⁵⁰ To this end, Avicenna argues that the plurality of

¹⁵⁰ These characteristics were already demonstrated by the results of the inquiry in *Ilāhiyyāt* IX.2–3, which established the celestial intellects' role as unmoved movers of celestial bodies, and by the inquiry in *Ilāhiyyāt* IX.4, which stipulates that from a cause that is absolutely one only an effect that is likewise one may proceed—that is, *via* our Rule of One.

their intellectual knowledge emerges as a necessary consequent (*lāzim*) of their essences, rather than being an internal feature thereof. He writes:

No plurality is possible in the separated intellects except in the manner I state, [which is as follows:] The effect in itself is possible of existence and, through the First, is necessary of existence. Its necessary existence consists in its being an intellect. It apprehends itself intellectually and necessarily apprehends the First intellectually. Hence, there must be in it, by way of plurality, the meaning [(a)] of its intellectual apprehension of its essence as being, within its own bound, possible of existence; [(b)] of its intellectual apprehension of its necessary existence, through the First, that intellectually apprehends itself; and [(c)] of its own intellectual apprehension of the First. The plurality it has is not [acquired] from the First. For the possibility of its existence is something that belongs to it in itself, not by reason of the First. Rather, from the First it has the necessity of its existence. Then the plurality, in its intellectually apprehending the First and intellectually apprehending itself, is a necessary consequence of its necessary existence from the First.¹⁵¹

In this passage Avicenna argues that the plurality attributed to the celestial intellect emerges because it has become the object of its own intellection. Only then do the distinct considerations or “meanings” (*ma‘ānī*) regarding the state of its existence emerge, i.e., that it is necessary through another and contingent in itself. For this reason, Avicenna argues that the plurality inherent in the

¹⁵¹ *Ilāhiyyāt* IX.4.10–11, 330 (Cairo, 405–06). In the *Ta‘līqāt*, 282, Avicenna writes: “It has been elucidated by necessity that the necessary of existence in itself is one in all aspects and that existents proceed from Him in the manner of necessary entailment (*‘alā sabīl al-lawāzim*); [it was also established] that the one insofar as it is one necessitates only one thing. [We have also established that] matter (*al-hayūlā*) cannot possibly exist without form. Rather, it is necessary that [matter] exists by mediation of form and that corporeal form cannot be the cause of the existence of matter, of soul, or of the body. [We have also established that] what is singular in essence must be an intelligible form that is not mixed with matter, [the result of which is] that the First intellect cannot possess a plurality except in the way just mentioned, namely that it is possible in itself, necessary through the First and intellecting the First [...] The plurality with respect to bodies is not like the plurality in regard to intellects, [whose plurality] is on account of its concomitants, which is its contingency of essence, necessity on account of the First, and intellection of the First.”

intellect's self-knowledge and in the consequent perception of the Necessary Being (as its cause) is merely a concomitant aspect (*lāzim*) of the essence and is therefore external to it.¹⁵² This plurality of thought is necessary, because a pure intellect is inherently intelligible and must have itself as an object of knowledge—as we have seen above. But it is external, because the distinct meanings do not characterize the constitutive aspects of the quiddity (*muqawwimāt*); rather they simply articulate the content of its act of intellection.

However, even if these distinct acts of intellection are deemed “external” to the essence, the resulting plurality of the objects of knowledge should render their essences essentially passive and divisible, given what we have learnt regarding the nature of intellectual knowledge in Avicenna's substantive-representationalist theory of perception. The essence of the separable intellect must either assimilate into each of the three “meanings” above simultaneously, which would render it divisible, or in succession, which would render it changeable.¹⁵³ Furthermore, if it apprehends the three objects in succession, at any given state it would be only have *potential* knowledge of the two meanings that it is not presently contemplating. Thus, even with the provision that this plurality is concomitant to the essence, Avicenna's claim that celestial intellects perceive a plurality of intelligible meanings while remaining perpetually actual, simple, and impassible is still open to serious doubt.

The solution to this problem lies in the special mode of intellection that characterizes the celestial intellects and the Necessary Being. That is, knowledge possessed by these entities is not something they *receive* in their essences; rather their knowledge is necessarily “exteriorized” into the concrete realm as a necessary entailment of the act. Avicenna designates this mode of knowing as

¹⁵² See the definition of *lawāzim* and its relationship with the quiddity in *Ilāhiyyāt* VI.3.6, 207 (Cairo, 270).

¹⁵³ In Peripatetic and Avicennian theory of intellection, where—as we have seen—the intellect must become the intelligible form it perceives, perceiving two or more distinct intelligible meanings at the same time would entail that the intellect is *P* and not-*P* at the same time, which is a contradiction. Thus, the only reliable model for our hypothetical case is that the perception of the three meanings must occur in succession.

“active” knowledge (*al-ʿilm al-fīlī*) and contrasts it with the “passive” knowledge possessed by hylomorphic entities such as human beings. In fact, he advocates for the more enigmatic doctrine that the essentially productive knowledge of separate intellects is the default ontological state of any intellectual entities.¹⁵⁴ Even human beings are capable of immediately exteriorizing thought into the realm of concrete existence, though only to the extent permitted by the fact that they are accidentally bound to matter.¹⁵⁵ The underlying structure upon which existence unfolds from the First Principle is dependent on the intrinsic contiguity between Mind and Being. It is through this productive aspect of Divine knowledge that the Necessary Being acquires its status as the First Cause of existence and the celestial intellects acquire their demiurgic function—yet inhabiting their respective offices in a way that maintains their complete transcendence from the effects they necessitate, preserving the divine qualities of impassivity, pure actuality, and simplicity.

While the theory of active knowledge is already fully developed in Avicenna’s middle works such as the *Ilāhiyyāt* and the *Najāt*, the explicit formulation of the term “active knowledge” (*al-ʿilm al-fīlī*) occurs only in the *Taʿlīqāt* and *Mubāḥathāt*.¹⁵⁶ In the first two works, Avicenna develops the idea of essentially productive intellection as part of his extended discussion of the Necessary Being’s

¹⁵⁴ Thus, “active” knowledge necessarily implies “efficient” knowledge. Both terms can serve as a translation of *al-ʿilm al-fīlī*. However, I will use the term “active knowledge” consistently in this dissertation. “Active knowledge” would have served well for *al-ʿilm al-fāʿilī*. However, I did not find Avicenna using this term when discussing the doctrine of productive intellection.

¹⁵⁵ Only a limited class of human intellects are capable of this kind of immediacy in producing action from a state of contemplation, namely prophets, mystics, and to a lesser extent theoretical philosophers. Greater perfection of the human being depends on their capacity to minimize the gap between thought and act in a way that is in complete harmony with one’s will. Most, however, require deliberation (*tafakkur*) of the object of contemplation, coercion by a higher authority, and the careful acquisition of the material means to enact thought in the concrete world, whether this be in terms of moral action, craftsmanship, industry, or legislation. For the celestial intellects, the two acts are mutually necessitating and self-motivated. In Neoplatonic terms, thought is the fruit of reversion, action the fruit of procession.

¹⁵⁶ *Taʿlīqāt*, 12–13, 168, 583–84; *Mubāḥathāt* §844–45, 299–300. Another late work, the *Ishārāt*, also establishes the notion of productive intellection without, however, giving a name to it. See *namaʿ* 7, pg. 182.

knowledge of particulars.¹⁵⁷ In a formulation that would be repeated in his various works, Avicenna writes in *Ilāhiyyāt* VIII.7 that since God is simple and thus cannot be subject to the successive arrangement and differentiation of intelligible forms in the manner similar to human intellects,

He intellectually apprehends things in one fell swoop (*dafʿatan wāḥidatan*), without being rendered multiple by them in His substance, or their becoming conceived in their forms in the reality of His essence. Rather, their forms emanate (*tufīḍu*) from Him as intelligibles (*maʿqūlatan*). He is more worthy to be an intellect than the forms that emanate from His intellectuality (*ʿan ʿaqliyyatihi*). Because He intellectually apprehends His essence, and because He is the principle of all things, He apprehends [by] His essence all things.¹⁵⁸

In the discussion following this passage, Avicenna offers examples to illustrate the difference between the passive knowledge of human intellects and the essentially emanating knowledge of the Necessary Being. The first is knowledge of astronomical phenomena, which is “taken from existence (*maʿkhūḍha min al-wujūd*).” Knowledge of the celestial entities and their regular motion depends on observation of these entities. In the order of existence, astronomical theories are posterior to the existence of these objects and depend upon the fact of their existence for their

¹⁵⁷ There are two distinct aspects of God’s mode of knowledge that are often treated as a single issue: God’s knowledge as essentially productive of other things and God’s knowledge of things other than Himself. In the *Ilāhiyyāt* and the *Najāt*, Avicenna seems to be preoccupied with the latter question. However, I consider the productive aspect of effective intellection to be the more basic metaphysical doctrine. Indeed, I would argue that the issue of “God’s knowledge of particulars” does not directly proceed from the metaphysical inquiry into His primary mode of knowledge. Rather, it becomes a question only *after* the metaphysician has assumed that things other than the Divine Essence are already existing. Only after this *a posteriori* consideration does the issue of God’s knowledge of His effects become a question to be dealt with. Furthermore, when read carefully, the context of the inquiry in *Ilāhiyyāt* VIII.7 is dialectical; Avicenna is responding to a question from a hypothetical opponent, that is, whether his decisively apophatic theology would allow for God to have knowledge of Zayd doing something specific at some contingent place and time. Avicenna proceeds to describe how this is possible within the limits of his metaphysical principles. By contrast, the context of the discussion on God’s productive knowledge is *demonstrative*, in that it derives immediately from the metaphysician’s inquiry into the nature the Divine Essence. In relation to this, the question of God’s knowledge of particulars is a corollary problem. In later works such as the *Ishārāt* this conceptual order is more explicit; while in the *Taʿlīqāt*, Avicenna discusses the two issues as separate items, though the connection between them remains closely placed, at least in the recension of the work available to us. The reason why the two issues are often conflated is the influence of Ghazālī polemics, which has had the effect of exaggerating the importance of “God’s knowledge of particulars” in Avicenna’s metaphysics. Of course, in relation to the history of Islamic philosophy, its prominence is well-deserved.

¹⁵⁸ *Ilāhiyyāt* VIII.7.1, 291 (Cairo, 362–63); translation modified. See also *namaṭ* 7 of the *Ishārāt*, 181–82.

acquisition in the mind. This acquisition of *intelligibilia* and *sensibilia* from the external world is how Avicenna defines perception and knowledge in his *De anima*. This is contrasted with knowledge of a builder, whose intellectual knowledge of the structure of the building “moves” the organs to “bring it into existence.”¹⁵⁹ In this mode of knowledge, the priority of the form of the building in the mind is not only a logical priority that pertains to any true theoretical conception of some event or object; rather the priority is also in terms of existence. Only after the form exists in the mind is the object enacted in the external world. Furthermore, since this mode of knowledge does not require the use of organs to actualize, nor does it require the successive impression of intelligibles, but occurs in one fell swoop (*dafatan wāhidatan*), Avicenna designates this effective knowledge as nothing less than the Divine Command itself: *kun! fa-yakūn*.¹⁶⁰

We must note, however, that Avicenna’s argument is not that since the Necessary Being does not acquire knowledge passively, He must therefore possess active knowledge that is productive of the “objects” of His thought. These are not contradictory propositions, since a third logical alternative remains, namely that God knows Himself in a completely solipsistic way, completely self-contained without any transitivity and otherness implied in the act.¹⁶¹ As a result, the mere negation of passive knowledge does not necessarily affirm the claim that Divine self-knowledge is necessarily productive of other things.

Rather, Avicenna’s doctrine of divine active knowledge demands recourse to another set of premisses. The *first* is mentioned in the passage above, namely that the Necessary Being is the principle or cause of all things. Avicenna argues that since God possesses true knowledge of His

¹⁵⁹ *Ilāhiyyāt* VIII.7.2, 291 (Cairo, 363)

¹⁶⁰ *Ta’līqāt*, 580.

¹⁶¹ In the *Ta’līqāt*, Avicenna offers examples of human knowledge comparable to divine active knowledge, but which is not necessarily productive of other things: “This is like reading a book and then you are asked whether you know the contents of the book, and you say yes. You know with certainty that you know it and you are capable of describing in detail. The simple intellection is something like this” (351). See also *ibid*, 168.

essence, He must have knowledge of His effects as a “secondary intention” of His self-knowledge.¹⁶² This inference holds, because of two assumptions. The first is that God is as the ultimate cause of all existing things, and so His self-knowledge must also include knowledge of His status as the supreme cause.¹⁶³ The second is the epistemic principle that knowing the cause implies knowledge of the effect.¹⁶⁴ However—and this is the *second* premiss for Avicenna’s theory of productive knowledge—these objects of knowledge cannot inhere in the Divine Essence as distinct intelligibles, since this would entail a divisibility, potency, and dependency that are impossible for the Necessary Being.¹⁶⁵ These objects of knowledge must therefore be exteriorized as necessary concomitants (*lawāzim*) of His essential act and must possess an existence separate from the essence of the percipient agent.¹⁶⁶

¹⁶² In the *Ilāhiyyāt*, Avicenna marshals this notion of “second intention” only in *Ilāhiyyāt* IX.3.5–16, where he discusses the nature of circular motion and how this act is a secondary entailment of the celestial soul’s primary act of desiring and imitating its intellectual principle. He wants to maintain the claim that the celestial soul is not oriented towards the lower orders of existence but is oriented primarily towards its intellectual cause. The fact that it causes celestial motion is an accidental feature of the act. Only in the *Ta’līqāt* do we find Avicenna explicitly invoking the idea of second intention when discussing the inherent efficiency of the Divine knowledge and Divine will: “He desires His essence, and His essence is the principle for the arrangement of the good. Thus, the arrangement of the good is desired by him through a second intention” (186–87). As we shall see below, God’s knowledge of His Essence is convertible to the recognition that He is the ultimate Good and object of His own desire (*mā shūq*).

¹⁶³ *Ilāhiyyāt* VIII.6.13, 287 (Cairo, 358–59). In this section, Avicenna presents the argument why God has knowledge of particulars *qua* universals. The idea that knowing the cause of an effect necessarily implies knowledge of the effect as a secondary intention of the act is a central premiss to the argument. The example of the eclipse is a popular Peripatetic illustration that Avicenna also adopts (*Ilāhiyyāt* VIII.6.19, 289; Cairo, 361); see Peter Adamson, “On Knowledge of Particulars,” *Proceedings of the Aristotelian Society* 105 (2005), 280.

¹⁶⁴ We cannot delve into the principle that knowing the cause implies knowing the effect; but suffice to say that it is based on Avicenna’s doctrine of the “true efficient cause” in *Ilāhiyyāt* VI. Given the principle of compatibility (*munāsaba*) between the cause and effect, which states that the structure of the effect must mirror at some level the native structure of the essence of the true cause, then knowledge of the essence of the cause must entail knowledge of the basic paradigm of all possible effects proceeding therefrom. If a skilled metaphysician can discern this causal structure, it must be even more apparent, as it were, to the Divine Mind.

¹⁶⁵ Again, this inference assumes Avicenna’s substantive-representationalist theory of perception.

¹⁶⁶ “Nor should it be thought that, if the intelligibles with Him have forms and multiplicity, the multiplicity of the forms He intellectually apprehends would constitute parts of His essence. How [can this be] when they are posterior to His essence? For His intellectual apprehension of His essence is identical with His essence; and of [His essence] He intellectually apprehends everything posterior to Him. Hence, His intellectual apprehension of His essence is the cause of His intellectual apprehension of what is posterior to His essence. Thus, His intellectual apprehension of what is posterior to His essence is the effect of His intellectual apprehension of His essence. The intelligibles and concepts, however, which He has posterior to His essence are intellectually apprehended in the manner of intellectual intelligibles, not [in the manner of things apprehended] by the soul. With respect to them, He has only the relation of the principle from which [something] proceeds, not [of something] in it” (*Ilāhiyyāt* VIII.6.4, 292; Cairo, 364). This

In the *Ta'liqāt*, Avicenna offers another version of the same argument that infers the principle of exteriority from the premisses of God's indivisible essence and His knowledge of Himself as the principle of all things. This time, however, he focuses on the simplicity of Divine knowledge (*al-ʿilm al-basīṭ*) to show how the stages of divine self-knowledge, His knowledge of His essence *qua* transitive principle, and the subsequent procession of existents in the concrete realm form a transcendent singularity that is only divisible in conception, but not in reality. He writes:

The First intellectually essentially perceives His essence as it truly is (*ʿalā mā hiya ʿalayh*), namely, as the principle of all existents, [perceiving thereby] that [these existents] follow necessarily on account of Him (*lāzimatun la-hu*) in a simple act of intellection (*ʿaqlan basīṭan*). Thus, he does not intellectually perceive His Essence first and then perceive that He is the principle of existents. For this would mean that He intellectually perceives His essence twice. Rather *His very act of intellectually perceiving [these existents] is their very existence from Him [...]* The state of intellectual perception of the First is not like the state in our intellectual perception. This is because, He does not need to intellectually perceive that he Had perceived His Essence as a principle of existents. This is because He intellectually perceives this in a simple manner (*basīṭan*) and in a way that apprehends the essential aspect of the matter (*ʿalā mā ʿalayh al-amr*) in existence. He does not intellectually perceive it syllogistically. Otherwise, a vicious cycle will ensue, whereby He would intellect His essence as a principle and intellect that He intellects His essence as a principle [and this is absurd].¹⁶⁷

forgoing argument for the exteriority of God's knowledge can be found in summary form in a cluster of "admonitions" and "pointers" in *namaʿ* 7 of the *Ishārāt*, 181–82.

¹⁶⁷ *Ta'liqāt*, 459–60. The idea that God's knowledge constitutes the very existence of the created order and that this knowledge is inseparable from the Divine's act of being is a constant pre-occupation in the *Ta'liqāt*, where Avicenna devotes much thought and clarification to the issue; see 114–15, 118, 151, 169, 149, 455, 463–64, 466–67, 477–78, 577–78, 579, 581–82.

In this perspective, the three stages of the cosmogonic process—from the simplicity of Divine self-knowledge to His self-knowledge *qua* principle to the procession of existents in the concrete realm—are divisible only in conception, specifically that of the human metaphysician. Furthermore, the passage also suggests that any divisibility and differentiation implied in the very *content* of God’s knowledge of Himself *qua* principle, which contains secondary knowledge of the universal hierarchy of the created realm, must be exteriorized as a function of God’s simplicity.¹⁶⁸ The same principle of exteriority can be said, *mutatis mutandis*, with respect to other active intellects, such as the celestial intellects.¹⁶⁹ The central difference between them is that the Necessary Being produces only a single effect as the direct consequence of his active knowledge, whereas the celestial intellects produces at least three.¹⁷⁰

Thus, Avicenna conceives Divine knowledge as the very inversion of the knowledge possessed by hylomorphic beings. If intellectual perception for hylomorphic beings involves a state of passivity whereby the intellect becomes constituted (*muqawwam*) by the intelligibles that inhere in it,

¹⁶⁸ This notion is more explicitly stated in the *Mubāḥathāt* and the *Ta’līqāt*. In the former, Avicenna explicitly describes this mode of cognition as “active knowledge” (*al-ilm al-fi’lī*): “The simple intellect [existing] in the First is His [very] essence. This is distinct from the simple intellect [existing] in us. For in the same way that our simple intellect necessitates (*yalzamu*) the realization of many differentiated intelligibles (*al-ma’qūlāt al-mufaṣṣala*), so too does the simple intellect [existing] in the First—which is [none other than] His Essence—necessitate [the realization of] differentiated intelligibles as its concomitants (*lawāzimuhu*). However, these concomitants are ‘aspects’ (*ḥay’āt*) of the First not in a manner of passivity (*infī’ālī*), but in a manner of activity (*fi’lī*)” (§844, 299). Even more vividly, Avicenna writes in the *Ta’līqāt* that simple entities (such as the Necessary Being and celestial intellects) are never mere “receivers” of anything, rather “insofar as they receive they enact”: “When you grasp that the reality of the First is in one way and His concomitants is in another, the meaning becomes clear: there is no multiplicity in Him. He is not a receiver and doer at the same time. Rather, insofar as he is receiving (*al-qābil*) he is enacting (*al-fā’il*). This status (*ḥukm*) is uniform with respect to all simple things. The reality of [the simples] is that concomitants proceed from them [as concomitants]. These concomitants [exist] in their essences, but only insofar they enact them when they receive [them]. In regard to the simple, what is “from it” (i.e., from the doer or agent) and what is “in it” (i.e., in the receiver) is a single thing. There is no multiplicity in it. Another scenario is impossible for it. As for the complex, “what is from it” is other than “what is in it”, for there exists multiplicity in it” (546–47).

¹⁶⁹ In the *Mubāḥathāt*, Avicenna explicitly states that celestial intellects’ mode of knowledge is also essentially productive: “Surely, we know that the intelligibles [possessed by] the active intellects (*al-‘uqūl al-fa’āla*) do not inhere in them (*taḥalluhā*); rather they enact them [into existence] (*bal tafāluhā*)” (§197, 96). The same point is made in *ibid*, §767, 262. See also the passage from the *Ta’līqāt* in the previous note.

¹⁷⁰ While the triadic structure of emanation represents the core emanative structure of a given celestial intellect, it does not exhaust the range of its causal efficiency. One notable example is the Active Intellect, which produces all sublunary species-forms. In Chapter 1.5, we shall discuss why the triadic structure does not represent a limit, but simply describes the architecture of the celestial realm.

intellectual perception for pure intellects that are completely abstracted from matter (*mujarradāt*) is inherently productive of its object of knowledge, which is exteriorized as a concomitant entailment (*lāzim*) of the act.¹⁷¹ As a result, despite being derived from the essence, the plurality, passivity, and potency that characterize the created order do not affect the Necessary Being and the rest of the active intellects, which remain completely transcendent from the entities they create.¹⁷²

Let us take stock of the argument so far. We have seen how the Necessary Being and the celestial intellects possesses a mode of cognition that is inherently productive of its content. The doctrine of “active knowledge” is based on the premiss that active intellects are perpetually actual, indivisible, and impassive entities. As such, the content of their knowledge cannot exist as intelligibles that inhere in their respective essences—a “passive” mode of knowledge that characterizes the intellect of hylomorphic entities, i.e., human beings. Rather, the content of their knowledge is exteriorized in the realm of concrete existence. For this reason, the concrete realm can be accurately described as a phenomenology of the divine minds.¹⁷³ In the case of the Necessary Being, this mode of

¹⁷¹ “The concomitant (*al-lāzim*) is that which is necessarily ascribed to a thing after ascertaining the inner reality of its essence in that it follows the essence and is not internal to its reality [...] The constituent (*al-muqawwim*) and the concomitant share in the fact that both are inseparable from the thing. The concomitant and the accidental (*al-ʿarīḍ*) share in the fact that both are external to the inner reality of the thing and attach to it after [the fact of its existence].” (*Maṭīq al-mashriḳīyyīn*, 14). Elsewhere, Avicenna writes: “The concomitant is what necessarily follows a thing since it does not constitute that thing (*lā yuqawwimu al-shayʿa*). All concomitants are like this, that is, it follows necessarily from their source given what it is [essentially]” (*Taʿlīqāt*, 543).

¹⁷² “The concomitants of the First proceed from Him, they are not realized (*hāṣila*) in Him. As a result, He is not subject to the plurality [of the concomitants]. Since He is their principle, they do not occur upon Him from the outside. The meaning of concomitant is for something to be necessitated from another without intermediary, or for something to necessitate another without intermediary. Since the First is the principle of its concomitants, they necessarily follow Him by means of procession (*lāzimatan ʿanhu ṣādiratan*). [They] do not necessarily follow Him from some other thing that is realized in Him. His attribute (*ṣifātuhu*) is that they are necessitated by His essence in such a way that they proceed from Him, and not in the way that they are realized in Him. Thus, He is not subject to multiplicity on account of them, and He is their necessitating cause [...] The reality of all concomitants is that they follow a thing on account of what the thing is in itself” (*Taʿlīqāt*, 543–44).

¹⁷³ The phrase is from Henry Corbin, who describes Avicenna’s cosmogony as “une phénoménologie de la conscience angelique” (*Avicenne et le récit visionnaire*, 69, 328, 333). Yahya Michot in *La destinée de l’homme* (58–102) has described Avicenna’s account of creation as a “métaphysique de l’épiphanie” (specifically in 99, 201, 210–11). He describes the cosmogonic process as a succession of intellectual “auto-structuration” propelled by God’s self-knowledge and the

cognition consists of its knowledge itself. From this singular act, a single entity proceeds as the concomitant entailment thereof, namely the First Intellect. In the case of the celestial intellect, at least three distinct acts of intellection can be discerned by the metaphysician: its knowledge of itself as contingent in itself, as necessary through another, and its knowledge of its cause, namely the Necessary Being. This leads to the procession of three distinct entities, respectively a celestial body, a celestial soul, and another celestial intellect. This process continues until the final emanations of the Active Intellect governing the sphere of the earth. Furthermore, we have seen that for Avicenna God's knowledge of Himself provides the basic paradigm and impetus for this progressive unfolding of concrete reality. This is because His self-knowledge implies knowledge of Himself as the principle of all existing things, which in turn implies secondary knowledge of the created order in their distinct articulations (*al-ma'qūlāt al-mufaṣṣala*). Given the principle of active knowledge, these too must be exteriorized as necessary entailments of Divine self-knowledge. It is within this "initial" phase of exteriority that the rest of the celestial intellect acquire their demiurgic function. Their respective capacities for essentially productive knowledge operate under the universal scheme enacted by God's secondary knowledge of concrete reality.

The theory of active knowledge on the part of divine beings allows us to clarify what the term *yaṣḍuru* ("proceeds" or "emanates") in the Rule of One implies. Firstly, "procession" or "emanation" describes the unique mode of causal efficiency possessed by the Necessary Being and the active intellects. Given our discussion in the previous subchapter, productive intellection is the very mechanism of efficient causality. This is because Avicenna restricts "true efficient cause" to

celestial intellects' contemplation. Michot develops a compelling notion of subjective ontology, namely that individual intellects, including the human intellect participate in the production of the various spheres of existence through their participation (*tashabbuh*) in the activity of the Divine principle. This subjective aspect adds depth and multi-dimensionality to an "objective ontology" based on efficient causality. Though Michot's discussion is speculative and does not discuss the theory of productive intellection on the part of the Necessary Being and the celestial intellects, he offers the readers a conceptual framework and a set of terminologies that describes one of the most obscure aspects of Avicenna's thought in a compelling and coherent manner.

the Necessary Being and the active intellects. Secondly, the ontological structure of this mode of causality conforms to the quiddity-concomitant structure of existence. Since the procession of the effect is directly linked to the very essence of the cause, this structure guarantees (1) the necessity of the causal procession once the cause's existence is granted, (2) the immediacy and perpetuity by which the effect is enacted into being (given the perpetual actuality of the cause), and—as we have seen in the previous discussion on *Ilāhiyyāt* VI.3—(3) the intelligibility and coherence by which the procession takes place. Indeed, Avicenna restricts the term *fayḍ* (“emanation”) to causal processes that observe this structure, which, again, is the sole privilege of the divine minds.¹⁷⁴

Now, one more aspect in Avicenna's theory of “emanation” needs to be discussed, which I call the “principle of excellence.” In Chapter 1.2, we discussed how the procession of a celestial body, a celestial soul, and a celestial intellect derives from the First Intellect's perception of itself as a contingent being, of itself as a necessary being but through another, and of its cause, respectively. Avicenna writes that this determination on his part was guided by the rather enigmatic principle that “the most excellent (*al-aḥḍal*) follows the most excellent in a variety of aspects.”¹⁷⁵ This principle seems to allow the metaphysician to deduce the *nature* of the effect from what he knows of the essential aspects of the cause. This is distinct from the Rule of One, which allows him to deduce the *number* of the effects from what he knows of the nature of the cause. Without understanding the metaphysical basis of this principle of excellence, our knowledge of Avicenna's cosmogony and emanation theory in *Ilāhiyyāt* IX.4 would remain incomplete.

The principle of excellence is based on Avicenna's metaphysics of final causality. More specifically it is based on the claim that being an efficient cause and being a final cause are mutually

¹⁷⁴ “Emanation (*fayḍ*) is used only with respect to the Creator and with respect to the intellects, nothing more. This is because the procession of existents from Him is by way of necessitation of concomitants (*lawāzim*), not by a will that follows some goal, rather on account of His essence, and their procession from Him is perpetual without obstruction or burden that attaches in this [act]. It proper [then] to call this emanation” (*Ta'liqāt*, 271).

¹⁷⁵ *Ilāhiyyāt* IX.4.12, 331(Cairo, 406)

entailing aspects of the Necessary Being.¹⁷⁶ The key concept in final causality is, of course, the “good,” since the good is that for the sake of which some action is undertaken. In the case of God, the action we speak of is His essential act of self-perception. The idea that God perceives the ultimate good that is Himself and derives pleasure from this act of contemplation is a well-established Peripatetic doctrine and is discussed extensively in Avicenna’s middle works, such as the *Ilāhiyyāt* and *Najāt*.¹⁷⁷ It is based firstly on God’s unique status as that whose existence is necessary in itself. If God’s existence is completely self-sufficient, exhibiting no shadow of contingency or non-existence, and if existence is that which what is desired in itself, then He is the most perfected object of desire, that is to say, the “pure good.”¹⁷⁸ Furthermore, since the Necessary

¹⁷⁶ Wisnovsky describes this feature of the Godhead as a “closed loop” of efficient and final causality: “Final and Efficient Causality in Avicenna’s Cosmology and Theology,” 111. He argues that the conceptual compositeness implied in this mutual entailment, one that Avicenna inherited from the Greek Neoplatonists, led Avicenna to insist on the primacy of the term the *wājib al-wujūd bi-dhātihī* (“that which in itself is necessarily existent”) as the core description of the Divine Essence. My analysis approaches the issue from a different angle. From the perspective of reconstructing Avicenna’s theory of cosmogony and emanation, God’s status as the Necessary Being is not so much a solution to the problem of compositeness implied in His status as both final and efficient cause as it is a premiss for their mutual entailment. See the following order of considerations Avicenna offers when trying to resolve the possible compositeness of this “closed loop” of efficient and final causality: “Insofar as He is a good He is an end (*khayrum ghāyatun*), and insofar as He is a principle He is an agent (*mabdaʿun fāʿilun*). Both [designations refer to] a single thing, except that they differ in terms of relation and mental considerations (*bi-l-idāfāt wa-bi-l-ʾitbārāt*). Thus, it is necessary that He intellectually perceives that He is the Necessary Being and that He is a principle, that He is good, that He is an end, that He is an Agent, that He is powerful (*qādīr*), and that He is like this, all in a single meaning (*maʿnā wāḥid*). This is because there is no multiplicity [in Him]” (*Taʿlīqāt*, 479).

¹⁷⁷ The *Najāt* develops this idea more elaborately than the *Ilāhiyyāt*: “Whatever is beautiful, agreeable, and the best that may be perceived is beloved and desired (*maḥbūb wa-māʾshūq*) [in itself]. The origin of this [desire] is [one’s] perception of it [...] when the act of perception is eminently capable of reaching the core essence of a thing (*ashadda iktināhan*) and is eminently capable of verifying its inner reality (*ashadda taḥqīqan*), and if the object of perception is the most beautiful and noble essence, then the love [expressed] by the power perceiving it and the pleasure it extracts [from this act] is even greater. Now the Necessary Being is the most perfect, beautiful, and splendid [essence], one that [also] contemplates itself (*yaʿqilu dhātahu*) in a manner that expresses its splendour and beauty and by means of a perfect act of intellection. Thus, the agent of intellection and the object of intellects are intellected [in a single act], since both of them are one in reality. The essence [of the Necessary Being] is essentially the greatest lover and beloved, and is the greatest recipient and source of pleasure. Thus pleasure is naught by the perception of what is agreeable insofar as it is agreeable. [...] The First is the most excellent of perceivers and possesses the most excellent act of perception, as well as the possessing the most excellent object of perception. Thus, it is the most excellent of recipient and source of pleasure. Nothing is comparable to it in this” (590–91). This passage and the section containing it are unique to the *Najāt*. It is an elaboration of a pithy statement in *Ilāhiyyāt* VIII.7.3 that “[the Necessary Being] is a lover of His essence, which is the principle of all order and good inasmuch as [His essence] is such [a principle]” (292; Cairo, 363). In the *Ilāhiyyāt* as well as in the *Najāt* Avicenna discusses God’s knowledge of the good in the context of defending the notion that He knows particulars “in a universal way.”

¹⁷⁸ *Ilāhiyyāt*, VIII.6.2–3, 283–84 (Cairo, 355–56)

Being is also an intellect that essentially perceives itself, it recognizes the fact that it already possesses the highest object of desire; and this leads to the state of unconditioned fulfillment and pleasure (*ladhīdh*). The conclusion that Avicenna draws in the *Najāt* is that the Necessary Being must therefore be an intellect that is perpetually in act, since He is an object of constant interest and desire for Himself.¹⁷⁹ God's status as the final cause of His essential act of intellection—perpetually satiated yet perpetually coveted—is the underlying mechanism that guarantees His unending actuality as intellect.

If the *Najāt* and *Ilāhiyyāt* establish how God's status as the “pure good” is a corollary of his status as Necessary Being, it is only in the *Ta'liqāt* that Avicenna explicitly establishes the reciprocity between God's status as the final cause of His essential act with His status as the efficient cause of all existing things. In a cluster of passages where he elucidates the nature of Divine will and providence (*al-ʿināya*), Avicenna writes:

Providence is that the First is the good, that He intellects His essence, that He desires His essence, and that He is the principle of other things. Thus, He is the object of His own essence. Anything that proceeds from Him will have His essence as the good that is the object of its desire (*al-maṭlūb*) [...] Since the First desires His essence given the fact that He is good, and His essence that is desired is the principle of existents, [these existents] proceed from Him in a manner that is arranged in the most excellent arrangement (*ʿalā aḥsan al-niẓām*). Providence is the procession of the good from His essence, not on account of some goal (*gharad*) external to His essence, and not by some will that occurs to Him. For His essence is His end (*ghāyatuhu*). Since His essence is His end, and His essence is the principle of existents,

¹⁷⁹ *Najāt*, 593.

His care (*‘ināyatuhu*) for them follows from His for His essence.¹⁸⁰ Furthermore, if His object of desire (*maṭlūb*) is the good, and the good is His essence and He is His end and He is the principle of everything other than himself, then His knowledge that His essence is Good is the cause for these things as an expression of His care for them (*‘ināyatan la-hu bi-hā*). If He were not intellectually perceiving His essence and that His essence is the principle of everything other than Himself, then nothing would proceed from His essence upon good governance and good arrangement (*‘alā al-tadbīr wa-l-niẓām*). Similarly, If He were not desirous of His essence, then what proceeds from Him would not be in a good arrangement (*ghayr muntaẓim*), because He would be averse to it without willing it. There is no will except when existents are not in conflict with His essence.¹⁸¹

In this passage, we see not only how God’s status as the Necessary Being implies the self-sufficiency and perpetuity of His essential act of self-knowledge, as already established in the *Ilāhiyyāt* and the *Najāt*, we also see how the procession of existing things from the Divine Essence is another aspect of this realization of the good, but now in the realm of concrete reality outside the indivisible matrix of the Godhead. Furthermore, when the contemplation of some perfection and desiring it as the good are conceived as mutually entailing states, we arrive not only at the doctrine of “efficient intellection” but also at how this efficiency unfolds, namely “in the most excellent arrangement (*‘alā aḥsan al-niẓām*).” This principle of “optimal procession” means that each causal nexus of the cosmic system, beginning with the Necessary Being, must conspire to produce the most excellent effect possible given the nature of the cause. In light of the principle of compatibility (*al-munāsaba*) discussed in the previous subchapter, “the most excellent” is always conceived in regard to the

¹⁸⁰ The term *al-‘ināya* used in this sentence primarily refers to a relationship of concern and benevolence, and certainly implies the more technical understanding of “providence.”

¹⁸¹ *Ta’līqāt*, 469–71. See also *Ishārāt*, 182.

essence of the efficient cause and the range of possible articulations of causal factors contained within its nature.

Thus, for Avicenna, when the essential conditions for causation obtain and no obstruction exists that would prevent the natural course of the causal event, the efficient cause must always exhaust the full range of causal principles available to it and actualize the proper effects pertaining to each of these principles.¹⁸² Furthermore, each of these causal possibilities is always rooted in some mode of conception on the part of the agent and this conception must be of something that is “good” and “agreeable” (*ghayr munāfin* or *muwāfiq*) to it. When will and knowledge converge in a single act, as in the case of the Necessary Being, but also in the case of other sentient beings, the realization of existence follows as a matter of course:

When we will (*aradnā*) something, we conceive (*nataṣawwaru*) that this thing is something that agrees (*muwāfiq*) with us. What “agrees” is that which is good (*ḥasanan*) or beneficial (*nāfiʿan*). From this conception and conviction (*al-ʾitiqād*) a desire (*shawq*) for it and for its realization in existence (*taḥṣīl*) necessarily follows (*tattabiʿu*). If the desire and resolve (*al-ijmāʿ*) is strong, the faculty (*al-quwwa*) that is in the muscles and organs will move towards its realization. On account of this, our action follows on account of the goal [i.e. the thing that is conceived that agrees with us and which is beneficial or good, which we want to realize in existence]. We have explained that the Necessary Being is perfect (*tamām*) and above-perfection (*fawqa al-tamām*). Thus, it is impossible that His action is on account of a goal. It is impossible that He knows that something agrees with Him and is an object of His desire, and [only] subsequently realizes its existence (*thumma yuḥaṣṣiluhu*). His Will [derives] from the knowledge of the fact that He knows that this object [of knowledge] is in itself good and excellent (*khayr wa-ḥasan*).

¹⁸² These principles are none other than the *maʿānī* discussed in the previous two sub-chapters.

The existence [of this thing] must be in such a way that it becomes a good existence (*wujūdān fādīlan*) and *the existence of this thing is better than its nonexistence*. As a result, after this knowledge, there is no need for another will to render this thing existent. Rather, the mere knowledge [of God] of the arrangement of contingent things in the excellent ordering is the necessitating cause for the existence of these thing based on the existing ordering and excellent arrangement.¹⁸³

This abhorrence for the nonexistence of the good when the latter becomes an object of contemplation is an even more compelling efficient principle in entities capable of pure thought—not just the Necessary Being, but also celestial intellects, celestial souls, prophets, and other human beings who are theoretically “perfected.” This is because these entities are either never in potency, or, in the case of the last two species, are variously proximate to actuality.¹⁸⁴ This abhorrence for nonexistence on the part of pure intellects—and the realization of existence as the default metaphysical state of intellectual contemplation—is consistent with the results of our previous inquiry where efficient causality is understood pre-eminently in terms of the divine minds’ active knowledge.¹⁸⁵ However, with the additional consideration of the metaphysics of the “good” in Avicenna’s theory of the efficient cause, we see how the Necessary Being’s contemplation of the Good that is Himself is not only source of the infinite force initiating the unfolding of the concrete realm; it is also the organizing principle that regulates the manner of its procession. Thus, the essentially productive knowledge of divine minds is not only a function of their apophatic status as

¹⁸³ *Ta’līqāt*, 13–14; emphasis mine. See also *Ishārāt*, 182.

¹⁸⁴ *Ta’līqāt*, 350.

¹⁸⁵ In the *Ta’līqāt*, Avicenna describes the priority of thought in the production of existence as follows: “The procession of acts occurs only from an agent of conceptualization (*mutaṣawwir*). When there is no conceptualization, action is impossible. The intellect that is in potency does not produce action (*lā yaṣḍuru ‘anhu fī’lun*), since it does not have conceptualization in act. The active intellects produce (*yaṣḍuru ‘anhu*) their acts of causation (*ta’thīrāt*) and actions (*al-af’āl*) only on account of their conceptualizations that they have in act. Anything that is stronger in conceptualization is more perfected in action. This traces itself to the First, in whom there is nothing in potency. Thus, it follows that all existents proceed from Him” (*Ta’līqāt*, 500).

impassive and indivisible entities. Rather, it is also the consequence of their desire for the highest good that is the Necessary Being. Consenting to the providential scheme through which this good is realized in concrete existence, they optimize its enactment in the realm of contingency and multiplicity by arranging the procession in the most excellent way possible given their native capacities as efficient causes.

The idea that the good is perpetually realized in the concrete realm in a manner that exhausts the efficient powers of every demiurgic being amounts to a strong affirmation of the principle of plenitude in Avicenna's metaphysics. All possible articulations of existence inherent in an effective agent must always be realized in the realm of concrete existence. These articulations refer primarily to the species-forms emanated by the Necessary Being and celestial intellects that form the essential structure of the cosmos. They refer secondarily to the production of individual instances of these forms, which are accidental occurrences unique to the conditions of generation and corruption that afflicts the sublunary world. However, this "overflow" of existence is carefully managed by the laws of efficient causality, in particular the rule of compatibility (*al-munāsaba*), which states that the range of possible effects is limited to the causal factors (*ma'ānī*) available in the agent. No effect may proceed whose nature is not already anticipated by that of its agent. Given the principle of optimal procession that aims at preserving—within the realm of contingency and multiplicity—the full range of perfected existence possessed by the First Principle, a kind of isomorphism must obtain between a causal factor and its proper effect. That is to say, the effect must reproduce as best as possible the "good" implicit in its causal factor(s), effectively mirroring its mode of being. However, given the doctrine of the modulation of existence, this isomorphism is not absolute; the effect is always existentially deficient relative to the cause, equality in nature and intensity notwithstanding. As such, when presented with the task of deducing the nature of the effects from the nature of the cause, the metaphysician must hold fast to the rule that "the most noble follows the most noble in

a variety of ways.”¹⁸⁶ This is how in *Ilāhiyyāt* IX.4 Avicenna is able to infer that of the three causal factors inherent in the celestial intellect, its intellection of itself as a contingent being produces an entity that is essentially in potency, namely a celestial body; its intellection of itself as necessary but through another produces an entity that is capable of actuality but which is attached to a subject that is essentially in potency, namely a celestial soul; its intellection of its principle, i.e., the Necessary Being, produces an entity that is likewise a perpetually actualized intellect, namely another celestial intellect. As a result, the principle of plenitude in Avicenna’s metaphysics has a rational structure operating at every level of existence, beginning with the first principles. Furthermore, while the principle of excellence is derived on Avicenna’s theory of final causality, it is deployed within the deductive procedure of *burhān lima*.

This excursus on the metaphysics of the good allows us to clarify a central, but oft-neglected, aspect of Avicenna’s emanation theory in *Ilāhiyyāt* IX.4. Although the Rule of One has acquired the reputation as the central metaphysical principle governing the successive procession of celestial entities from First Principle, we have shown that relying on it alone allows the metaphysician to deduce only the *number* of entities that emerge from a celestial intellect. On the other hand, the principle of optimal procession, “that the most excellent follows the most excellent,” offers the complementary insight into the very nature of these effects. Both principles operate under the larger project of deducing the core structure of the cosmic system through knowledge of the first principles of existence. As such, the resulting “emanation theory” must conform to the broader metaphysical and ontological framework of efficient causality and the attending rule of causal compatibility.

¹⁸⁶ *Ilāhiyyāt* IX.4.12, 331 (Cairo, 406).

1.4. The Rule of One and the limits of *burhān lima*

In Chapter 1.2, we have shown how Avicenna takes recourse to the Rule of One as a method that would allow him to deduce the procession of concrete existence solely through a systematic knowledge of the cause. By doing this, he believes that he would be able fulfill the aim of his inquiry, which is to secure demonstrative knowledge of the fundamental facts of existence.

However, while the deductive method showcased in *Ilāhiyyāt* IX.4 is the preferred instrument in the metaphysician’s toolkit, Avicenna admits that it is capable neither of deducing all species of existence nor of identifying all essential causal factors (*ma‘ānī*) involved in the procession of the many from the One. The natural limit of the human intellect prevents such an undertaking. As Avicenna writes in *Ilāhiyyāt* I.3, while it is possible for the metaphysician to establish through non-empirical “universal, rational premises” (*min ṭarīq muqaddimāt kulliyya ‘aqliyya*) the existence of the First Principle, and the fact that it is the “principle of the whole” (*mabda’ al-kull*), not all orders of existence can be established in a similar manner:

Due to our impotence (*al-‘ajz*), however, we are unable to adopt this demonstrative method (*al-ṭarīq al-burhānī*)—which is a method (*sulūk*) of arriving at the secondary [existents] (*al-thawānī*) from the [primary] principles (*‘an al-mabādi’*) and from the cause to the effect—except [in the case of] some aggregates of the orders of existence (*jumal al-marātib al-mawjūdāt*), [and even then] not in detail (*dūna al-tafṣīl*).¹⁸⁷

In this passage, Avicenna is reminding the reader that while the deductive method may yield knowledge of the core structure of the universe, establishing the exact number, spread, and nature of its governing entities in the same manner might still elude even the most talented of metaphysicians.

¹⁸⁷ *Ilāhiyyāt* I.3.11, 16 (Cairo, 21).

Surely enough in *Ilāhiyyāt* IX.4, Avicenna echoes this very sentiment when explaining why the procession of abstract celestial entities does not continue *ad infinitum*, but instead ends with an active intellect that governs not a realm of permanence and eternity, but one of generation and corruption. The explanation Avicenna offers to account for this fact can seem underwhelming. However, it is consistent with the framework of *burhān lima* that has characterized his procedure so far in the section. He writes:

If the existence of the many (*kathra*) necessarily follows from the intellects, then this would be on account of the many meanings (*ma'ānī*) that exists in them. However, this statement of ours is not convertible, such that each intellect in possession of this multiplicity must necessitate (*yulzimu*) these effects on account of its multiplicity. For these intellects are not identical (*muttafiqa*) in species, such that what their meanings (*ma'ānī*) necessitates is also identical.¹⁸⁸

While the deductive method allows Avicenna to show that the core structure of emanation is triadic and that some correspondence between cause and effect must obtain in each causal channel, the metaphysician cannot expect that the paradigm exhibited pre-eminently by the First Intellect is replicated without alteration for the rest of the celestial hierarchy. This is because Avicenna's theory of efficient causality holds that the agent will always produce an effect that is distinct in species. Given the isomorphism entailed by the rule of compatibility, this differentiation must be due primarily to the fact that existence is modulated in terms of the existential priority of the cause and the existential posteriority of the effect. How precisely this modulation affects the proliferation of causal factors in the agent is not always intelligible to the metaphysician. This diminishes his capacity to discern the exact number and nature of the effects. At some point in his inquiry, the

¹⁸⁸ *Ilāhiyyāt* IX.9.12, 331 (Cairo, 407).

metaphysician will simply need to re-orient his gaze from *a priori* metaphysical premises and observe the world as it already exists. He must accept that Divine providence had decreed that the procession of pure intellects terminates at a certain stratum of the cosmos, at which point a wildly incommensurate realm of generation and corruption began to exist.¹⁸⁹

Thus, reasoning from *a priori* principles must be complemented by an inquiry into the existing things insofar as they are already existing effects of the essential causes. Practically speaking, this means that the metaphysician must take recourse to other sciences whose principles metaphysics is supposed to establish demonstratively. Thus, Avicenna in *Ilāhiyyāt* I.3 writes that the study of metaphysics should ideally come after the study of mathematics and the natural sciences. This is because the metaphysician will rely on facts established by these sciences, such as “knowledge of the spiritual angels, and their ranks, and knowledge of the order of the arrangement of the spheres, [since these] can only be arrived at through astronomy; and astronomy is only arrived at through the science of arithmetic and geometry.”¹⁹⁰

However, this reliance on derivative disciplines in an inquiry that is supposed to establish their very principles does not entail circularity. This is because what these sciences supply to metaphysics are simply the facts of existence (*yufīdu al-wujūd faqat*); they do not supply knowledge of the cause (*laysa yufīdu al-‘illa*).¹⁹¹ The metaphysician therefore then does not beg the question when relying on astronomy to supply the premisses of his inquiry into the nature of celestial motion; this is because the question he pursues *qua* metaphysician is not the fact of its existence, but the cause thereof. This procedure informs not only Avicenna’s inquiry in chapter 4 of *Ilāhiyyāt* IX, but

¹⁸⁹ For Avicenna, only God has complete knowledge of all things though knowledge of their causes: “knowledge of the hidden (*al-ghayb*) [...] in the utmost detail (*al-tafṣīl*) and in the order that necessarily belongs to this detail in terms of what is received and in what is conveyed. These things, then, would be the keys of the hidden things which no one knows save He” (*Ilāhiyyāt* VIII.6.22, 290; Cairo, 362).

¹⁹⁰ *Ilāhiyyāt* I.3.6, 14–15 (Cairo, 19); Marmura’s translation slightly modified.

¹⁹¹ *Ilāhiyyāt* I.3.8, 15 (Cairo, 20).

especially in chapters 2 and 3, where he relies on astronomy to supply him with knowledge of the nature of celestial dynamics and the theory of orbs, epicycles, and a host of other celestial motion that will determine the number of intellectual entities he needs to posit to arrive at the basic structure of the celestial hierarchy. This procedure privileges teleological analysis, which assumes knowledge of the effect to arrive at knowledge of the final cause of each celestial phenomenon.

The subsequent discussion in *Ilāhiyyāt* IX.4 consummates the metaphysician's efforts by arriving at knowledge of these same effects solely through knowledge of the cause. However, the scope of scientific knowledge obtained by this latter method is limited, because—as discussed above—only a limited set of celestial entities can be deduced *a priori*. Teleological analysis, on the other hand, already assumes the extensive knowledge of the celestial bodies gained through astronomical observation. While Avicenna would admit that the deductive method is limited in scope, he would likely point out that it secures knowledge of the deeper structure of the celestial realm at a higher level of certainty. The deductive and inductive methods are therefore complementary in their distinct contribution to the metaphysician's knowledge of the first principles of being.

Despite this attempt at complementing the deductive approach of *burhān līma* with teleological inquiry that relies on the facts of existence, later thinkers would claim that Avicenna was not able to reconcile the *a priori* metaphysical principles he relies upon to arrive at knowledge of the celestial realm and the sheer diversity and complexity of observable celestial phenomena. Abū al-Barakāt al-Baghdādī and, following him, Fakhr al-Dīn al-Rāzī would argue that the Rule of One is too restrictive a metaphysical principle to account for even the most basic kind of diversity of the celestial realm. How, for instance, does the triadic structure of emanation account for the existence of the many ethereal bodies that populate the orb of the fixed stars? At this second stage of emanation, the host of celestial entities is spread out at the same celestial plane, observing a kind

of horizontality within a common altitudinal range. This structure does not seem to obey the neat vertical succession of each *planetary* orb that Avicenna envisions in *Ilāhiyyāt* IX.4.¹⁹² The inherent verticality of his triadic structure of emanation seems to prevent this horizontal proliferation of celestial entities to occur.¹⁹³ Furthermore, a person with some knowledge of astronomy may also ask the following question: how does this triadic structure map onto the complex topography of the celestial realm with the various eccentric and epicyclic orbs that the astronomer must posit to account for the “wandering” motion of the visible planets, the number and arrangement of which are still subject to dispute in the science of theoretical astronomy (*‘ilm al-hay’a*)?¹⁹⁴ It seems that through basic astronomical observations we find a proliferation of intellectual, psychic, and corporeal entities that cannot be readily regimented into the Rule of One and the neat triadic structure of causal procession that it presumably enacts in the celestial realm.

For Abū al-Barakāt, who was one of the few thinkers who criticized the Rule of One not only for its theological implications, but for its shortcomings as a general metaphysical principle of causation, establishing the causal principles behind celestial phenomena can only be achieved through recourse to teleological analysis, which is firmly rooted in the facts of existence established by empirical observation. Avicenna’s speculation into the *a priori* basis of efficient causality is not reliable metaphysics. The central importance it occupies in the system is not matched by rigorous proofs. Rather it is asserted like a “report” (*khabar*) of school doctrine that is duly accepted by the Peripatetics as if it were a “source-text” (*naṣṣ*) of “revelation” (*wahy*).¹⁹⁵

In the following chapters, we will discuss in detail Abū al-Barakāt’s arguments against the Rule of One and how it influenced Fakhr al-Dīn al-Rāzī’s approach to the same cluster of related issues

¹⁹² *K. al-Mu‘tabar* III, 150.

¹⁹³ *Ibid.*

¹⁹⁴ As we shall see, al-Rāzī asks these very questions, influenced of course by Abū al-Barakāt.

¹⁹⁵ *K. al-Mu‘tabar* III, 150.

in his early *ḥikma* works, such as *al-Mabāḥith al-mashrīqiyya*, *al-Mulakhkhaṣ fī al-mantiq wa-l-ḥikma*, *Sharḥ al-Ishārāt*, as well as his astro-magical work *al-Sirr al-maktūm*. We shall see how both thinkers fully grasped the epistemic function of the Rule of One in Avicenna's metaphysics, which is to ground knowledge of the basic features of the cosmic system through the method of demonstration (*burhān lima*). The dispute over the Rule, therefore, is not a dispute over an isolated aspect of his metaphysics, nor is it only motivated purely by theological concerns; rather it is a dispute over the promises and limits of metaphysical inquiry.

Chapter 2

The Background to Fakhr al-Dīn al-Rāzī's Theoretical Approach to the Rule of One

In the previous chapter, we saw how in his early and middle philosophical works, Avicenna appended the axiom that “only one may proceed from the one” to his unique doctrine of divine creation.¹⁹⁶ This Rule of One was his answer to the question of whether it is possible for an entity that is one in all respects to be the source (*mabdaʿ*) of multiplicity in the created world, while remaining invulnerable to the passivity, division, and alteration that such an involvement would usually entail. Though Avicenna’s treatment of the Rule of One is largely self-contained within the context of this inquiry, the metaphysical underpinnings of the theory extend to reveal a more ambitious scope. We have seen, for instance, how the Rule is in effect a special application of Avicenna’s theory of causal correspondence (*munāsaba*). Our source for this theory was *Ilāhiyyāt* VI.3, which is devoted specifically to the metaphysics of efficient causality. We also saw how the Rule is the upshot of his theory of productive intellection (*al-taʿaqqul al-ʿilī*), a mode of causal influence that belongs uniquely to the Divine Minds, from the Necessary Being to the celestial governor of the sublunary realm known as the Active Intellect. Thus, while Avicenna did not systematically link this causal principle to a general theory of efficient causality and a theology of productive contemplation, the seeds are already planted in the relevant sections of the *Ilāhiyyāt*.

By the time Avicenna wrote the *Ishārāt* during the late period of his career, however, he seemed to have decided that the Rule of One needed to be established as an independent metaphysical

¹⁹⁶ As we have seen in *Ilāhiyyāt* IX.4. For earlier works, see *K. al-Hidāya*, 274–79; *al-Hikma al-ʿArūḍiyya*, 161; *al-Mabdaʿ wa-l-maʿād*, 78; *K. al-Najāt*, 654–55, 663.

doctrine, rather than as a corollary principle of Divine creation. Instead of arguing that God can only create a single thing lest it compromises His absolute oneness, Avicenna now argued that the restriction is necessary lest he be accused of promoting an incoherent model of efficient causality. This is a subtle but crucial distinction. To formalize this shift of perspective, he relocated the original site of the discussion from the topic of Divine governance—which includes such issues as the emanation of the First Intellect and the subsequent triadic structure of emanation in the celestial world—to that of efficient causality. This relocation of the *topos* amounts to a shift from an applied context to a specially dedicated theoretical context. In this new framework, Avicenna treated the Rule of One as a stand-alone metaphysical principle and as part of a larger cluster of issues related to the metaphysics of efficient causality. The example of God’s agency is just that, an example of the causal principle at work, albeit a paradigmatic one.

Among post-Avicennian thinkers, Fakhr al-Dīn al-Rāzī was the first to perceive this distinction between the applied and theoretical context of the Rule of One. Although he dealt extensively with the applied context of its conception, his chief and unique involvement in the reception history of the principle lies in his interpretation and criticism of its theoretical foundations. Recognizing Avicenna’s bold ambitions in conceiving the Rule, he saw that beyond the applied context of divine creation, the principle epitomizes some of the deepest intuitions of the Master’s philosophical system. It also serves as the underlying structure upon which the intellectual, psychic, and hylomorphic realms of being rest within a unified cosmic system. Thus, unlike earlier criticisms of the Rule of One, which were preoccupied with the corollary issues (*fūrūʿ*) of creation (*ibdāʿ*) and emanation (*ṣudūr* and *ḥayḍ*), Rāzī decided to focus on theoretical principles (*uṣūl*) of efficient causality, hoping thereby to strike at the heart rather than at the limbs of Avicenna’s system. The true background to Rāzī’s criticism, therefore, is not, strictly speaking, the contest between opposing models of divine creation, though this is an important consideration and motivated his interest in

the theory. Rather, the true background is the proofs for the Rule of One that Avicenna developed during the later phase of his career, as these proofs consecrated the Rule as a stand-alone metaphysical principle formally distinct from its special application in some limited order of reality.

This chapter is devoted to understanding the theoretical context of the Rule of One. To this end, we will discuss Avicenna's discussion of the principle in his later works, such as the *Ishārāt*, *Ta'liqāt*, and *Mubāḥathāt*. For it is in these works, especially the first, that he explicitly formulated the Rule as part of a broader theory of efficient causality. The centrepiece of our inquiry is an "warning" (*tanbīh*) in *Namaṭ* 5 of the *Ishārāt*, where Avicenna offers a proof that would become the *locus classicus* for the later tradition. Since Rāzī's extensive critique of the Rule boils down to the viability of this proof, we must first understand it on its own terms. Previous studies have read Avicenna's argument in the *Ishārāt* primarily in light of Rāzī's critique, and this has had the effect of both obscuring the Master's intentions and of simplifying Rāzī's analysis.¹⁹⁷ My task consists not only in clarifying the argument's logical structure, but in identifying the metaphysical principles underlying it.

This discussion of the theoretical context, however, is preceded by an analysis of two important criticisms of the Rule of One that would prove influential for the later tradition. The first is by Abū Ḥāmid al-Ghazālī (d. 505/1111) and the second is by Abū al-Barakāt al-Baghdādī (d. c. 560/1164). Since their critique is concerned primarily with the application of the principle in the various domains of existence, especially in regard to the Avicennian doctrines of Divine creation and

¹⁹⁷ Recent studies, however, have offered a more systematic and nuanced analysis of both Avicenna's arguments and Rāzī's critique, and I have benefitted from their insights. See, for instance, Wahid M. Amin, "From the One, Only One Proceeds": The Post-Classical Reception of a Key Principle of Avicenna's Metaphysics," *Oriens* 48 (2020): 123–55; and Davlat Dadikhuda, "Rule of the One: Avicenna, Bahmanyār, and al-Rāzī on the Argument from the *Mubāḥathāt*," *Nazariyat* 6, no. 2 (2020): 69–97. Their studies improved on previous works, such as Nicholas Heer, "Al-Rāzī and al-Ṭūsī on Ibn Sīnā's Theory of Emanation," in *Neoplatonism and Islamic Thought*, ed. Parviz Morewedge (Albany: State University of New York Press, 1992), 111–26; and Arthur Hyman, "From What Is One and Simple Only What Is One and Simple Can Come to Be," in *Neoplatonism and Jewish Thought*, ed. Lenn E. Goodman (Albany (N.Y.): State University of New York Press, 1992), 111–36.

emanation, and since we have just been acquainted with the basic features of this approach from our discussion of *Ilāhiyyāt* IX.4 in Chapter 1, it is best to discuss their criticism first before making our way to the theoretical context. This excursus is necessary because Ghazālī's and Abū al-Barakāt's reception represent the immediate polemical context in which Rāzī's investigation takes place. On the one hand, he was influenced by their criticism of the Rule of One as an applied principle of Divine governance and adopted some of their arguments. On the other, he also seems to have privileged the theoretical context of the Rule of One to address what he regarded as the deficiencies and limitations of their approach. As such, their criticism forms an essential background to his inquiry. Together, these two sections of Chapter 2—the first regarding the polemical context of Rāzī's critique, and the other regarding its foundational context—form the background discussion to Chapter 3, which will be devoted entirely to Rāzī's critique of the Rule of One.

2.1. Abū Ḥāmid al-Ghazālī and Abū al-Barakāt al-Baghdādī's critique of the Rule of One

Ghazālī's discussion of the Rule of One can be found in his *kalām* work, *al-Taḥāfut al-falāsifa*. To understand his approach, we must remember that the goal of this work is not so much to offer decisive refutations of the metaphysical doctrines that he deems problematic from a theological point of view—though this is no doubt an important aspect of the work. Rather, the true target of his polemics is the intellectual authority of the *falāsifa*, the Arabic Peripatetics, such as Abū Naṣr al-Fārābī (d. ca. 331/943) and Avicenna. Ghazālī's detailed criticism of their various philosophical doctrines is meant to effect a certain shift of perspective on the part of the reader, namely, to undermine the prestige and authority of these thinkers, whose opinions commanded a growing following among the intellectual elite of his day. Much like his autobiography, *al-Munqidh min al-*

dalāl, written just a year or two before his death, the overarching theme of the *Tahāfut* is *taqlīd* (blind imitation of authoritative teachings). The ideal reader Ghazālī has in mind is not so much the philosophers and the *muqallidūn* (“blind followers”) he criticizes, but rather the neutral observers, who are intellectually inclined and sincerely seek after the truth. Whereas the first two groups fall within his direct line of fire, the third group are the ones he seeks to persuade by means of the art of dialectics. This much we can glean from the introduction to the *Tahāfut*.¹⁹⁸ When we keep this goal in mind, it is unsurprising that when refuting metaphysical doctrines, such as the Rule of One, Ghazālī focuses on finding out weaknesses and contradictions to the theory and showing how they fail to achieve what they set out to do.

Thus, when Ghazālī turns his attention to the Rule of One in Discussion (*Masʿala*) 3 of the *Tahāfut*, he is not so much concerned about its status as a stand-alone metaphysical principle. He focuses instead on whether the Rule lives up to expectations as a governing principle of efficient causality. The main area of contention concerns the theory of Divine creation in *Ilāhiyyāt* IX.4, where Avicenna derives the Rule of One as a corollary principle to God’s oneness and simplicity.¹⁹⁹ To this, Ghazālī raises several objections that would be reiterated and improved in subsequent critiques, such as those of Abū al-Barakāt al-Baghdādī, Sharaf al-Dīn al-Masʿūdī, Averroes, and Fakhr al-Dīn al-Rāzī.

¹⁹⁸ *Tahāfut*, 1–8, especially ¶2, 5–7, 9–10, 22.

¹⁹⁹ *Tahāfut*, 55: “[Regarding] the third [aspect], God for them is one in every respect; and from the One according to them, nothing but that which is one in all respects proceeds.” Ghazālī produces an account of the Rule of One and its relation to God’s creative act and the structure of the celestial realm in pp. 64–65 (¶36–37) and 66–68 (¶41–46). In ¶46, Ghazālī writes: “Nothing proceeded from the First Principle except one [thing]: namely, the essence of this intellect by which it apprehends itself intellectually. It has as a necessary consequence—not, however, from the direction of the Principle—that it apprehends the Principle intellectually. In itself, it is possible of existence; but it does not derive [this] possibility from the First Principle, but [has it] due to itself. We do not deem it improbable that, from the one, one comes into existence, where the [latter] effect would have as a necessary concomitant—[but] not from the direction of the First Principle—necessary matters, relative or non-relative, because of which multiplicity comes about, [this effect] becoming thereby the principle for the existence of plurality. In this manner, then, it becomes possible for the composite to meet the simple, since such a meeting is inevitable; and it can only happen in this way. This, then, is the way the [matter] must be adjudged. This, then, is the discourse explaining their doctrine.” The paragraph that contains this argument is a paraphrase of the important passage in *Ilāhiyyāt* IX.4.11, 330 (Cairo, 406).

Broadly speaking, these objections can be classified into three types. The *first* interrogates whether the modal qualifiers of “necessity” and “contingency” as well as the act of contemplation on the part of the Necessary Being and the celestial intellects can serve as principles of efficient causality.²⁰⁰ How, Ghazālī asks, do the distinct modes of existence introduce real multiplicity in the substance in question, such that it can become a causal principle for the procession of plurality in the concrete realm?²⁰¹ Ghazālī’s intention in this query is dialectical. He simply wants to highlight a flaw in the argument, by claiming that if an intellect’s possibility of existence is distinct from its existence, then the same distinction must also apply to the First Cause in that His existence is conceptually distinct from the *necessity* of its existence. This, however, is a weak objection, because a conceptual distinction for Avicenna does not necessarily entail an ontological distinction, especially when it involves the Necessary Being. This aside, Ghazālī would raise a more substantive point regarding the role of modal qualifiers in the emanation process. How can the First Intellect’s status of being “possible of existence” (*mumkin al-wujūd*) serve as the causal ground for the existence of the outermost sphere?²⁰² In what sense does it have causal influence over the unfolding of this layer of the celestial realm? Although this is a pertinent question to ask, Ghazālī produces a rather facile objection, arguing that the modal qualifiers offer an arbitrary determination of causal relations, since we would not expect the emanation of a celestial sphere from a person’s contemplation of his possibility of existence.²⁰³

²⁰⁰ These are the first three objections Ghazālī offers: *Tahāfut*, 68–72 (§49–62).

²⁰¹ This is referred to as Objection 1 in the edited text: *Tahāfut*, 68–69 (§49–52).

²⁰² This is Objection 5: *Tahāfut*, 76–77 (§75).

²⁰³ The analogy between the celestial intellect’s self-intellection and the human being’s self-intellection is of course inadmissible. Its deployment is merely polemical, in keeping with the intent of the work. Averroes did not take this approach kindly, writing that “This theory [...] is not so ignominious as this man tries to represent it to be through this comparison, in order to cast odium on the theories of the philosophers and to make them despicable in the eyes of students”: *Tahāfut al-tahāfut*, 151 (Bouyges, 253). Fakhr al-Dīn would offer a more substantial version of Ghazālī’s objection in the *Sharḥ al-Ishārāt*, dealing with the question of whether possibility of existence (*imkān al-wujūd*) or the contemplation of the possibility of existence (*ta’āqqul imkān*) can serve as causal factors in emanation (vol. II, pp. 499–502). Heer has offered an analysis of Rāzī’s discussion in “Al-Rāzī and al-Ṭūsī on Ibn Sīnā’s Theory of Emanation,” 115 ff.

Another argument that falls under this first class of objections involves the issue of the First Cause's act of self-contemplation.²⁰⁴ Here, Ghazālī intends to expose another knot in Avicenna's theory, namely, that if the First Intellect's contemplation of its principle is distinct from its existence, it should form another causal relationship that owes its origin in the Divine Essence. As a result, at least two things should have emanated from the Necessary Being: the existence of the First Intellect and the latter's act of self-contemplation.²⁰⁵ To this Ghazālī also adds other aspects that should also proceed therefrom: the First Intellect's act of contemplating its principle, its being possible of existence, and its being necessary through another. These too must be accounted for in the agency of the Necessary Being.²⁰⁶

This first class of objections against the Rule of One is not convincing. Ghazālī is content with poking holes in Avicenna's account, rather than delving into the underlying principles of the theory. For later thinkers such as Averroes, this approach reflects a lack of fairness.²⁰⁷ Nevertheless, his lines of questioning, however facile and perfunctory they may seem, contain the seeds of more penetrating critiques offered by later thinkers. For instance, both Sharaf al-Dīn al-Mas'ūdī and Rāzī would emphasize that Avicenna neglected to specify whether it was the essence (*māhiyya*) or the existence (*wujūd*) of the First Intellect that is directly caused by the Necessary Being.²⁰⁸ They

²⁰⁴ This is Objections 3: *Tahāfut*, 72 (§62).

²⁰⁵ This is a weak argument, because Avicenna conceives the acts of contemplation as a concomitant of the First Intellect's essence. So, the cause must be the essence itself. Ghazālī is aware of this conception, as shown in his reconstruction of the triadic structure of emanation in *Tahāfut*, 68 (§47). However, he chooses to ignore that aspect.

²⁰⁶ This is also weak, because the Avicennian can readily respond by claiming that these modal qualifiers accrue upon the First Intellect as entailments of the fact of its existence. The true object of the Necessary Being's agency is simply the unconditioned existence of the First Intellect. Everything that is entailed by this fact is strictly speaking out of God's hands.

²⁰⁷ *Tahāfut al-tahāfut*, 117 (Bouyges, 195): "What Ghazālī ought to have done, since he relates these theories, is to show the motives which led to them, so that the reader might compare them with the arguments through which he wants to refute them." And again in pg. 150 (Bouyges, 252), Averroes writes: "These are all theories of Avicenna and his followers, which are not true and are not built on the foundations of the philosophers (*uṣūl al-falāsifa*); still they are not so inept as this man says they are, nor does he represent them in a true light."

²⁰⁸ Mas'ūdī, *al-Mabāhith wa-l-shukūk 'alā kitāb al-Ishārāt*, 276–77; and Rāzī, *Sharḥ al-Ishārāt* II, 502–03. This aspect of their critique touches on the issue of "causing the essence" and "causing existence" (*ja' l al-māhiyya* and *ja' l al-wujūd*),

argue that had Avicenna brought up the question, he would have to admit that at least two effects must simultaneously proceed from the First Principle, implication being is that the theory is undermined by the this most basic of Avicennian metaphysical doctrines.²⁰⁹ Such was the potential injury inflicted by this line of inquiry that Naṣīr al-Dīn al-Ṭūsī (d. 672/1274) responded by nothing less than an overhaul Avicenna's emanative scheme to maintain the integrity of the Rule of One.²¹⁰ Another aspect of this first class of objections is the charge that the modal categories of possibility and necessity are merely conceptual and cannot therefore exert any real influence over the concrete realm, and that designating them as causal principles in the triadic structure of emanation is both unjustified and arbitrary. Rāzī did not only take up this line of attack, he also offered a more systematic treatment that takes into consideration other relevant aspects of Avicenna's metaphysics.²¹¹

The *second* type of criticism Ghazālī offers in his *Tahāfut* is to demonstrate that what is necessitated by the Rule of One does not correspond with the basic facts of observed reality. For instance, if the Rule were correct, then what proceeds from the First Principle would have been a purely vertical succession of one effect after another, “each one [being] the effect of another one

which is a central question in Rāzī's metaphysics. Bilal Ibrahim has offered an in-depth analysis of this important aspect of Rāzian metaphysics: “Causing an Essence: Notes on the Concept of *Ja' l al-Māhiyya*, from Fakhr al-Dīn al-Rāzī to Mullā Ṣadrā,” in *Philosophical Theology in Islam: Later Ash'arism East and West*, ed. Ayman Shihadeh and Jan Thiele (Leiden: Brill, 2020), 156–94. Rāzī explicitly brings up the issue of *ja' l al-māhiyya* when criticizing the Rule of One in *Sharḥ al-Ishārāt* II, 511.

²⁰⁹ Avicenna can retort by claiming unambiguously that what the First Cause (and all other true efficient causes for that matter) enacts is the mere existence of the entity. Furthermore, he can argue that the quiddity is, strictly speaking, the object of final causality rather than of efficient causality. This is a well-established principle of Avicennian metaphysics; see Wisnovsky, “Final and Efficient Causality in Avicenna's Cosmology and Theology.” Despite this possible retort, I think that Mas'ūdī and Rāzī is justified in bringing up the problem, because Avicenna used Rule of One to infer the existence of distinct species of existence through knowledge of the cause. He also writes in the *Ishārāt* that the First Intellect, with respect to its status as an effect (*ma'lūl*), possesses “constituent parts” (*muqawwimāt*), namely its possibility of existence and its necessity through another (*Ishārāt*, 173–74; see Rāzī's evaluation of this statement in *Sharḥ al-Ishārāt* II, 502–03). Therefore, the question of the *a priori* basis of the species must also include the question of the *a priori* basis for these constituent parts.

²¹⁰ See Heer, “Al-Rāzī and al-Ṭūsī on Ibn Sīnā's Theory of Emanation,” which sketches out the baroque emanative scheme Ṭūsī had to concoct to account for both the Rule of One and the basic distinction between essence and existence for any given entity that emanates from God and every subsequent Celestial Intellect.

²¹¹ *Sharḥ al-Ishārāt* II, 499–504.

above it and the cause of another below it, until an effect without an effect is reached, just as [this chain] terminates in the direction of ascent with a cause that has no cause.”²¹² However, this plainly contradicts reality as we experience it, because we observe that numerous entities can be found within the same plane of existence, such as the celestial orbs that are located within each planetary stratum, and the various individuals of a single species in the case of sublunary entities. Showing the impossibility of a test implication to determine the truth or falsity of the Rule of One was an influential approach for later thinkers, such as Abū al-Barakāt, Averroes, and Fakhr al-Dīn.²¹³

Finally, the *third* type of objection is based on the general claim that the Rule of One imposes a certain structure of procession—whether a purely vertical succession, or one with some measure of horizontality, as implied in the triadic scheme or in some other model—that will prove too rigid when accounting for the observable complexity of the celestial realm.²¹⁴ For instance, what are the necessary and sufficient reasons for the outermost orb’s having the magnitude that it has, as opposed to some other size? While the causal factor of the First Intellect’s intellectual apprehension of itself as possible of existence may—as *per* Avicenna—account for the *existence* of outermost orb, its magnitude cannot be specified by the same causal factor since magnitude is an added consideration to existence.²¹⁵ The same point is made regarding the position of the poles of the outermost orb.²¹⁶ Ghazālī seems to be thinking here of the orb’s axis and its position relative to,

²¹² *Tahāfut*, 65 (§39).

²¹³ We shall turn to Abū al-Barakāt’s argument later in this chapter. Averroes agrees with Ghazālī’s assessment that, against the observable facts of the concrete existence, the Rule of One would entail only a vertical succession of entities, precluding any horizontal procession: *Tahāfut al-tahāfut*, 105 (Bouyges, 174–75). For Rāzī’s adoption of this approach, see *Mabāḥith* II, 533; *Mulakhkhaṣ* III, 549–50 (Khān’ūghlū II, 1085); and *Sharḥ al-Ishārāt* II, 497.

²¹⁴ This is Objection 4: *Tahāfut* 72, (§63–73).

²¹⁵ Furthermore, and this is not a point that Ghazālī makes, the material substance of the celestial world, ether, is supposed to be homogenous, unchanging, and unmixed. Thus, it cannot behave like accidental change in the sublunary world, which depends on the constant permutations, coalescence, and movement of the four elements, compelled by both the respective natures of the elements, which are always trying to return to their natural place, a process that is constantly thrown to disarray by “mixing” effect exerted by the dizzying rotations of the celestial orbs in their varying speed and magnitude.

²¹⁶ *Tahāfut*, 73 (§63).

say, the ecliptic, which is at a 23.5 degree angle to the celestial equator. Recall that in Avicenna's theory the outermost orb is caused by the First Intellect's contemplation of its own contingency. If such is the cause of its existence, what else among the causal factors in the First Intellect specifies the quality of its positioning?

This line of reasoning offers some of the strongest arguments against the Rule of One. For instance, to demonstrate the inflexibility of the Rule of One, Ghazālī brings up the kaleidoscopic variety and differentiation already observed in the orb of the fixed star (the Eighth Orb), governed by the Second Intellect. This variety refers to the sheer number of the fixed stars, which Ghazālī reckons to be over 1200.²¹⁷ What accounts for this astounding example of differentiation and diversity occurring already at the second phase of emanation from the First Principle? The Rule of One seems too rigid a metaphysical principle to explain this diversity. Later thinkers, such as Abū al-Barakāt and Rāzī, would argue that Avicenna's attempt at offering a deductive account of reality through the Rule of One falls short of grasping the complexity of the observable world. Another model of causality is needed that can interact more dynamically with the prevailing conditions of the empirical world.

Ghazālī concludes his criticism of the Rule of One by reminding his readers that his main intention is to sow doubt in the claims of the *falāsifa*.²¹⁸ In other words, the discussion was an exercise in *kalām* dialectics. However, he also adds that, beyond impugning the prestige and authority of his opponents, he also wanted to define the limits of rational speculation. As though addressing the *falāsifa*, he writes:

²¹⁷ Naṣīr al-Dīn al-Ṭūsī reported that 1022 fixed stars have been observed by astronomers but adds that the total amount "cannot possibly be enumerated" (*Tadhkira* II.4, 128). Ghazālī brings up the example of the fixed stars in *Tahāfut*, 75 (¶73).

²¹⁸ *Tahāfut*, 76 (¶79).

Investigating the manner of the act's proceeding from God through will is presumption and a coveting of what is unattainable. The end product of the reflection of those who have coveted seeking [this] relationship and knowing it reduces to [the notion] that the first effect, inasmuch as it is possible of existence, [results in the] procession from it of a celestial sphere; and, inasmuch as it intellectually apprehends itself, the soul of the sphere proceeds from it. This is stupidity, not showing of a [causal] relationship (*munāsaba*). Let, then, the principles of these things be accepted from the prophets, and let [the philosophers] believe in them, since reason does not render [these principles] impossible. Let investigating quality, quantity, and quiddity be abandoned, for this is not something which the human faculties can encompass. And, for this reason, the one who conveyed the religious law has said: “think on the creation of God and do not think on the essence of God.”²¹⁹

Thus, Ghazālī's extended discourse on the Rule of One seems to have been deliberately designed to create doubts in the mind of the reader. What often seems to be a blind volley of attacks against the Avicennian doctrine—especially to later commentators like Averroes—is a deliberate strategy to produce a fog of uncertainty and contradictory opinions. For thinkers such as Plato, *aporia* has the role of divesting the mind of unjustified belief and whetting the desire for true knowledge. Ghazālī's use of the method, by contrast, is to show the necessity of revelation in areas of knowledge that for him lie beyond the reach of human capacity. He does this by demonstrating the rational possibility that standard *falsafa* doctrines—which the *falāsifa* consider necessary—are false, and the rational possibility that standard *kalām* doctrines—which the *falāsifa* consider as impossible—are true. These are the discursive limits of his inquiry in the *Tahāfut*.²²⁰

²¹⁹ *Tahāfut*, 76-77 (¶79-80).

²²⁰ Ghazālī's intellectual project is obviously broader and more complex than the discourse of the *Tahāfut*. Later in life, after his self-exile from Baghdad, he would downgrade the utility of *kalām* as a science to a mere exercise of dialectics

While adopting aspects of Ghazālī's objections to the Rule of One, Abū al-Barakāt al-Baghdādī offered two distinctive approaches that would prove influential for later thinkers, especially Fakhr al-Dīn al-Rāzī. The first was to interpret the Rule as being a part of Avicenna's general theory of efficient causality, rather than a localized principle of celestial causality. Abū al-Barakāt, however, did not explicitly formulate this perspective. He also did not discuss the Rule in his theoretical analysis of causality and efficient causality in the metaphysics section of *K. al-Mu'tabar*, which would have strongly indicated that he intended to approach the issue from a theoretical framework.²²¹ Rather, he seems to have taken for granted the notion that the Rule of One is operative in both celestial and sublunary realms. This is apparent from the fact that he references Avicenna's defence of the principle not only in the sections of *K. al-Mu'tabar* that correspond roughly to Avicenna's *Ilāhiyyāt* IX, but also in the sections devoted to the nature of the soul.²²² In both instances, Abū al-Barakāt presents the Rule of One as a foundational premiss (*aṣl*, pl. *uṣūl*) of several "Peripatetic" (*mashā'ir*) doctrines, which he would subsequently scrutinize.²²³ Thus, we may infer that for him the Rule of One is part of a general theory of causality in Avicenna's system rather than a localized principle. I will first discuss Abū al-Barakāt's criticism of the Rule in the psychology sections of *K. al-Mu'tabar*. However, I shall only deal with aspects of his critique that are directly relevant to our

in defence of true religious doctrine. It is a science that is heavily reliant on *taqlīd*, the uncritical adoption of authoritative teachings. It does not anchor faith—or even knowledge in general—so much as simply preserving what a devotee already accepts as true from skeptical attacks.

²²¹ *K. al-Mu'tabar* III.1, 48–54.

²²² In the Hyderabad edition of *K. al-Mu'tabar*, the psychology section is found in vol. II.6, 297–451. It occupies a significant portion of the physics section and comprises of 30 chapters. The Divine governance section is found in vol. III.2, 145–226.

²²³ In *K. al-Mu'tabar*, the "Peripatetics" sometimes refers specifically to Avicenna and his students, or it can indicate a broader membership that includes the ancient Peripatetics. To designate Avicennians specifically, Abū al-Barakāt would sometimes refer to them as "the moderns" (*al-muta'akkhirūn*).

goal in this chapter, which is to understand the sources and context of Fakhr al-Dīn's reception of the Rule of One.²²⁴

The second distinctive approach is that, unlike Ghazālī, Abū al-Barakāt is not interested merely in casting doubt on Avicennian doctrines. His critique of the Rule of One is not directed at the authority of the Peripatetics. Rather, what is at stake is the Rule itself, whether it is a credible principle of efficient causality that can offer the physicist insight into the inner workings of observable phenomena such as celestial dynamics, generation and corruption, and psychic states and action. Furthermore, Abū al-Barakāt's refutation serves the broader project of devising new metaphysical principles that he deems are less vulnerable to skeptical attacks. Perceiving that the Rule of One is too rigid a metaphysical principle to account for the complexity of psychic states, on the one hand, and operations of Divine governance at a macrocosmic level on the other, he proposed alternative theories of the same phenomena that do not rely on the principle. Furthermore, while prioritizing demonstrative knowledge that yields the highest degree of certainty, he is often transparent when such a lofty goal cannot be attained and settles for arguments of lesser yet still viable merit. Thus, the aim and tenor of Abū al-Barakāt's discussion of the Rule—which is reflective of *K. al-Mu'tabar* as a whole—is not dialectical. He seeks after the truth of the matter and the end goal of his criticisms is often constructive.²²⁵

²²⁴ I should add that examining Abū al-Barakāt in this manner should not give the impression that his thought is relevant only in light of Rāzī's intellectual project.

²²⁵ Cf. Frank Griffel who has argued that Abū al-Barakāt initiated a “dialectical turn” in Islamic philosophy; see “Between al-Ghazālī and Abū l-Barakāt al-Baghdādī: The Dialectical Turn in the Philosophy of Iraq and Iran During the Sixth/Twelfth Century,” in *In the Age of Averroes: Arabic Philosophy in the Sixth/Twelfth Century*, ed. Peter Adamson (London: Warburg Institute, 2011), 45–75; and more recently, *The Formation of Post-Classical Philosophy in Islam*, 224–25, 482–99. I think we need to be stricter on what counts as a paradigmatically “dialectical method.” Though appealing to common beliefs and authoritative opinion qualifies as a dialectical approach, when philosopher scrutinizes the basis of these opinions in the view of finding true premisses for a given position, then he has taken steps to go beyond mere dialectics toward demonstrative knowledge. Aristotle takes for granted that dialectic is a necessary first step in any science (*Topics* 101a36–b4). Appealing to common opinions is often unavoidable since explanatory disciplines are always historically transmitted. As such, using them in philosophical reasoning does not condemn us to mere dialectics. What if the philosopher does not achieve demonstration from dialectics? This is an irrelevant question, since the nature

To understand Abū al-Barakāt's concerns with the Rule of One, let us examine the two major sites of his critique. The first concerns the nature of psychic states, while the second concerns the operations of Divine creation. In regard to the first, Abū al-Barakāt argues in the psychology section of *K. al-Mu'tabar* that Avicenna's theory of psychic faculties is ultimately based on his adherence to the Rule of One.²²⁶ This is because for each kind of activity enacted by the soul, the Avicennian physicist must posit a corresponding faculty that serves as its principle (*mabda*).²²⁷ This leads to a proliferation of such faculties to account for the various life-functions of the organism, such as the vegetative, nutritive, appetitive, imaginative, estimative, and rational faculties. Thus, Abū al-Barakāt writes:

According to them [the Avicennian philosophers] the faculties are simple essences (*dhawāt basīl*), and simple things have a single inner reality (*wāḥidat al-ḥaqīqa*). Nothing is necessitated from them (*yalzamu minhā*), insofar as they are single substances or essences, except a single action. Thus, the principles (*mabādī*) of many activities are based on what they claim, namely on the many faculties that are enumerated based on [these different types of activities].²²⁸

This is a rather aggressive interpretation of Avicenna's theory of psychic faculties. Abū al-Barakāt views their status as potencies for the actualization of certain acts as implying a kind of substantiality

of inquiry may be such that demonstration is difficult to attain. What is important is the dogged pursuit of the ideal. Abū al-Barakāt explicitly privileges and consistently aims for demonstrative knowledge (*K. al-Mu'tabar* III, 145–48). He just thinks that some philosophical doctrines which Avicenna holds to be demonstrative are not demonstrative at all. And since some of these are extremely difficult to settle through *a priori* principles, given the limits of our faculties of empirical observation as well as the natural limits of reason, we are often consigned to preponderating opinion. By contrast, when a discourse is content to *remain* within the ambit of common opinion, since its object is persuasion of the public rather than truth, this suffices to classify it as a “dialectical method.” Such is the approach of Ghazālī in the *Tahāfut*.

²²⁶ We can find Abū al-Barakāt's discussion of the Rule of One in the context of psychology in the following sections: in the Physics of *K. al-Mu'tabar* II.6, 310, 313–14 and the Metaphysics of the *K. al-Mu'tabar* III.2, 159.

²²⁷ Abū al-Barakāt seems to have been thinking of passages in Avicenna's *K. al-Nafs*, such as the following: “The faculty (*al-quwwa*), insofar as it is essentially and primarily a faculty, is a potency (*al-quwwa*) for a certain thing, and it is impossible that it be a principle of thing other than this. Thus, insofar as it is a potency-faculty for this [thing], it is a principle (*mabda'an*) for it. If it were to be a principle for something else, then insofar as it is what it is, it would not be essentially a principle for the first [thing]. Thus, the faculty, insofar as it is a faculty, is a principle only for specific actions in the first instance (*bi-qasḍ al-awwal*)” (*K. al-Nafs* I.4, 36).

²²⁸ *K. al-Mu'tabar* II.6.4, 313.6–8.

and causal agency, mimicking those of the soul. The faculties must also be simple, perhaps because unlike corporeal entities they are not aggregates of lesser components. Rather, they seem to be discrete units of causal principles, whose inner reality (*haqīqa*) corresponds to the species of action they produce. Given these two characteristics of the faculties—being a principle of action and being simple entities—Abū al-Barakāt argues that they must submit to the Rule of One.

This interpretation, however, strikes us as conflation of two separate issues: a hylomorphic account of accidental change, on the one hand, and the inner workings of efficient causality, on the other. It is not obvious how the two should be part of the same theory of causality. The notion of faculty (*quwwa*) is, of course, an element of Aristotle’s hylomorphic analysis of change.²²⁹ The faculty or potency here is understood only in terms of what it is the potency of, i.e., a certain activity or product. Whenever a species of actuality of accidental change occurs, it necessarily occurs to something that undergoes the change, namely the substrate or substance. The physicist observing this phenomenon must posit a state belonging to the substance whereby it is *capable* of producing that species of action; he must also posit a distinct state belonging to the substance insofar as it is actualizing that very act. The first is logically prior to the second. However, in relation to the concrete world, potency is something inferred *a posteriori*, that is, after the observed actuality of the act. Positing the existence of potencies allows the physicist to predicate, say, “speaking” of an animal, even when it is not speaking at the very moment of predication, or “sheltering” of a building when that building is vacant.²³⁰ The distinction between potency and actuality and its relationship to predication cannot be understated. Without positing the existence of a potency for every species of actuality, the physicist cannot with truth predicate any quality of a subject term

²²⁹ For Avicenna’s analysis of potency and actuality as concomitants (*lawāḥiq*) of being, see *Ilāhiyyāt* IV.2. Avicenna bases his discussion on Aristotle’s discussion of the same topic in *Metaphysics Theta* and *Delta* 12.

²³⁰ This is the substance of Aristotle’s critique of the Megarians who deny that we can predicate *A* of *X* when *X* is not actually exercising *A*: *Metaphysics Theta*, 1047a, 10–29.

unless that quality is actual during the moment of predication. This forecloses his ability to make universal statements about sublunary natural phenomena that are constantly changing. For instance, “rationality” and “speaking” cannot be predicated of humans when the relevant organs of thought and speech are at rest, as when sleeping; and “healthy” cannot be predicated of certain nourishments when they are not consumed. Universal terms such as these are neutral with respect to its actuality within time and space. Thus, if the physicist is to make true statements regarding the nature of the soul, he must posit the existence of potencies in the logical structure of the substance that would ground the predication of these terms. Without positing a multiplicity of faculties, the physicist would not be able to make a systematic and universal taxonomy of the various activities of the soul in relation to its nature and the various organs its body possesses.²³¹

We must, however, square this conception of potency with Avicenna’s account of psychic faculties in *K. al-Nafs* that relies heavily on the language of efficient causality, such as *ṣadara* and *ṣudūr*, “to proceed” and “procession,” and *fāḍa* and *fayḍ* or *fayḍān*, “to issue” and “emanation” or “pouring forth,” to describe the relationship between faculties and the activities they govern. For instance, in the beginning of his analysis of psychic faculties in *faṣl* 4, the Master writes that the goal of the inquiry is

[to] discover whether in the procession of [the soul’s] activities from its faculties (*al-quwā allatī taṣḍuru ‘anhā hādhihi al-afā’īl*), it is necessary [to hold] that pertaining to each species of activity is a single faculty uniquely specified for it, or not.²³²

And at the end of the *faṣl*, he writes:

²³¹ This problem of predication would be irrelevant in the case of perpetually actual entities, such as the Necessary Being and the celestial intellects.

²³² *K. al-Nafs* I.4, 33. The same language of the “procession” of activities from faculties is prominently used in this work, and their instances are too many to be enumerated here. In the sections concerned, however, we may find this language in the following pages: 37, lines 7 and 18; 38, line 1.

[The] totality of activities that are ascribed to the animal requires organs; thus, the senses and images pertain to another set of corporeal faculties that is other than the faculty of motion, even though they [i.e., the senses and images] issue (*tafīdu*) from them.²³³

When the faculties are described as being the source of psychic action (*ṣudūr al-afāl*), they seem to acquire some measure of causal influence in their own right. However, this does not seem to entail that they are active principles of causality. Whatever “agency” they possess, it is subject to the direction and determination of the soul. The soul uses the faculties to mediate its interaction with the organs. The more varied the species of actualities produced, the more such intermediary principles must be posited to account for the occurrence of change. It is tempting to interpret this model of intermediary principles and the causal language of “procession” and “emanation” as implying that our unified consciousness is a mere epiphenomenon of these faculties, all of which somehow work in concert as discrete entities brought together by the unifying principle that is soul.²³⁴

The hylomorphic interpretation of faculties further recedes to the background in favour of the language of efficient causality when we consider that for Avicenna the soul does not only function as the form of a material substrate composed of various organs; rather, it is a transcendent entity that governs the body, one that actualizes its various potencies and directs the attainment of its perfection. One reason why Avicenna adopted a strongly causal language to describe the relationship between the faculties and their actions is to emphasize how the soul is a transcendent

²³³ *K. al-Nafs* I.4, 39.

²³⁴ Avicenna is aware of this potential problem. He explicitly counts himself among the partisans of the soul’s unity and took pains to show that the proliferation of the faculties does not compromise the unity of the soul: *K. al-Nafs* V.7, 249-262. Furthermore, the soul is a substance, while potency and actuality are concomitant accidents (*lawāzim*). Substance cannot be composed of its potencies because accidents are what the substance undergoes, not what it is composed of. To be more precise, these faculties are only incidentally related to the soul insofar as it performs certain activities related to its life functions.

entity that uses the body to achieve its own ends.²³⁵ However, since it is wholly immaterial, the soul must produce mediating principles that would allow it to safely interface with the various organs of the body. These intermediaries, in turn, govern specific organs of the body and with the direction of the soul actualize the various life-functions of the organism. It is as though Avicenna reproduces the emanative scheme of the celestial world in the microcosm of the soul.²³⁶

This is, of course, a simplistic account of Avicenna's theory of psychic faculties.²³⁷ It is the result of exploiting a tension in Avicenna's account of the soul between its role as form of the body and its role as a transcendent governor of the body, and the difficulties of reconciling them through a consistent set of technical terms. Indeed, Abū al-Barakāt seems to be aware that this is an ambiguity rather than of a clear-cut "Peripatetic" doctrine. He never went so far as to accuse Avicenna of endowing the faculties with substantiality and causal self-sufficiency. Rather, his approach is to

²³⁵ See for instance, the language of emanation (*fayḍān*) used to describe the relationship between the soul and the faculties in *K. al-Nafs* V.7, 254, where he explains how the single thing (*al-shay' al-wāḥid*) that agglomerates the faculties cannot be a body: "The body insofar as it is a body cannot be the locus in which these faculties are agglomerated (*majma' hādhihi al-quwā*); if not, then any unit of bodies would possess [these faculties as part of their bodily nature]. Rather, something [else must be posited] to account for the fact that the body [in question] becomes like this [i.e., in possession of the various faculties and activities]. Now this thing is the first unifier (*al-jāmi' al-awwal*), which is the perfection of the body insofar as it is the locus of agglomeration (*majma'*), and it is incorporeal. Thus, the locus of agglomeration is this incorporeal thing, which is the soul. [Furthermore, it is possible that] something incorporeal can [still] be the source (*manba'*) of the faculties. Some of them emanate (*yafīḍ*) [directly] from it to the organ, while others are specified in themselves (*yakhtaṣṣu bi-dhātihū*). However, both are produced by [the source] as distinct species of effects (*naw'an min al-adā'*). The [faculties] that exist in the organ are agglomerated in the principle (*mabda'*), which [in turn] assembles them in the organ of this principle. [Thus] each [of these faculties] emanate (*fā'īḍ*) from that which is independent of the organs, as we will explain after when resolving some doubts. As for the body, it is impossible that these faculties emanate from it. For the relationship between the faculties and the body is not a relationship of emanation (*al-fayḍān*); rather, [it is a relationship] of reception (*al-qubūl*). For it is possible with respect to emanation that there be a separation (*mufāraqa*) between the emanation and the thing receiving the emanation. Whereas reception does not permit this [separation]." When we consider that the same term "*fayḍ*" is also used to describe the production of acts by the faculties, we can legitimately draw a parallel between the emanation of faculties from the soul and the emanation of actions from the faculties, producing a chain of efficient causal processes—as expressed, for instance, in the following passage in the same chapter (pg. 252): "The various activities [of the soul] pertain to various faculties. Each one of these faculties are specified in their respective manner insofar as a [species of] action emanate from it (*yaṣḍuru 'anhā*) in a primary way." I translate the terms *fayḍ* and *ṣudūr* as "emanation" only to draw attention to the ambiguously causal language implied in these passages. Otherwise, it would be better to translate these terms without imposing this interpretation, such as "procession," "to issue," etc.

²³⁶ See Thérèse M Bonin, "The Emanative Psychology of Albertus Magnus," *Topoi* 19 (2000): 45–57.

²³⁷ We will return to the question of potencies as causal factors of efficient causality in the next subchapter. We shall see that in Avicenna's account both concepts overlap in the case of hylomorphic beings. Indeed, despite lacking direct engagement with Avicenna's psychological writings, Abū al-Barakāt's interpretation of potencies as having quasi-active powers is not so off the mark.

simply highlight the faculties' role as intermediaries that channel the agency of the soul.²³⁸ In my view, it is best to view Abū al-Barakāt's interpretation not as an intentionally hostile construal of Avicenna's theory of faculty differentiation. Rather, he is concerned with arriving at a satisfactory, streamlined model of psychic action that adheres to the basic principles of the science and is free from ambiguity.²³⁹ By positing the existence of faculties to explain how psychic change occurs, Avicenna risks obfuscating two fundamental principles of psychological inquiry: the soul's agency through multiple, distinct faculties and its indivisibility.²⁴⁰ The first, because by using faculties to analyze psychic states, the Avicennian physicist introduces mediating principles between the soul and its acts, thereby delegating portions of its power to mere tributaries. This casts doubt on the status of the soul as the transcendent cause of the body's perfection and the actuality of its various functions. The second, because this delegation of agency implies a divisibility of its essence and fragmentation of its consciousness. This decentralized model of perception introduces an unnecessary complication to what Abū al-Barakāt considers to be the immediate and primary intuition that all acts of perception occur to a single percipient subject that has a unity of consciousness.²⁴¹ The soul's unity and simplicity and its transcendental governance of the body are

²³⁸ As we shall see in Chapter 3, Rāzī, unlike Abū al-Barakāt, explicitly links the theory of potencies with Avicenna's notion of causal factors (*ma'ānī*, *ahkām*, *jihāt*), which we discussed in Chapter 1.3. Rāzī can do this because he delves into the theoretical principles supporting the Rule of One. The basis of this overlap is that the causal *ma'ānī* like potencies are universal terms that qualify the subject term and reveal its ontological structure.

²³⁹ The same qualification is also advisable when reading Fakhr al-Dīn's criticism of Avicennian psychology; but the same can also be said of his approach to other Avicennian doctrines, such as the Rule of One.

²⁴⁰ Abū al-Barakāt offers his arguments for these doctrines in Chapter 15 of the psychology of *K. al-Mu'tabar* II.6.15, 364–67.

²⁴¹ *K. al-Mu'tabar* II.6.4, 318.6–319.5: “We are immediately aware from our selves—with an awareness that grasps the reality of the matter (*shu'ūran muhaqqiqan*)—that the single thing in us is that which sees, hears, thinks, contemplates, remembers, desires, detests, approves, and is subject to anger, and that the essence and existence of [this single thing] is one, and that there is no otherness in any action it [produces] [...] If the [the faculties] are those which produce the act, then the agent would be other than [our soul], and if [for instance] the faculty of seeing is that which sees and this [faculty] is other than me, being other than myself and my essence, then what is other than me is what which perceives. However, it is I who is aware, recognizes, and knows with certain and true knowledge that it is I who sees, speaks, and acts. If [in response to this, it is said that the faculty] perceives with me and I perceive with it, each [doing this] separately (*bi-infirādihi*) and independently, then I would have no need of [the faculty]. We would [still] have consciousness of our act of perception, not of the act of perception of [some other agent]. Anything that is distinct in

key principles of psychology that should form the basis for all other inquiries in the science. Furthermore, positing the existence of faculties as intermediary principles amounts to a gratuitous proliferation of theoretical constructs (*ʿtibārāt*) to describe the intuitive fact of the soul's unified agency in exerting direct control over its organs.²⁴² The physicist should instead make use of a much more streamlined model of psychic action that is consistent with this fact, rather than one that introduces unnecessary and distracting layers of mediation.

Abū al-Barakāt's solution is to present a model of soul-action that does not rely on faculties to mediate the indivisible soul and its many activities. In this model, the substance of the soul (*jawharat al-naḥs*) functions as the locus (*maḥall*) for all psychic action, "from which, in which, and by means of which" all activities of a sentient being takes place.²⁴³ However, while this unitary being serves as a nexus for all psychic states and activities in a single consciousness and agency, it remains completely transcendent and isolated from all of them. All other functions of the body are reduced

number (*bi-l-ʿadad*) [from our essence] is other [than our essence]. Now if [the faculty] sees and transfers [the object of sight] to the seer and I see it by means of it and in it, then it is inevitable that whatever I perceive passes [to me] by means of its realization [in the faculty] first, before it is transferred to me from it. Thus, [the faculty] is [merely] a receptive organ and is not an active [principle]. [The faculty understood in this manner] is [merely] a substrate for my act of seeing and is the matter (*hayūlā*) and is not an active faculty (*quwwa fāʿila*). I gain no act of awareness from [the faculty's] act, and there is no difference to me whether [the faculty] transfers the object of sight to me, but does not itself perceive it, or whether it does perceive it and I perceive it in [the faculty]. For the seer is that which I recognize and that which I am intimately aware over all other things, namely I myself, which is my essence and my very identity (*dhātī wa-huwiyyatī*). Anything other than [myself that is involved in the act of seeing] is either something that carries (*hāmil*) [the object of sight] or something that connects (*muwaṣṣil*) it [to my attention], such as the eyes and the pneuma in them—and these are not seeing faculties. Thus, I avail naught from their act of seeing, rather only from their reception and their act of connecting [the object of perception to me]. [In our perspective] the seeing faculty is the primary soul (*al-naḥs al-ūlā*). Therefore, the act of thinking, remembering, and other [acts] do not necessitate the proliferation of active essences and faculties."

²⁴² Recall how in the Peripatetic analysis of hylomorphic change, positing the existence of potencies in the logical structure of the substance allows the physicist to make universal statements regarding it. The causal language Avicenna uses to describe these suggests that these are not only logically prior to the actuality of the effects but are existentially prior to them as attributes of the substance, which together make up its "nature." We shall discuss this aspect of the theory of potency when we turn to Avicenna's proofs for the Rule of One in the following subsection of this Chapter.

²⁴³ Referring to the perception of particulars and universals, Abū al-Barakāt writes: "The soul is [therefore] the locus (*maḥall*) of all forms that are items of knowledge (*al-suwar al-mā'lūma kullihā*), because we perceive them *from us, in us and through us* (*minnā wa-finā wa-ʿindanā*), such that we are aware of them. We do not find any division [between the perceiver of universals and the perceiver of particulars] that is essentially apprehended [as such]. To us, [the Avicennians] have no proof for [their doctrine]. Thus, according to us, there is no distinction between the two [kinds of perception] in terms of the perceiver thereof. The locus in which [universals and particulars] are preserved and observed is a single essence (*dhāt al-wāḥid*) that is ourselves" (*K. al-Mu'tabar* II.6.22, 297.24–98.3).

to being a physical “container” (*hāmīl*) of psychic states or “that which connects” (*muwaṣṣil*) them to the soul.²⁴⁴ How precisely this model works and how Abū al-Barakāt envisions the separation of the soul from its various bodily functions is not clearly elucidated in *K. al-Mu‘tabar*. Attempting to reconstruct his theory would go beyond the remit of the present discussion.²⁴⁵ However, the general implication of the model to our present discussion is clear: if it can be shown that the soul exerts direct and sovereign control over its corporeal organs without the mediation of faculties, we have found a paradigmatic case wherein the many proceed from the one.

Abū al-Barakāt’s discussion of the Rule of One in the context of psychology is his most original contribution to the reception history of this principle, one that would be influential for Fakhr al-Dīn al-Rāzī. However, he also offered an analysis and refutation of the principle where we would expect to find it, which is in the section of *K. al-Mu‘tabar* that deals with Divine acts, power, will, and knowledge, and the creation of the world, a section that corresponds roughly to Avicenna’s *Ilāhiyyāt* IX.²⁴⁶ This applied context is where Abū al-Barakāt offers his most systematic analysis of the principle.

Abū al-Barakāt begins his criticism of the Rule of One by claiming that it is “basically correct” (*ḥaqqun fī nafsihī*).²⁴⁷ Rather, his contentions are apparently directed at the corollary doctrines of the principle that do not stand up to scrutiny.²⁴⁸ We have discussed one such doctrine above, which is the theory of psychic faculties. In this section we will discuss another cluster of metaphysical

²⁴⁴ By the *hāmīl*, Abū al-Barakāt seem to be referring to the organs, by the *muwaṣṣil*, he seems to think of the pneuma.

²⁴⁵ In Chapter 3, I will return to it when discussing Rāzī’s conception of efficient causality and how he further develops Abū al-Barakāt’s model of the soul and psychic action.

²⁴⁶ This is *maqāla* 2 of the work devoted to cosmogony, the introductory chapter of which is entitled, “On the beginning of creation and its existentionation from the First Principle” (*fī bidāyat al-khalq wa-l-ijād ‘an al-mabda’ al-awwal*): *K. al-Mu‘tabar* III.2, 145–226. The principle is specifically mentioned and discussed in the following pages: 48, 148–50, 156–59, 160–61. The Rule is introduced in earnest in Chapter (*fāṣl*) 2, entitled “On recollecting the opinion of Aristotle and his partisans (*shī‘atihi*) regarding the origins of creation” (148), and Chapter (*fāṣl*) 4, entitled “On pursuing what is said with respect to the beginning of creation in regard to the separate intellects, celestial souls, and their bodies” (156).

²⁴⁷ *K. al-Mu‘tabar* III.2.4, 156.4–5.

²⁴⁸ “*Laysa yalzamu minhu intāḡ mā antāḡu wa-lā yabnī ‘alayhi mā banū*” (*K. al-Mu‘tabar* III.2.4, 156.4–5).

doctrines, which revolve around the theory of emanation and the triadic structure of procession celestial entities that characterizes Avicenna's cosmic system. However, it will be clear by the end of this discussion that by claiming that the Rule of One is "basically correct," Abū al-Barakāt could not have referred to the same general principle of efficient causality that Avicenna developed in *Ilāhiyyāt* IX.4, and especially in later works such as the *Ishārāt*. Rather, by this statement, he is referring to a localized principle of agency that is unique to the First Cause. As for the subsequent channels of causation, he holds that the many may proceed from the one—whether the subject here is celestial intellects and Souls, or sublunary entities. Since Avicenna did not conceive the Rule of One as a localized principle of agency—as we have seen in Chapter 1 and as we shall see in more detail in the next subsection—but as part of a comprehensive theory of efficient causality, what Abū al-Barakāt holds as "basically true" is not the principle as the Master conceived it. Rather, it is the principle—or rather, the formula—as Abū al-Barakāt conceived it within the framework of his system.²⁴⁹

Let us turn first to Abū al-Barakāt's criticism of the Rule of One before discussing which aspect of it he found acceptable. Like Ghazālī, Abū al-Barakāt focused on the applied context of the principle. He saw it as primarily as a corollary doctrine of Divine Oneness.²⁵⁰ His account revolves around the issues of Divine creation and the triadic structure of emanation.²⁵¹ However, this did

²⁴⁹ Cf. Amin, "From the One, Only One Proceeds," 134, 144.

²⁵⁰ *K. al-Mu'tabar* III.2.4, 156.6–13: "They claim with respect to the First Principle that nothing more than one proceeds from it. They claim that from the second three things proceed from it, since it is a single essence (*wāḥid al-dhāt*) in terms of three conceivable intelligible considerations (*ʿtibārāt*) without any additional essence to its singular essence; rather [this is due to] its act of intellection and conceptualization. This is not the case regarding the First Principle. [They] render [what proceeds] in the order of what comes first, second, before and after, in the same way that they rendered in regard to the second, which in regard to the First is primary."

²⁵¹ Avicenna's theory of triadic emanation is discussed in the following sections of *K. al-Mu'tabar* III.2: pp. 151.9–19; 156.10–157.11. Abū al-Barakāt correctly identifies Avicenna's theory of the intellect as a central aspect of the Rule of One—as we have seen in Chapter 1 of this thesis. In the present metaphysical portion of *K. al-Mu'tabar* where cosmogony is discussed, the author devotes an entire chapter—*faṣl* 3—to explaining and interrogating Avicenna's theory of the intellect (pp. 152–55). This discussion is based on results of Abū al-Barakāt's inquiry into the same topic in the psychology of the work (vol. II, *juzʿ* 6), especially in *faṣl* 23 and 24 (pp. 407–17), entitled, "On what has been said

not mean that his source for the principle was limited to Avicenna's early and middle works, where this applied context took centre stage. He seems to be aware of the later shift in Avicenna's conception, since he also adduces a paraphrase of the *Ishārāt* proof for the Rule of One, which treated the principle as a stand-alone metaphysical principle belonging to a general theory of efficient causality.²⁵² However, despite perhaps being the first post-Avicennian critique to bring up this proof, Abū al-Barakāt neither elucidates nor interrogates it. He simply appended this argument as a subsidiary proof to what he considered to be the more primary imperative of upholding God's oneness when accounting for the creation of the world. This applied context, then, remains for Abū al-Barakāt the primary locus of interpretation.

Broadly speaking, in the metaphysics section of *K. al-Mu'tabar*, Abū al-Barakāt offers three types of arguments against the Rule of One. The first two conform, respectively, to the second and third classes of Ghazālīan objections, which we have discussed above; while the third is a new objection based on the nature of the intellect.²⁵³ We will not, however, discuss Abū al-Barakāt's doctrine of the intellect and how it undermines the metaphysics of the Rule of One, although it is the more intrinsically fascinating topic of the three objections.²⁵⁴ The theory is quite complex, relatively unexplored, and will require us to examine in detail his theory of the human soul, which, as mentioned above, falls beyond the scope of this dissertation. We will, however, touch on some aspects of it in Chapter 3 when we discuss Rāzī's theory of the cosmic system. Let us now turn to the other two objections against the Rule of One. The first objection adopts Ghazālī's *reductio ad*

regarding the intellect in potency and the active intellect," and "On refuting the claim that the intellect does not perceive particulars and sensibilia [i.e., *qua* particulars and *qua* sensibilia]," respectively. We will discuss Abū al-Barakāt's doctrine of the intellect, and Rāzī's adaptation of it, in Chapter 3.3 of this thesis.

²⁵² *K. al-Mu'tabar* III.2.2, 150.20–24. In the *Ishārāt*, the principle is presented in *Namaṭ* 5, 153; see also *Sharḥ al-Ishārāt* II, 419.

²⁵³ For Ghazālī's objections, see pg. 6 *ff* above.

²⁵⁴ Abū al-Barakāt devotes an entire chapter on the nature of the Intellect (*K. al-Mu'tabar* III.2.3, 152–155). It immediately follows the chapter where he introduces the Rule of One and criticizes it through the two classes of objections mentioned above and which we will discuss (*K. al-Mu'tabar* III.2.2, 150–155).

absurdum argument in the *Tahāfut*. Abū al-Barakāt argues that, if the Rule were true, then the resulting picture of the world would be one of a vertical succession of single units of entities that are species unto themselves.²⁵⁵ However, he does not present any arguments why he thinks that such is the implication of the Rule of One. Like Ghazālī, he seems to have taken it as a self-evident conclusion. Abū al-Barakāt also argues that if the Rule were true, then God would have no knowledge of particulars, since His sphere of governance will be limited to Himself and the First Intellect. Any direct engagement with the subsequent unfolding of reality would introduce multiplicity in His Essence. However, since Avicenna *does* affirm that God does have knowledge of things other than Himself, he must therefore be contradicting himself.²⁵⁶ This attempt at forcing the opponent to concede internal incoherence is thoroughly consistent with the Ghazālīan method and is in fact lifted from the original version of the argument in the *Tahāfut*. Of course, to this, followers of Avicenna may respond with an account of Divine knowledge that does not violate the Rule; but Abū al-Barakāt does not produce a counter-objection on their behalf.

The second Ghazālīan objection Abū al-Barakāt adopts is the general claim that the Rule of One is too rigid a metaphysical principle to account for the complexity of celestial phenomena. He also adduces Ghazālī's example of the multitude of the fixed stars that exist at the second strata of emanation, following the outermost orb. To this example, he also adds the equally valid question of whether these stars have their own souls or intellects and of their function in the cosmic system:

[The Peripatetics, i.e., Avicennians] pass over the stars (*kawākib*) [as though they are] left alone to move by themselves (*sudān*), having neither intellects nor souls. [However] they provide these [i.e., intellects and souls] for the orbs [to account for their] motions. They hold

²⁵⁵ *K. al-Mu'tabar* III.2.2, 150.20–151.9.

²⁵⁶ *K. al-Mu'tabar* III.2.4, 157.2–10. Abū al-Barakāt here is not referring to Avicenna's famous theory of knowledge of particulars *qua* universals, but rather to statements where the Avicenna seems to affirm the notion that God answers prayers and cares for human beings (157.6–8).

that [these orbs] are noble, ancient, and eternal bodies, each of which deserves to have soul and life, since they are more deserving (*aḥaqq*) of these than human beings. However, they neglect the stars in their multiplicity. They do not mention them at all, whether [they have] soul or intellect. They regard them [only] as [the physical] parts of the orb, like the organs of the body. However, even the organs of the body are not lame. How were they able to associate them [i.e., bodily organs] with certain faculties, but divest [the stars] from these [things] and neglect to theorize about [their nature]? They affirm [these faculties for some things] and negate them [from others]. Yet these [faculties] are more properly ascribed [to the stars] given what they clearly produce by way of rays (*shu'ā'*), lights (*anwār*), powers (*quwan*) and spirits (*rūḥāniyyāt*). [Furthermore,] the planets are more deserving of [faculties] than the stars that are fixed to their orbs, in accordance with their size, number, and whether they are visible to us or not.²⁵⁷

In this passage, Abū al-Barakāt raises a valid point regarding Avicenna's application of the Rule of One. In works such as *Ilāhiyyāt* IX.4, the Master deduced the basic structure of the celestial realm through the careful application of the Rule of One and the resulting triadic structure of emanation. However, this account only takes into consideration three types of celestial entities: the celestial intellects, the celestial souls, and the orbs. Avicenna does not discuss the procession of the fixed and wandering stars. He also does not discuss the possibility that they are living entities that possess faculties of their own. For Abū al-Barakāt, to account only for the nine orbs while ignoring the stars and planets seem to be an arbitrary demarcation. Their visibility to the naked eye and the obvious causal influence they exert on the sublunary realm should have merited at least a passing acknowledgement. Even if Avicenna were to respond by saying that these entities and their motions

²⁵⁷ *K. al-Mu'tabar* III.2.4. 157.17–158.1.

do not belong to a properly metaphysical inquiry, by what definition of the science should the question of their nature be excluded from the inquiry? By insisting on this point, Abū al-Barakāt wants to intimate that Avicenna’s silence is likely forced upon him. He could not have reconciled the neat triadic structure of emanation with the true conditions of the celestial realm, because the kaleidoscopic variety of the fixed stars and planets would ultimately bring the poverty and inadequacy of the Rule of One into stark relief. This seems to be the main takeaway of the passage above. For this reason, Abū al-Barakāt immediately chastises the Peripatetics for what seems to be a willful neglect of inconvenient facts that might subvert their theory. Concluding the passage above, he writes that they are ultimately dogmatic, presenting “[their position as] some wisdom (*hikma*) that they adduce like a transmitted report (*khavar*); for they would stipulate a certain account of the matter (*naṣṣū fīhā naṣṣan*) as though it was given [to them] as revelation (*ka-l-wahy*), for which there can be no objection, and whose supporting [proofs] (*waliyya*) are not even well-considered.”²⁵⁸

For Abū al-Barakāt, the notion that God’s knowledge is limited to Himself and the First Intellect, the inability to account for the plurality and effective agency of the fixed stars and planets, as well as the fragmented model of consciousness and psychic states, are all false doctrines that are necessitated by the Peripatetics’ adherence to a flawed principle at the heart of their metaphysics, namely the Rule of One.²⁵⁹ When we abandon the principle, or at least Avicenna’s construal of it, we will arrive at a model of divine and psychic agency that is consistent with the observable facts of the celestial realm, on the one hand, and the immediate experience of individual consciousness, on the other. Indeed, in several passages of the metaphysics of *K. al-Mu’tabar*, Abū al-Barakāt explicitly links the psychological and divine aspects of his discussion of the Rule of One, implying

²⁵⁸ *K. al-Mu’tabar* III.2.4. 158.1–2.

²⁵⁹ Abū al-Barakāt writes: “In theoretical investigations (*al-anṣār*), the branches of the sciences (*furū’ al-‘ulūm*) are in accordance with their roots (*al-uṣūl*). The spoiling of a yeast (*al-ḥamīr*), even if a little bit, necessitates the spoiling of the dough-batter (*al-‘ujayn*)” (*K. al-Mu’tabar* III.2.4. 157.10–11).

thereby that what is at stake is not the validity of a localized theological issue, but the coherence of the cosmic system as a whole.²⁶⁰

Although we have seen that Abū al-Barakāt is deeply indebted to Ghazālī's objections in the *Tahāfut*, this broader interpretation of the Rule of One is one aspect that distinguishes his approach from his predecessors. There is another aspect that distinguishes Abū al-Barakāt's line of inquiry, one that would also be influential for later thinkers. In addition to presenting his objections against the Rule of One, he would also offer alternative theories to the corollary doctrines he refuted. Where Ghazālī's discourse is meant only to impugn the reputation of *falāsifa* by introducing a cloud of doubt and uncertainty over their most fundamental metaphysical doctrines, Abū al-Barakāt is anxious to show that his criticism is meant to serve the constructive and systematic investigation (*naẓar*) into this most elusive of inquiries.²⁶¹ Chapter (*faṣl*) 5 of the cosmogony section of *K. al-Mu'tabar*—which dwarfs adjacent chapters in length—is devoted specifically to this effort in developing a distinct theory of Divine creation and of the cosmic system generally. However, since the present chapter of this thesis focuses on our thinkers' analysis and criticism of the Rule of One, I will postpone discussing this aspect of Abū al-Barakāt's theory to Chapter 3.3, where I will undertake a reconstruction of Rāzī's theory of the cosmic system. As we shall see, Rāzī adopts many of the insights Abū al-Barakāt advances in *K. al-Mu'tabar*. We shall also see how both Abū al-Barakāt and Rāzī attempt to dislodge Avicenna's theory of psychic faculties and the triadic structure of emanation with a “monadic” theory of soul (*jawhar al-nafs*) and a metaphysics of divine

²⁶⁰ *K. al-Mu'tabar* III.2.5. 159.17–22; 160.4–10; 161.1–3; 161.12–16].

²⁶¹ “We do not intend to oppose the majority [of philosophers] (*al-jumhūr*) by refutations (*bi-l-abāṭil*), on account of which we would be isolated from them, since by means of this [position] a certain distinction has obtained between us and them. The person who says, ‘oppose, and you shall have concession [on the matter]’ is not [necessarily] among those who are in possession of the best opinion. Rather, [the better opinion is with] he who says, ‘give assent and approval in regard to truth; and oppose [only] in regard to falsity whether you have concession [on the matter] or not.’ The person who desires opposition but turns back against truth courts falsity.” (*K. al-Mu'tabar* III.2.5. 161.4–8).

archetypes (*arbāb al-anwāʿ*) respectively.²⁶² We shall also see how both thinkers hold that God does not create everything at once. Rather creation unfolds in stages, beginning with a single entity, before proceeding to a host of other celestial entities that participate in the governance of the sublunary realm. This, however, is not a concession to the Avicennian Rule of One, because their doctrine of the “first creature”—whatever it be called in their respective systems—and of celestial mediation has shifted from the metaphysics of causal necessity to the metaphysics of will. This divests the procession of the First Creature and the subsequent order of creation from the restrictions Avicenna had imposed in terms of necessity, unidirectionality of agency, stratified procession, and the distribution of God’s power to the host of celestial intellectual entities, restrictions that lead to a strict hierarchy of the celestial entities in their uncompromising impassivity and unperturbed transcendence (*tanzīh*) from ever-changing cycles of sublunary generation and corruption.²⁶³

²⁶² I will discuss the idea of the “monad” in Chapter 3 of this thesis. Briefly, however, it is best understood in terms of Aristotelian and Avicennian hylomorphism—to which it is opposed—and the *kalām* theory of substance and accidents—aspects of which it adopts. As we shall see, this theory is based on the metaphysical intuition that the inner structure of any substance is inaccessible by philosophical and scientific means of analysis, which for Abū al-Barakāt and Fakhr al-Dīn is always reliant on *a posteriori* observation of psychic phenomena. This kind of analysis can *describe* what the core structure of the soul *should* look like and systematize knowledge of relatively essential or accidental attributes thereof. But these are attempts to explain the substance insofar as it appears to the physicist from the outside, not insofar as he has insight into its inner reality. As we shall see, the theory of the monad derives from a primarily epistemic imperative, and is rather a model, which in its very design is meant to be neutral in regard to the precise ontological structure of the object in question. It is based on this fundamental metaphysical insight regarding the limits to our knowledge of essences that Rāzī will deny the validity of the Rule of One. While he was obviously influenced by Abū al-Barakāt in his conception of the soul, extrapolating the metaphysical implications of the theory into the realm of general ontology is Rāzī’s unique contribution, a further development of his predecessor’s insight, but not anticipated by him. To my knowledge Henry Corbin is the first to have described Abū al-Barakāt’s theory of the soul as a “monadology.” See *Avicenna and the Visionary Recital*, translated by Willard R. Trask (New Jersey: Princeton University Press, 1960), 77-93 (first published in Téhéran/Paris, Adrien-Maisonneuve, coll. « Bibliothèque iranienne » no. 4 et 5, 1954); ‘Herméneutique Spirituelle Comparée,’ in *Face de Dieu, face de l’homme: Herméneutique et soufisme* (Paris: Entrelacs, 2008), 78 (first published in Eranos-Jahrbuch, XXXII/1964. Zurich, Rhein-Verlag, 1965. In-8°, pp. 71-176); *En Islam Iranien II, Aspects spirituels et philosophiques: Sohrawardī et les platoniciens de perse* (Paris: Gallimard, 1971), 135 (first published in Gallimard (coll. « Bibliothèque des idées »), 1971). Richard Frank, when describing Ashʿarite ontology of substance and accidents also used the term “monadic entities” to describe the substance that is the locus of accidents; see Richard Frank, “The Aṣʿarite Ontology: I Primary Entities,” *Arabic Sciences and Philosophy* 9 (1999), 196, 199, 201.

²⁶³ Indeed, one of the chief objects of Abū al-Barakāt’s criticism of Avicenna’s cosmic system is the rigidity and formalism of the latter’s conception of *tanzīh* in regard to both God and the celestial intellects: *K. al-Muʿtabar* III.2.4. 157.12–17; III.2.5. 163.1–24.

Although Abū al-Barakāt departs from Ghazālī in these two aspects, he shares the latter's narrow approach to the Rule of One. Both thinkers focus on the “applied context” of the principle. In *K. al-Mu'tabar* the scope of this applied context is much broader than what we find in the *Tahāfut*, since Abū al-Barakāt also discusses the principle in the psychology section of the work, in addition to the paradigmatic event of the emanation of the First Intellect and the subsequent procession of celestial entities. By focusing on the applied context, Ghazālī's and Abū al-Barakāt's approach consists of criticizing the corollary doctrines of the Rule as an indirect way of refuting it. By exposing all its necessary consequences—in terms of triadic structure of procession and the fragmented model of consciousness—the falsity of the premiss immediately obtains. Thus, the logical structure of Ghazālī and Abū al-Barakāt's argument is to deny the consequent in order to show the falsity of the antecedent, i.e., *modus tollens*.²⁶⁴

As we shall see in the following section of this chapter, Rāzī also makes use of this *modus tollens* strategy in his criticism and even adopted some of Ghazālī and Abū al-Barakāt's objections. However, he seems to have regarded their approach as inadequate and limited. For while he dealt with the applied context of the Rule of One, his most extensive discussion focuses on reconstructing and criticizing the underlying theoretical premisses that support the principle. He conducts this line of inquiry from several different perspectives and in light of the various proofs Avicenna adduces for the Rule of One, especially those of his later-period works such as the *Ishārāt*, *Ta'liqāt*, and *Mubāḥathāt*. In fact, this “theoretical context” is Rāzī's preferred method of approaching the principle, because it informs all other aspects of his criticism. This more systematic framework of interpretation will allow him to identify the fundamental metaphysical issues at stake and interrogate the core intuitions sustaining Avicenna's theory of divine creation and efficient

²⁶⁴ Abū al-Barakāt confirms that “denying the consequent” is the basic structure of his criticism in the beginning of the Chapter (*fāṣl*) 5, where he develops his own theory of divine creation: *K. al-Mu'tabar*, III.2.5. 158. 19–24.

causality. It also allows him to offer a rival theory of the cosmic system from the ground up, since the terms of the debate have shifted from the constraint of corollary issues (*furūʿ*) to the fundamental doctrines (*uṣūl*) of ontology and epistemology. Since the true background to Rāzī's criticism of the Rule of One is the theoretical context, and not—as *per* Ghazālī and Abū al-Barakāt—the applied context of Divine governance, we must first elucidate what this theoretical context consists of from a strictly Avicennian point of view. Doing this will allow us to understand the substance of his theory from a fresh perspective, thus placing us in a better position to critically examine Rāzī's criticism.

2.2. Avicenna's later proofs for the Rule of One: the theoretical context of efficient causality

In his late works, such as *al-Ishārāt wa-l-tanbīhāt*, *al-Taʿlīqāt*, and *al-Mubāḥaṭhāt*, Avicenna had reoriented his general approach to the Rule of One and refined the arguments supporting it. Instead of arriving at the Rule as a corollary doctrine to God's simplicity, as we have seen in *Ilāhiyyāt* IX.4 and other compendia of *ḥikma* from his early and middle period, he now presents it as an independent metaphysical principle based on *prima facie* immediate and necessary premisses (*badīhiyyāt*).²⁶⁵ In doing so, Avicenna has shifted the locus of discussion from the applied context of Divine governance—i.e., absolute creation (*ibdāʿ*), triadic procession (*ṣudūr*) of celestial entities, and Providence (*ināya*)—to the theoretical context of general causality, specifically efficient causality. Thus, what was previously implicit in *Ilāhiyyāt* IX.4, one which required us to reconstruct Avicenna's theory of causal compatibility in *Ilāhiyyāt* VI.3, is now explicitly affirmed as the premisses of a new argument for the Rule of One, which would make its first appearance in the *Ishārāt*. This new argument, which I designate as the “*maṣdariyya* argument,” specifies that the

²⁶⁵ *Ishārāt*, 153f; *Mubāḥaṭhāt* §260–61, 672–74, 740, 787; *Taʿlīqāt*, 45, 549.

referent of “the one” (*al-wāḥid*) that serves as the causal ground (*maṣḍar*) of the single effect (*lā yaṣḍuru ‘anhu illā wāḥidun*) is not necessarily a substance (*jawhar*) that is numerically one (as both God and the animal can be called “one” despite the internal compositeness of the latter), nor is it strictly “the single thing that is one in *all aspects* (*min kulli jihāt*in),” as Avicenna would often formulate it in the context of absolute creation and as later commentators would emphasize. Rather, “the one” that is intended here is the causal factor subsisting through the agent’s essence, whether this causal factor be one—as in the case of God—or many—as in the case of contingent beings. The idea that the nature of the effect must be prefigured by a corresponding constellation of causal factors pertaining to the agent forms the very premiss of the argument. Although Avicenna presented the *maṣḍariyya* argument as a “reminder” or “admonition” (*tanbīh*), it is demonstrative in structure and seeks to persuade the reader of its truth. The process of further strengthening the *maṣḍariyya* argument began early on with Avicenna’s recorded engagements with his students in the *Mubāḥathāt* and in the various appending notes of the *Ta’līqāt* that aim to clarify difficult points of the Master’s doctrines. It eventually became the paradigmatic proof for the Rule of One in the Eastern *ḥikma* tradition.²⁶⁶ Rāzī, as an inheritor of this tradition, naturally focused on this argument when evaluating the principle.²⁶⁷ Indeed, while he adduced three additional proofs for the Rule of One on behalf of the Avicennians, Rāzī believed that the success of his criticism depended on whether he can demonstrate the falsity of the *maṣḍariyya* argument.

²⁶⁶ See Bahmanyār, *K. al-Taḥṣīl*, 531; and Lawkarī, *Bayān al-ḥaqq*, 345 f.

²⁶⁷ Rāzī, being one of the first commentators on the *Ishārāt*, participated in this process of canonizing the *maṣḍariyya* proof. As we shall see in Chapter 3, he offers not only a paraphrase and critique, but also tries to salvage the proof from its major weaknesses—although he does this in the *Mabāḥith*, rather in his commentary on the *Ishārāt*. The only other post-Avicennian scholar to explicitly account for this proof is Sharaf al-Dīn al-Mas‘ūdī, *Shukūk*, 275–78. Shahrastānī seems to also be aware of the argument, but his paraphrase of it is very concise and he does not directly engage with its premisses (*Muṣār‘at al-falāsifa*, 59 ff). As we have seen, Abū Ḥāmid al-Ghazālī in his *Tahāfut* and Abū al-Barakāt al-Baghdādī in his *K. al-Mu‘tabar* do not interact with it at all.

Our present discussion will focus on clarifying the structure and premisses of the *maṣdariyya* argument from a strictly Avicennian perspective.²⁶⁸ Since Avicenna was not always transparent about his metaphysical commitments, doing this requires us to reconstruct the theory based on the various versions of the proof in his later works, such as the *Ishārāt*, as well as the *Taʿlīqāt* and *Mubāḥathāt*. I will also draw from materials in Chapter 1.3 of this thesis, where I discussed Avicenna's theory of efficient causality in *Ilāhiyyāt* VI.3. This is because the *maṣdariyya* argument presumes and further reinforces the theory of causal correspondence or compatibility (*munāsaba*) that he developed in that work. The argument takes for granted the claim that the efficient causal powers (*fāʿiliyya*) of the agent are mediated by causal factors (*maʿānī*, *aḥkām*, or *jihāt*) that exist as concomitants (*lawāzim*) of its essence. In fact, Avicenna further systematizes the theory by making explicit what I was only able to infer from key passages of *Ilāhiyyāt* VI.3, namely that these causal factors fall under two types: those that derive from or are concomitants of (*lāzim ʿan*) the cause's essence (*māhiyya* or *dhāt*), and those that derive from the modulation (*tashkīk*) of its existence (*wujūd*). He would also elucidate other characteristics of these causal factors, such as having a reality (*ḥaqīqa*) that is distinct from the essence of the agent, rather than having a mere conceptual existence; and as being divided exhaustively into two types, those determined by "nature" (*tabʿ*) and those determined by rational deliberation or "will" (*irāda*). Thus, by analyzing the later proofs for the Rule of One, we will gain a deeper understanding of the principle and why it was such a crucial component of Avicenna's metaphysics.

²⁶⁸ To my knowledge Wahid Amin's study on the Rule of One is the only publication in European language to deal directly with the argument in the *Ishārāt*; see "‘From the One, Only One Proceeds’: The Post-Classical Reception of a Key Principle of Avicenna's Metaphysics," *Oriens* 48 (2020): 123–55. The Latin reception of Avicenna is based on the *Ilāhiyyāt*. As a result, studies discussing the Rule from this perspective do not discuss the proof in later works such as the *Ishārāt*.

The *maṣdariyya* argument is ultimately based on the proof for the Rule of One that Avicenna presented in his early- and middle-period works. The difference between the earlier and later proofs consists in the scope of the terms of the premisses. Instead of referring to the specific nature of the Necessary Being (i.e., “that which is one and simple in all respects”), Avicenna in the *Ishārāt* refers to the generic category of a “single thing,” “one thing,” or “a simple thing.” This “single thing” designates not only the essence of the cause, but also the causal factors (*maḥnā*) that mediate the procession of an effect from an agent. Furthermore, where *Ilāhiyyāt* IX.4 refers to these causal factors as *maḥnā*, *ʿtibār*, *jīha*, and *ḥukm*, the *maṣdariyya* argument of the *Ishārāt* uses the term *ḥayth* (“aspect”), especially in expressions such as *min ḥaythu* (“in regard to some aspect”). The use of the term *ḥayth* in the *Ishārāt*, *Mubāḥathāt*, and *Taʿliqāt* is systematic and consistent, unlike the *Ilāhiyyāt*, which uses *maḥnā*, *ʿtibār*, *jīha*, and *ḥukm* interchangeably. This indicates an assuredness on the part of Avicenna, who now seems to have decided that the generality of the Rule of One as a principle of efficient causality should be articulated explicitly and canonically as a pillar of his metaphysics. This effort was not lost to later commentators of the *Ishārāt*, such as Quṭb al-Dīn al-Rāzī al-Taḥṭānī (d. 766/1365), who designated the causal factors as *ḥaythiyyāt al-ṣudūr* (“aspects that determine the procession [of effects]”).²⁶⁹ It is from this formulation that I choose to refer to the *Ishārāt* argument as the “*maṣdariyya* argument” for the Rule of One, as it is primarily concerned with the ontological status of these *ḥaythiyyāt* as the causal ground (*maṣdar*) of efficient causal events.

Let us turn to Avicenna’s formulation of this argument in the *Ishārāt*. He writes:

Admonition: the conception (*mafhūm*) of a certain cause in regard to some aspect (*bi-ḥaythu*) whereby *A* proceeds necessarily from [the cause] is distinct from the conception of a certain cause in regard to some other aspect whereby *B* proceeds necessarily from it. If from the

²⁶⁹ *Muḥākamat sharḥay al-Ishārāt wa-l-tanbīhāt*, 127.

single thing (*al-wāḥid*) two things necessarily proceed, then [this is on account of] two distinct aspects that differ in concept and reality (*min ḥaythayni mukhtalifay al-maḥmūm mukhtalifay al-ḥaqīqa*), in which case either [these two aspects] are constitutive parts (*muqawwimāt*) of [the single thing], its concomitants (*lawāzimuhu*), or both separately (*aw bi-l-tafrīq*). If [these two aspects] are taken as concomitants [of the single thing], the inquiry returns to the original question, ultimately ending at the two differing aspects that are constitutive of the cause. [These aspects] differ either on account of the quiddity (*li-l-māhiyya*), on account of the fact that it exists (*li-annahū mawjūdān*), or on account of both separately (*bi-l-tafrīq*). Thus, anything from which two things proceed at the same time, whereby the one proceeds not by the mediation of the other, is divisible in terms of its inner reality (*munqasim al-ḥaqīqa*).²⁷⁰

The basic structure of the argument is *reductio ad absurdum*. Avicenna assumes the truth of the proposition that many effects may proceed from a single cause. If he is able to show that this proposition is false, then the contradictory proposition—that only one effect may proceed from such a cause—must be true and valid.

As for the premisses of the argument, Avicenna first assumes that when two effects proceed from a single cause *X*, then two distinct conceptions (*maḥmūm*) must necessarily obtain, namely, *X* in terms of some aspect through which (*bi-ḥaythu*) it causes *A* and *X* in terms of some other aspect through which it causes *B*. He also assumes that these conceptions are not figments of the metaphysician's or physicist's mind but correspond to the real ontological structure of *X* in regard to its being a cause of *A* and *B* respectively. As Avicenna writes above: "If from the single thing two things necessarily proceed, then [this is on account of] two distinct aspects that differ in concept and reality (*min ḥaythayni mukhtalifay al-maḥmūm mukhtalifay al-ḥaqīqa*).” In the *Mubāḥathāt* argument for

²⁷⁰ *Ishārāt*, 153f.

the Rule of One, Avicenna would assert the “reality” of the *mafhūmāt* more explicitly: “the conception (*al-mafhūm*) derived from the two aspects are distinct, each possessing their respective [causal] relation (*idāfa ukhrā*). For that whose conception (*mafhūmu*) differ, its reality (*haqīqatuhu*) also differs.”²⁷¹ Reifying the conceptions in this manner is crucial for the argument, because it is on the basis of their plurality that Avicenna infers the plurality of the essence of the cause if more than one effect proceeded from it.

Unfortunately, in the *Ishārāt* version of the *maṣdariyya* argument Avicenna does not further substantiate why it was necessary to for him to reify the *mafhūmāt* in this manner. He is content only to assume its correctness. To understand the underlying reason behind the assertion, we must refer to other versions of the *maṣdariyya* argument, especially the one in the *Ta’liqāt*. Avicenna seems to have conceived this version as a replacement of the original *Ishārāt* argument for reasons I will address later. For now, I use it only to elucidate the substance of the original version. Avicenna writes in the *Ta’liqāt*:

I say that it is impossible that more than one thing proceeds from (*yaṣduru ‘an*) a single thing that is simple in all aspects. You know already that nothing exists from another except that which is necessitated by it. Thus, if a certain thing proceeds necessarily from another, but then from this very aspect and in terms of the same necessity something other than the first [effect] proceeds, the latter would not have proceeded from the [its cause] by necessity [in the first place]. If [the cause] were not simple, then it is possible that [something other than the first effect] proceeds from it. Thus, in the case of one thing proceeding from [the cause] (*ṣadara ‘anhu*) in terms of its nature (*tab‘*) and another thing proceeding from it in terms of its will (*irāda*), the implications in regard to the duality of nature and will and their necessitation

²⁷¹ *Mubāhathāt*, §261; emphasis mine.

and procession from it is no different than the discussion in regard to the first cause above.

Thus, the question may be raised why such a situation would necessarily arise from its nature.

As a result, it is impossible that there is any plurality in the Necessary of Existence.²⁷²

The reason why Avicenna would want to assert a real correspondence between the *conception* of distinct causal relations and the ontological structure of the cause's essence is because he wants to uphold the principle of causal necessity. If *A* truly came into existence as an effect of *X*, then the causal relation between the cause and this effect must have been necessary, or else *A* would not have existed in the first place. However, if we posit that *X* in the very same respect—namely *qua X*—also causes *B*, this will render both the procession of either *A* or *B* a contingent rather than necessary outcome, for *X* might as well have caused *B* rather than *A*, or vice versa, while remaining within the same parameters of agency and without provoking a contradiction of terms. If, despite lacking a preponderating factor, effect *A* nonetheless proceeds from *X*, while *B* remains absent, the principle of sufficient reason demands that we look for external reasons why this came to pass, for the parameters internal to the agent did not in themselves determine that it produces *A* anymore than *B*. However, this recourse to external preponderating factors contradicts the initial assumption of the argument that cause *X* is that from which *A* or *B* proceeds necessarily. This recourse would also be incompatible with the definition of the efficient cause, which, as we have seen in Chapter 1.3 of this thesis, is “that which bestows from itself the existence of the effect.”²⁷³

²⁷² *Ta'liqāt*, 549; emphasis mine. Wahid Amin (*op. cit.*, 130–31) has drawn attention to this passage as an important supplement to the *Ishārāt* argument. He argues that Avicenna asserts this new argument to emphasize that the Necessary Being cannot cause a plurality of effects through a single causal aspect. However, this part of the argument is already made explicit in the original *maṣḍariyya* argument of the *Ishārāt*. In my interpretation, Avicenna added the notion of necessity to the *Ta'liqāt* version of the *maṣḍariyya* argument to substantiate his reification of the various conceptions (*maḥāḥūm/maḥḥūm*) of the agent being the cause of effects *A*, *B*, etc.

²⁷³ See pp. 24–28 of this thesis. See also Avicenna's definition of the efficient cause in *Ilāhiyyāt* VI.1.2, 194–195 (Cairo, 257–258); VI.1.5, 196 (Cairo, 259); VI.5.38–39, 231 (Cairo, 295–296).

Thus, if we accept external preponderating factors, we would no longer be talking about the efficient cause, for the terms of the argument have shifted.

As a result, the procession of two effects from a single cause is possible only when we posit two aspects pertaining to the agent that serve as the causal ground for their respective effects. These two causal aspects must be, first, distinct from the essence of the cause—though caused directly by it—and, second, ontologically real and not merely conceptual. If these are not distinct from the essence, the requirement of preponderance that would qualify X as the “cause of A ” (that is, X^a), or X as the “cause of B ” (that is X^b) would be meaningless or tautological; and if they are not real, then they would be mere figments of the physicist’s imagination and would not, as such, have any real consequence in the causal process. If any of these two scenarios prevails, the causal responsibility that Avicenna assigns to these aspects would be forfeited.

In the *Ta’liqāt* passage above Avicenna further systematizes this metaphysics of efficient causal *ḥaythiyyāt*. He divides them into two classes: those that are determined by nature (*tabʿ*) and those determined by will (*irāda*).²⁷⁴ While Avicenna does not stipulate how these two classes ought to be interpreted, it is likely that by “nature” he intends the necessary effects of the quiddity of the cause that occur without the need for deliberation and desire, and by “will” (*irāda*) he intends the activities grounded in intellectual deliberation and perception and oriented towards the good and perfection of the species. The first would be activities that proceed from the nature of both sentient and non-sentient beings such as the animals, plants, the elements, and minerals; while the second would be activities that pertain uniquely to rational souls as well as purely intellectual beings, such as the

²⁷⁴ I adopt the term *ḥaythiyyāt al-sudūr* from Quṭb al-Dīn al-Rāzī’s (d. 766/1365) helpful summary of Avicenna’s *maṣdariyya* argument in his *Muḥākamat sharḥay al-Ishārāt wa-l-tanbīhāt*, 127.

Intellects and the First Cause. The examples of “nature” and “will” reflect a strict theoretical division, for it is exhaustive of all causal factors operative in the world.²⁷⁵

What then is the relationship between these *ḥaythiyyāt* with the essence of the agent? If the cause in question is only one and simple in all respects, such as the Necessary Being, then no distinction between them needs to be posited. They are collapsible into a single causal factor that is identical to the essence. This much is clearly stated in the *Taʿliqāt* argument, as it is the main point of the argument. In the case of complex essences, the implication is also straightforward. Nothing prevents the physicist from positing the existence of many causal *ḥaythiyyāt*, because these can be accounted for by the complexity of the agent’s quiddity, as long as the Rule of One is observed at every channel of causation.

The question, however, arises regarding what kind of complexity would produce these causal factors in the first place. Complexities, after all, are of different kinds, such as complexities of matter, number, and accidental states occurring to a given substrate. However, since the condition of pure oneness that characterizes the Necessary Being consists in the identity between His essence and existence, and since this identity determines the purely unitary nature of His agency, what Avicenna intended as the relevant kind of complexity required to produce many effects must be the most fundamental kind, which is that the agent must have an essence distinct from its existence. This much Avicenna had explicitly stated in the original *maṣdariyya* argument of the *Ishārāt* quoted above, where he writes that these concomitants must “differ either on account of the quiddity (*li-l-māhiyya*), on account of the fact that it exists (*li-annah mawjūdun*), or on account of both separately (*bi-l-lafrīq*).”²⁷⁶ The first division—“on account of the quiddity”—seems to refer to the constitutive

²⁷⁵ In the original Aristotelian context, from which Avicenna is drawing, “nature” refers to innate, non-rational potencies, while “will” refers to potencies acquired “by practice” or through “a rational formula” (*Metaphysics Theta*, 1047b, 31–1048a, 24).

²⁷⁶ *Ishārāt*, 154.

parts of the quiddity that form the species, such as the genus and the differentia in the case of internally complex beings, and to the undifferentiated essence of simple entities such as celestial intellects and the elements. Examples of these concomitants of agency are the heat produced by fire, the various natural functions of the animal, and the intellectual activity of rational beings. What Avicenna intends by the second division—“on account of the fact that it exists”—is less obvious. However, Avicenna seems to have in mind the modality of an agent’s existence, specifically the various factors that modulate existence (*tashkīk al-wujūd*), such as priority and posteriority, necessity and contingency, self-sufficiency and neediness.²⁷⁷ Thus, if we recall Avicenna’s triadic structure of emanation, we find that the causal grounds of the emanation of the Second Intellect, the Outermost Sphere, and the soul of this first body are, respectively, the First Intellect’s contemplation of its cause, of itself *qua* essentially contingent, and of itself *qua* necessary through another. The first object of knowledge refers to the essential act of the First Intellect (whose perfection consists in the contemplation of its highest good, i.e., its Cause), the second and third objects of knowledge are the various ways by which its existence is modulated. As for the *act* of contemplation itself, we have seen in Chapter 1.4 that this is the essential activity of the Divine Minds, which means that it is a concomitant of their essence.

As a result, both essential and existential causal *ḥaythiyyāt* have been accounted for in the triadic structure of emanation. It is therefore plain to see that Avicenna’s theory of causal factors in the *maṣḍariyya* argument for the Rule of One—both the original version of the *Ishārāt* and the revised version of the *Ta’līqāt*—is consistent with his theory of triadic emanation in *Ilāhiyyāt* IX.4 and his theory of efficient causality in *Ilāhiyyāt* VI.3 as discussed in Chapter 1.3. Recall how in that chapter we had identified both the components of the quiddity and the modulating factors of existence to

²⁷⁷ I discussed the idea that modulating factors of existence may serve as causal factors in efficient causality in Chapter 1.3 of this thesis.

be the causal *ma'ānī* of *Ilāhiyyāt* IX.4. However, we arrived at this conclusion only by extrapolating Avicenna's discussion of the principle of causal correspondence (*munāsaba*) in *Ilāhiyyāt* VI.3. Having discussed the *maṣdariyya* argument of the later period, we now see that the Master had systematized the doctrine of causal *ma'ānī* in explicit terms and solidified his position that the Rule of One, the triadic structure of emanation in the celestial world, and the principle of causal correspondence are elements of a single theory of efficient causality.

To summarize what we have learned from comparing the *Ishārāt* and *Ta'liqāt* versions of the *maṣdariyya* argument: the *ḥaythiyyāt* that Avicenna systematically identifies in all versions of the argument must possess the following qualities. They must (1) be distinct from or superadded to the agent; (2) be caused by it as its direct concomitant (*lāzima minhā*), such as the act of contemplation on the part of intellectual entities; (3) possess an extramental reality (*thubūtiyya*); and finally, they can (4) be categorized exhaustively as arising from “nature” (*tabīʿa*) or from “will” (*irāda*), depending on the kind of entity in question.

Thus, we have clarified what Avicenna meant by the phrase *min ḥaythu* in the original *maṣdariyya* argument of the *Ishārāt*. This discussion has shown that the causal *ḥaythiyyāt* of this argument are no different from the causal *ma'ānī*, *jihāt*, and *aḥkām* that Avicenna mentioned in his earlier proof for the Rule of One in *Ilāhiyyāt* IX.4 and in his discussion of efficient causality in *Ilāhiyyāt* VI.3. They both describe the same theory. The only difference is that the *maṣdariyya* argument offers a more mature and systematic articulation thereof.

Let us now return to the second portion of the *maṣdariyya* argument of the *Ishārāt*. Recall how Avicenna proposes to negate the contradictory of the sought-after proposition (*al-maṭlūb*), i.e., that only one effect may proceed from a single cause, in order to affirm it. Once it has been established that for the causation of effects *A* and *B* the metaphysician must posit two distinct aspects pertaining to the cause, Avicenna argues that these aspects must either be (1) its constitutive elements

(*muqawwimāt*), (2) concomitants (*lawāzīm*), or (3) both (i.e., that *A* is a constitutive, while *B* is a concomitant, or vice versa). These three possibilities are exhaustive options in the framework of Avicenna's ontology. If the *first* option holds, then the essence of the cause must be internally divided, and this contradicts the initial assumption of its simplicity. If the *second* option holds, then this also leads to a plurality of the constitutive elements of the cause, because concomitants are, by definition, effects of the quiddity. A plurality of second-order concomitants—*viz.* the effects—presumes a plurality of first order concomitants—*viz.* the causal *haythiyyāt*. This, in turn, presumes a plurality of the quiddity which caused the latter in the first place, and this again contradicts the initial assumption. As for the *third* option, namely that effects *A* and *B* are caused by, respectively, the quiddity and a concomitant, or vice versa, i.e., *bi-l-tafrīq*, Avicenna probably intended the following point. Assume that the causal factor for the procession of *A* is sourced directly from the essence of the agent, while the causal procession of *B* is sourced from a first order concomitant. However, this first order concomitant causing *B* must ultimately derive from an aspect of the agent's quiddity that is distinct from that which produced *A*. This, once again, implies a plurality of the essence, thereby contradicting the initial assumption. As a result, whichever of the three options the reader chooses as his model of causation, he is bound to admit the multiplicity of the agent, whether in terms of its quiddity, its mode of existence, or both. Since this violates the initial assumption that the cause is “one in all respects,” the proposition that “the many may proceed from the one” is consequently false. The contradictory proposition that “more than one effect cannot proceed from a single cause” must then be true.²⁷⁸

²⁷⁸ This argument in the *Ishārāt* refers only to the implication of the Rule of One—and its contradictory proposition—with regard to the *essence* of the agent. How then do we explain the procession of many effects from an entity whose essence is simple, such as the celestial intellects? For this we must recall that for Avicenna the causal *haythiyyāt* may also proceed on account of the agent's existence (*li-annahū mawjūd*), rather than just the essence. I have shown how this refers to the various external circumstances or accidents that accrues upon the quiddity when it exists, modulating the manner of its existence (*tashkīk al-wujūd*). The celestial intellects *acquire* a plurality of causal *haythiyyāt* due to the factors

The reader may already sense that in the *maṣḍariyya* argument of the *Ishārāt* Avicenna is begging the question. In claiming that a plurality of effects necessitates a plurality in the essence of the cause, he has assumed the very proposition he seeks to prove. For if the causal factors causing *A* and *B* are conceptualized as concomitants of the agent's essence (whether as first order concomitants, second order concomitants, or both), the relationship between them and the agent must be one of effect and cause—such is the basic structure of the *māhiyya-lawāzīm* relationship. However, the exact modality of such relationships is precisely what is under scrutiny in the first place, that is, whether these are governed by the principle that “only one effect may proceed from a single cause.” As such, they cannot be used as premisses to demonstrate the proposition. Furthermore, by stipulating that the multiplicity of these causal concomitants necessarily leads to a *plurality* of their cause, Avicenna has assumed the truth of the principle that “the many proceed only from the many.” This, however, is a corollary doctrine of the Rule of One, which I have designated in Chapter 1.2 as the “Rule of Many.” In *Ilāhiyyāt* IX.4, for instance, Avicenna relies on this doctrine to arrive at his famous triadic structure of emanation; but this was deployed only after he had established the Rule of One. In the *maṣḍariyya* argument of the *Ishārāt*, however, the Rule of Many is embedded within the proof for the Rule of One, serving as an implicit premise of its validity. This spectre of begging the question holds with every scenario Avicenna adduces for describing the relationship between the effects and the essence of the agent, whether it is mediated by first-order concomitants (i.e., the second and third options), or not (i.e., the first option). By using

that modulate its existence. However, if this is correct, then the *maṣḍariyya* proof, which relies solely on the implications of the Rule of One on the *essence*, lack universal application. Or, perhaps, the implication is that the essence of the celestial intellects is not simple in all respects. This seems to be the likely scenario. In the *lemma* of the *maṣḍariyya* argument quoted above, Avicenna writes that the causal *ḥaythiyyāt* may derive from the very essence of the agent, the fact of its existence, and a combination of the two. It seems to me that the agency of the celestial intellects falls under the third division. The Master, however, never speculated as to the exact manner of their internal complexity. Whatever it is, it is not the complexity we find in hylomorphic beings. He acknowledges this ambiguity in *Ilāhiyyāt* IX.4, when discussing the triadic structure of emanation, as we have seen in Chapter 1.

the basic features of this causal link to establish the very proposition that underlies it, Avicenna has committed the mistake of circular reasoning.²⁷⁹

Given the serious flaw undermining the *maṣdariyya* argument in the *Ishārāt*, it is unsurprising that Avicenna seems to try to immediately repair it in other works of the same period. In the *Mubāḥathāt* and the *Ta'liqāt*, this original version of the *maṣdariyya* argument is no longer found. In the *Ta'liqāt*, for instance, Avicenna offers a revised version of the *maṣdariyya* argument, which we have quoted and extensively discussed above.²⁸⁰ This proof does not rely on *reductio ad absurdum*, but rather focuses on the metaphysical bases of efficient causality, such as the principle of causal necessity. The risk of violating these basic metaphysical principles alone seem to justify recourse to the Rule of One. Let us revisit the *Ta'liqāt* argument, but this time with an eye for understanding the relationship between the principle of causal necessity and the Rule of One.

What is distinct about the *Ta'liqāt* argument is that it does not argue for the Rule of One for fear of violating the absolute oneness of the Necessary Being—as was the case for, say, the

²⁷⁹ Tūsī seems to have been aware that Avicenna had begged the question and interpreted the argument in a manner that would deflect this charge. He argues in his commentary on the *Ishārāt* that the *reductio* portion of the proof—where Avicenna had begged the question—is in fact superfluous to structure of the *maṣdariyya* argument. He writes: “The conception whereby *A* is necessitated by the thing [i.e., the cause] is other than the conception whereby *B* is necessitated from it [means that] the causality (*‘illīyya*) of the one is other than the causality of the other. This otherness of the two conception indicates otherness in their reality. Thus, what is posited [i.e., the cause] is not a single thing. Rather it is two things, or it is a single thing that is ascribed with two distinct attributes (*maḥṣūf b-ṣifātayn mutaghāyiratayn*). However, we had assumed it to be one. And this is a contradiction. This [consideration alone] suffices (*kāfīn*) in elucidating this meaning. However, to further clarify [this point] (*ziyādat al-wuḍūh*) he [i.e., Avicenna] writes that these [two attributes] are either constitutive parts of the single thing or its concomitants [etc.]” (*Sharḥ al-Ishārāt* III, *namaṭ* 5, 123). For Tūsī, Avicenna added the *reductio* portion of the argument simply to clarify his argument. As we shall see in Chapter 3, Rāzī was aware that the *reductio* portion begs the question. He was also aware that it is superfluous to the essential point of the argument. We know this because tried to repair the original *maṣdariyya* argument in such a way as to prevent recourse to circular reasoning, presenting thereby the strongest version of the argument that an Avicennian metaphysician can adduce.

²⁸⁰ In his important study on the Rule of One, Wahid Amin has also observed that Avicenna begged the question (*op. cit.*, 131 ff). However, Amin argues that Avicenna committed this error in the *Ta'liqāt* argument cited above, rather than in the *Ishārāt* argument. I argue that the opposite is the case: Avicenna begs the question in the *Ishārāt*; but not in the *Ta'liqāt*. In fact, as we shall see, Avicenna seems to have advanced the *Ta'liqāt* argument precisely because it wants to remedy the defects of the *Ishārāt* version. The new *Ta'liqāt* argument relies on the possible violation of the law of sufficient reason and the theory of causal compatibility to draw the sought-after proposition, i.e., the Rule of One. This is distinct from the *Ishārāt* argument, which relies on the Rule of Many to prove the Rule of One, whereby the former is in fact a corollary doctrine of the latter. Thus, it seems to me that the *Ta'liqāt* argument is a revision of what is clearly a flawed proof.

argument in *Ilāhiyyāt* IX.4. Rather, Avicenna is more concerned with ensuring compliance with the principle of causal necessity. He invokes the case of the Necessary Being only as an example of how this principle is upheld, though obviously it is an important example to get right. He argues that the metaphysician must restrict its agency to the production of a single effect, because

[If] a certain thing proceeds necessarily from another, but then from this very aspect and in terms of the same necessity something other than the first [effect] proceeds, the latter would not have proceeded from [its cause] by necessity [in the first place].²⁸¹

That is to say, if in terms of the same causal factor *X*, both *A* and *B* proceed, then no sufficient reason has been adduced that would necessitate the production of one effect over the other. No specifying factor to *X* has been posited that would modify the causal parameters and preponderate one effect over the other. If the metaphysician insists on positing the existence of preponderating factors that can supplement the causal factor of *X*, these factors must be external to it—since nothing *within* the essence stipulates any such differentiation. In this case we would no longer be speaking of the true efficient cause (*al-fā'il al-ḥaqīqī*), whose agency (*fā'iliyya*) in regard to its true object of causation—namely, the effect *qua* species—must be entirely determined by the essence.²⁸² We would also no longer be speaking of efficient causality (*al-'illa al-fā'iliyya*), since the agency of *X*, being preponderated by external factors, must consist of the procession of the species *qua* individuals rather than of individuals *qua* species.²⁸³

²⁸¹ As quoted above in pp. 35–6; *Ta'liqāt*, 549.

²⁸² See pg. 27 *ff* above, where I discussed Avicenna's conception of the efficient cause in *Ilāhiyyāt* IV.3.

²⁸³ The difference between these two modes of production is subtle but important. The true efficient cause will produce the individual *qua* species, such as the First Cause in the procession of the First Intellect and the rest of the celestial intellects in their production of a celestial body, celestial soul, and another intellect. While each of these entities are individuals, they are species unto themselves, because they are the only member of their kind. The same holds for the Active Intellect, which emanates corporeal species-forms. However, unlike the celestial intellects above it, the outcome of its causal effect in the sublunary world consists in the production of many individuals of the same species. Still, the Active Intellect does not stand in need of external factors, i.e., the elements, to actualize its productive capacity, but is simply contingently related to the material realm due to the determination (*qaḍā*) of Divine providence (*'ināya*). These two modes of true efficient causation are contrasted with the production of the species *qua* individual, which is the

The same considerations must apply *mutatis mutandis* to agents that are complex entities. In their case, no contradiction arises when the metaphysician assumes the existence of many concomitants acting as causal factors on behalf of the essence. This is because the plurality of these concomitants may be readily accounted for by the plurality of the essence. However, the Rule of One must still govern the procession of many effects, this time stipulating that “from a *single causal factor* only a *single species* of effect may proceed.” Without this restriction, the same problems afflicting the absolutely unitary agent would also afflict the complex agent. The principle of causal necessity and sufficient reason requires that each species of effect be governed or mediated by a corresponding causal factor residing in the agent. Causal factor X^a , therefore, may produce only a single effect A ; but for the production of effect B from the same agent X , the metaphysician must posit another causal factor X^b as the concomitant responsible for its procession. Since the agent is complex, no contradiction obtains when he asserts this added consideration.

We may readily perceive that the central premiss supporting the validity of the *maṣdariyya* argument in the *Taʿlīqāt* is the principle of sufficient reason and more broadly the principle of causal necessity. This tallies up with our discussion in Chapter 1.3, where I tried to show that Avicenna conceived the theory of correspondence or compatibility (*munāsaba*) in efficient causality to uphold this principle. Indeed, one of the most vital intuitions of Avicenna’s metaphysics is that what exists and what is necessary are mutually entailing, and both are primary concepts of the system.²⁸⁴ This is further reinforced by the doctrine of the Necessary Being, whose “necessity” (*wājib*) Avicenna conceives not only in terms of itself, as the basic feature of the concept, but also in terms of what it

purview of sublunary pseudo-agents, such as human beings, animals, and plants, all of which require external factors to “direct” the emanations of the Active Intellect towards the production of some member of the species. Sublunary agents do not have the capacity to produce the species itself.

²⁸⁴ Robert Wisnovsky, *Avicenna’s Metaphysics in Context* (Cornell University Press, 2003), 197–263; Amos Bertolacci, “‘Necessary’ as Primary Concept in Avicenna’s Metaphysics,” in *Conoscenza e contingenza nella tradizione aristotelica medievale*, ed. Stefano Perfetti (Pisa: ETS, 2008), 31–50.

entails by way of other things.²⁸⁵ Thus, when describing the world that actually exists (rather than a world of counterfactuals), the metaphysician is bound by the framework of necessity.²⁸⁶ While true and demonstrative knowledge of how certain states of affairs are *necessarily* the case may not always be achieved, it is the default framework of his inquiry. However, the principle of necessity implied in sufficient reason is not a premiss that Avicenna articulates explicitly; rather it is best classified as an immediate and necessary principle (*badīhī*) that is inferred from the basic structure of his system. We will return to this important theoretical point when we discuss Rāzī's evaluation of the *maṣdariyya* argument in Chapter 3. This is because, Rāzī will demand that the premiss of causal necessity in efficient causal events be demonstrated, rather than assumed.

In addition to the *Ta'liqāt* argument, Avicenna offers another proof for the Rule of One that avoids the pitfalls of the original *maṣdariyya* argument of the *Ishārāt*. This proof can be found only in the *Mubāḥathāt*, and so I designate it as the “*Mubāḥathāt* argument.” Though this argument also relies on *reductio ad absurdum* procedure, it avoids mistake of circularity that fatally weakens the *Ishārāt* argument. There are four versions of the proof in the *Mubāḥathāt*, all making the same points with minor variations:

Verily, only one is necessitated from the one. If *A* proceeds from the same aspect from which *B* proceeds, then from this same aspect non-*A* would proceed from it, and this is a contradiction.²⁸⁷

Judging from the formal structure of the argument, Avicenna seems to assert that the proposition “*X* is the cause of *A*” contradicts “*X* is the cause of *B*,” which he parses as “*X* is the cause of non-

²⁸⁵ Wisnovsky, *Avicenna's Metaphysics in Context*, 245–263.

²⁸⁶ To this point, see *Mubāḥthāt* §787.

²⁸⁷ *Mubāḥathāt* §673. Other variations of same argument can be found in §260–61, 740, 787.

A.” Affirming both to be true, therefore, would violate the principle of non-contradiction. To avoid this unwanted conclusion, the initial assumption, therefore, must be rejected.

However, as Bahmanyār and Fakhr al-Dīn al-Rāzī have both pointed out, this argument does not seem to be valid, because the two propositions do not *prima facie* contradict each other.²⁸⁸ This is because both propositions are affirmative (*ijāba*), and two affirmative propositions with different predicate terms do not contradict each other (*tanāquḍ*). In this case, the second proposition affirms that “*X* is the cause of *B*.” However, Avicenna claims that this proposition can be reformulated into one that *affirms* a negative predicate term, “*X* is the cause of *non-A*.” Avicenna, and other Arabic logicians, refer to this kind of proposition as metathetic (*maʿdūla*).²⁸⁹ However, the metathetic is formally distinct from a negative proposition, which negates a proposition. The interlocutor in the *Mubāḥathāt*—which seems to be Bahmanyār—says that if Avicenna wanted to produce a contradiction to the proposition “*X* causes *A*,” he should have asserted “*X* is *not* the cause of *A*.”²⁹⁰ But he does not. Thus, the two propositions do not contradict each other.

In a recent contribution to the scholarship on the Rule of One, Davlat Dadikhuda has shown how the formal aspect of the argument—that the affirmative contradicts the metathetic—can be salvaged. It involves adding a truth condition to the proposition, namely that the subject term exists (*maʿjūd*).²⁹¹ Once this reading of the subject term is added, the negative proposition “*X* is not the cause of *A*” is equivalent (or “equipollent”) to the metathetic proposition “*X* is the cause of *non-A*.” As a result, the contradiction Avicenna seeks would hold. Dadikhuda’s reconstruction is based

²⁸⁸ Bahmanyār, *K. al-Taḥṣīl*, 531. We shall discuss Rāzī’s criticism in Chapter 3.

²⁸⁹ Saloua Chatti, *Arabic Logic from al-Fārābī to Averroes: A Study of the Early Arabic, Categorical, Modal, and Hypothetical Syllogistics* (Cham, Switzerland: Birkhäuser, 2019), 26 ff, 58 ff; Yusuf Daşdemir, “The Problem of Existential Import in Metathetic Propositions: Qutb al-Dīn al-Tahtani contra Fakhr al-Dīn al-Rāzī,” *Nazariyat* 5, no. 2 (2019): 81–118; Wilfrid Hodges, “Affirmative and Negative in Ibn Sīnā,” in *Insolubles and Consequences: Essays in Honour of Stephen Read*, ed. Catarina Dutilh Novaes and Ole Thomassen Hjortland (London: College Publications, 2012), 119–34.

²⁹⁰ *Mubāḥathāt*, *op. cit.*; and again in §260–61 and §740.

²⁹¹ Dadikhuda, “Rule of the One: Avicenna, Bahmanyār, and al-Rāzī on the Argument from the *Mubāḥathāt*,” *Nazariyat* 6, no. 2 (2020), 86 ff. For a more general discussion, see Chatti, *op.cit.*

on what seems to be Avicenna's immediate clarification to Bahmanyār's objections in the *Mubāḥathāt*, where the Master writes:

The conception (*ma'qūl*) that [an aspect or thing] is that from which *B* is necessitated is distinct from the conception that it is not that from which *A* is necessitated. Thus, an existence (*wujūd*), in regard to the aspect whereby *B* is necessitated from it, is distinct from an existence, in regard to the aspect whereby *A* is necessitated from it. Thus, the aspect on account of which *A* is necessitated from is not the aspect on account of which *B* is necessitated. Thus, if *B* is necessitated from it, this would not be from the same aspect from which *A* is necessitated.²⁹²

And also:

The conception derived from the two aspects are distinct, each one of them possessing their respective relation (*idāfa ukhrā*). That whose conception (*mafhumu*) differs, its reality (*haqqatuhu*) also differs. Thus, either they proceed [from their cause] simultaneously [which is impossible due to contradiction], or just one of them [which is sought after].²⁹³

We can immediately notice that in the two passages above Avicenna brings to bear the fundamental metaphysical underpinnings of the causal *ḥaythiyyāt* of the *maṣdariyya* argument. The first and most fundamental one is that any distinctions we draw between the various causal factors responsible for the procession of certain effects are not merely conceptual, they are real attributes that qualify the nature and existence of the agent. In the first passage, Avicenna writes “an existence (*wujūd*), in regard to the aspect whereby *B* is necessitated from it, is distinct from an existence, in regard to the aspect whereby *A* is necessitated from it.” The consequence of this assertion is that whenever a subject term *X* is qualified by the causality of two distinct effects (*A* and *B*), we are effectively dealing with two distinct entities, the causal factor inherent in *X* that is responsible for

²⁹² *Mubāḥathāt* §674; emphasis mine.

²⁹³ *Mubāḥathāt* §261; emphasis mine.

the procession of A (X^a) and the causal factor inherent in X that is responsible for the procession of B (X^b). Now these two causal factors must be distinct to each other as S is to P . Otherwise, if their identities overlapped, this would compromise causal necessity, as we have seen above. In order to function as the necessary causal factor of their respective effects, they must be mutually exclusive. Thus, to claim that X^a is the necessary and sufficient cause of effect B *at the same time and in the same respect* that it is the necessary and sufficient cause of A is to claim that $X^a=X^b$, which effectively amounts to claiming that S is P , and this violates the principle of identity.

In the second passage, we find Avicenna formulating an axiom that underlies his entire analysis of efficient causality and the Rule of One, and indeed his metaphysical project as a whole, namely “that whose conception (*mafhūmuhu*) differs, its inner reality (*ḥaqīqatuhu*) also differs.” We had already discussed this passage when elucidating the meaning of *min ḥaythu* and *ḥaythiyya* in the original *maṣdariyya* argument of the *Ishārāt*. We now return to it, but with a fresh perspective. By “conception,” Avicenna is referring exclusively to universal concepts that correspond to some ontological fact in the subject of predication. The example he immediately gives following the quoted passage is the difference between X being a mover (*muḥarrik*) and X being a mobile (*mutaḥarrik*).²⁹⁴ A single entity may be capable of moving some object and of being moved; these are two distinct and contrary potencies residing in the same subject.²⁹⁵ However, holding both statements as true does not commit us to a violation of the principle of identity, because, as Avicenna points out, it is not insofar as the subject is a mobile that it is a mover, or vice versa. Nor is it insofar as the subject X is simply X without qualification that it is the necessary and sufficient of both states simultaneously, for this would lead to a contradiction, as we have seen above. Rather,

²⁹⁴ *Mubāḥathāt* §261.

²⁹⁵ The passage explaining the previous point regarding the mover and the mobile in *Mubāḥathāt* §261 comes much “later” in Bidārfar’s edition: §679. I credit Dadikhuda (*op. cit.*, 88) for having identified the reference.

it is by virtue of some added consideration or accident, distinct from yet caused by the essence, that *X* becomes a mover; and by virtue of another consideration or accident, again distinct from yet caused by the essence, that *X* becomes a mobile. Thus, Avicenna writes:

It has been verified in other discussions that the thing that is mobile is not that which is a mover, nor is it a constituent of it. Otherwise, all mobiles would be a mover. Nor is [a mobile] a concomitant of being [a mover], such that from the fact of its being a mover it necessarily becomes a mobile, or insofar as it is mobile it becomes a mover. Otherwise, what we have mentioned [i.e., that all mobiles would be a mover] would occur. Thus, the association [that the thing is a mover and that it is a mobile] is an association of some accidental aspect (*amr ‘ārid*) and not constitutive, nor it is an unconditional concomitant [of the essence]. As a result, the principle (*mabda’*) through which the thing becomes a mover is neither its essence, nor a power (*quwwa*) that is also the same principle by means of which it becomes a mobile. The association [of the thing as a mover and as a mobile] is necessitated only accidentally. Thus, [existing] in anything [that has the potency of being a mover] is a principle for the fact of its being a mover. This is the *jiha* and *ḥaythiyya* (“aspect”) by means of which it becomes a mover. [This principle is distinct from another] principle for the fact of its being a mobile. This is the *jiha* and *ḥaythiyya* by means of which it becomes mobile.²⁹⁶

The thing *X*, therefore, possesses two separate natural capacities—being a mobile and being a mover. These potencies (*quwan*) can be caused by something external to the subject of predication, such as the capacity of a person to be a physician and a patient at the same time (due to the accidents of the art of medicine on the one hand and, say, a virus, on the other); or it could be caused by an internal (natural) factor, such as the capacity of sentient organisms to move other

²⁹⁶ *Mubāḥathāt* §679

things and to be moved. In both cases, these potencies are accidental (*‘āridan*) relative to the essence, though in the case of internal potencies, these are necessary concomitants of the entity in question.²⁹⁷ Now, from one perspective, these potencies are the basis upon which the physicist may predicate certain attributes universally of a subject term, where the truth condition of the proposition depends on the capacity for actualizing them, and *not* on their very actuality. Recall Abū al-Barakāt’s criticism of Avicenna’s theory of psychic potencies discussed in the previous subsection. We saw how from the latter’s perspective, positing the existence of these potencies allows the physicist to claim that “human is rational” even when rational acts, such as the contemplation of universals or the cultivation of virtues, are not always actualized by Zayd during the span of his life. The physicist must also be able to assert that a body is mobile even when it is not being moved, and that it is a mover when it is not moving.²⁹⁸ What grounds the physicist’s statement in reality is the fact that entities such as human beings are in possession of forms (*ṣuwar*), such as “rationality,” “mobile,” and “moving” that are concomitants of their essences. However, beyond this hylomorphic analysis of accidental change, the *Mubāḥathāt* passage above strongly suggests that these potencies also function as causal factors through which the thing becomes actually moving or actually being moved. For Avicenna describes them as the “*jīha* and *ḥaythiyya* by means of which” the agent actualizes its various natural capacities. This description invokes the use of the same terms in the *maṣḍariyya* argument of the *Ishārāt* and the *Ta’līqāt*. As a result, what Avicenna means by “potency” (*quwwa*) seem to overlap with his conception of the causal *ḥaythiyyāt* that are operative in the context of efficient causality. In fact, both terms may well be referring to the same thing. The only difference is that the use of the term “potency” is restricted to

²⁹⁷ We have discussed the metaphysics of potency and actuality and how this relates to Avicenna’s theory of efficient causality when we discussed Abū al-Barakāt’s psychology. My analysis here is based on Avicenna’s discussion on potency in *Ilāhiyyāt* IV.2 and Aristotle’s *Metaphysics Theta*, 1047a, 10–29.

²⁹⁸ This problem of predicating universal concepts does not afflict subject terms that are perpetually actual like the Necessary Being and celestial intellects.

hylomorphic entities that undergo successive alternations of accidental states, whereas the terms “*ḥaythiyya*” is more general and ontologically neutral, as it may include causal factors that that inhere in, say, celestial intellects, who have no potency since they are perpetually active. If this is the case, then potencies must also exhibit the same characteristics as the causal *ḥaythiyyāt*, such as being distinct from the essence, having an extramental reality, and being a concomitant of the essence and existence of the agent.

Now, bringing these considerations together—or at least seemingly so given the disjointed nature of the *Mubāḥathāt* text—Avicenna writes:

As long as the thing is possible (*mumkinan*) of being existentiated from its cause and no necessity in regard to the procession ensues, this thing would not exist. Thus, only when it is necessitated does it come to exist. If, therefore, from a single thing two things proceed, then either these are necessitated by it from a single aspect (*jīha wāḥida*) such that either [the aspect on account of which] *A* is necessitated by it, *B* is also necessitated by it, or these are necessitated on account of two different aspects. If on account of the aspect from which *A* proceeds necessarily that which is not-*A* [*also*] proceeds from it, then insofar as *A* proceeds from it non-*A* proceeds from it and this is a contradiction. But if both [*A* and *B*] proceeds from two distinct aspects, then both must either be concomitants of the [cause's] essence, or its constituents. If [its] constituents, then the thing [*i.e.*, the cause] would be composed, not simple. If both are concomitants, then the discussion in regard to them would be no different than the discussion in regard to *A* and *B*.²⁹⁹

From this passage we see that the *Mubāḥathāt* argument from contradiction is hardly distinct from the *maṣdariyya* argument of the *Taʿlīqāt*. Both rely on the frameworks of sufficient reason and the

²⁹⁹ *Mubāḥathāt* §787.

principle of causal necessity to justify Rule of One. Because of this, the *Mubāḥathāt* argument from contradiction does not actually require the *reductio* procedure to be coherent. In fact, adding it only ends up inviting skeptical attacks, as we have seen. The core engine of the proof is the metaphysical assumptions underlying the *maṣdariyya* argument.

Thus, we have seen how for Avicenna the *maṣdariyya* argument is the primary proof for the Rule of One. Although the original version of the argument in the *Ishārāt* exhibited the fatal mistake of circular reasoning, Avicenna designed two additional arguments, one in the *Taʿliqāt* and another in the *Mubāḥathāt*, that are formally valid. It is tempting to claim that these two additional arguments are intended to replace the *Ishārāt*'s question-begging *maṣdariyya* argument. However, we do not know this for certain. What is clear, however, is that Avicenna is remarkably consistent in his basic conception of the Rule of One. By the time he was writing the *Ishārāt*, he seems to have been more assured in the view that the Rule is part of a general theory of efficient causality. It is the operating principle that ensures compliance to the more primary metaphysical doctrines of causal necessity, compatibility, and sufficient reason. This compliance applies to both the unfolding of the causal event itself in the concrete realm and the theoretical analysis thereof on the part of the physicist and metaphysician. What is more, in these later works Avicenna offered further refinements to the theory. First, he explicitly affirmed what we previously had to extrapolate from the relevant sections of the *Ilāhiyyāt*, namely that the various aspects (*jihāt*, *maʿānī*, *aḥkām*) through which the metaphysician establishes the necessary link between the procession of certain effects and the agent are not merely conceptual; rather they also have existential import as causal factors that determine the parameters and range of the agent's causality. He also established three other characteristics of what he now refers to as *ḥaythiyyāt* and *maḥmūmāt*. They are concomitants (*lawāzim*) entailed by the essence or existence of the agent; as such, they are not reducible to the essence of

the agent but are distinct from it. Finally, they can be classified exhaustively as being subject to the determinations of either “nature” or “will.” We must keep these four characteristics in mind when we turn to Rāzī’s criticism of the Rule of One.

Second, from the *Mubāhathāt* argument we learn that in the case of sublunary entities that are subject to the alternation of contrary states, the causal factors are interchangeable with the concept of potencies or faculties (*quwan*). This is because unlike perpetually actual entities like the Necessary Being and the celestial intellects, sublunary entities actualize their causal capacities only through the mediation of the body. Their exploits are thereby constrained by the limits imposed by matter, such as dimension, temporality, and the alternating cycles of corruption and generation. As a result, the causal factors they possess are only potentially active, though these remain embedded within their ontological structure. This “embeddedness” is the truth condition for any statement made regarding the nature of the entity in question, such as “human is rational,” or “fire burns,” etc. However, while being an important aspect of the physicist’s analysis of physical change, these forms are not figments of his imagination (*i’tibārāt*). Rather, they are extramental entities that have some measure of reality (*ḥaqīqa*) that is distinct from the essence, and yet caused by it as its concomitants. Thus, potencies constitute the *a priori* structure of the agent *qua* agent, one that prefigures all possible effects that may proceed from it, delimiting the parameters of its agency (*fā’iliyya*).

Furthermore, although these potencies are—from the perspective of the sublunary agent—concomitants particularized within the confines of its individual, contingent, and changeable existence and determined by its essential reality, they are universal forms that inhere in the agent. As we have seen above, the truth of statements such as “*Xs* are causes of *As*” is grounded on the fact that “being the cause of *A*” belongs to *X* as a concomitant attribute. Causal *ḥaythiyyāt* or *ma’ānī* are forms that are predicated of the subject term. Perhaps for this reason Avicenna designated them with abstract terms in the first place, like *ḥaythiyya*, *ma’ānī*, and *jīha*. As causal factors, however,

these forms somehow act upon individualized existence and participates in the unfolding of concrete reality. By reifying the concepts discerned by the metaphysician as possessing some existential import, thereby revealing the deep structure of concrete existence, Avicenna commits himself to an epistemic and ontological framework that assumes some correspondence, indeed unity, between the world of concepts and the world of concrete existence. Under the hands of a talented metaphysician, the deep structure of this correspondence can be discerned. As we shall see in Chapter 3, however, Rāzī viewed this doctrine as the soft underbelly of Avicennian metaphysics. He will strike hard at it in order to undermine not only the Rule of One, but to take down the theory of triadic emanation and the metaphysics of efficient causality supporting it. It is this awareness of the deepest intuition of Avicenna's metaphysics that sets Rāzī's critique apart from his predecessors.

Chapter 3

Fakhr al-Dīn al-Rāzī's Critique of the Rule of One

3.1. Rāzī's theoretical approach to the Rule of One and the primacy of the *maṣdariyya* argument

Fakhr al-Dīn al-Rāzī was the first thinker in the post-Avicennian period to highlight the theoretical underpinnings of the Rule of One. Whenever the Rule appears in his discussion of substantive issues such as Divine creation, the theory of celestial intellects, and the nature of the human soul, Rāzī not only evaluated its validity in regard to these questions but directed the reader to sections of his works where he evaluates its metaphysical principles. These theoretical discussions often fall under explicit subject headings, such as “On the principle that only one may proceed from the one,” and other variations, such as “On that only one effect may proceed from what is absolutely simple.” This chapter will examine these sections, particularly those in the early *ḥikma* works, such as the *Mabāḥith*, *Mulakḥḥaṣ*, and *Sharḥ al-Ishārāt*.³⁰⁰ Since his engagement with the Rule of One is part of a broader concern he had with Avicenna's philosophical project, especially regarding the nature of causality, the knowability of essences, and the ideal method of metaphysical inquiry, I will also draw on other aspects of Rāzī's metaphysics that are relevant to his interpretation but which he did not explicitly cite. We shall also see how his criticism in turn supplied the premisses

³⁰⁰ Modern scholars have focused almost exclusively on Rāzī's most extensive presentation of the Rule of One in *al-Mabāḥith al-maṣdariyya* I, 588–94. However, Rāzī reproduced the same points in other works, albeit in summary form. These secondary versions are still useful, because they reiterate his original points with more precision and offer additional insights. See *al-Mulakḥḥaṣ fī al-ḥikma* II, 383–87 (Khān'ūghlū II, 575–78); *Nihāyat al-'uqūl* I, 466–71; *Sharḥ al-Ishārāt* II, *namaṭ* 5.9, 419–20; *Muḥaṣṣal afkār al-mutaqaddimīn wa-l-muta'akhkhirīn*, 237–38; *al-Arbā'īn fī uṣūl al-dīn*, 229–31; *Sharḥ 'Uyūn al-ḥikma* I, 139; *al-Matālib al-'ālīya* IV, 381–97. Note that the *Matālib* is unique in that Rāzī does not reproduce any of the points originally made in the *Mabāḥith*. Instead, he offers objections within the “applied” context of the Rule of One, which chiefly deals with the doctrine of Divine Creation and Avicenna's theory of emanation.

and framework for his own theory of the cosmic system, a topic that we will discuss in the last subsection of this chapter. For such is the unique payoff in pursuing a systematic analysis of Rāzī's critique of this important Avicennian principle. It allows us to see Rāzī as an independent interpreter of Avicenna as well as a speculative metaphysician in his own right.

In most of his major works in *ḥikma* and *kalām*, Rāzī consistently presents four proofs for the Rule of One that he attributes to the *falāsifa* and Avicenna specifically.³⁰¹ The first is the argument from the nature of the efficient cause or agent, which I have designated above as the “*maṣdariyya* argument.” The second is the argument from the contradiction that presumably obtains when we assume that a single cause *X* is the causal ground for effects *A* and *B*. Since this argument appears only in the *Mubāḥathāt*, I shall designate it as the “*Mubāḥathāt* argument.”³⁰² The third and fourth arguments are not—as far as I can tell—asserted by Avicenna himself. Rather, Rāzī seems to derive them from the general scope and application of Avicenna's theory of efficient causality. The third argument, for instance, can be referred to as the “argument from causal compatibility,” as it is based on Avicenna's transmission theory of efficient causality, which, as we have seen in Chapter 1.3, refers to the claim that the nature of the effect must be prefigured in the agent. Finally, the fourth argument derives from the empirical observation of elemental change from one effect, e.g., the burning of a certain body, to the contrary, e.g., its cooling down. The physicist must, therefore, posit two distinct causes, namely, fire and water respectively. I shall designate this proof as the “argument from elemental change.”

³⁰¹ These four proofs appear in their complete form in the *Mabāḥith*, *Nihāyat al-ʿuqūl*, and *Arbaʿīn*. Other works offer an incomplete roster of proofs. Wahid Amin has recently offered an analysis of these four arguments based solely on the *Mabāḥith*: “‘From the One, Only One Proceeds’: The Post-Classical Reception of a Key Principle of Avicenna's Metaphysics,” *Oriens* 48 (2020): 123–55. My discussion is complementary to Amin's study, though I differ in a few points of interpretation.

³⁰² Davlat Dadikhuda's article, “Rule of the One: Avicenna, Bahmanyār, and al-Rāzī on the Argument from the *Mubāḥathāt*,” *Nazariyat* 6, no. 2 (2020): 69–97, offers an in-depth and insightful reconstruction of the argument in light of Rāzī's objections.

I will first discuss the last three proofs, beginning with the argument from the nature of elemental change. Despite presenting these proofs as distinct arguments in favour of the Rule of One, Rāzī seems to have regarded them as secondary considerations that ultimately derive from the metaphysics of efficient causality established in the *maṣdariyya* argument.³⁰³ His reason for including them in the discussion was to exhibit his command over the various theoretical and applied aspects of the principle in question, even those that Avicenna did not mention. After showing the derivative nature of these proofs, I will then turn to the centrepiece of Rāzī's criticism of the Rule of One, namely his evaluation of the *maṣdariyya* argument. As we shall see, his approach is to draw our attention to the implicit premisses of the proof before criticizing them. These premisses are the extramental reality of the causal *ḥaythiyyāt*, the principle of causal necessity, and the knowability of the agent's essence. As we have seen in the previous chapter, Avicenna presented these premisses as immediate and necessary (*badhiyya*) conceptions, requiring no separate justifications for their deployment. With the sole exception of the *Mubāḥathāt* argument, which mentions the premiss that the causal *ḥaythiyyāt* are extramental entities, Avicenna did not make any of his other premisses explicit, neither there nor in the *Ilāhiyyāt*, *Ishārāt* and *Ta'liqāt*. Rāzī rejected this approach. These premisses require separate justification, since they are based on an ontology of efficient causality that is not self-evident. This is the gist of Rāzī's objection against the *maṣdariyya* argument.

Rāzī's method of teasing out premisses that Avicenna had only assumed and subsequently interrogating their validity distinguishes his approach from previous criticisms of the Rule of One. However, this aspect of his criticism has not been discussed in previous studies, which have tended

³⁰³ In Chapter 2.3, I have shown how the *Mubāḥathāt* argument from contradiction is basically a reformulation of the *maṣdariyya* argument. In the present discussion, I will show how this reduction can also be observed in the argument from elemental change and the argument from causal compatibility.

to treat Rāzī's objections to the four proofs as distinct arguments that are unrelated theoretically.³⁰⁴ This approach is perhaps the natural effect of the source material itself. By embedding his objections under separate proofs for a given proposition, even those that the original claimants did not necessarily assert, Rāzī seems to rely on the sheer accumulated force of dissent rather than taking aim at the underlying theory or conception. The exhaustive series of objections and counter-objections offered under each argument seems to betray a preference for the dialectical method of inquiry. However, it would be a mistake to be misled by this impression. Behind Rāzī's procedure is a keen awareness of the fundamental theoretical issues at stake that would render a proposition under scrutiny demonstratively true or demonstratively false.

Let us now turn to the proofs Rāzī adduced on behalf of the partisans of the Rule of One and his objections to them. In presenting these proofs, I will mainly rely on the text of *al-Mabāḥith al-mashriqiyya* as it represents Rāzī's earliest but most elaborate formulation. I will also refer to other versions of the proofs, such as those found in the *Mulakhkhaṣ*, *Sharḥ al-Ishārāt*, and the *Arbaʿīn*, because they summarize the points made in the *Mabāḥith* and often clarify the author's original points.³⁰⁵ We begin with the fourth proof, which is based on the observation of physical change in a bodily substrate.³⁰⁶ Rāzī writes on behalf of the *falāsifa* that when placing fire close to a dry body we observe that the body burns, and when placing the dry body close to water we observe that the body cools down. From this, the physicist may draw two legitimate conclusions. The first is that

³⁰⁴ Such as, Mokdad Arfa Mensia, "Essai sur le principe de 'L'un ne procède que l'un' dans la philosophie islamique" (Paris, Université de Paris - Sorbonne, 1976); Nicholas Heer, "Al-Rāzī and al-Ṭūsī on Ibn Sīnā's Theory of Emanation," in *Neoplatonism and Islamic Thought*, ed. Parviz Morewedge (Albany: State University of New York Press, 1992), 111–26; Heer, "Al-Rāzī and al-Ṭūsī on Ibn Sīnā's Theory of Emanation."; Dadikhuda, "Rule of the One: Avicenna, Bahmanyār, and al-Rāzī on the Argument from the *Mubāḥathāt*"; Amin, "'From the One, Only One Proceeds': The Post-Classical Reception of a Key Principle of Avicenna's Metaphysics."

³⁰⁵ *Mabāḥith* I, 588–94; *Mulakhkhaṣ*, II, 383–87 (Khān'ūghlū II, 575–78); *Sharḥ al-Ishārāt* II, *namaṭ* 5.9, 419–20 *Arbaʿīn*, 229–31.

³⁰⁶ *Mabāḥith* I, 589.

the quiddity (*māhiyya*) or nature (*tabīʿa*) of fire is distinct in nature from that of water, and that each may only produce their respective effects separately. The second is that when several effects proceed from a given cause, and these effects are distinct in species, the physicist may legitimately infer (*yastadillu*) that these must arise from distinct natures. Thus, we arrive at the principle that any difference of the effects (*ikhtilāf al-āthār*) must be due to the difference of the causes (*ikhtilāf al-muʾaththirīn*).³⁰⁷ This adheres to what I have referred to as the Rule of Many, whereby the physicist or metaphysician, having observed the procession of different effects, must posit a corresponding plurality of causal factors (*taʿaddud al-muʾaththirāt*).³⁰⁸ In Chapter 1.1 of this thesis, I have shown that this precept is a corollary principle of the Rule of One.

This proof sounds like something Avicenna would adduce. The effects of fire and water are stock examples he uses to illustrate how substantial change occurs to a corporeal substrate.³⁰⁹ However, as far as I am aware, Avicenna never marshalled this example to prove the Rule of One—at least explicitly. In *al-Kawn wa-l-fasād*, Avicenna argues that the primary qualities (*al-kayfiyyāt al-ūlā*) of the elements (*uṣṭuqsāt* or *ʿanāṣir*) are of two types, active (*fāʿil*) and passive (*munfāʿil*). Each of these are responsible for distinct aspects of the element’s nature.³¹⁰ Water, for instance, does not undergo evaporation or fumigation (*tadakhkhun*) on account of its “wateriness” alone, but due to its passive quality of moistness (*ruṭūba*); similarly, water does not harden or freeze up (*ijmād*) another body on account of its “wateriness” alone, but due to its active quality of coldness (*burūda*).³¹¹ Though water is a single element, its moistness—a passive principle—and coldness—an active

³⁰⁷ This formulation is from the *Mulakhkhaṣ* II, 384 (Khānʿūghlū I, 575; and *Arbaʿīn*, 231).

³⁰⁸ *Mabāḥith* I, 589; *Arbaʿīn*, 230.

³⁰⁹ Examples of this abound in Avicenna’s works. To cite a few relevant examples in the *Ilāhiyyāt*, see *maqāla* VI.2.4, 201 (Cairo, 264); and in *al-Samāʿ al-ṭabīʿī*, see I.12.1–2, 74–75; I.12.3–4, 76 and 78; II.3.4–5, 138–40; IV.10.4, 475; *al-Kawn wa-l-fasād* 5, 147–49.

³¹⁰ Avicenna discusses the nature of the four elements and argues that they are the irreducible components of all sublunary mixtures in *al-Kawn wa-l-fasād* 5, 147–49.

³¹¹ *Al-Kawn wa-l-fasād* 5, 154–57. See also *Fī al-afʿāl wa-l-ʾinfʿālāt* 5, 222 ff.

principle—are two contrary species of primary qualities, and must be posited as distinct constituents of its nature or substantial form. Such is Avicenna’s argument for the need to affirm two distinct qualities of the elements.

This discussion in *al-Kawn wa-l-fasād* seems to be consistent with the Rule of One, as it adheres to the principle that for every species of effects, a distinct species of causal factor must be posited. Rāzī often argued that the requirement of the physicist and metaphysician to distinguish between active and passive principles as irreducibly distinct faculties (*quwā*) is part of a broader cluster of principles that comply with the restrictions of the Rule of One.³¹² However, any reference to the Rule in the proof from elemental change remains oblique and uncertain. Avicenna never cited the examples of fire burning and water cooling as the sole basis for inferring the essential difference of the cause. In *maqāla* VI of the *Ilāhiyyāt*, for instance, he argues that fire does not transmit fiery form to a watery body. Rather, by heating up the water, fire simply annuls (*abṭala*) its disposition (*istīḍād*) to receive and retain its liquid form. In doing so, it prepares the substrate to receive another form from the Active Intellect, namely fire.³¹³ In *al-Samāʿ al-ṭabīʿī*, however, Avicenna observes that the substantial form of fire must be contrary (*muḍādda*) to the substantial form of water, because of the occurrence of a “maximal degree of difference between them.”³¹⁴ This expression refers to the fact that water—which is cold and moist—shares no primary quality with fire—which is hot and dry.³¹⁵ Thus, he writes:

If by [the] subject one means any substrate whatever, then it seems that the form of fire is contrary to the form of water—and not merely their quality (for there is no doubt about [the

³¹² Rāzī described this principle as the claim that “a single thing cannot be an agent and a recipient at the same time.”

³¹³ *Ilāhiyyāt* VI.2.4–4, 201–02 (Cairo, 264–65).

³¹⁴ *al-Samāʿ al-ṭabīʿī* II.3.4, 139; translation modified.

³¹⁵ This is unlike earth, which shares in dryness with fire; and air, which shares in hotness with fire. Earth also shares in coldness with water, and air shares in moistness with water. Along with the contrary set of water and fire, we have the contrary set of earth and air, which like the first set share in no primary qualities.

contrariety of their qualities]), but, rather, the forms from which their qualities proceed. That is because the two forms share a substrate upon which they follow each other in succession (*tata'āqabāni*) and there is a maximal degree of difference (*ghāyat al-khilāf*) between them.³¹⁶

Here Avicenna adduces two reasons for holding that fire and water are distinct substantial forms: the first is the fact that “they follow each other in succession,” the second is the occurrence of a “maximal difference between them.”³¹⁷ Rāzī’s account of the proof from elemental change, however, offers only the criterion of “difference” (*khilāf*), and even this he restricts to the observation of the active principle, namely fire burning or water cooling, to the exclusion of the passive principles of dryness and moistness. The equally important condition of “successive occurrence” (*ta'āqub*) is conveniently ignored. I say conveniently, because the omission has the intended effect of impairing the strength of the proof. Had Rāzī stipulated both conditions of “difference” and “successive occurrence,” it would have been clear that, from an Avicennian point of view, only certain types of causal events would justify the inference that a distinct species of effects necessitates a distinct species of causes, namely those that produce effects in the manner that fire burns and water cools. This, however, falls short from the general scope of the Rule of One, which is meant to also regulate the procession of distinct effects that do not necessarily occur in succession, such as the procession of a celestial body as distinct from the procession of a celestial soul, both of which simultaneously emanate from the Necessary Being in the eternal present. Thus, Avicenna would have never adduced such a proof as it is presented by Rāzī. The latter’s account of the proof from elemental change and its ascription to the partisans of the Rule of One may seem ill-conceived perhaps out of carelessness in assessing Avicenna’s theory.

³¹⁶ *al-Samā' al-ṭabī'ī* II.3.4, 139.

³¹⁷ This discussion is consistent with the relevant passages in *al-Kawn wa-l-fasād* 5, where Avicenna also infers the irreducibility and mutual distinction of the four elements based on the criteria of the four primary qualities of hotness, coldness, dryness, and moistness: pp. 147–49.

Despite this, however, Rāzī's objection still helps us understand the underlying theoretical concerns he wanted to impress upon the readers. Thus, he writes on behalf of the partisans of the Rule of One that the distinct phenomena of fire burning and water cooling might allow the physicist to infer that they are distinct causal factors. As expected, he argues against this inference, claiming that it is not fully justified by the criterion of difference alone. Rather, the inference is justified by the mutual exclusion of these two effects when occurring in a single bodily substrate, such that the one would always succeed the other (*takhalluf*). Thus, he writes:

When we place water near a body, the fire will burn [it]. When we pour water on it, the water will cool it down. Thus, we establish the natural difference between fire and water not because of the mere difference (*ikhtilāf*) of the effects. For when we see that water does not burn [the body] and burning does not affect it [at all] (*lā yuqārīnuhu*), we acquire the knowledge that the nature of [water] opposes the nature of fire. For if it were commensurate (*musāwīya*) with [fire] the succeeding (*takhalluf*) of the effect [of burning] by [the presence of water] would have been prevented, such that if we were to observe a single thing and found that it is the source of many actions and that [these actions] do not [proceed] from it successively (*ghayr mutakhallifa 'anhu*), it would be impossible for us to infer the differences of the causes (*ikhtilāf al-mu'aththirāt*) from the mere differences of the effects (*bi-ikhtilāf al-āthār*). However, this is precisely the bone of contention (*huwa bi-'aynihi maḥall al-nizā'*) [regarding the Rule of One], and so this is a weak argument.³¹⁸

Rāzī's point here is that the example of a body being heated up and cooled down successively may allow the physicist to posit the existence of two causes that are distinct in species. However, the sample of natural phenomena that this example includes falls short of the ambitious jurisdiction of

³¹⁸ *Mabāḥith* I, 593–94.

the Rule of One, which purports to regulate all species of efficient causal events. The example of fire and water refers to a specific class of differentiation, one that involves mutual exclusion and succession (*takhalluf*). This is consistent with Avicenna's description of the same phenomena in *al-Samā' al-ṭabī'ī* discussed above, where the criteria of inferring the distinction between fire and water as elements are maximal degree of difference as well as successive occurrence. The way Rāzī formulated the argument from elemental change on behalf of the partisans of the Rule of One, however, does not specify the latter type of differentiation.³¹⁹ Rather, he enlists only the criterion of differentiation in a broad sense, one that may include species-defining differences that are neither contraries nor contradictories, and that may subsist in the same substrate simultaneously; for example, the Sun that gives both light and heat at once, or the human being, which performs vegetative and animal functions at once.³²⁰ Although this appeal to a broader conception of differentiation accurately reflects the theoretical promise of the Rule of One, ascribing this argument to the partisans of the principle borders on artifice and is effectively an *ad hominem* attack.³²¹ However, despite this weakness in Rāzī's approach, his main concern is clear: those who uphold the Rule of One must demonstrate that the procession of distinct species of effects necessitates a corresponding proliferation of causes. In the language of the *Arba'īn*, they must show that "the differentiation of the effect indicates the differentiation of the cause, which in turn justifies

³¹⁹ For a clearer formulation of this point see *Arba'īn*, 231.

³²⁰ Amin in his article on the Rule of One (op. cit., 142) interprets *ikhtilāf* as a distinction of individuals, and *takhalluf* as a distinction of species. This is inaccurate. As we have seen, Rāzī characterizes *takhalluf* as implying succession of one effect after another, i.e., the absence of one effect when the other comes to be in the same substrate. This implies a difference of species that are mutually exclusive. However, there exists a broader category of differences of species that do not mutually exclude each other. This is *ikhtilāf*.

³²¹ If, however, Rāzī's target here is not Avicenna, but some Avicennian philosopher who appealed to the example of fire and water as proof for the Rule of One, then his set-up of the proof is well-justified. However, Rāzī does not indicate whether he is reporting on an argument made by a partisan of the Rule, or whether he is formulating it on behalf of them. I have not found a possible source for Rāzī's report.

the proliferation of the cause[s] (*ta'addud al-mu'aththir*).³²² This is the “bone of contention” with respect to the Rule of One and it is precisely what the *maṣdariyya* argument sets out to prove.

The third proof invokes the principle of agreement (*mulā'ama*) between cause and effect. Rāzī seems to have reconstructed this proof from materials in texts such as *Ilāhiyyāt* VI.3, which—as we have seen in Chapter 1.3—discusses the principle of causal agreement or compatibility (*munāsaba*).³²³ According to this principle, every species of causal factors in the agent produces a corresponding effect that is commensurate with it in nature. To show that this is consistent with the Rule of One, Rāzī uses once again the paradigm of the elements, observing that fire and burning possess a certain correspondence that water and burning do not. From this, the physicist may infer that there must be some mutual identity (*mumāthala*) between the nature of fire and burning. In the case of elemental causes like fire, this *mumāthala* is easily observable since the effect seems to reproduce the essential characteristic of the cause by burning another inflammable body. Running through a series of burning bodies, therefore, is the “thread” of a common nature. If we were to posit that from a single cause two distinct species of effects proceed, then given the principle of causal agreement, we need to posit two distinct natures subsisting in the cause to account for the causal event. Had we assumed that the two effects *A* and *B* are distinct due to their agreement with a *single aspect* of the cause—rather than two distinct aspects thereof—then we must affirm that this single aspect is simultaneously similar to and distinct from both effects respectively. It must share a common nature with *A*, given the principle of causal agreement; but it must also have a nature that is not-*A* since it is simultaneously the cause of *B*. To avoid falling into the contradiction of affirming *A* and not-*A* of the same entity, we must stipulate that the single cause must possess two distinct aspects on which the distinction between the two effects can be grounded and the principle

³²² *Arbaʿīn*, 230.

³²³ *Mabāḥiṭh* I, 589.

of causal agreement can be satisfied without contradiction. However, once we posit two distinct causal aspects in a single agent, we are now dealing with a complex entity, rather than a simple one. We thus arrive at the theory of the causal *ḥaythiyyāt*, which serve as the ontological basis for Avicenna's theory of efficient causality.

Rāzī's criticism of this proof attempts to exploit the problems we encounter when we hold that causality (*mu'aththiriyya* or *fā'iliyya*) is a real or extramental (*thubūtī*) feature of the agent rather than being solely a function of empirical observation. It also attempts to exploit Avicenna's strict doctrine of what qualifies as an efficient cause and what qualifies as the proper object of efficient causality. As we have seen in Chapter 1.3 of this thesis, the true object of the efficient cause is the existence of the effect *qua* species; and the true agent (*fā'il*) is that which achieves this task solely in terms of its essence *qua* species, rather than *qua* individual. These conditions impose a highly restrictive view of what counts as true agents (*al-fā'il bi-l-ḥaqīqa*). Only the Necessary Being and the celestial intellects can exert causal influence in this manner.³²⁴ The theory also leads to a narrow conception of what counts as the true *object* of efficient causality, which is the existence of the effect *qua* species. This does not mean, of course, that distinct individuals of the same species cannot proceed from an efficient cause. The Active Intellect, after all, is ultimately the cause of individual plants, animals, minerals, and other sublunary beings. However, the individualizing factors that accrue to the species are accidental and external to the Intellect's agency (*fā'iliyya*), as these belong to the material conditions of the sublunary world. For Avicenna, nothing is relevant for the Intellects' productive powers other than their contemplation of their Cause and their respective essences.

³²⁴ As we have seen in Chapter 1.3, the agent's essence and the modulating factors of its existence are the two determinants of its causality (*mu'aththiriyya* or *fā'iliyya*).

Rāzī offers four objections against the argument from causal compatibility. We will discuss only one of them because it is representative of Rāzī's general approach to the proof. He writes:

Agreement (*al-mulā'ama*) can only be characterized as mutual identity (*mumāthala*). This mutual identity can be regarded (*mu'tabaratan*) [in two ways]: either as an aspect (*min jiha*) in consideration of which the cause becomes a cause, in which case the cause with respect to its causality (*bi-'illiyyatihu*) is not any more deserving [of being a cause] than [the effect]; or as an aspect that is foreign to the cause. However, this [second aspect] is unintelligible (*lā yumkinu 'tibāruhu*) [given the nature of efficient causality, whereby the causal factor must be internal to the essence of the agent]. As a result, it is clear that no aspect of agreement exists between the cause and the effect.³²⁵

Rāzī here imposes a very strict understanding of *mulā'ama* (mutual agreement) as *mumāthala* (mutual identity). This notion may be applicable to the example of the elements, such as fire causing fire on another body.³²⁶ It may also apply to the procession of purely intellectual entities from other intellectual entities, such as the First Intellect proceeding from the Necessary Being and the Second Intellect proceeding from the First.³²⁷ Rāzī argues that if the aspect through which the agent “acquires” its status as an efficient cause were identical to the nature of the effect, then another preponderating factor should have been appended to the cause in order for it to be more deserving of its status than the effect sharing a common nature. However, if we add this preponderating factor to the cause, then we have forfeited the requirement of strict agreement.

Rāzī's objection has an obvious and irredeemable flaw. Avicenna never stipulated such a strict condition for causal agreement. In fact, as we have seen in Chapter 1.3, Avicenna's discussion in

³²⁵ *Nihāyat* I, 471. Rāzī's formulation of this idea in this work is much clearer than the corresponding passage in the *Mabāḥith*.

³²⁶ *Mabāḥith* I, 589.

³²⁷ *Mabāḥith* I, 593.

Ilāhiyyāt VI.3 is devoted to the claim that the efficient cause is “more deserving” (*awlā*) of whatever species of existence it bestows upon the effect. To maintain the superiority of the cause, especially in cases where the effect is similar or identical to the cause in nature, Avicenna proposes the theory of the modulation of existence (*tashkīk al-wujūd*). In this case, the cause and effect must still differ in terms of certain modulating factors, such as priority and posteriority, self-sufficiency and reliance, and necessity and contingency.³²⁸ These factors render the cause distinct from its effect, despite sharing a common species, such as fire causing fire; or despite sharing a common attribute or state, such as the Necessary Being causing the First Intellect, and the First Intellect causing the Second Intellect, and so on.³²⁹ Since the existence of the cause is by definition prior, self-sufficient, and necessary, it must be superior to the effect and more deserving of the nature or state that they possess in common. Rāzī, however, ignores this aspect of the theory in his account of causal agreement. The denial may be consistent with *his* ontology, but it is not consistent with Avicenna’s, which is the target of his criticism.³³⁰

As a result, Rāzī’s objection to the third proof misses the mark, as he ignores the complexity of Avicenna’s theory of efficient causality, which does not exhibit this narrow conception of causal agreement as mutual identity. Rāzī also stipulates this narrow conception of agreement in the remaining three objections to the proof from causal agreement. Consequently, these too will fall

³²⁸ *Ilāhiyyāt* VI.3.6, 206 (Cairo, 279–70).

³²⁹ Each of the celestial intellects, of course, constitutes a distinct species. Thus, the common factor between them is the “state” of being essentially separate from matter and being capable of intellection.

³³⁰ For Rāzī’s view on modulation (*tashkīk*) of existence see Rosabel Ansari and John McGinnis, “One Way of Being Ambiguous: The Univocity of ‘Existence’ and the Theory of Tashkīk Predication in Rāzī and Ṭūsī,” *American Catholic Philosophical Quarterly* 96, no. 4 (2022): 545–70; Damien Janos, “*Tashkīk al-wujūd* and the *lawāzīm* in Avicenna’s Metaphysics,” in *Penser avec Avicenne. De l’héritage grec à la réception latine, en hommage à Jules Janssens*, ed. Daniel De Smet and Meryem Sebti (Leuven-Paris-Bristol: Peeters, 2022), 91–147; Francesco Omar Zamboni, “Is Existence One or Manifold? Avicenna and his Early Interpreters on the Modulation of Existence (*tashkīk al-wujūd*),” *Documenti e studi sulla tradizione filosofica medievale* 31 (2020): 121–49; Fedor Benevich, “The Necessary Existent (*wājib al-wujūd*): From Avicenna to Fakhr al-Dīn al-Rāzī,” in *Philosophical Theology in Islam: Later Ash‘arism East and West*, ed. Ayman Shihadeh and Jan Thiele (Leiden: Brill, 2020), 123–55; Hakan Coşar, “İşârât Geleneği İçinde Fahreddin er-Râzî Eleştirileri: Seyfeddin el-Âmidî Örneği,” in *İslâm Düşüncesinin Dönüşüm Çağında Fahreddin er-Râzî*, ed. Ömer Türker and Osman Demir (Istanbul: İsam Yayınları, 2011), 587–612.

short from mounting a proper challenge to the Rule of One. We must note, however, that by denying this narrow conception of causal compatibility, Rāzī does not deny that some measure of commensurability must obtain between cause and effect. This is a basic fact of empirical observation. What Rāzī rejects is Avicenna's use of the principle of causal compatibility to *deduce* the nature of the effect solely by considering the nature of the cause. As we shall see, Rāzī holds that causal agreement or compatibility is an entirely *a posteriori* construction.

Although Rāzī's objections to the proof from causal agreement are directed at a conception of efficient causality that Avicenna does not hold, we can still draw some important lessons. The first is that Rāzī is aware that the Rule of One and the theory of causal correspondence (*munāsaba*) are part of the same general theory of efficient causality. By using the term *mulā'ama*, and glossing it as a correspondence of species, Rāzī seems to be drawing from *Ilāhiyyāt* VI.3 and other related sources to make sense of the principle. We should not take this awareness for granted since it shows that he wanted to strike at a vital point in Avicenna's metaphysics, one that would deny other aspects of his system related to causality. However, Rāzī would have made a better case had he considered the underlying theory of causal agreement, rather than focusing on the surface-level dispute regarding the term "agreement" (*mulā'ama*). Fortunately, he *does* eventually offer such an analysis in his criticism of the Rule of One, namely when he discusses the *maṣdariyya* argument. As we shall see, this argument reveals the inner structure of efficient causality on account of which the "agreement" or "compatibility" between cause and effect is established. The second lesson is that for Avicenna to safeguard his theory of causal correspondence, he would have to be correct in his claim that existence is predicated of things in a modulated way (*bi-l-tashkīk*). Otherwise, he would be susceptible to Rāzī's objections. Whether or not it was Rāzī intended to draw this implication is not clear. He never cites the issue of modulation in his criticisms of the Rule of One or in other discussions related to causality. Had Rāzī appended some reference to his view that existence is

not modulated—whether as an additional premise or as a response to an imagined Avicennian counter-objection—his criticism could have been sustained. As it is, from a formal perspective, his objections to the argument from causal correspondence are irrelevant.

The second proof that Rāzī enlists on behalf of the partisans of the Rule of One is the *Mubāḥathāt* argument from contradiction, which we discussed in Chapter 2.3. Rāzī, following Bahmanyār’s objection in the source-text and in his *Kitāb al-Taḥṣīl*, argues that the proof is not valid.³³¹ Where Avicenna saw a contradiction (i.e., X causes A ; X causes non- A), both see two affirmative propositions, one of which contains a negative subject term (metathesis or *ma’dūl*). From a formal perspective and without specifying a truth condition for the proposition, the two propositions do not contradict each other. However, as we have seen in Chapter 2.3, Avicenna attempts to salvage the proof by stipulating another premiss, which is to add the truth condition that the subject term X exists as an extramental reality. However, we have seen that once we stipulate this added truth condition, the argument is effectively identical to the revised *maṣdariyya* argument of the *Ta’liqāt*. Since Avicenna did not reformulate the *Mubāḥathāt* argument based on this supplementary consideration, Rāzī (as well as Bahmanyār) is justified in focusing on the invalid form of the *Mubāḥathāt* argument, ignoring material considerations that an Avicennian philosopher may have supplied to salvage it. For this reason, Rāzī’s refutation of this argument is always brief. He is content with simply pointing out the invalid form it takes.

It is clear then from the forgoing discussion that these three proofs are dependent in one way or another on the *maṣdariyya* argument and the premisses supporting it. It is the proof that makes or breaks the Rule of One.

³³¹ In *Sharḥ ‘Uyūn al-ḥikma*, Rāzī mentions Bahmanyār and his concerns with the proof, as recorded in the *Mubāḥathāt* (*Sharḥ Uyūn al-ḥikma* I, 139).

3.2. Rāzī's reconstruction and critique of the *maṣdariyya* argument

Instead of paraphrasing the *maṣdariyya* argument of the *Ishārāt*, Fakhr al-Dīn al-Rāzī in the *Mabāḥith* presents an improved version that addresses some of the problems found in the original argument. In Chapter 2.3, I had argued that Avicenna seems to have begged the question when formulating the *reductio* portion of the proof. To prove that only a single effect may proceed from a single cause, Avicenna postulated the contradictory proposition that “the many may proceed from the one” and sought to establish the absurd consequences of this statement. He does this by enumerating three scenarios through which two effects may proceed from the one. The first is that the two effects directly proceed from the quiddity of the agent; the second, that they proceed through the intermediary of concomitants; the third, that they proceed from a combination of a mediating concomitant and the quiddity. Avicenna argues that the differentiating factors that determine the procession of effect *A* as distinct from the procession of effect *B* must therefore be either intrinsic to the quiddity itself, or externalized through concomitants, or be a combination of essential and concomitant factors. If the differentiating factors are intrinsic to the quiddity itself, then the agent will consist of a plurality of essential parts, and this contradicts the initial assumption that it is one in all respects (*fī kulli wajhin*). If the factors are externalized through concomitants, then this would ultimately imply a plurality of the quiddity of cause, because concomitants are effects of the cause. If the factors are a combination of essential and concomitant factors, this too will lead to a plurality of constitutive parts of the agent because the concomitant should also be traced back to a distinct aspect of the essence responsible for its causation. However, by arguing that the three causal scenarios above imply the plurality of the essence of the agent, thereby contradicting the initial assumption that the many may proceed from the *one*, Avicenna already takes for granted the restrictions imposed by the Rule of One. This begs the question because denying the initial

assumption was supposed to justify the sought-after proposition that only one effect may proceed from one cause, and not the other way around.

Seemingly aware that this argument suffers from circularity, Rāzī tries to patch up the argument to render it viable, at least from a purely formal point of view.³³² He writes on behalf of Avicenna:

The First [argument] is that the conception (*mafhūm*) that *A* proceeds from a certain thing is other than the conception that *B* proceeds from that thing. Now these two conceptions are either (1) two constituents (*muqawwimayn*) of the cause (*illa*), (2) two concomitants (*lāzimayn*) of the cause, or (3) one of them is a constituent while the other is a concomitant. If both are constituents of the cause, then the cause is a composite, in which case it would not be a unity in every way. If both are concomitants, whereas concomitants are effects [of a cause], then the division returns to the beginning, in that the conception that one of the concomitants proceeds from the thing is distinct (*mughāyir*) from the conception that the other concomitant proceeds from it. If this did not end at a plurality of constituent parts [of the cause] (*kathra fī al-muqawwim*),³³³ it would be necessary that each concomitant exist by the intermediary of another concomitant. Since this argument entails affirming an unending series of concomitants, it is an argument for an infinite series of causes and effects. However, [affirming] this necessitates the negation of concomitants absolutely. [This is] because this

³³² Rāzī did not explicitly state that he is trying to repair the *Ishārāt*'s *maṣḍariyya* argument. However, he does attempt to buttress the argument by explicitly invoking premisses Avicenna had assumed and supplying subsidiary arguments to offset the impression that he has begged the question.

³³³ The modern Cairo and Hyderabad editions offer the reading: "*kathra fī al-mafhūm*." This is attested by several witnesses, such as MS Istanbul: Yeni Cami 774, f.154r, 19, MS Istanbul: Feyzullah 1211, f.128r, line 18. However, the following witnesses attest a different reading, namely "*kathra fī al-muqawwim*": MS Istanbul: Feyzullah 1212, f.131v, line 10, MS Berlin: Staatsbibliothek Ms. or. quart. 13, f.173v, line 28, MS Istanbul: Ragib Pasha 808, f.118v, line 7, MS Istanbul: Ragib Pasha 807, f.130v, line 20. This is not an exhaustive survey, but it seems to me that "*al-muqawwim*" is the better reading, because the point of this second division regarding the plurality of concomitants is to return to the conclusion of the first division, which explicitly refers to a plurality of "two constituent parts (*al-muqawwimayn*)."

quiddity [i.e., the cause]—insofar as it is what it is—either entails (*taqṭaḍī*) that a concomitant occurs for it, or it does not. If it does, then this concomitant follows from it insofar as [the quiddity] is what it is, in which case [the concomitant] occurs without intermediaries. However, it has been posited [in this division] that each [concomitant] have been posited to have an intermediary, and [this] contradicts [the initial assumption]. If the quiddity [i.e., the cause] does not entail anything by way of concomitants, this is an acknowledgement that [the cause] has no concomitants. It is, therefore, clear that the argument affirming an infinite series of concomitants necessitates the falsity of the argument affirming [their very existence]. If one of the two conceptions is a constituent of the cause, while the other is its concomitant, the two conceptions would not occur simultaneously at the same [ontological] level (*daraja*), since the constituent is prior while the concomitant is not prior, and the prior is not that which is not prior. Therefore, the result of this discussion returns to the fact that this concomitant is the effect only; and the effect is one. From this it is clear that the single cause does not produce many effects.³³⁴

This version of the *Ishārāt's maṣdariyya* argument is fundamentally identical to Avicenna's. It is basically a *reductio ad absurdum* argument where the contradictory of the sought-after proposition is assumed to be true, namely that two effects may proceed from a single cause. This necessitates positing two distinct conceptions in the agent. These two conceptions are either constituents, concomitants, or a combination of both. Rāzī then shows that each division would lead to the conclusion that the agent is complex, and this contradicts the initial assumption. The crucial difference is in how Rāzī discusses the second division (the bolded portions above), which stipulates that the two conceptions (*maḥmūmāt*) are concomitants of the cause. We have shown in Chapter 2.3

³³⁴ *Mabāḥith* I, 588–89; emphasis mine.

that Avicenna simply assumed that the multiplicity of concomitants must lead to a multiplicity of essence. However, since the essence is to its concomitant as a cause is to its effect, this assumes from the outset the validity of the Rule of One, which prohibits the procession of many effects from a single cause. Rāzī, however, introduces a new line of reasoning. First, he explicitly states a premiss that was only implicit in Avicenna's version, namely that concomitants are effects of the essence of the agent. As a result, the conception (*mafhūm*) that the essence causes one concomitant must also be distinct from the conception that it causes another concomitant. This plurality of *mafhūmāt*, however, must ultimately originate in the quiddity of the cause, or else, we would need to posit another set of concomitants to account for these two conceptions. Unless the causal chain ends at the level of the essence, we would be positing an infinite series of concomitants, which is an impossibility.

By adding this subsidiary argument regarding the relationship between the essence and its concomitants and the implication of infinite regress, Rāzī can negate the second division without taking recourse to the very principle the argument sets out to prove, relying instead on the impossibility of an infinite regress of cause and effect. He was able to do this while remaining within the framework of Avicenna's metaphysics and without introducing new terms that are not already cited in the original argument in the *Ishārāt*.

In this revision of the *maṣdariyya* argument, one premiss plays a crucial role as Rāzī needed to appeal to it twice to clarify and repair the proof. The first appeal allowed him to arrive at the initial division of three possible outcomes; the second allowed him to arrive at the absurdity of an infinite regress of concomitants. This premiss is the claim that “the conception (*mafhūm*) that *A* proceeds from a certain thing is other than the conception that *B* proceeds from that thing” and that consequently “if from the single thing (*al-wāḥid*) two things necessarily proceed, then [this is because of] two distinct aspects that differ in reality (*min ḥaythayni mukhtalifay al-mafhūm mukhtalifay al-*

ḥaqīqa).”³³⁵ In Chapter 2.3, I had shown that for Avicenna these conceptions are extramental entities subsisting through the essence and serving as its concomitants. X causing A (X^a) and X causing B (X^b) refer to two distinct aspects of X , which, given their mutual difference, is effectively a distinction between S and P . These are the *ma‘ānī* or *ḥaythiyyāt* that serve as the causal ground for the procession of distinct effects proceeding from a single cause. When the agent is absolutely simple, the causal principle is entirely immanent and indistinguishable from the essence; but when the agent is complex even in the most subtle manner—as in the case of the celestial intellects—it may possess more than one causal principle.

By reemphasizing this premiss in repairing the argument, Rāzī wants to show that these causal *ḥaythiyyāt* lie at the heart of Avicenna’s Rule of One and his theory of efficient causality. In fact, Rāzī seems to view the second portion of the *maṣdariyya* argument, where the *reductio ad absurdum* is pursued, as a mere implication of the principle of causal differentiation, rather than being an essential part of a proof that ascertains the necessity of the Rule of One. Once we accept Avicenna’s theory that the causal *ḥaythiyyāt* must be distinct not only in conception but also in reality, that these are extramental “attributes” of the cause, and that these exert causal influence in the production of existing things in the concrete realm, the Rule of One will follow as a matter of course. The division of three possible scenarios for the ontological “location” of these *ḥaythiyyāt* relative to the essence is not a premiss for the proof. It simply elucidates a conclusion already established at the first few lines of the argument.³³⁶ This is why Rāzī’s criticism of the argument, as we shall see, did not focus on the *reductio* form it takes but interrogates the metaphysics of the causal *ḥaythiyyāt*

³³⁵ *Ishārāt*, 153 f.

³³⁶ That the *reductio* portion is superfluous in proving the Rule of One can be seen in Avicenna’s revised *maṣdariyya* argument in the *Ta’liqāt*, where he focuses only on the metaphysics of the causal *ḥaythiyyāt*. In Chapter 2.3, I also discussed that Avicenna relies on the implicit premisses of causal necessity, sufficient reason, and the knowability of the essence of the agent.

underlying it.³³⁷ Seeing that Avicenna merely states his claim that the differentiation of causal aspects in conception implies a differentiation in reality, Rāzī demands that the partisans of the Rule of One offer a demonstrative argument in support of this claim. He writes:

The objection to the first proof is the following: If we conceptualize that X causes A , then this knowledge is knowledge of the relation (*nisba*) of the cause to the effect, and it will be apparent that knowledge of a relation of one thing to another includes knowledge of each one of these two relata (*al-muḍafayn*). As a result, this knowledge attaches to three things: the cause, the effect, and the relation of the one to the other. Thus, if we arrive at knowledge that X causes A , the object of [our] knowledge (*al-ma'lūm*) is the aggregate (*majmūʿ*) of this cause X considered (*ma'khūda*) with respect to A . If we arrive at knowledge that X is a cause of B , then the object of knowledge is the aggregate of X considered with respect to B . Now it is obvious that the aggregate of X and A is different from the aggregate of X and B . However, why did you say that if the first aggregate is distinct from the other then each thing that is considered in one of the two aggregates is other than each thing that is considered in the other aggregate? A demonstration regarding this is necessary! For what [you] claim necessitates [only the following]: that what is considered as one of the two conceptions (*mafḥūmayn*), which is the first aggregate, is other than the second conception, which is the second aggregate. However,

³³⁷ Naṣīr al-Dīn al-Ṭūsī also holds that the *reductio* portion is superfluous to the *maṣdariyya* argument for the Rule of One. He writes in his commentary on the *Ishārāt*: “The conception whereby A is necessitated by the thing [i.e., the cause] is other than the conception whereby B is necessitated from it [means that] the causality (*ʿilliyya*) of the one is other than the causality of the other. This otherness of the two conception indicates otherness in their reality. Thus, what is posited [i.e., the cause] is not a single thing. Rather it is two things, or it is a single thing that is ascribed with two distinct attributes (*mawṣūf bi-ṣifayn mutaghāyiratayn*). However, we have assumed it to be one. And this is a contradiction. This [consideration alone] suffices (*kāfīn*) in elucidating this meaning. However, to further clarify [this point] (*zīyādat al-wuḍūh*) he [i.e., Avicenna] writes that these [two attributes] are either constitutive parts of the single thing or its concomitants [etc.]” (*Sharḥ al-Ishārāt* III, *namaṭ* 5, 123).

this [alone] does not necessitate that what is considered in one of the two aggregate is other than what is considered in the second aggregate.³³⁸

For Rāzī, the only conceptual distinction we may draw from the observation that “*X* causes *A*” and “*X* causes *B*” is the distinction of two causal nexuses, or aggregates (*majmūʿ*), that pertain to a single subject. These are the “facts” of the causal event that we immediately and necessarily discern. Likewise, the immediate and necessary theoretical distinction implied in this observation is the difference between the two aggregates taken as a whole.³³⁹ If the partisans of the Rule of One want to make the further claim that the observation implies that “*X* causing *A*” and “*X* causing *B*” are distinct attributes of *X* (*viz.*, *X^a* and *X^b* respectively), which designates its status as a cause (*mu’aththiriyyatuhu*, *fā’iliyyatuhu*, or *‘illiyyatuhu*), they must supply additional considerations to demonstrate this fact. Rāzī is not disputing that Avicenna may be correct regarding the need to posit these causal *haythiyyāt* pertaining to the agent. Rather, he simply argues that such a theory is not the immediate and necessary implication of the empirical observation. Additional premisses are warranted that Avicenna failed to supply.

Rāzī, however, is not content merely to only point out weaknesses of the *maṣdariyya* argument; he intends to refute Avicenna’s metaphysics of causal *haythiyyāt*. Rāzī thus adduces six counterexamples to the claim that differentiation in the conception necessarily implies differentiation in reality (*fī al-ḥaqīqa*). These counterexamples would become stock examples that he would regularly cite in later formulations of the critique. These are: (1) the fact that many potentially infinite lines may theoretically proceed from a single point; (2) the juxtaposition of two things together and the various relations that can be conceived between them; (3) the potentially

³³⁸ *Mabāḥiṭh* I, 589–90.

³³⁹ As we will discuss shortly, Rāzī would further elaborate on this point in the corresponding discussion in the *Mulakhkhaṣ*. Unlike the discussion in the *Mabāḥiṭh*, the later refinement would take up the notion of aggregate (*majmūʿ*) to develop a distinct analysis of the propositions that “*X* causes *A*” and “*X* causes *B*.”

infinite negations that can be made of a single thing; (4) the various aspects of the Necessary Being's existence, such as the Avicennian doctrine that God is both the subject and object of His own contemplation; (5) that a thing may be a receiver of many actions (*qābil* or *munfā'il*) at the same time, resulting in differentiated aspects of reception, such as prime matter; and (6) that causality (*mu'aththiriyya*) is a relation (*idāfa*) and that plurality of relations does not necessarily imply a corresponding plurality in the essence possessing them.³⁴⁰ Of these, the sixth is the most important. Unlike the other five, it is not strictly speaking a counterexample. Rather, it asserts a theoretical principle that strikes at the heart of the problem.³⁴¹

Indeed, in later formulations of his critique of the Rule of One, Rāzī would focus on the relational nature of causality as the main objection against the *maṣdariyya* argument.³⁴² The revision seems to have been immediate and decisive, because already in the *Mulakhkhaṣ* Rāzī moves this sixth counterexample to the head of the discussion, where it serves as the theoretical principle underlying the relevance and validity of the counterexamples. He writes:

The answer to the first [argument, i.e., the *maṣdariyya* argument] is the following: [Avicenna's] statement that “the two aspects designating the agent's status as the cause of two effects (*maṣdariyyatā l-‘illa li-l-ma'lūlayn*) are either internal to the quiddity of the cause, external from it, or one of them is internal and the other is external” is a false premiss (*muqaddima kādhiba*).³⁴³

³⁴⁰ These are not meant to be an exhaustive list of counterexamples. Rāzī would also add other examples to the repertoire, such as the fact that the conception of the human being as a speaker (*mutakallim*) is other than the conception of the human being as being silent (*sākit*), or being seated (*jālis*) is other than being mobile (*mutaḥarrik*), etc.; and the conception that the body receives blackness is other than the conception that it receives motion (*Mulakhkhaṣ* II, 386–87; Khān'ūghlū I, 577–78). An expanded set of examples can be found in the *Nihāyat* I, 240–42.

³⁴¹ As we shall see, the true significance of these counterexamples in the critique of the *maṣdariyya* argument will be apparent only once we have established the primacy of the sixth counterexample—i.e., causality as a relation. Their relevance depends on this theoretical point. In fact, their purpose in Rāzī's critique will be obscured if we take them as stand-alone arguments.

³⁴² We can see this move in *Sharḥ al-Ishārāt* II, *namaṭ* 5.9, 419–20; *Muḥaṣṣal*, 237–38. III, 576, as well as in the *Mulakhkhaṣ*, as discussed below.

³⁴³ Rāzī's use of the abstract term, “*maṣdariyya*,” rather than a concrete noun is consistent with Avicenna's use of the terms “*mafhūm*” and “*bi-ḥaythu*” in the *Ishārāt*: “The conception (*mafhūm*) of a certain cause in regard to some aspect (*bi-*

This is because the division is correct only if that aspect designating the agent's status as the cause for the procession of the effect were a real attribute (*ṣifa thubūtiyya*). However, this is false, because if it were a real attribute, then it would either be: (1) the very causal ground itself (*dhāt maṣdar*) but this is false because *maṣdariyya* is a relation that occurs accidentally (*idāfa ʿarīḍa*) to the essence of the cause through [its] connection to the essence of the effect, whereas the accidental (*al-ʿarīḍ*) is posterior (*mutaʾakhkhir*) and a thing does not come to be after itself; (2) a part of [the causal ground] (*juzʾ minhu*) but this is impossible, because the part is prior, whereas the accidental is posterior and the prior is not the posterior; (3) external to [the causal ground] (*khārij ʿanhu*) but this [too] is impossible, as has been previously explained. If [the claim that the *maṣdariyya*] is a real entity is false, then this division is also false.³⁴⁴

The first major difference between this version of the critique and the *Mabāḥith*'s is that Rāzī refers to the causal *ḥaythiyyāt*—i.e., the various aspects of an entity designating its status as the cause for some effect (*maṣdariyyat l-ʿilla li-maʿlūl*)—as a “real attribute” (*ṣifa thubūtiyya*) of the agent. *Ṣifa* is a catch-all term referring to any accident predicated of a subject term, while *thubūt* implies existence in concrete reality. I argue that Rāzī's use of the term “real attribute” is well-justified. If the causal *ḥaythiyyāt* were not concrete accidents inhering in the agent, Avicenna would not have attempted to identify their ontological location, as it were, relative to the essence of the agent—whether they be internal to it as constitutive parts, external to it as concomitants, or some combination of both.³⁴⁵

ḥaythu) whereby *A* proceeds necessarily from [the cause].” We can rephrase this statement as “*kawnuhu ʿillatan li-alif*,” which designates *ʿilliyyatuhu li-alif*.” Thus, I have opted to translate *maṣdariyya* with the rather periphrastic “the aspect designating the agent's status as the cause for the procession of the effect.” For its later usage, I either use a shortened version of this phrase or simply *maṣdariyya*. Other terms that Rāzī, Ṭūsī, and Quṭb al-Dīn al-Rāzī use to designate the same notion are *muʾaththiriyya*, *fāʿiliyya*, *ʿilliyya*, and *ḥaythiyyāt al-istilzām* or *ḥaythiyyāt al-ṣudūr*.

³⁴⁴ *Mulakhkhas* II, 384–85; *Khānʿūghlū* II, 576.

³⁴⁵ As Rāzī writes in the *Muḥaṣṣal*, “the thing's capacity to exert causal influence over (*muʾaththiriyyat al-shayʾ fī*) another thing has no ontological reality (*amr thubūtī*), as we have explained. If this is the case, then the claim that the [*muʾaththiriyya*] is [either] a part of the quiddity or external to it is refuted” (pg. 237). According to Rāzī, Avicenna's contention that the *muʾaththiriyya* must either be internal or external to the quiddity implies the premiss that it has ontological reality relative to the concrete being that is the agent.

We have also seen that in the *Mubāḥathāt* argument for the Rule of One he was compelled to affirm the reality of the causal *ḥaythiyyāt* in order to respond to Bahmanyār's doubts regarding the argument from contradiction. For the proposition “*X* is the cause of *A*” to contradict the *ma'dūl* (metathetic) proposition “*X* is the cause of non-*A*”, the subject term *X* must be reified as an existing entity. Only then will the material content of both propositions be mutually exclusive. Thus, the term “real attribute” to designate the causal *ḥaythiyyāt* is not only consistent with Avicenna's own conception, it brings his metaphysical commitments into stark relief. The term also seems to have been influential for later “Avicennian” commentators of the *Ishārāt*, who adopted Rāzī's nomenclature to elucidate the Master's argument.³⁴⁶

Having established that the causal *ḥaythiyyāt* are extramental entities, Rāzī then further refines his reconstruction of Avicenna's theory. He argues that these entities must either be the very causal ground itself (*dhāt al-maṣḍar*), a part of the causal ground (*juz' minhu*), or external to it (*khārij 'anhu*). The last two divisions do not obviously reflect Avicenna's theory, since the causal *ḥaythiyyāt* are the very causal ground for the procession of the effects. Rāzī's intent for including them is simply to offer an exhaustive analysis. Against the first division, therefore, he argues that *maṣḍariyya* is fundamentally “a relation that occurs accidentally (*iḍāfa 'arīda*) to the essence of the cause on account of [its] connection to the essence of the effect.” Rāzī holds that the causal *ḥaythiyyāt* cannot be conceived as distinct attributes possessing their own ontological reality, much less influence the concrete workings of efficient causality, because they are fundamentally relational in nature. This is the key insight that directly challenges Avicenna's theory of the causal *ḥaythiyyāt*.

³⁴⁶ See Ṭūsī's *Sharḥ al-Ishārāt* III, 123, and Quṭb al-Dīn al-Rāzī's *Muḥākamāt sharḥay al-Ishārāt wa-l-tanbīhāt* III, 122–23. Both authors argue that the causal *ḥaythiyyāt* must have extramental reality. The resulting analysis is largely consistent with Fakhr al-Dīn's. There is, however, a crucial difference: the latter holds that the premiss affirming the ontological reality of causal *ḥaythiyyāt* requires demonstration; the former holds that it is an obvious and necessary doctrine (*ẓāhir* and *ḍarūrī*) that requires no demonstration.

Despite the crucial significance of this point, Rāzī does not immediately explain what he means when he says that causality (*maṣdariyya*) is a relation. The proposition does not seem intuitive or self-evident. In order to understand this aspect of the critique, we need to discuss a separate section in the *Mabāḥith* and *Mulakhkhaṣ* that is devoted to the Aristotelian categories of action and passion (*an yafʿala wa-an yanfaʿila*). There Rāzī offers an extended discussion on the ontological status of causality (*muʾaththiriyya*) and argues that is an essentially relational accident that has no concrete existence.

Before turning to that section, however, we need to discuss one last point Rāzī makes in his critique of the *maṣdariyya* argument in the *Mulakhkhaṣ*, one that will help us understand his conception of causality as a relation. This point refines a brief statement he made in the corresponding discussion in the *Mabāḥith* where he had offered an analysis of the propositions “*X* causes *A*” and “*X* causes *B*,” one that is intended to be distinct from Avicenna’s analysis. He writes:

If we accept the correctness of the divisibility [of the essence of the cause on account of the plurality of the effect], why is it impossible that the two conceptions are internal to it? He [Avicenna] says, ‘because it would necessitate composition (*tarkīb*).’ We say: does it necessitate composition (1) in the aggregate, which consists of the essence [of the agent] and the aspect by which it is conceived as the cause of some effect (*maṣdariyya*), or [does it also necessitate composition] (2) in the essence [only], to which the causal aspect had occurred as an accident (*ʿarīḍa*)? The first can be accepted, and we do not dispute its truth. For we if arrive at the knowledge that a thing is the causal ground (*maṣdar*) for something else, then the object of our knowledge (*maʿlūmunā*) is the aggregate of the essence of this thing and the [added] ascription of its being the cause of the other thing (*maʿa wasfī kawnihi ʿillatan li-shayʾin ākhara*). This object of knowledge is [therefore] a composite of the essence of the thing to which an accident has occurred (*maʿrūḍ*) and the accidental attribute (*al-ʿarīḍ*). No one disputes this. The dispute is regarding the essence of the cause, which is itself the locus in which the accident of causality

has occurred (*ma'rūd al-'illiyya*). Is it [really] necessary that it be a complex entity? What you have mentioned does not necessitate this, because it is possible that the single thing is taken with a certain ascription (*wasf*) at one time, and with another ascription at another, and thus each of the two aggregates is distinct in conception (*fī al-fahm*) from the other aggregate but with the stipulation that what is considered in one part of the two aggregates is identical to what is considered in the other [aggregate].³⁴⁷

Unlike the original analysis in the *Mabāḥith*, Rāzī in this passage reframes the issue in more precise terms: *maṣdariyya* is now conceptualized as a predicate ascribed to the agent *after* observing the fact that it has caused a certain effect. *Maṣdariyya*, therefore, must be interpreted in the first instance as an artifact of *a posteriori* analysis. As a result, the ascription remains within the realm of conventional discourse that the metaphysician and physicist use to describe the observation that “*X* is the cause of *A*.” The ascription does not *prima facie* reveal that the essence of the agent possesses some attribute by means of which it becomes the cause of *A*; rather it simply describes a relation obtaining between the two entities. The metaphysician may describe this relation by coining abstract term, namely *maṣdariyya*, or more precisely “the status of being the cause of *A*.” However, this abstraction is a function of conventional theory, and not an immanent feature of extramental reality. The predicate, therefore, remains semantically distinct from the essence of the agent (hence it is a “construct” or “aggregate,” i.e., *majmūʿ*), although from a logical point of view—that is, from the perspective of the sheer act of predication—it is something that pertains to the agent. In this *a posteriori* framework, whether the predicate reveals something of the immanent structure of *X* is a separate question that requires its own proof. The corollary claim that a multiplicity of effects proceeding from *X* necessitates a corresponding plurality in *X*—consisting of concomitants

³⁴⁷ *Mulakhkhaṣ* II, 385; *Khān'ūghlū* I, 576–77.

(*lawāzim*) and, ultimately, constituent parts (*muqawwimāt*)—presumes special knowledge of quiddities that the partisans of the Rule of One have failed to justify—at least in the *maṣdariyya* argument. To this Rāzī adds the supplementary claim that it is possible to conceive of cases where a multiplicity of conceptions and predications regarding a single subject term does not necessitate plurality in its essence. This is the purpose of the counterexamples cited in his critique of the *maṣdariyya* argument, e.g., that an infinite number of lines may theoretically proceed from a single point; that we can ascribe an infinite number of negations to a single subject term; that the Necessary Being can be both the object and subject of His own intellection; etc.³⁴⁸ Thus, the relational quality of *maṣdariyya*, the lack of any demonstration proving its ontological reality, and the abundance of real-world counterexamples to the Rule of One are the three principle objections to the *maṣdariyya* argument Rāzī offers in the *Mabāḥith* and *Mulakhkhaṣ*.

In light of these passages from the *Mulakhkhaṣ*, I hope to have shown that we cannot rely solely on the *Mabāḥith* to elucidate Rāzī's objection to the *maṣdariyya* argument and the Rule of One more generally, despite being the most detailed exposition of the issue in his corpus. Later works, especially the *Mulakhkhaṣ*, offer additional insights into the original exposition that allow us to better understand the author's concern. Relying solely on the *Mabāḥith* can easily give a false impression of Rāzī's grasp of the Avicennian theory of causal *ḥaythiyyāt* and efficient causality and of the relative cogency of his objections. We have seen, for instance, that the six counterexamples Rāzī provides are not intended to be the focal point of his objection. Rather, they illustrate a secondary concern

³⁴⁸ For an analysis of these five counterexamples, see Amin, "'From the One, Only One Proceeds,' 139–40. This article offers the most extended analysis in Western scholarship of Rāzī's criticism of the *maṣdariyya* argument. However, the author does not delve into the theoretical points Rāzī asserts and focuses instead on the six supporting examples as discrete self-contained objections. This approach does not take into consideration Rāzī's discussion in the *Mulakhkhaṣ* (and other works), where he promotes the sixth counterexample as the central theoretical concern underlying the validity of the rest of the counterexamples. Instead, he focuses on the early formulation in the *Mabāḥith*, where Rāzī did not seem to have fully systematized his thoughts on the matter.

regarding the relationship between conception (*mafhūm*) and extramental reality (*ḥaqīqa* or *amr thubūtī*), namely, that distinct conceptions do not necessarily and immediately imply an ontological distinction. We were able to adjust our perspective because what Rāzī had initially subsumed under the six counterexamples—that causality is a relation—was in later works upgraded to the head of the discussion as part of the theoretical framework of the argument.

This framework reveals a hermeneutic of causal relations, one that attempts to clarify the relationship between the conventions of systematic rational discourse and the concrete reality that discourse purports to describe. Under this framework, the Rule of One and the metaphysics of causal *ḥaythiyyāt* underlying it is not so much false as it is irrelevant. It imposes a rigid structure of causal relations that promises a high degree of certitude regarding the nature of the agent, the nature of the effect, and the necessary operations by which the former causes the latter. However, it presumes a doctrine of the quiddity that is untenable and requires such a high evidentiary standard that is virtually impossible to achieve through empirical observation, much less through the speculative inquiry of the metaphysician. Rāzī's hermeneutic is based on two claims. The first is that causality (*mu'aththiriyya*, *'illiyya*, *fā'iliyya*) cannot be conceived as a real extramental attribute (*ṣifa thubūtīyya*). Here, the relational nature of causality will assume paramount importance. The second is that the inner structure of quiddities is not something easily accessible to the human mind, if at all. The consequence of these two principles of the hermeneutic is the following proposition. What we recognize to be agent *X*'s causality of effect *A* (*mu'aththiriyyatuhu*, or *kawnuhu mu'aththiran li-shay'in*) is nothing more than an artifact of the physicist or metaphysician's speculative endeavour. It is inferred from the systematic observation of the effects *a posteriori*. As a result, instead of producing knowledge of the agent's essence from which the existence and nature of the effects can be subsequently discerned through a deductive procedure, the inquirer arrives at what can be best described as a theoretical approximation or model of the agent's essential features. This undercuts

the expectation that the metaphysician will be able to produce a *limmī* or demonstrative account of causal relations, especially as it relates to the first principles of existence. However, this was precisely Avicenna's design for the Rule of One, which, as we have seen in Chapter 1.1, was deployed for the express reason of providing a deductive account of concrete reality from its roots in the Necessary Being to its many branches in the sublunary world.

In the following subchapter, I will discuss these two principles of Rāzī's hermeneutic of causal relations. By clarifying the general characteristics of the hermeneutic we will be in a better position to understand what he meant when he claimed that the many may proceed from the one.

3.3. Rāzī's hermeneutic of efficient causality

3.3.1. Causality (*mu'aththiriyya*) as a relation (*iḍāfa*)

In the *Mabāḥith* and *Mulakhkhaṣ*, Rāzī analyzes an entity's being a cause (*mu'aththiriyya*) in two major discussions. The first falls under the subject heading "On [the fact] that knowledge of the cause necessitates knowledge of the effect, while knowledge of the effect does not necessitate knowledge of the cause."³⁴⁹ This discussion is part of Rāzī's investigation on the nature of knowledge (*al-ʿilm*), which in turn falls under the broader inquiry into one of the ten Aristotelian categories (*maqūlāt*), namely, quality (*kayfiyya*). Knowledge is listed among the first class of qualities, namely those "that are ascribed specifically (*mukhtaṣṣa*) for ensouled entities, and which is named 'state' (*al-ḥāl*) or 'disposition' (*al-malaka*)."³⁵⁰ The second inquiry concerns the categories of action and passion (*fī an yaʿfala wa-an yanfaʿila*); it appears at the end of the *maqūlāt* section of the two works.³⁵¹ Since these two sites offer distinct but complementary insights, they should be read together. We will begin by

³⁴⁹ *Mabāḥith* I, 477–81; *Mulakhkhaṣ* II, 271–320 (Khān'ūghlū I, 475–516)

³⁵⁰ *Mabāḥith* I, 435; *Mulakhkhaṣ* II, 269 (Khān'ūghlū I, 473)

³⁵¹ *Mabāḥith* I, 583–85; *Mulakhkhaṣ* II, 376–77 (Khān'ūghlū II, 569–70). The subject heading in the *Mulakhkhaṣ* explicitly identifies "*an yaʿfala*" as "*mu'aththiriyya*" and "*an yanfaʿila*" as "*muta'aththiriyya*."

discussing the second inquiry, because that is where Rāzī focuses specifically on the ontological status of *mu'aththiriyya*; the first site, by contrast is where he teases out the first substantive implication, namely, the possibility of gaining knowledge of efficient causal events. Readers of the *Mabāḥith* and *Mulakhkhaṣ* will also notice that Rāzī devotes an extended discussion to “Cause and Effect (*al-‘illa wa-l-ma‘lūl*),” which forms its own separate section immediately following the Aristotelian categories.³⁵² However, it offers no sustained inquiry into the nature of *mu'aththiriyya*. We find only the application of Rāzī’s theory of causality—as established in the two sites above—to specific issues pertaining to efficient causality, including, of course, the Rule of One.

Rāzī’s analysis of action and passion is a response to Avicenna’s discussion of the same topic in his *Maqūlāt* (Categories) of the *Shifā’*, the *Najāt*, and especially the *Ilāhiyyāt*.³⁵³ In the first work, Avicenna, following Aristotle’s *Categories*, writes that accidents such as quality, quantity, and the rest of the nine categories including action and passion, are predicables that are not only “said of” a subject (*yūqāl ‘alā mawḍū‘in*) but also “exist in” (*mawjūd fī*) it.³⁵⁴ The distinction here should be understood in purely conceptual terms. Predicates that are only said of a subject but do not exist in it are terms that designate secondary substances, such as “animal” when it is predicated of the human being.³⁵⁵ These predicates cannot exist in the subject because they constitute its very

³⁵² *Mabāḥith* I, 586–668; *Mulakhkhaṣ* II, 378–435 (Khān’ūghlū II, 571–619)

³⁵³ *Maqūlāt*, 235–36; *Ilāhiyyāt* III.1.1–2, 71–72 and III.10.5, 117; *Najāt*, 156–57.

³⁵⁴ *Maqūlāt*, 27. The discussion is quite detailed and spans the entire chapter, pp 18–27. The first four chapters of this work establish the logical issues surrounding the various kinds of predication, including the predication of accidents of a self-subsisting substrate (*jawhar*). Avicenna’s discussion is based on Aristotle’s discussion in the *Categories* and the famous distinction the latter makes between those things that are said of a subject term and not said of a subject term, and things that are present in a substrate and not present in a substrate. See *Categories* 1–3, 1a1–1b24. In the *Ilāhiyyāt*, the discussion on the various senses of being a substrate and being a predicable is very brief (III.1.1–2, 71; Cairo, 93). Avicenna refers his readers to his discussion on the categories in the *Maqūlāt* and *Madkhal*.

³⁵⁵ “Animal” is just one example of a predicate that may be said-of a subject term but does not exist in it. Other examples include particular terms, such as “this animal” or “this human being,” or “Zayd,”; and form being said of matter. Particulars *qua* particulars cannot be predicated of a subject matter because this violates the principle of identity. While form does not, strictly speaking, exist in matter, because form is what actualizes the existence of matter as a hylomorphic substance that exists in the concrete realm.

essence. Nothing may exist in a substrate unless that substrate is already a fully realized substance in possession of its essential parts (*muqawwimāt*). For this reason, predicate terms that designate the constitutive parts of a substance cannot be said to exist in it as a distinct entity. They merely form the essential components (*dhātiyyāt*) through which a self-subsistent substance (*jawhar qā'im bi-nafsihī*) may be formed. If they do have substantiality, this is in a secondary sense because “animal” can still be the subject of other predicates, whether essential—in which case we have arrived at a definition (*ḥadd*) of “animal”—or accidental—in which case we have arrived at a mere description. On the other hand, predicables that Avicenna designates as accidentals (*‘awārīḍ*) may exist in a subject, because they contribute nothing to its inner constitution. To exist they must inhere in a concrete substance. By stating that these predicates “exist in” (*mawjūd fī*) the subject, Avicenna, following Aristotle, intends to draw our attention to this ontological dependence.³⁵⁶

The categories of “to act” and “to be acted upon” belong to the class of predicables that are accidents of the substance. In regard to the predicable of passion (*an yanfa‘ila*), Avicenna writes that it is a state (*ḥāl*) of a thing insofar as it is conjoined (*ittiṣāl*) to certain dispositions (*hay’āt*), such as the possession of quantity, quality, location, space, etc., which are enacted through the causal influence of an agent.³⁵⁷ As Aristotle often states, the patient and agent are not necessarily separate entities, because it is possible that the physician heals himself. In this case, the capacity of the physician to receive healing is not conceived in terms of his status as a patient, but in terms of a distinct state of being an agent. As for the predicable of action (*an yaf‘ala*), Avicenna describes it as a state whereby an entity is the effective source of these dispositions, specifically in regard to their being related to some other thing, *qua* other thing.³⁵⁸ As mentioned above, the respective states of being in act and

³⁵⁶ *Maqūlāt*, 18–20, 22–3, 27.

³⁵⁷ The following analysis is based on Avicenna’s description of “to act” and “to be acted upon” in the *Maqūlāt*, 235–36.

³⁵⁸ Again, this qualification is necessary to account for the possibility that the physician heals himself; for he does this not in terms of his status as a patient, but in terms of his status as a physician.

being acted upon are inseparably connected to the specific *hay'a* or disposition it enacts.³⁵⁹ That is to say, they are always conceived in relation to the species of action that is being received or enacted. As a result, there exist different types of “being acted upon” and “being the effective source of action” depending on the qualities or quantities enacted in the causal event.

The question now turns to the nature of action and passion as accidentals (*ʿawāriḍ*). Avicenna’s description of these predicates suggests that they must be conceived in relation to the activity that is enacted by the agent and received by the patient. Unlike the accident of colour, for instance, they cannot be taken as self-contained units of accidental change. Rather, the accident of “being the recipient of some colour” entails conceiving the agent, and “being the cause of some colour” entails conceiving the patient. Avicenna, however, treats them as distinct accidents that must exist in the substrate. What then is the ontological status of these predicables?

We must rule out the notion that action and passion fall under the broader category of relations (*idāfāt*). Avicenna classifies these three predicables as distinct *maqūlāt*, which in the Peripatetic theory of predicables are the highest and irreducible genera of things that are said of “existent” (*mawjūd*). However, action and passion—and other accidentals, such as knowledge (*ʿilm*) and power (*quwwa*)—always imply some relation to another entity other than that in which they inhere. Action is always the enactment of some effect; passion is always the reception of some causal influence; and knowledge is always the perception of *sensibilia* or *intelligibilia*. Thus, these accidents are inseparably connected to their proper object. Avicenna argues, however, that this relationality is contingent on the fact of their existence in the concrete realm and is not necessitated by their

³⁵⁹ *Maqūlāt*, 235–36.

definition or quiddity (*māhiyya*) as a distinct accident. When conceived in terms of their definition, they have a reality separate from any relata outside the substance in which they inhere.³⁶⁰

However, does this conceptual distinction imply an ontological distinction? Are these accidental predicables not only a function of language, but also reflect the deeper structure of concrete reality? To answer this question, we must refer to the discussion of the categories in the *Ilāhiyyāt* of the *Shifā'* (*maqāla* III, *faṣl* 1), where Avicenna takes up the issue in earnest. He writes in the beginning of the *maqāla* that he is now attempting to establish the existence of accidents (*fa-bi-l-ḥarā an nantaqila ilā taḥqīq al-a'rāḍ wa-ithbātihā*), having already established the existence of other fundamental constituents of reality, such as form and matter, the body, soul, and the separate intellect—the last two being established in the psychology section of the *Shifā'*.³⁶¹ The only other section of the *Shifā'* where Avicenna discusses the concept of accidents is in the logic, specifically the *Maqūlāt*, where we find the concept of the accidental predicable (*al-ʿarīḍ*). We have seen that in this work he used the term *mawjūd fī* (“existing in”) to describe the special characteristic of accidental predicables; however, the phrase is not intended to assert an ontological fact. Rather, it simply describes the logical relationship between an accidental predicable with its subject term, whereby the accidental exists not by itself but requires the prior realization of a proper substrate to subsist. This is distinct from other predicables, such as those constituting the species (*muqawwimāt*)—i.e., the genus and differentia—which do not exhibit this kind of relationship with the subject term. Rather than existing through the subject term, they cause its very existence *qua* species. As such, they are only “said of” the subject term (*yuqāl ʿalā*) and do not “exist in” it. Thus, when Avicenna uses the term “*mawjūd fī*” in the context of the categories, he asserts not an ontological fact but the

³⁶⁰ Note, however, that for Avicenna these accidentals *and* relatives possess extramental reality and are not just artifacts of the mind. For Avicenna’s doctrine of the relative, see *Ilāhiyyāt* III.10, 116–123. Michael Marmura analyzes Avicenna’s position in his article, “Avicenna’s Chapter ‘On the Relative,’ in the Metaphysics of the *Shifā'*,” in *Essays on Islamic Philosophy and Science*, ed. George F. Hourani (Albany: State University of New York Press, 1975), 83–99.

³⁶¹ *Ilāhiyyāt* III.1.1, 71.

logical structure of certain acts of predication. Furthermore, Avicenna envisions a strict separation between the aims of logic and the aims of metaphysics. Regarding the specific category of the relative (*mudāf*) he writes: “It is not for the logician to prove the existence of the relative and explain its state in existence and conception. Whoever undertakes this, undertakes, inasmuch as he is a logician, that which is of no concern of his and which is not his special task.”³⁶² Thus, establishing the status of accidental predicables as accidents (*ʾaṣṭād*) that exist in concrete reality is restricted to metaphysical inquiry, such as in *Ilāhiyyāt* III. Here, the categories are conceived as divisions of being, and not simply as an exhaustive and systematic classification of the various ways that being is predicated. Although the language he uses in the *Maqūlāt* to describe the relationship between accidentals and their substrate is no different from that of the *Ilāhiyyāt*, the meaning has now shifted from the realm of logic and linguistics to that of ontology. What is more relevant for our purpose is that Avicenna in *Ilāhiyyāt* III.1 explicitly cites action and passion (*al-ʿiʿl wa-l-ʾinfʿāl*) as accidents that exist in a subject. He writes:

Regarding the ten categories, you have come to understand their quiddities in the introduction (*al-Madkhal*) to the Logic (*al-Mantiq*). Doubtlessly, the relative among them—insofar as it is a relative—is something that necessarily occurs [as an accident] to a thing. The same [applies to] the relations that fall within [the categories] of “where,” “when,” “position,” “action,” and “affection.” For these are states that occur [as accidents] to things in which they inhere as an existent in a subject (*ka-l-mawjūd fī al-mawḍūʿ*)—unless one were to say, “[This] is not the case with action. For the existence of action is not in the agent, but in the patient. Should [someone] say this and it is conceded to him, this does no harm to what

³⁶² *Maqūlāt*, 143.

you are after—[namely] that action exists in a thing whose existence is in a subject (*al-fi'l mawjūd fī shay' in wujūdahu fī al-mawdū'*), even if it is not the agent.³⁶³

Note that this passage does not offer any argument to prove the thesis that action and passion have ontological reality in the concrete realm. Avicenna seems only to assert the thesis as something obvious to the reader. In the case of empirical accidents, such as colour, taste, and odor, this assumption is well justified, because we can directly experience them through our senses.³⁶⁴ However, in the case of accidents that are more abstract and are not in themselves observable empirically, such as the accident of “being a cause” or “being receptive of causal influence”—as well as others, such as the accidents of the relative (*mudāf*), knowledge (*ilm*), and certain classes of quantities—this assumption requires justification. Indeed, Avicenna would provide separate proofs to justify the claim that the relative, the quality of knowledge, and certain classes of quantities are accidents that exist in their respective substrates.³⁶⁵ He does not, however, offer such a discussion for the categories of action and passion. He simply assumes their status as real accidents. As we shall see, Rāzī, perhaps noticing this lacuna, will offer one such proof on behalf of Avicenna, before criticizing the proposition.

Let us now turn to Rāzī's account of Avicenna's theory of accidental predicables, especially regarding the categories of action and passion. In the *Mabāḥith* and *Mulakhkhaṣ*, Rāzī not only recounts Avicenna's discussion in the *Maqūlāt* and *Ilāhiyyāt* of the *Shifā'*, he also offers an argument for the ontological reality of these two categories that Avicenna himself did not produce.³⁶⁶ The

³⁶³ *Ilāhiyyāt* III.1.2, 71–72; translation modified.

³⁶⁴ “As for sensible and corporeal qualities, no one doubts their existence” (*Ilāhiyyāt* III.7.1, 102).

³⁶⁵ For the relative, see *Ilāhiyyāt* III.10, 116–23; for knowledge, see *Ilāhiyyāt* III.7, 107–110; for quantities, see *Ilāhiyyāt* III.2–6, 74–102.

³⁶⁶ The discussions in the *Mabāḥith* and *Mulakhkhaṣ* are distinct but complementary. The standard definition of action and passion is offered only in the *Mabāḥith* (volume I, 583–84), but not in the *Mulakhkhaṣ*. However, Rāzī's argument

argument attempts to highlight what Rāzī believes is the doctrine's underlying premise, which was only implied in the original source, namely that the logical structure of reality as apprehended by the metaphysician necessarily corresponds to the immanent conditions of the concrete world. He considers this to be an authentically Avicennian argument for the proposition, one that he would subsequently criticize. By criticizing his predecessor's doctrine on the ontological status of predicables such as action and passion, Rāzī distances himself from the inherited tradition of Eastern *ḥikma*. He is not committed to the doctrine that all the nine categories reflect the very structure of being. Some of them describe only the logical structure of linguistic expression. Thus, while Rāzī seems to have accepted the status of the categories as basic genera of predicables (*yuqāl 'ala*), their status as extramental entities is a distinct question that the metaphysician must pursue in separate lines of inquiry.

Let us start with Rāzī's account of Avicenna's doctrine, before discussing his criticism. Writing on behalf of the *falāsifa*, Rāzī states in the *Mulakhkhaṣ*:

As for those who affirm the existence of [*mu'aththiriyya* and *muta'aththiriyya*] (*wa-li-man athbatahumā*),³⁶⁷ [they claim that] the conception (*al-mafhūm*) that a thing is a cause (*mu'aththir*) or a receiver (*qābil*) [of some act] is other than the conception of the essence that has been judged (*ḥukimat 'alayhā*) to be a cause and to be an effect (*kawnihā mut'aththira wa-kawnihā atharan*). [This is] because the intellection of the essence of fire is one thing, and the intellection of the essence burning (*iḥtirāq*) is another; the intellection of the fire's act of causing burning is one thing, and the occurrence of burning by means of the fire is another.

Thus, this “being a cause” (*mu'aththiriyya*) and this “being an effect” (*muta'aththiriyya*) are two

for the ontological reality of action and passion on behalf of the Avicennians can only be found in the *Mulakhkhaṣ* (vol. II, 376–77; Khān'ūghlū II, 569–70).

³⁶⁷ Note that in the *Mulakhkhaṣ*, Rāzī glosses “*an yaf'ala*” as *mu'aththiriyya*” and “*an yanfa'ila*” as *muta'aththiriyya*.

things that are distinct from the essence of the cause and the effect respectively. These are not two negative conceptions (*mafhūmayni salbiyyayni*). This is because we know by necessary knowledge (*bi-l-darūra*) that both “not being a cause” (*al-lā-mu’aththiriyya*) and “not being a receiver of some act” (*al-lā-muta’aththiriyya*) are non-existent things. Thus, the opposite must be existent. Nor are these things postulated concepts (*fardiyya*) that have no correspondence (*muṭābaqa*) with extramental reality. Otherwise, nothing would in themselves be causes and nothing in themselves would be effects. Thus, “being a cause” and “being an effect” are two existent things that are distinct [to the essence], and this is what is sought after.³⁶⁸

Here, Rāzī argues that we can clearly perceive the conceptual distinction between “cause” (*mu’aththir*) and “being a cause” (*mu’aththiriyya*). This necessarily implies an ontologically real distinction between them, whereby the latter supervenes on (*zā’id ‘alā*) the essence of the agent. He offers two reasons for this claim. The first argues that since not-*X* is *not* the case, then *X* must be the case. That is, since “not-being-a-cause” does not exist, then “being-a-cause” must exist. This inference looks valid, because the two subject terms are contradictory. But this is not the case. Arguments that seek to affirm a proposition by denying its opposite must involve contradictory predicate terms, not contradictory subject terms. As it stands, denying not-*X* and affirming *X* are simply two different propositions with no logical relationship between them. They can theoretically be true or false at the same time, depending on what kind metaphysical theory one holds regarding the nature of predicables. This first argument is therefore weak, though perhaps by design. The second argument by comparison is stronger and may more accurately represent Avicenna’s concerns. It highlights the observation that “being a cause” and “not being a cause” are two distinct states of being that a common subject term undergoes successively when it is performing an act at

³⁶⁸ *Mulakhkhas* (II, 376–77; Khān’ūghlū II, 569–70)

one time and when that act ceases at another. Thus, predicating the term “to act” of the subject term as a distinct state it undergoes seems to reflect the state of affairs in the concrete world, whereby the subject term exhibits a transition or change from not being a cause of some effect to being a cause of it. The same considerations apply to the accident “to be acted upon.” The predication of both terms, therefore, seems to reflect the conditions of extramental reality and is not a mere supposition (*fardīyya*) on the part of the metaphysician.³⁶⁹

In the same discussion, Rāzī also presents an argument on behalf of those who deny that *mu’aththiriyya* and *muta’aththiriyya* are ontologically real entities. However, he adopts a neutral tone and refrains from stating his preferred position. In the corresponding discussion in the *Mabāḥith*, however, Rāzī plainly states his position on the matter. His criticism in this earlier work is also more extensive. He writes:

In my view (*‘indī*) it is impossible that *X*’s causing *A* (*ta’thīr al-shay’ fī al-shay’*) is an affirmative attribution that is superadded to (*wasfan thubūtiyyan zā’idan ‘alā*) the essence of the agent (*mu’aththir*) and the essence of the effect (*athar*). Now with respect to *A*’s being caused by *X* (*ta’aththur al-shay’ ‘an al-shay’*), which is *A*’s reception (*qābiliyya*) of *X*’s [causal influence], it is likewise impossible that [*ta’aththur*] is an existent description that is distinct from the essence of the receiver (*qābil*) and the received effect (*maqbul*). Let us elucidate this [claim]. First, regarding causation (*al-ta’thīr*), we say that if a *X*’s causing *A* (*ta’thīr al-shay’ fī al-shay’*) were an affirmative thing, it would be counted among the class of things that are not independent in themselves (*mustaqilla bi-anfusihā*),³⁷⁰ but would stand in need of another cause (*mu’aththir ākhar*) for its existence. In this case, that cause’s causing (*ta’thīr dhālika al-mu’aththir*) that causation

³⁶⁹ This argument sounds like Aristotle’s argument for the reality of potency (*dunamis*) and actuality (*energeia* or *entelecheia*) against the Megarians in the *Metaphysics* *Theta* 3: namely that without positing these two states of being as distinct accidents occurring successively to a substrate, we would be incapable of accounting for the reality of accidental change (*Metaphysics*, 1046b28–1047b30).

³⁷⁰ That is, contingent existents requiring a cause for their existence.

(*al-ta'thīr*)³⁷¹ would be something superadded to [the essence of the cause] (*zā'idan 'alayhi*), and this would lead to infinite regress, which is impossible.³⁷² [...] As for being receptive of some act (*al-qābiliyya*), if it were an affirmative attribute, then either it would be a substance or an accident. If it were a substance, then the relation (*nisba*) between the substrate (*maḥall*) and the inhering accident (*ḥāl*) would be something superadded to the two correlatives (*al-muntasibayn*). If it were an accident, then the essence would be receptive of this receptivity, in which case its receptivity for that [receptivity] is another accident and this leads to infinite regress. Thus, the question returns to [whether receptivity is a substance]. Now, a thing's being receptive of another thing is a relation that the receiver has with respect to what is being received. However, the fact of one thing's being related to another (*intisāb al-shay' ilā shay'*) is something that is posterior to each one of the two correlatives. If the receptivity were to be a constitutive part of the thing, while the essence of any entity is posterior to its constitutive parts, it would follow that the essence would be posterior to itself, and this is impossible. This is a decisive demonstration for the claim that “being a cause” and “being an effect” (*al-mu'aththiriyya wa-l-muta'aththiriyya*) cannot be affirmative attributes.³⁷³

³⁷¹ Most manuscripts I consulted (MS Istanbul: Yeni Cami 774, f.153r, 14, MS Istanbul: Feyzullah 1211, f.127v, line 2, MS Istanbul: Feyzullah 1212, f.130v, line 13, MS Berlin: Staatsbibliothek Ms. or. quart. 13, f.172v, line 20, MS Istanbul: Ragib Pasha 808, f.117v, line 10) confirm the reading of the Cairo and Hyderabad editions: *fa-yakūnu ta'thīr dhālika al-mu'aththir fī dhālika al-ta'thīr zā'idan 'alayhi*. Despite the ambiguity entailed by the successive usage of *ta'thīr*, this reading is intelligible and is most likely the authoritative reading. The idea here is that metaphysician needs to posit another middle term between the cause and the original *ta'thīr* that enacts the existence of the effect, this middle term being another secondary *ta'thīr*. One witness (MS Istanbul: Ragib Pasha 807) attests to the helpful reading of *al-athar*, which again refers to the secondary *ta'thīr*.

³⁷² Here, I have omitted a long secondary argument Rāzī adduces in favour of the proposition.

³⁷³ *Mabāḥith* I, 584–85. The version of this argument in the *Mulakhkhaṣ* (II, 376–77; Khān'ūghlū II, 569–70) is shorter but clarifies some of the difficult points Rāzī made in the *Mabāḥith*, though I detect no substantive differences between them: “Among [the remaining categories] is ‘to act’ (*an yaf'ala*), which is “being a cause” (*mu'aththiriyya*) and ‘to be acted upon’ (*an yanfa'ila*), which is “being an effect” (*muta'aththiriyya*). However, in an investigation is called for on this matter. Those who deny that [*mu'aththiriyya* and *muta'aththiriyya*] are two affirmative things distinct from the essence of the cause and the essence of the effect [respectively] claim that if *X*’s “being ascribed with *A*” (*kawn al-shay' mawṣūfan bi-ghayrihi*) is something that is superadded to [both] the essence of *X* (*al-mawṣūf*) and the essence of the attribute *A* (*al-sīfa*), then it should also be concretely realized (*ḥāṣila*) in the essence of *X*. It follows that [*X*’s] ascription with “being ascribed” [in such a manner] (*al-mawṣūfiyya*) is something superadded to it. This leads to the infinite regress. Likewise, if the cause’s

Here Rāzī produces a common argument against the ontological reality of abstract terms, one that we find in many of his works.³⁷⁴ When the metaphysician posits that *mu'aththiriyya* or *muta'aththiriyya* are affirmative attributes (*sifa thubūtiyya*), their ontological status becomes a question that must be pursued separately. This question is distinct from the claim that, say, cause *X* and effect *A* are two distinct entities in the concrete realm.³⁷⁵ This is because he has posited another entity, the intermediary accident *P* (*wasīla*), designating the accident through which *X* has become the cause of *A*. In this case, he would need to posit the existence of two additional entities: another agent that enacts the existence of *P*, and another accident inhering in that agent designating the state through which it causes the specific effect of *P*. This leads to an infinite regress of causes and effects, since each time the metaphysician posits a new cause, he would need to account for the existence of its *mu'aththiriyya*, *ad infinitum*. Now, we may respond by saying that it is possible to conceive that the accident is caused by the same cause, namely *X*. However, we would still need to posit a distinct accident—say, *S*—inhering in *X* that would account for the procession of *P* as distinct from *A*. Such is the implication of positing the extramental reality of a causal factor whose nature is pegged to the procession of a certain effect. For we would also need to posit another accident inhering in *X* for the specific procession of *S* as distinct from *P*. This process of continually adding intermediary

causation of the effect (*ta'thīr al-mu'aththir fī al-athar*) were something superadded to them both, then, since [this] is among the concomitants of the cause that is dependent upon it [for its existence], its causation of “being a cause” (*ta'thīruhu fī tilka al-mu'aththiriyya*) must [also] be superadded to it. This leads to infinite regress, which is an impossibility. By acknowledging this we arrive at the aim of [the inquiry], because infinite regress is unintelligible unless it involves an unending series of successive terms, whereby each term is the cause of the other. This succession is unintelligible unless one term is made the cause of an effect without [positing] an intermediary [existing] between them. However, this is ascertained only if the cause's status of causing the effect is not something superadded to them both, and this is what is sought after.”

³⁷⁴ The most famous of these terms is, of course, existence; see Fedor Benevich, “The Necessary Existent (*wājib al-wujūd*): From Avicenna to Fakhr al-Dīn al-Rāzī,” in *Philosophical Theology in Islam: Later Ash'arism East and West*, ed. Ayman Shihadeh and Jan Thiele (Leiden: Brill, 2020), 129 ff.

³⁷⁵ Of course, we can simply deal with a stipulation that *X* is the cause of *A* without being committed to their existence. However, the contention here concerns actually existing entities, and whether *X*'s status as cause and *A*'s status as effect are distinct ontological states that have a distinct reality from their substrate.

accidents within the initial causal frame of *X* and *A* would lead to an infinite regress of causes and effects. The same considerations hold, *mutatis mutandis*, for the accident of *muta'aththiriyya*.

For Rāzī, then, the baseline ontological framework that the metaphysician may rely upon consists solely of the cause and the effect. As he writes elsewhere in the discussion, “there exists [in the causal nexus] only the essence of the cause and the essence of the effect.”³⁷⁶ While the intermediary accidents designating the status of *X* as having the capacity of affecting *A* and of *A* as having the capacity of receiving the causal influence of *X* may *describe* the inner workings of the causal event, arriving at these distinct conceptions (*taṣawwur*) does not in itself guarantee that they correspond to immanent states of affairs in the concrete realm. We have seen in his critique of the *maṣdariyya* argument how Rāzī accused Avicenna of failing to demonstrate the assumption. Such a demonstration should offer additional considerations beyond the need to posit logically necessary concepts, which underlined Avicenna’s theory of the causal *ḥaythiyyāt*. Since he also did not provide such a demonstration in his discussion of the categories of action and passion in the *Ilāhiyyāt*, relying solely on the logical framework of the *Maqūlāt*, the same requirement is also relevant in this case.³⁷⁷ This skeptical posture regarding the *maṣdariyya* argument, however, is necessarily tentative and dialectical, because it is predicated on the perceived failure by Avicenna to provide evidence for the ontological reality of *mu'aththiriyya* and *muta'aththiriyya*. By offering the present argument from the impossibility of an infinite regress, however, Rāzī is explicitly moving away from this dialectical maneuver, providing what he thinks is a decisive proof for the purely conceptual nature of *mu'aththiriyya* and *muta'aththiriyya*.

³⁷⁶ *Mabāḥith* I, 481.

³⁷⁷ As mentioned above, Avicenna cannot be accused of such a failure in the case of other classes of accidents, such as relatives, certain qualities, such as knowledge, and certain quantities, such as numbers and measurements, since he does provide separate justification of their extramental reality in *Ilāhiyyāt* III. Avicenna may also be well-justified in his assumption that empirical qualities also do not require a separate demonstration, because their reality is immediately evident to the senses. The problem then is regarding accidents that are abstract and are not in themselves empirical.

The intermediary accidents of *mu'aththiriyya* and *muta'aththiriyya*, therefore, remain within the realm of speculation. The metaphysician stipulates their logical necessity only after the causal event has occurred, and after the connection between the cause and the effect has been discerned. “X’s being’s related to A (*intisāb al-shay’ ilā shay’*),” Rāzī writes in the above passage, “is something that is posterior to each of the two correlatives (*muḍāfayn*).” As such, these ascriptions do not exist as distinct entities belonging to the agent or to the effect respectively. Rather, they are products of the mental act of gluing two entities together in a special kind of relation. “Being a cause” (*mu'aththiriyya*), for instance, is always conceived in relation to another entity, namely the effect (*mu'aththiriyyat al-shay’* or *mu'aththiriyyat al-ma'lūl*). It is for this reason that Rāzī considers the categories of *mu'aththiriyya* and *muta'aththiriyya* as having a primarily relational nature (*iḍāfiyya*).

However, we must be more precise and clarify that his argument here is *not* that the causal *ḥaythiyyāt* cannot have extramental reality *because* they are relatives. Rather, Rāzī establishes first through the argument from the impossibility of an infinite regress that they must be purely mental entities—otherwise, efficient causal events would never have obtained in concrete reality. Only *then* does he identify their status as relatives. In this discussion he appeals neither to the well-known Ash‘arite position that relatives (*iḍāfāt*, or, in the language of *kalām*, *ta‘alluqāt*) are non-existent entities (*‘adamī*), nor to the standard *kalām* argument that positing the reality of relatives would lead to an infinite regress of relations—an argument which he explicitly endorses only in the *Mulakhkhaṣ*.³⁷⁸ By omitting this specific line of inquiry in the *Mabāḥith*, Rāzī remains within the terms of discussion set by Avicenna without having to take recourse to an explicitly *kalām*

³⁷⁸ *Mulakhkhaṣ* II, 360–62 (Khān’ūghlū II, 555–57). Here, Rāzī takes up the question of the ontological status of the relative, and explicitly argues against Avicenna’s position in *Ilāhiyyāt* III.10 that relatives *qua* accidents are extramental. By contrast, the corresponding discussion in the *Mabāḥith* (I, 560–63) offers only an overview of the arguments for or against Avicenna’s position. Rāzī’s extended endorsement of this position can be found in the *Nihāyat* II, 471–73.

position.³⁷⁹ As such, he seems intent on safeguarding the reality of efficient causality by offering a framework of causal analysis that does not rely on Avicenna's ontology of action and passion.

What can we learn from Rāzī's critique of the causal *ḥaythiyyāt*? From his discussion of the categories of action and passion, we saw that he treats causality (*mu'aththiriyya*) first and foremost as a problem of predication. His analysis attempts to identify the theoretical components involved in the proposition that a certain act, such as "being the cause of effect *A*," is predicated of the cause *X*. On his interpretation, Avicenna has proposed that three entities are at play: the cause, the effect, and the attribute designating the cause's being the cause of *A*. This attribute, which Rāzī refers to above as the "intermediary" (*wasīla*), grounds the act of predication (i.e., *X* is the cause of *A*) in concrete reality. This intermediary allows the mental conceptions to correspond with concrete states of affairs. When carried over to causality, this intermediary serves as the causal principle (*maṣḍar* or *mabda'*) through which the agent enacts its effect. However, as we have seen, positing the affirmative reality of a mediating entity only creates further difficulties, because the reason for its existence becomes a separate question. Once the metaphysician reifies a predicate, such as "being an effect of *X*," into an entity that is ontologically distinct from its substrate, it must itself be a substrate in which the possibility of its being enacted inheres, and this substrate must in turn be another distinct entity in which the possibility of its being enacted inheres, *ad infinitum*. The same problem of an infinite regress obtains in the case of agency (*mu'aththiriyya*), as we have seen above. Thus, rather than engaging in the futile task of cutting the hydra's heads, Rāzī decides to torch the

³⁷⁹ We can call the first approach a purely *ḥikma* approach to the ontological status of *mu'aththiriyya*, whereas the second is the *kalām* approach. The difference is subtle. The first establishes the conceptual status of *mu'aththiriyya* before claiming that it is a relative; the second establishes the fact that *mu'aththiriyya* is a relative first before claiming that it is therefore conceptual. The upshot of the *ḥikma* approach is that it intimates a working model for efficient causality that does not rely on the causal *ḥaythiyyāt*. The *kalām* approach, by contrast, is interested only in refuting Avicenna's theory of causality. Both approaches are ultimately complementary. In the *Mabāḥith* and other works, Rāzī would cite the *kalām* approach of asserting that relatives are purely conceptual entities when criticizing Avicenna's theory of causality (e.g., *Mabāḥith* I, 479, 481, 609, 614; *Muḥaṣṣal*, 112, 235).

creature. That is, rather than attempting to establish the *a priori* basis of causation, he opts for a parsimonious framework for the analysis of causal events that affirms only the existence of the cause and the effect, relegating the proliferating intermediaries (i.e., the causal *ḥaythiyyāt*) to the status of artifacts of speculation. In this framework, the theoretical analysis of a causal event describes neither the nature of the cause in isolation from the effect that it causes, nor the nature of the effect in isolation from the cause that causes it. Rather, it describes the special relation obtaining between them. Since the intermediary accidents do not describe the essence of the cause, but is a function of the causal relation, the metaphysician is free to posit as many intermediaries he needs in order to account for the causal event in question or to describe the range of causal capacities that a cause possesses. He need not worry about introducing multiplicity into either the cause or the effect.

If we restrict our reconstruction of Rāzī's model of efficient causality to the cited passage above in the categories section of the *Mabāḥith* (and corresponding section in the *Mulakhkhaṣ*), we would be justified in thinking that he has offered us an impoverished theory. As it stands, this parsimonious framework does not seem to go beyond the trivial observation that cause *X* has caused effect *A*. As we have seen in his criticism of the *maṣdariyya* argument, this framework consists simply of the “aggregate” or “construct” (*majmūʿ*) of the cause *X* plus effect *A*. However, a phrase used in the *Mulakhkhaṣ*' argument against the extramental reality of *mu'aththiriyya* reveals another layer to Rāzī's conception of efficient causality, one that we did not encounter in the *Mabāḥith* discussion quoted above. On behalf of those who reject the claim that *mu'aththiriyya* and *muta'aththiriyya* are real entities, Rāzī writes:

If the status of “being ascribed with some attribute” (*kawn al-shayʾ mawṣūfān bi-ghayrihi*) is something superadded (*zāʿidan*) to both the essence of the subject (*dhāt al-mawṣūf*) and the essence of the attribute (*dhāt al-ṣifa*), then it would also be concretely realized (*ḥāṣilan*) in the

essence of the subject. Thus, [the subject's] being ascribed with this “being ascribed [with some attribute]” (*ittiṣāfuhu bi-tilka al-mawṣūfiyya*) would also be distinct from its essence; and this necessitates infinite regress. Likewise, if “the cause’s causation of the effect” (*ta’tḥīr al-mu’aththir fī al-athar*) were distinct from them both, then, since [this causation] is among the cause’s concomitants that are dependent on it [for their existence], its causing that “being a cause” (*ta’tḥīruhu fī tilka al-mu’aththiriyya*) must [also] be distinct from it. This leads to infinite regress, which is an impossibility.³⁸⁰

In this passage, Rāzī clarifies his objection to reifying *mu’aththiriyya* (“*ta’tḥīr al-mu’aththir fī al-athar*”) as a concrete entity, by drawing a parallel between it and *mawṣūfiyya*, or “being ascribed [with some attribute].” When we assume that *mawṣūfiyya* is something distinct from the subject (*mawṣūf*) and the attribute (*ṣifa*), and that it possesses its own reality, this leads to an infinite regress of *mawṣūfiyyāt*, in the same way that assuming the reality of *mu’aththiriyyāt* leads to an infinite regress. For when these terms are conceived as distinct entities, their existence becomes a separate question that requires a causal explanation, since they are contingent—rather than necessary—beings. However, to account for their existention, we must posit another *mawṣūfiyya* or *mu’aththiriyya* in the essence of the subject and agent respectively to account for the special relationship that binds the first set of terms with their proper counterpart in the second set of terms. However, since this second-order *mawṣūfiyya* and *mu’aththiriyya* are also distinct entities, they too require a causal explanation, and so on *ad infinitum*.

By drawing this parallel between *mu’aththiriyya* and *mawṣūfiyya*, Rāzī is implicitly making the following claims. The first is that the attribute (*ṣifa*) stands in relation to its subject (*mawṣūf*) as the effect (*ma’lūl*) stands to the cause (*illa* or *fā’il*). As we shall see in the following subchapter, this is an

³⁸⁰ *Mulakhkhas* II, 376 (Khān’ughlū II, 569).

important premiss for his theory of efficient causality, which relies on what Bilal Ibrahim has called an “attributive framework” of analyzing substances and accidental change.³⁸¹ The second claim, which is a corollary of the first, is that it is permissible to ascribe an affirmative attribute (*sifa thubūtiyya*) to the essence of the subject term as long as the attribute in question is a concrete entity. It cannot be a second-order concept derived from a concrete fact, such as the *mawṣūfiyya* of some attribute, as this would lead to an infinite regress of *mawṣūfiyyāt* that render the act ascription impossible.

What is the difference between these two types of ascriptions? The first consists in the ascription of a concrete attribute (*sifa*) to the subject term, as when we say that “Zayd is white”; while the second is the ascription of “being attributed with whiteness” to Zayd. This abstract state of being so ascribed (*mawṣūfiyya*) is distinct from the concrete existence of both the real attribute and the subject since it is dependent on the act of predication. It *may* refer to some concrete attribute subsisting in the subject term that grounds the act of predication. However, given the non-empirical nature of this attribute, its existence in this manner is a separate question that remains purely speculative unless proven by demonstration. In his criticism of Avicenna’s theory of action and passion, Rāzī is thus charging Avicenna with the error of taking a purely linguistic artifact—that is, *mu’aththiriyya* or *maṣdariyya*—and assuming it to be a distinct and fully realized attribute, subsisting concretely in the essence of the subject. This reification consists in sublimating the linguistic artifact into an immanent capacity of the subject term, that is, as “being ascribed with *A*” (*mawṣūfiyyat A*) or “being the cause of *B*” (*mu’aththiriyyat B*). These reified terms now stand outside the limits of linguistic predication and exist in their respective subjects as universal qualities. In this framework,

³⁸¹ The term “attributive” framework or analysis is borrowed from Ibrahim’s article, “Beyond Atoms and Accidents: Fakhr al-Dīn al-Rāzī and the New Ontology of Postclassical *Kalām*,” where he systematizes Rāzī’s non-hylomorphic analysis of substances and accidental change in the *Mabāḥith* and *Mulakhkhaṣ*. My analysis here further elaborates on his insights.

if a cause produces a certain effect, such as motion, then there must exist in that cause a state or potency (*quwwa*) that designates the causal factor uniquely fashioned for the enactment of motion.³⁸² For Avicenna then, the concept of causality (*mu'aththiriyya* or *maṣdariyya*) and the attending concept of the causal *ḥaythiyyāt* overlap theoretically with the concept of potency.³⁸³ In Rāzī's interpretation, this overlap assumes that conceptual distinctions expressed in the act of predication necessarily designates some concrete aspect of the essence. In cases where such distinctions cannot be observed empirically, however, a separate demonstration is required, one which Avicenna has failed to provide.

Thus, we see that Rāzī's criticism of Avicenna's theory of the categories of action and passion is consistent with his criticism of the causal *ḥaythiyyāt* of the *maṣdariyya* argument discussed in the previous subchapter. Both argue that Avicenna's metaphysics exhibits a realist commitment with respect to abstract universal terms; that this realist commitment is a mere assumption since he does not justify it by a separate demonstration; and that in the specific cases of action and passion this assumption would lead to an infinite regress of causal *ḥaythiyyāt* that would render efficient causality impossible.

The parallel Rāzī draws between *ṣifa* and *mawṣūfiyya*, on the one hand, and *athar* and *mu'aththiriyya*, on the other, allows us to draw two additional insights into Rāzī's theory of efficient

³⁸² In the *Mabāḥith* Rāzī offers two distinct conceptions of potency that should not be confused with each other. The first is potency as *imkān* or *ṣiḥḥa*. Rāzī holds that this kind of potency is thoroughly conceptual and corresponds roughly to Avicenna's causal *ḥaythiyyāt*. It has no extramental reality and certainly cannot be deployed as an operating principle of causation (*Mabāḥith* I, 211–14; *Mulakhkhaṣ* II, 93–6; Khān'ūghlū I, 340–41). He interprets the *mu'aththiriyya* to produce a certain effect as the *imkān* to produce a certain effect. In the *Nihāyat*, Rāzī shifts terminology and prefers to use *ṣiḥḥa* to designate the same concept. The second conception of potency is to interpret it as an accident that subsists in the essence of the cause. In the *Mabāḥith*, Rāzī uses the term *qudra* (power) interchangeably with *quwwa* (*Mabāḥith* I, 502–09, Cf., 368–73; *Mulakhkhaṣ* II, 321–26; Khān'ūghlū I, 517–22). Unlike the first conception, *qudra* or *quwwa* as a concrete accident does not designate a certain innate capacity of the essence to produce a particular species of effect. Rather it designates an accident that the essence must have when it actualizes a concrete effect. The first describes one aspect of the causal network, the second describes the nature of the cause. We will shortly discuss this distinction below.

³⁸³ Rāzī explicit links up the concept of causal *ḥaythiyyāt* and potency in the “common matters” (*al-umūr al-ʿamma*) section of the work; see *Mabāḥith* I, 212–13.

causality. The first is that, notwithstanding his denial of any intermediary coming between the cause and its effect, the subject may still possess attributes that describe its various capacities as a cause, as long as these attributes can be shown to be concrete entities rather than abstract or universal qualities. This requires a separate demonstration beyond their mere conception—however useful they may be in revealing the logical structure of the causal event in question. The second insight—and this is related to the first—is that the parallel reveals a common structure underlying the ontology of substance and its accidents, namely that the attribute (*ṣifa*) stands in relation to the subject (*maṣṣūf*) in the same way that the effect (*athar*) stands in relation to the cause (*mu'aththir*). Thus, when dealing with a class of attributes that the metaphysician has shown to be concretely realized in the subject, we must conceive them as necessary concomitants (*lawāzim*) of the essence. In this case, the essence functions as the cause of the attribute. However, since the possession of attributes (i.e., their necessitation by the subject) does not require some conceptualized intermediary (*wāsiṭa*) (i.e., the causal *ḥaythiyyāt*), the subject term may possess as many attributes is necessary to account for the range of its native capacities without these fragmenting its inner constitution. Rāzī's criticism of the categories of “acting” and “being acted upon” (*an yaf'ala wa-an yanfa'ila*), therefore, does not imply a wholesale rejection of the concept of faculties, capacities, or powers (*quwwa*, pl. *quwan*), as long as these are interpreted as accidents caused by the essence of the subject.³⁸⁴ As we shall see, this condition imposes severe limits on what kind of accidents or native capacities the metaphysician may attribute to the subject term. Indeed, a major goal of Rāzī's inquiry into the categories in his *ḥikma* works is to figure out precisely which

³⁸⁴ This is consistent with Rāzī's discussion of the category (*maqūla*) of power or faculty in both the *Mabāḥith* and the *Mulakhkhaṣ*, where he reproduces Avicenna's central points on the issue and affirms its status as an accident that subsists in the subject (*Mabāḥith* I, 502–09, Cf., 368–73; *Mulakhkhaṣ* II, 321–26; Khān'ūghlū I, 517–22). As we shall see, however, this affirmation must be interpreted in light of Rāzī's analytical framework, which regards each faculty not in terms of a hylomorphic ontology, but as distinct accidents caused by and structurally distinct from the subject.

of these can be demonstratively shown to possess extramental reality and which are mere artifacts of speculation.

3.3.2. Attributes of the essence, the principle of causal deduction, and the limits of metaphysical knowledge

The above reconstruction of Rāzī's theory of efficient causality is provisional, since it is based on the short passage in the *Mulakhkhaṣ* translated and cited above.³⁸⁵ In that passage Rāzī does not explicitly assert that a substance stands in relation to its attributes as a cause to its effects—this structure is only implied in the parallel drawn between the two clusters of concepts. Fortunately, in other sections of the *Mabāḥith* and *Mulakhkhaṣ*, Rāzī offers extended discussions of the nature of efficient causality that exhibit a more precise conception of the broader theoretical elements at play. The first discussion appears under the heading of knowledge (*ilm*). The specific question (*mas'ala*) under consideration is “whether knowledge of the cause necessitates knowledge of the effect.”³⁸⁶

We will examine three claims Rāzī makes in this section.³⁸⁷ The first is that knowledge of the essence is something foreclosed to the metaphysician and physicist. Any description of its nature is purely speculative and conceptual. The second is that a substance may have two kinds of necessary attributes (*lawāzim* or *ṣifāt*): concomitants that are not merely conceptual (*ghayr i'tibāriyya*) and concomitants that do not have extramental reality and are merely conceptual (*i'tibāriyya lā thubūta la-hā*). When we combine this doctrine with the first claim regarding the unknowability of the essence, we arrive at the principle that any predicate term we ascribe to some entity, however

³⁸⁵ *Mulakhkhaṣ* II, 376 (Khān'ūghlū II, 569).

³⁸⁶ *Mabāḥith* I, 477–81. This discussion is in Chapter (*fasl*) 22 of the first section (*taraf*) of the broader discussion on the nature of knowledge. The inquiry comprises three sections: the first on the nature of knowledge itself, consisting of 28 chapters; the second on the nature of the knowing subject, or more precisely the intellecter (*al-'āqil*), consisting of six chapters; and the third on the nature of the object intellection (*al-ma'qūl*).

³⁸⁷ The corresponding discussion in the *Mulakhkhaṣ* is in vol. II, 296–98 (Khān'ūghlū I, 496–97).

essential it may seem to the subject's nature, cannot be taken either as revealing the internal constituents (*muqawwimāt*) of a species or as representing a substantial form, but must always be conceived as external attributes of an individual entity. Some of these attributes are necessitated by the essence, others necessitated by external circumstances; some are purely conceptual, others have extramental reality. The unity and impenetrability of the essence is, therefore, inviolable. The third claim is that knowing the nature of the cause necessarily leads to knowledge of its effect. This "principle of causal deduction" is the central thesis of the inquiry (*mas'ala*), whereas the first two claims are secondary points that Rāzī brings to its defence. However, this principle is controversial and difficult to interpret. It is controversial because it sounds like a properly Avicennian principle of causal necessity that comes with commitments to other aspects of Peripatetic metaphysics that may be disconcerting for an Ash'arite theologian. It is difficult to interpret because Rāzī flip-flopped on the issue. In the *Mabāḥith*, he claims to have changed his mind from rejecting the principle of causal deduction in earlier works to now supporting it. However, in the *Mulakhkhaṣ*, a work that was written shortly after the *Mabāḥith*, he unambiguously rejects the principle.³⁸⁸ Part of our task is to determine whether Rāzī is being inconsistent, whether he changed his mind for good, or whether the two positions are not contradictory but can somehow be reconciled. By the end of our discussion, we will see that what appears to be an endorsement of an Avicennian deductive (*limmā*) method of inferring the effect from knowledge of the cause, derives not from a commitment to his predecessor's metaphysics, but instead represents a corollary principle derived from his own theory of intellection and efficient causality.

Rāzī developed these three doctrines in their most extended form in the *Mabāḥith*. He seems to have regarded his inquiry in this work as a unique contribution to the philosophical tradition he

³⁸⁸ See the corresponding discussion in *Mulakhkhaṣ* II, 296–98 (Khān'ūghlū I, 496–97). He also rejects it in *Sharḥ al-Ishārāt*, the *Muḥaṣṣal*, and the *Maṭālib*.

inherited, claiming that the depth and breadth of his investigation was unprecedented.³⁸⁹ He has some basis in making such a claim. Only in Avicenna's *Ilāhiyyāt* VI.3 do we find a close precedent to Rāzī's inquiry. In Chapter 1.1, we have seen how in that section of the *Ilāhiyyāt* Avicenna derives the epistemic principle that knowledge of the cause can lead to knowledge of the effect through his theory of causal correspondence. Rāzī's inquiry in the *Mabāḥith*, however, is solely concerned with the epistemic dimension of the question since it falls under the specific inquiry into knowledge. However, he does appeal to insights he makes elsewhere regarding the nature of causality, especially efficient causality. The second preliminary remark is that Rāzī's inquiry into knowledge is meant to be comprehensive of all species of knowledge. He intended to provide a unified theory of knowledge that includes the nature of human, angelic, and Divine knowledge. As we shall see, Rāzian epistemic principles that echo those of Avicenna should be interpreted in this light. The third preliminary remark is that the thesis Rāzī defends in this section, that is, the principle of causal deduction, represents his own considered position. Not only does he support the claim with evidence, he also responds to objections in a committed, rather than a distant "academic" manner. Furthermore, at the end of the inquiry, he dispels any doubt regarding his endorsement of the thesis by stating that his support for the proposition reverses his previous opposition voiced in "a number of my works."³⁹⁰

These qualifying remarks are necessary, because we cannot take for granted that Rāzī's discussion of the various issues (*masā'il*) concerning knowledge represents his own perspective.³⁹¹ In some sections, Rāzī's presentation reiterates standard Avicennian doctrines regarding

³⁸⁹ "I have not seen anyone before me mentioning even a small portion of the issues surrounding this subject matter, much less plunging into the depths as meticulously (*mithl ḥadhihi al-daḡā'iq*) as the above discussion" (*Mabāḥith* I, 481).

³⁹⁰ *Mabāḥith* I, 481.

³⁹¹ The same qualification can be said regarding the *Mabāḥith* and to a certain extent the *Mulakhkhaṣ* as a whole. Due to Rāzī's style, the distinction between a report of Avicennian positions and his own positive doctrine is not so obvious and must be read between the lines and in conjunction with all the relevant theoretical points made in other sections of the work. Ibrahim has made the same observation in "Beyond Atoms and Accidents," pp. 75, 106–07, 108.

intellection.³⁹² In others, he plainly states his opposition and offers his own analysis of the question at hand.³⁹³ In regard to the first group of cases, some are a matter of simple agreement; others are non-committed “academic” discussions; others reproduce Avicennian doctrines but from a different perspective and with qualifications or modifications. The question of whether knowledge of the cause entails knowledge of the effect is an example of the third kind of discussion.³⁹⁴ It may conform to a genuine Avicennian intuition, but his modifications are so extensive that it is so only in form but not in content.³⁹⁵ Given the importance of the discussion in the *Mabāḥith*, I will first outline the doctrine presented in this work, before discussing the varying, possibly contradictory, positions asserted in the *Mulakhkhaṣ*. I will then explain the variant positions and, if possible, reconcile them.

³⁹² Such as *faṣl* 8 on the difference between the inherence of intellectual forms and the inherence of corporeal forms (*Mabāḥith* I, 453–44); *faṣl* 9 on how intellectual forms are universal; *faṣl* 20 on immediate intellection (ibid, 475); *faṣl* 21 on the apprehension of many acts of intellection through a single act of knowing; *faṣl* 23 on that perfect knowledge of an entity consists of knowledge of its cause; *faṣl* 26 on active and passive knowledge; *faṣl* 27 on the nature of the intellect and its divisions.

³⁹³ Such as chapters (*fuṣūl*) 1–7 (*Mabāḥith* I, 437–53), where Rāzī interrogates Avicenna’s theory of knowledge as impression (*intibāʿ*) of the sensible or intellectual form in a perceiving substrate or faculty.

³⁹⁴ Other similar discussions are *faṣl* 10 on the species of intellection (*Mabāḥith* I, 455–56); *faṣl* 12 on the nature of being an intellect, the intellecter, and the object of intellection; *faṣl* 18 on the possibility that the unitary soul engages in many acts of intellection (*Mabāḥith* I, 472), etc.

³⁹⁵ Rāzī is aware that affirming the principle of causal deduction places him in the same camp as Avicenna. For instance, when discussing the proposition that “any entity that is separate from matter (*mujarrad*) must possess intellectual knowledge of itself (*ʿāqilan li-dhātih*),” Rāzī endorses a “second line of reasoning” (*al-ṭarīq al-thānī*) proposed by the philosophers (*hukamāʾ*) in favour of it. This approach is distinguished by two premisses: the definition of knowledge or intellection (*taʾaqqul*) as the presence (*hudūr*) of the object of knowledge to the knower and the principle that knowing the cause necessarily leads to knowledge of the effect (*Mabāḥith* I, 494). Rāzī affirms this approach; however, he modifies the first premiss above, defining knowledge instead as a “relational state that is conditioned by the realization [of a form] (*mashrūṭa bi-l-ḥuṣūl*),” contrasting this with the philosopher’s position that intellection is “just that” (*al-taʾaqqul huwa hādihā al-qadar*), i.e., the mere realization of the form in the percipient substrate. The same overlapping agreement regarding the principle of causal deduction can be observed when Rāzī discusses whether “the reality of things can be known by human beings” (*Mabāḥith* I, 499); and when he discusses God’s knowledge of universals (*Mabāḥith* II, 491–92). Rāzī also deploys it to affirm a number of metaphysical doctrines that are explicitly non-Avicennian, and which conform rather to his own doctrine, such as when he refutes the philosopher’s doctrine that knowing the causes only leads to knowledge of universals (*Mabāḥith* I, 483); and when he subsequently affirms God’s knowledge of particulars *qua* particulars (*Mabāḥith* II, 508). Rāzī also mentions the principle of causal deduction as a premiss in Avicennian metaphysics when recounting his theories in a neutral manner, such as when discussing the notion of existence (*Mabāḥith* I, 103). We will discuss some of these points when we turn to Rāzī’s application of the principle to substantive metaphysical issues.

Let us now turn to the three claims outlined above. Regarding the central thesis that knowledge of the cause necessitates knowledge of the effect, Rāzī offers the following argument:

It is said that the cause (*al-‘illa*) either causes the effect (*mu’aththira fī al-ma’lūl*) essentially (*li-dhātiḥā*), or it does not cause the effect essentially. If its causation (*ta’thīr*) is not essential, but rather requires stipulating some other condition (*qayd ākhar*), then it is not the [true] cause. Rather the cause is the agglomeration [of the incomplete cause and some other conditions]. However, the argument regarding this agglomeration is like the argument regarding the first, namely that it [must] lead to something that essentially necessitates the effect. Now, whoever acquires knowledge of this thing must thereby gain knowledge of the fact that it is essentially the cause of this effect. For if [the cause’s] essence causes this effect on account of itself and not on account of something else, then when we gain knowledge of it, it is necessary that we should know it in this very aspect (*hādhā al-wajh*). As a result, when we gain knowledge of the fact that the cause caused this effect [solely] from [our consideration of its essence], it is necessary that our knowledge of this effect be realized. This is because knowledge of the relation (*idāfa*) of one thing to another includes knowledge of the two related things (*muḍāfayn*).

Thus, it is necessary that from knowledge of the cause knowledge of the effect is realized.³⁹⁶

This argument brings together several insights into the nature of causality that Rāzī establishes elsewhere in the *Mabāḥith* and *Mulakhkhaṣ*. Chief among these are the doctrine of the “complete cause” (*al-‘illa al-tāmma*) and the immediate realization of the effect once the complete cause has been realized.³⁹⁷ It also assumes another doctrine Rāzī affirms regarding the nature of knowledge,

³⁹⁶ *Mabāḥith* I, 477. I replaced Rāzī’s repeated use of the third person impersonal to first person plural for added clarity in the translation. The corresponding passage in the *Mulakhkhaṣ* is in vol. II, 296.

³⁹⁷ Both notions mutually imply the other. See *Mabāḥith* I, 507, 603–09, 651; *Mulakhkhaṣ* II, 324 (Khān’ūghlū I, 520). For the idea of the “complete cause” in Avicenna and Fakhr al-Dīn, see Muhammet Fatih Kılıç, “The Emergence of the Distinction between Complete and Incomplete Causes from Avicenna to al-Abharī,” *Nazariyat* 4, no. 1 (2017): 63–85.

namely that it is possible for the soul to apprehend an aggregated plurality of intellectual conceptions in one fell swoop (*imkān ijtimāʿ al-taʿqqulāt al-kathīra fī al-nafs dafʿatan wāḥidatan*).³⁹⁸ Finally, we also see Rāzī citing the theory that causality is a relation, a claim we discussed in the previous subchapter. We will return to these premisses as we proceed in the discussion. For now, however, let us keep in mind that the premisses Rāzī uses to support the thesis are not strictly speaking Avicennian, although they may be consistent with his predecessor's intuitions.

To further buttress the thesis that knowledge of the cause necessarily entails knowledge of the cause, Rāzī sets up several objections and then responds to them. The first objection argues that if the thesis were correct, then if we were to acquire knowledge of the reality of a thing (*ḥaqīqat shayʿ*) we would acquire knowledge of its proximate and secondary concomitants in immediate succession, a process that carries on until we have gained knowledge of all concomitants in a single act of thinking. The consequence is that we would be in possession of God-level knowledge, as “nothing would be hidden from us.”³⁹⁹ However, since the conclusion is impossible, the initial claim must be rejected. To this, Rāzī first acknowledges that when we gain knowledge of the quiddity of a thing (*māhiyyat shayʿ*) and its inner reality (*ḥaqīqatahu*), then we must necessarily gain knowledge of the totality of its concomitants. However, he pours cold water on this expectation, stating abruptly that “we have no knowledge of the inner reality of anything; and the most we can ever gain is knowledge of its concomitants and attributes.”⁴⁰⁰ While it is theoretically possible to

³⁹⁸ *Mabāḥiṭh* I, 476–77. This sounds of course like the famous Avicennian doctrine of divine intellection. Rāzī produces no objections against it and defends it from objections by adducing a number of arguments. However, Rāzī accepts the position not because it is an authoritative doctrine, but because it poses no challenge to his model of intellection (*taʿqqul*) and of perception (*idrāk*). As shown by a number of scholars, this model departs from Avicenna's since it rejects the theory of impression (*intibāʿ*), on the one hand, and of the pure quiddity, on the other, both of which are crucial for the Master's doctrine. See Ibrahim, “Freeing Philosophy from Metaphysics”; Ibrahim, “Fahṛ ad-Dīn ar-Rāzī, Ibn al-Hayṭam and Aristotelian Science”; Griffel, *The Formation of Post-Classical Philosophy in Islam*, 341–87; Hutchins, “Fakhr al-Dīn al-Rāzī on Knowledge.”

³⁹⁹ *Mabāḥiṭh* I, 477–78.

⁴⁰⁰ *Lākinna lā naʿrifu ḥaqīqata shayʿin min al-ashyāʾi wa-innamā ghāyatunā an naʿrifa lawāzimahā wa-ṣifātihā* (*Mabāḥiṭh* I, 478).

gain knowledge of the effect solely through knowledge of the cause, it remains practically impossible for anyone to achieve—except perhaps by God. This statement also reveals his underlying position on the nature of essences, namely that their inner constitution is completely inscrutable and inaccessible to metaphysical speculation. Such is the underlying assumption of the response. As a result, anything that we predicate of the essence must be conceived of exclusively as external concomitants or attributes, rather than internal aspects of what we would designate as its “nature.” This stands in contrast to the Avicennian model of the essence, which is “constituted” (*muqawwam* or *mutaqawwim*) of a class of predicables that are essential (*dhātī*) to its nature. We have seen that in the Peripatetic classification of predicables, the accidental is that which is predicable of a subject and exists only *in* a substrate, whereas the non-accidental or essential is that which is predicable of a subject, but does not exist *in* it; rather it formulates its inner reality.⁴⁰¹ For instance, the term “animal” does not exist in the subject “human being,” since—together with the differentia “rational”—it renders the species subsistent (*qā'imān*). Only once the subject is realized (*mutaḥaṣṣil fī al-wujūd*) is it possible for an accidental to exist in it. Thus, while existing in a substrate, the accidental is a foreign object relative to the essential predicable constituting its nature.

In Rāzī's model of the essence, by contrast, all predicables ascribed to the subject term must be conceived as external attributes of an already subsistent and constituted essence. Some of these attributes may derive from its nature or inner reality, rather than being dependent upon external circumstances; however, they do not assume the role of an essential part (*dhātī*). The most we can say is that these are the necessary effects of the essence. Thus, the passage above refers to them as concomitants (*lawāzim*) and attributes (*ṣifāt*), emphasizing their structural otherness from and dependence on the essence. We must bear in mind, however, that Rāzī asserts this model as an

⁴⁰¹ *Categories* 2, 1a18–1b9. Avicenna's account of the division can be found in *Maqūlāt*, 27.

epistemic rather than metaphysical imperative. By affirming that knowledge of the cause necessarily implies knowledge of the effect, he implicitly admits that the essence *can* be the object of theoretical knowledge and be subsequently analyzed (*taḥlīl*) into distinct conceptions. However, by stipulating that this kind of knowledge is practically out of reach, he is also asserting that the essence is realistically foreclosed to metaphysical speculation.⁴⁰²

Rāzī reaffirms this epistemic imperative in a later section entitled, “On [the fact] that human beings may acquire knowledge of the inner realities of things (*ḥaqāʾiq al-ashyāʾ*).”⁴⁰³ In this discussion, the term *ḥaqāʾiq al-ashyāʾ* seems to refer specifically to the quiddity (*māhiyya*) of substances or substantial forms, although the discussion will also veer towards the knowability of the quiddities of accidents. Rāzī’s main objective is to refute the position that simple quiddities (*al-basāʾiʿ*) are unknowable. According to this position, only composite quiddities (*al-murakkabāt*) can be known, because unlike simples they consist of constitutive parts, which form part of their definition. Gaining knowledge of the parts would lead to knowledge of the whole. Simples, by contrast, are known only by their concomitants (*lawāzīm*), that is, by the effects they produce, and which are observable to the metaphysician. Souls, for instance, are known in virtue of the fact that they move bodies. This provides us with a description (*rasm*) of soul, but not a definition (*ḥadd*).

It is not clear who Rāzī has in mind when citing the position that simple quiddities are unknowable. In fact, the position may even sound like something he might defend, given his

⁴⁰² Note, however, that we should restrict this judgment only to simple substances that designate irreducible natural kinds, such as the “human being,” “horse,” “water,” “fire,” etc. Complex substances, which consists of distinct empirical parts, can be essentially defined, as long as we can enumerate those parts. These substances are entities that display some sort of unity but can still be reduced to smaller components, such as mountains and trees. Bilal Ibrahim has reconstructed Rāzī’s theory that simples are indefinable and known only through their concomitants; see Ibrahim, “Freeing Philosophy from Metaphysics,” 6, 77 ff; “Fahṛ ad-Dīn ar-Rāzī, Ibn al-Hayṭam and Aristotelian Science,” 399–417; “Beyond Atoms and Accidents,” 79, 81, 110 ff. His reconstruction of Rāzī’s theory reflects the developments found in the *Mulakḥḥaṣ*, where the skeptical stance is much more decisive—as we shall see. In the *Mabāḥiṭh*, I argue that Rāzī wants to maintain as a general principle that simples are theoretically (though not practically) definable.

⁴⁰³ *Mabāḥiṭh* I, 499–501.

skeptical stance on the possibility of gaining knowledge of essences. However, this is not the case, as he clearly maintains the position that knowledge of simples is a theoretical possibility for human beings. If knowledge of simples were completely foreclosed, we would have no knowledge of composites either, because composites consist of simples. Furthermore, even if we grant that simples are undefinable and the only way to describe them is to identify their concomitants (*lawāzim*), gaining knowledge of these concomitants would still be impossible. This is because concomitants are also divisible into that which is simple and that which is composite; and knowledge of either of these divisions presumes in turn knowledge of simples. Thus, Rāzī argues, “it must remain possible that the realities of simples be intelligible,”⁴⁰⁴ for otherwise, “it would have been necessary that the human being intellectually apprehend nothing at all, whether by definition (*bi-l-ḥadd*) or by description (*bi-l-rasm*).”⁴⁰⁵ Despite affirming the theoretical possibility of knowing the reality of simples, Rāzī reminds us of the qualification he made earlier when discussing the principle of causal deduction. He writes:

Regarding the claim that if we were to know the quiddity of things, we would then know the totality of its concomitants, we say, suppose then that we have no knowledge of the reality of the essences that are the sources of concomitants (*al-malzūmāt*). However, the contention [here] concerns whether [all categories of] simples are unintelligible; thus, *perhaps*⁴⁰⁶ [it is the case that] while we have no knowledge of the essences that are the sources of concomitants (*malzūmāt*), we can still acquire knowledge of their simple concomitants (*lawāzimahā al-basīṭa*),

⁴⁰⁴ *Fa-anā aqūla inna al-ḥaqāʾiqa al-basīṭata yumkinu an takūna maʿqūlatan* (*Mabāḥith* I, 499).

⁴⁰⁵ *Mabāḥith* I, 499–500.

⁴⁰⁶ I read “*fa-laʿallanā*” instead of “*fa-qulnā*,” which is the preferred reading of the Cairo and Hyderabad editions of the *Mabāḥith*. My reading is based on the following witnesses: MS Istanbul: Yeni Cami 774, f.128r, line 12; MS Berlin: Staatsbibliothek MS. or. quart. 13, f.145r, line 6; MS Istanbul: Ragib Pasha 807, f.107v, line 15. In the last witness, the scribe (or another hand) corrects what seems to be a cacographic *fā-lām-ʿayn-nūn-alif* [sic] with *fa-laʿallanā*. The same cacography can be found in MS Istanbul: Ragib Pasha 808, f.95r, line 1, but without the correction.

and it has been explained that knowledge of the effect does not necessitate knowledge of the cause.⁴⁰⁷

Here, Rāzī reproduces the same objection against the possibility of knowing the “quiddity of things” that he cited in the previous inquiry into the principle of causal deduction, namely that if we acquire knowledge of the essence of the cause, then, given the principle of causal deduction, we would have knowledge of all concomitants at once—which is an impossibility.⁴⁰⁸ However, whereas in the previous inquiry the absurdity of this conclusion is meant to show that the principle of causal deduction is false, in the present inquiry this conclusion is meant to demonstrate that human beings cannot have knowledge of essences at all. Rāzī in the *Mabāḥith* objects to both propositions. Wanting to affirm the possibility that human beings *can* have knowledge of essences, he reproduces the same response as he did when dealing with the argument against the principle of causal deduction. That is, he sidesteps the issue of knowing quiddities or substantial forms as such, deeming it practically impossible, and focuses instead on the more promising prospect of gaining knowledge of their concomitants.

Despite playing down the possibility of knowing substantial forms and focusing on the higher likelihood of knowing them through their concomitants, Rāzī in the passage above still wants to affirm the theoretical possibility of gaining knowledge of simples. By doing this, he aims to uphold the coherence of several claims he made when discussing the principle of causal deduction. Foremost among these is his insistence that while knowledge of essences is, for all practical purposes, out of reach, we may still gain serviceable knowledge by recourse to their concomitants—that is, by offering a “*rasm*,” a description, rather than a definition. This claim would have been

⁴⁰⁷ *Mabāḥith* I, 500.

⁴⁰⁸ Note, however, that the discussion here has shifted to the quiddity of substances, to the exclusion of the quiddity of accidents.

unintelligible had he sided with the opinion that knowledge of simples *of any class* is foreclosed to human beings. The implicit consequence of this epistemic framework is that unlike substantial forms or quiddities—both of composed or simple substances—concomitants or external attributes necessitated by the essence remain knowable in themselves without requiring prior knowledge of the essence. This is not a controversial position to hold, because many effects are empirically observable or may consist of phenomena that are more knowable to the human mind than the true nature of its essence. Nevertheless, given Rāzī’s affirmation of the principle of causal deduction, this does not preclude the possibility that a knower with exceptional capacity can acquire knowledge of these concomitants through sheer insight into the nature of the cause.

Having asserted that the essence of the cause is ultimately unknowable and that the best we can achieve is to identify its attributes and concomitants, Rāzī outlines the various attributes an essence may possess and identifies the class of attributes that the metaphysician should privilege when analyzing the basic characteristics of some entity.⁴⁰⁹ He argues that the essence may possess two types of attributes, “the conceptual and non-conceptual concomitants” (*lawāzim ʾtibārīyya wa-ghayr ʾtibārīyya*). By the first he intends those attributes that have no extramental existence (*thubūt; lā wujūd al-hā fī al-khārīj*) but exist only as conceptions in the mind. These include “being self-subsistent” (*kawnuhā qāʾimatan bi-dhātihā*), “being contingent” (*kawnuhā hādithatan*), and “being everlasting” (*kawnuhā bāqiyatan*).⁴¹⁰ In a later passage, he will add “being a cause” (*kawnuhā ʿillatan* or *ʿilliyya*) to this group of attributes.⁴¹¹ According to Rāzī, gaining knowledge of the quiddity does not necessarily confer knowledge of these attributes. This is because “the quiddity strictly speaking (*muṭlaqan*) is not the cause of the realization (*li-taḥaqquq*) of these attributes [...] Rather it becomes

⁴⁰⁹ I should note that Rāzī does not offer this analysis programmatically or even systematically. He simply mentions this framework of analysis when offering a response to another objection against the principle of causal deduction.

⁴¹⁰ *Mabāḥiṭh* I, 478–79.

⁴¹¹ *Mabāḥiṭh* I, 479.

the cause of the realization of these attributes [only] when the intellect also considers the [quiddity] in relation to the totality of middle terms (*wasatiyyāt*) [required for their conception].”⁴¹² For instance, in the case of “being contingent,” this attribute requires the simultaneous conception of a cause, the consideration of which stands beyond the mere conception of the effect as distinct entity. As for “being everlasting,” this conception arises only by negating the contradictory term, which is death. The second type of attributes are those that are mind independent in the sense that they exist in concrete reality. Though Rāzī mentions only the power to perceive and move (*qudra ‘alā al-idrāk wa-l-tahrīk*) as examples of such attributes, we can also include qualities like colour, odour, taste, and other accidents that are observable empirically. The case of perceiving and moving demand special consideration because these are psychic qualities (*kayfiyyāt nafsanīyya*) that are not in themselves observable. Their existence is indicated by the effects they produce, such as the well-attuned and responsive reactions of our sensory organs to external stimuli in the case of perception and the deliberate motion of our limbs in the case of the capacity to move. For this and other reasons Rāzī discusses elsewhere, the power to perceive and the power to move are attributes that “are dependent neither on supposition nor mere conception (*al-farḍ wa-l-ʿtibār*).”⁴¹³ Furthermore, he claims that unlike the first category of attributes, we can gain knowledge of these real attributes by acquiring knowledge of the essence.⁴¹⁴ Note, however, that this last statement must be qualified by the proviso that such knowledge is a theoretical possibility, not a practical one. Rāzī also does not claim that knowing the essence is the *only* way we may acquire knowledge of these attributes and effects. While gaining knowledge of the essence would confer what he later

⁴¹² *Mabāḥith* I, 479.

⁴¹³ Rāzī offers a demonstration for the reality of perception (*idrāk*) or knowledge (*ʿilm*) in *Mabāḥith* I, 458–59. As for the capacity to move, see *Mabāḥith* I, 502–09.

⁴¹⁴ “*Fa-ammā al-lawāzīm al-ghayr al-ʿtibārīyya fa-hiya li-l-nafs mithla qudratihā ‘alā al-idrāk wa-l-tahrīk. Fa-inna al-qudra šifātun ḥāṣilatun li-l-nafs la yatawaqqafu ‘ala al-farḍ wa-l-ʿtibār. Fa-lā jarama man ‘arafa dhātahu fa-qad ‘arafa ḥādhihi al-šifa*” (*Mabāḥith* I, 479).

calls “complete intellection” (*al-ta‘aqqul al-tāmm*), it is still possible to acquire knowledge of the attributes and effects and show that it pertains necessarily to a certain cause. We have seen in the previous discussion that in the absence of a true definition (*hadd*) of a quiddity, the metaphysician can gain knowledge of its attributes through a systematic description (*rasm*) of its concomitants. Due to the natural limits of inductive knowledge, however, a *rasm* will not confer true insight into the nature of the cause.⁴¹⁵ It provides a lesser—but still reliable—standard of knowledge. We will return to these points later in the discussion.

In addition to supporting the principle of causal deduction by responding to possible objections, Rāzī also adduces his own metaphysical and epistemic principles that are distinct from Avicenna’s. In the argument quoted above, we saw that he appeals to his position on the nature of causality (*mu‘aththiriyya*) as established in the categories section of the *Mabāḥith* and *Mulakhkhaṣ*. Since causality is not an extramental attribute distinct from the essence of the cause, but rather is “the very essence [of the cause] in question (*nafsu dhātihā al-makḥṣūṣa*), gaining knowledge of it necessarily leads to knowledge of the effect.”⁴¹⁶ Here, Rāzī is responding to the objection that knowledge of the causality of the cause will necessitate only knowledge of the causedness of the effect (*ma‘lūliyyat al-ma‘lūl*) rather than of the effect itself, since the correlative of causality is the causedness, not the effect. This objection seems to be consistent with the theory that causality is relational in structure, which he defends in the categories section of the *Mulakhkhaṣ* and *Mabāḥith*. However, Rāzī did not consider this aspect of his theory to be relevant to the question at hand. For in defending the principle of causal deduction, he has stipulated the existence of an essential cause (*‘illa dhātīyya*), whose causal capacity is not determined by some external factor. The causality of the essential

⁴¹⁵ The full title of the chapter devoted to the principle of causal deduction is “On [the fact] that knowledge of the cause necessitates knowledge of the effect, and that knowledge of the effect does not necessitate knowledge of the cause.” Rāzī begins discussing the second proposition on pg. 480 of *Mabāḥith* I.

⁴¹⁶ *Mabāḥith* I, 480.

cause, by definition, must be inseparable from its essence.⁴¹⁷ As such, knowing the essence must include knowledge of the causal relation, and knowledge of the causal relation necessarily produces knowledge of both relata. Thus, he concludes that knowing the essential cause will produce knowledge of its effect.

Another aspect of Rāzī's defense of the principle of causal deduction is the condition that the knower possesses "complete intellection," which he defines as knowledge that "corresponds to extramental reality (*muṭābaqan li-l-wujūd al-khārijī*).” Here, he adduces the view established in the inquiry into the categories of action and passion, that the metaphysician may rely on a parsimonious framework of analysis that includes only the cause and effect to the exclusion of intermediary accidents (*wasīṭa*) such as the Avicennian causal *ḥaythiyyāt*. If we accept this theory, then, given the doctrine of the essential cause (whose existence Rāzī stipulates for the purposes of defending the principle of causal deduction), nothing prevents the "complete" knower from gaining knowledge of the effect through sheer knowledge of the cause.⁴¹⁸

As mentioned above, the parsimonious framework of causality that Rāzī relies upon to establish the principle of causal deduction is the very same model Rāzī affirms in the categories section of the *Mabāḥith* and *Mulakhkhaṣ* where he discusses the accidents of action and passion. It is clear, then, that Rāzī is trying to maintain a consistent perspective in his various inquiries related to efficient causality, both in the logical and linguistic context of the predicables (connected, of course, to its

⁴¹⁷ In the argument quoted above, Rāzī seems to imply that without the existence of the essential cause, an infinite regress of causes will ensue, since each member in the chain of causation will always require something other than itself to enact its causal influence. The essential cause cuts the chain at some finite end. Thus, the essential cause is most likely the Necessary Being. Rāzī, however, does not make this explicit. In his attempt to construct a general theory of knowledge and of causality, he uses the case of God not as an exception to the rule, but as the theoretical paradigm. Whatever qualifications the metaphysician introduces to the theory to accommodate cases involving contingent beings will be settled as corollary principles of the fundamental doctrine.

⁴¹⁸ *Mabāḥith* I, 480. Rāzī would later refer to the same concept as "complete certainty" (*al-yaqīn al-tāmm*), defined here as knowledge that is obtained "when the mental form corresponds to external affairs." The discussion in which this term appears follows immediately the discussion of the principle of causal deduction. Here, Rāzī affirms the proposition that "knowledge of the essences of the causes (*al-asbāb*) is attained from knowledge of their causes" (*Mabāḥith* I, 482).

metaphysical implications regarding their ontological status) and in the epistemic context as we see here regarding the principle of causal deduction.

However, despite the epistemologically optimistic outlook conveyed by this principle, we have seen that Rāzī places a strict condition on its attainment, one that renders it practically impossible to realize. This condition renders the principle less Avicennian than it might seem at first. The central problem is that while knowledge of the essences of things is theoretically possible, it is nigh impossible for ordinary modes of cognition. For the most part, reliable knowledge of essences consists in the systematic analysis of its various attributes and concomitants. Whether this inquiry reveals the internal structure of the essence is difficult to determine with any certainty. As a result, the reliable logical framework through which the metaphysician may organize his knowledge of the essence is to designate all predicables said of an agent—even those that seem essential to its nature—as belonging to the accidental class of predicables (*‘awāriḍ*). These predicables describe not what the essence is made of but describe what the essence possesses by way attributes or accidents. This restriction, however, does not preclude the attainment of some demonstrative proof that would allow the metaphysician to identify the essential structure of a subject term. However, this depends on a highly restrictive threshold of cognition, which Rāzī calls “complete intellection.”⁴¹⁹

In my reading of the *Mabāḥith* and *Mulakhkhaṣ* so far, I found only three cases that proved worthy of this knowledge: disembodied human souls, the celestial intellects, and the Necessary Being. Rāzī mentions these three cases together when discussing whether it is possible to perceive a plurality of conceptions in a single act of thinking.⁴²⁰ He argues that these three entities are capable of this feat because they are never in potency. When we stipulate that knowledge of the

⁴¹⁹ *Mabāḥith* I, 480, 482.

⁴²⁰ *Mabāḥith* I, 476. Rāzī offers the example of God, the celestial intellects, and the disembodied souls as the third proof in favour of the possibility that a plurality of conceptions may be conceived in a single act of thinking.

concomitant (*lāzim*) always accompanies knowledge of the essence from which it is entailed (*malzūm*), then, since both are correlative terms (*mudāfayn*) that are mutually implicative, we must acknowledge that a perpetually active act of intellection would acquire knowledge of these terms at once, that is, simultaneously and without succession. He writes:

The third [proof] [is that] knowledge of the existence of two correlative terms is realized simultaneously. Such is the case regarding knowledge of the existence of the concomitant (*lāzim*) and the existence of that from which the concomitant derives (*al-malzūm*). This proves our contention. What verifies this in both conception and judgment is that God Most High and the separate intellects are among those things whose acts of intellection are never in potency. Rather, it is necessary that these acts are actually present and realized in their totality. Such is also the case regarding rational souls after their separation from [their] bodies, for it is necessary that the totality of their objects of knowledge is present [to them] in actuality.⁴²¹

Indeed, the criteria Rāzī posits for attaining “complete intellection” is that of perfect actuality and immateriality.⁴²²

Notwithstanding the importance of both disembodied rational souls and celestial intellects as examples of “complete knowers,” the paradigmatic example that Rāzī has in mind and which he mentions more than once in the *Mabāḥith* is the Necessary Being. The central issue at stake is

⁴²¹ *Mabāḥith* I, 476

⁴²² This provision may sound, once more, like a simple affirmation of a well-known Avicennian doctrine. However, like many doctrines that seem to overlap between the two thinkers, Rāzī arrives at the proposition through a different set of premisses. This, of course, does not deny that he was influenced by his predecessor. Rāzī offers his own reasoning for the doctrine in several chapters. The first is entitled, “On how an entity intellects itself” (*Mabāḥith* I, 461–64). The second is entitled, “On the fact that the immaterial entity (*al-mujarrad*) must necessarily intellect itself” (*Mabāḥith* I, 491–494). In the latter discussion, Rāzī explicitly aligns himself with the Avicennian perspective in support of the proposition. However, he modifies the position to accommodate his own theory of intellection. Another section where Rāzī defends the criterion of immateriality for complete intellection is in the psychology section of the *Mabāḥith* (vol. II, 366–72).

the nature of Divine knowledge, specifically the question of whether God knows particular things as well as universal concepts. When discussing the proposition that “the immaterial entity must necessarily intellect itself,” Rāzī invokes the principle of causal deduction to establish that since God knows Himself, and since God is the cause of all things, he must also have knowledge of things other than Himself. Now our author attributes this view to the philosophers (*ḥukamāʾ*), specifically to a “second method” (*al-ṭarīqa al-thāniya*) that they adduce in support of the proposition above. However, he counts himself among their number. When outlining the arguments of this “second method,” Rāzī includes under its division a theory of intellection that he developed as an alternative to Avicenna’s, namely that intellection (*taʿaqqul*) is not only the mere presence (*ḥudūr*) of the object of knowledge to the knower, but is rather “a relational state that is conditioned upon the realization [of the form of the object of knowledge] (*ḥāla idāfiyya mashrūṭa bi-l-ḥuṣūl*).”⁴²³ This conception belongs under the same division, since it falls under the broader definition of knowledge as “the presence of the object of knowledge to the knower.” What distinguishes Rāzī’s position as a subdivision is the added characteristic of knowledge as “a relational state.” Thus, affirming God’s knowledge of things other than Himself via the principle of causal deduction is an approach he shares with the *ḥukamāʾ*.

Rāzī also deploys the principle of causal deduction in the pure *divinalia* (*al-ilāhiyyāt al-mahḍa*) section of the *Mabāḥith*, specifically when defending the view that God has knowledge of universals. This discussion is noteworthy not for the relatively uncontroversial proposition, but for the arguments he cites in support of it. Rāzī presents two “demonstrations” (*burhān*), one that is consistent with his own theory of knowledge and one that is not. The demonstration he prefers is based on the principle that anything that is immaterial must therefore know itself. This is a standard

⁴²³ *Mabāḥith* I, 492.

position Rāzī defends in several sections of the *Mabāḥith*, one in the section on knowledge and another in the psychology, when proving the immateriality of the human soul.⁴²⁴ This principle is based, in turn, on a model of intellection that Rāzī prefers, namely that knowledge or perception in general “is not only the mere presence of the form of the object of perception in the perceiver, rather it is a specific relation between the object of perception and the perceiver, and this relation may require the impression of the quiddity of the object of knowledge in the perceiver, especially when these are distinct from each other.”⁴²⁵ In this model of intellection, the mere presence of the knower’s essence to himself is “sufficient to realize this relation (*kāfiyyan fī taḥaqquq tilka al-nisba*).” Nevertheless, the principle is also consistent with a purely Avicennian conception of knowledge as “the mere presence of the form of the object of knowledge.” The second demonstration, the one that Rāzī rejects, is based on the insight that anything that is immaterial must be intelligible in itself; therefore, God must possess knowledge of Himself because as an immaterial being He is both eminently intelligible and eminently capable of intellection. Rāzī does not specify the source of this position. But in an earlier discussion, the same argument is attributed to Avicenna in *al-Mabda’ wa-l-ma’ād*.⁴²⁶ At any rate, when we take the premisses that the immaterial entity must know itself; that God is the cause of all things; and that knowledge of the cause necessitates knowledge of the effect, we arrive at the conclusion that God must have knowledge of all contingent things.⁴²⁷ Rāzī is well aware that for the Avicennian philosophers, this reasoning will allow them to affirm God’s

⁴²⁴ *Mabāḥith* I, 491–494 and vol. II, 366–72.

⁴²⁵ *Mabāḥith* II, 493. Note the important qualification that this relation “may require” the impression of a form. Self-knowledge and God’s knowledge seems to be excluded from this requirement.

⁴²⁶ *Mabāḥith* I, 491. This section is part of the broader inquiry into knowledge, specifically on the proposition that anything that is immaterial must have knowledge of itself.

⁴²⁷ “We have explained that anything that does not subsist in a body and is immaterial must be abstract in itself. We have also explained in the section on knowledge that all abstract things must intellect themselves. Thus, the Creator intellects Himself. Furthermore, we have explained that knowledge of the cause necessitates knowledge of the effect and that the essence of the Creator Most High is the cause of the existence of all contingent things. Since there exists only one Necessary of Existence, it follows that His knowledge of Himself necessitates knowledge of all other contingent things” (*Mabāḥith* II, 491).

knowledge of universals, which is the subject matter at hand. Since this proposition is consistent with his own view, he accepts the same doctrine without qualification. Nevertheless, his preferred method of supporting the proposition is the one based on his own theory of intellection. Indeed, this is just one of many cases in the *Mabāḥith* and *Mulakhkhaṣ* where doctrinal convergence between Rāzī and Avicenna should not obscure the subtle differences in the metaphysical and epistemic doctrines supporting it.

Another occasion where Rāzī deploys the principle of causal deduction is when he attempts to refute Avicenna's famous doctrine that God knows particulars as universals. The discussion is quite extensive and merits its own study. We will discuss only those aspects that are directly relevant to our present inquiry. Rāzī's analysis of the issue is quite neutral, pitting the "most of the ancient and modern philosophers (*akthar al-mutaqaddimīn wa-l-muta'akhhirīn min al-falāsifa*)" on one side of the debate, and the sole figure of "the Master" (*al-shaykh*) Abū al-Barakāt al-Baghdādī, on the other.⁴²⁸ He offers objections against both positions as well as defending them on their behalf. Rāzī, however, privileges Abū al-Barakāt's position—for two reasons. The first is that the objections he offers against the *falāsifa*'s positions are based on metaphysical principles that he explicitly affirms in other sections of the *Mabāḥith* and which are distinct from Avicenna's.⁴²⁹ The second is that he supports Abū al-Barakāt's position on Divine knowledge using principles he also affirms in other sections of the work and which are also distinct from Avicenna's. In the second proof in favour of God's knowledge of particulars, Rāzī summarizes his position as follows:

⁴²⁸ It is noteworthy, but also unsurprising, that Rāzī does not mention any of the Muslim theologians or *mutakallimūn* as another group of scholars who affirm God's knowledge of particulars *qua* particulars. This is consistent with the general method of the *Mabāḥith*, which is devoted to the transmitted tradition of Eastern *ḥikma* and its authoritative teachings.

⁴²⁹ See, for instance, the objection based on his inquiry in the psychology of the *Mabāḥith* that it is possible for the rational abstract soul to perceive shapes and corporeal things (*Mabāḥith* II, 501). The relevant sections are *Mabāḥith* II, 387–92; 414–18.

There is no dispute regarding the fact that God's knowledge of Himself necessitates knowledge of particulars *qua* universals. However, what we also claim is that His knowledge of Himself also necessitates knowledge of these particulars insofar as the very conception thereof prevents the occurrence of commonality [i.e., prevents them from being predicable of the many].⁴³⁰ [Taken] in this manner, no doubt they [remain] dependent upon the Creator Most High, and knowledge of the cause necessitates knowledge of the effect."⁴³¹

This second proof is based on the principle that individuation (*tashakhkhuṣ* and *ta'ayyun*) is a causal process that involves an ordered series of causes, which must ultimately originate at the creative act of the Necessary Being.⁴³² Rāzī writes, "The Necessary Being's knowledge of Himself necessarily produces knowledge of the cause of this individuation insofar as it is so [individualized]. If such is the case, it is necessary that this very individuation is known [to God]."⁴³³

Thus, from the various discussions of God's knowledge, it is clear that the principle of causal deduction is a key element of Rāzī's metaphysics, at least in the *Mabāḥith*. It allows him to affirm several important theological doctrines, some of which coincide with Avicenna's, while others are in opposition. In both cases, however, Rāzī makes the effort to rely on his own epistemic and metaphysical principles, especially in cases where the alternative Avicennian doctrines are doubtful from his point of view. The result is a subtle method of inquiry that can be misunderstood as a

⁴³⁰ This is of course Avicenna's definition of the particular (*al-juzʿ*) as outlined in *Ilāhiyyāt* V.1.

⁴³¹ *Mabāḥith* II, 506.

⁴³² Although omitted from our main discussion, the first proof Rāzī adduces to defend God's knowledge of particulars *qua* particulars is very important, because it is a standard *kalām* proof for determining that God is knowing (*ʿālimun*). It is based on the principle that the diversity and complexity of life cannot emerge as an epiphenomenon of material mixtures, but is a process guided by a supreme intelligence (*Mabāḥith* II, 504–07). Rāzī claims that this is the strongest proof for "those who uphold (*al-muthbitūn*) that God knows particulars *qua* particulars." True to his more neutral posture, however, that he still offers objections and counter-objections to this proof. Compare this to the corresponding discussion in the *Mulakhkhaṣ*, where the same proof is privileged as the sole "authoritative" (*mu'tamad*) position and Rāzī offers no objections against it, even in a neutral manner (vol. III, 535; Khān'ūghlū II, 1075–76).

⁴³³ *Mabāḥith* II, 506. Rāzī makes the same point regarding the causality of individuation earlier in the work in a chapter entitled, "On the claim that when a thing is known through knowledge of its cause, it is known only in its universal [aspect]" (*Mabāḥith* I, 483). Rāzī, of course, denies this proposition and appeals to the principle of causal deduction to undo the restriction that God knows only universals.

straightforward adherence to Avicennism. Doctrinal convergence in Rāzī's *ḥikma* works does not imply disciplinary or methodological loyalty.

As mentioned before, the principle of causal deduction is an epistemic principle that seems to adhere to the Avicennian paradigm. However, I have intimated that this is not the case because unlike Avicenna, Rāzī seems to restrict the relevance of the theory to the Necessary Being, making it an exceptional case rather than a general principle. To some extent, this exception also applies in the cases of other entities that are also capable of knowing the essences of things, such as celestial intellects and disembodied human souls—although for a lack of more evidence, we cannot ascertain this expanded list with certainty.⁴³⁴ For most aspiring metaphysicians and physicists, however, this kind of knowledge is inaccessible. As a result, Rāzī insists—as we have seen—that the only reliable framework for analyzing causal relations is one that avoids the need to speculate on the internal structure of the essence, maintaining instead its inscrutability as a concrete entity. The metaphysician, therefore, must guard against the temptation to use the tools of theoretical analysis as a scalpel to dissect the essence. This “dissection” was the method implicitly at work in Avicenna's *maṣḍariyya* argument, which as we have discussed, traces every species of effect to some internal aspect of the agent's essence. These aspects, in turn, function as *a priori* causal principles that anticipate in some manner the nature of the effects. In the *Ishārāt*, Avicenna articulates this structure of causality as the *maṣḍariyya* (ontological groundedness) of effect *A* as distinct from the *maṣḍariyya* of effect *B*. Rāzī, however, regarded these causal *ḥaythiyyāt* as intellectual postulates that the metaphysician discerns after the fact. They designate the causal relations already at play, rather than revealing the *a priori* basis of their actuality. Furthermore, by predicating specific causal

⁴³⁴ Doing so would require a systematic analysis of exceptional non-ordinary modes of knowledge in all Rāzī's works.

relations of the agent's essence, the Avicennian metaphysician has interpreted what is primarily a contingent event as a universal attribute subsistent in the essence. This leads to two problems. The first, which we have discussed, is that the existence of these causal *ḥaythiyyāt* provokes the question of their own causedness as distinct from the causedness of their concrete effects. Since the metaphysician needs to posit a causal principle for every accident that subsists in the essence, an infinite regress of such principles ensues.

The second problem is one that Rāzī explicitly states only when discussing the principle of causal deduction and that we have just discussed, namely that the essence is practically unknowable to the human mind. The claim—implicit in the *maṣḍariyya* argument—that from a concrete instance of a causal event we can arrive at knowledge of an inherent state in the cause responsible for producing a particular species of effect, presumes a certain capacity to gain knowledge of essences from empirical data that human beings simply do not have. Despite the theoretical possibility of acquiring this knowledge, achieving it is an exceedingly rare event and is realistically reserved for certain classes of divine beings. Thus, despite the similarities we observe between Rāzī's affirmation of the principle of causal deduction in the *Mabāḥith* and Avicenna's theory of causal correspondence in *Ilāhiyyāt* VI.3, only the latter model accommodates the Rule of One as a working procedure of causal deduction. The epistemic intuitions restricting its application will frustrate any recourse to its framework of analysis. For this reason, the contradictory claim that the many *may* derive from the one remains a theoretical possibility that a metaphysician must consider in his analysis of causal events.

As I have alluded to above, however, the *Mabāḥith* is the exception to the rule when it comes to the principle of causal deduction. In other works, Rāzī either distances himself from the theory and attributes it to the “philosophers” (*falāsifa* or *ḥukamā*) without explicitly rejecting it, or he treats it

as one of their false metaphysical doctrines. He does this in his early works, such as the *Mulakhkhaṣ*, *Nihāyat al-ʿuqūl*, and *Sharḥ al-Ishārāt*; his middle-career works, such as the *Muḥaṣṣal*; and his later works, such as the *Maṭālib*.⁴³⁵ Since the earliest of these works, such as the *Mulakhkhaṣ*, were written after or concurrently with the *Mabāḥith*, it is likely that Rāzī changed his mind on the matter and decided to dispense with this principle altogether. However, if this is true, then he would have changed his mind twice in very quick succession. As I have alluded to before, Rāzī writes that his defense of the principle in the *Mabāḥith* revises an old position he held in previous works.

To understand why Rāzī wavered on the issue before settling on a definitive position, let us examine an important passage at the end of the discussion of the principle of causal deduction in the *Mabāḥith* where—in a precious moment of self-referentiality—he lays out the reasons why he changed his opinion from rejecting the principle to now defending it. Examining this issue will allow us to appreciate how Rāzī’s opposition to the Rule of One became more uncompromising and theoretically consistent by the time he was writing the *Mulakhkhaṣ*. He writes:

I had mentioned in some of my books (*qad dhakartu fī baʿḍ kutubī*) that knowledge of the cause does not unconditionally (*mutlaqan*) necessitate knowledge of the effect in any way whatsoever (*kayfa kāna*). Rather, knowledge of the cause necessitates knowledge of the effect only with the condition that the quiddity of the effect be conceived (*bi-sharḥ taṣawwur māhiyyat al-maʿlūl*). I had arrived at this conclusion based on the [doctrine] that causality (*al-ʿilliyya*) is a relational description (*wasf idāfī*) and the burden of necessitating relational entities (*al-umūr al-idāfiyya*) cannot be assumed by one of the two relata; otherwise, the relation would exist on account of it alone, the other [relatum] being non-existent, and this is impossible. Thus, knowledge

⁴³⁵ See the discussion below for references in the *Mulakhkhaṣ*. As for other works, see *Nihāyat* vol. I, 136; *ibid*, vol. II, 190–94; *Sharḥ al-Ishārāt* vol. I, 68–70; *ibid* vol. II, 536–37, 546, 640; *Maṭālib* vol. II, 92; *ibid*, vol. III, 123–26, 163; *ibid*, vol. VII, 41, 424. Note that in the last reference (*Maṭālib* VII, 424), Rāzī seems to be endorsing the principle without qualification. A deeper analysis of the *Maṭālib* is needed in order to understand Rāzī’s precise position on the matter. In the *Muḥaṣṣal*, Rāzī does not mention the principle at all, at least based on my reading so far.

of this relation does not follow from knowledge of [just] one of the two relata, nor is it necessary that knowledge of the essence of the cause necessitates knowledge of the causality. Rather, knowledge of the essence of the cause leads to knowledge of the effect with the condition that the conception of the effect [is also] realized. This is because if a relational description is an effect of the agglomeration of the two relata, then surely knowledge of both is the cause for knowledge of the relational description. *As for now* (*fā-ammā al-ān*) [i.e., in the *Mabāḥith*], since it was established that causality cannot possibly be an affirmative description, but rather there is only the essence of the cause and the essence of the effect, and when there is no doubt that the essence of the cause, considered solely in terms of itself, is [truly] the cause of this effect, surely, then, it follows that knowledge of the cause necessitates knowledge of the effect in an unconditioned manner.⁴³⁶

In this passage Rāzī explains why he previously rejected the principle of causal deduction and why he has now changed his mind. The reasons are subtle. In the old position, Rāzī held that the “unqualified” (*muṭlaqan*) knowledge of the cause does not necessitate knowledge of the effect “in any way whatsoever” (*kayfa kāna*). His new position in the *Mabāḥith* asserts the *theoretical* possibility for this deduction to take place—but not its practical possibility. We must also bear in mind that the key premiss Rāzī used in order to deny the principle of causal deduction is the same doctrine he defends in the *Mabāḥith*, namely that causality (*‘illiyya*) is a relational description and, therefore, cannot be an extramental description or real attribute (*sifa thubūṭiyya*). Consequently, knowledge of the causal relation requires not only knowledge of the cause but also of the effect. Only then can the nature of the causal event be discerned in its entirety. In his new position, Rāzī does not dispute this premiss. The difference is that he now stipulates the existence of the “essential cause,” which,

⁴³⁶ *Mabāḥith* I, 481.

as we have seen, has altered the terms of the inquiry. If the essential cause is that which acts solely by virtue of its essence, nothing prevents the theoretical possibility that knowledge of the effect derives solely from knowledge of the essence of this cause. This is because in Rāzī's hermeneutic of causality, we do not need to posit any mediating accidents such as causal *ḥaythiyyāt* to account for the procession of the effects. No separate item of knowledge is required in order to discern the causal necessity other than knowledge of the cause.

Rāzī's admission above may sound definitive; however, he would change his mind yet again in the *Mulakhkhaṣ*—this time for good. The reason he provides for returning to the old position is the same reason he had offered in the first place, namely that knowledge of the “causality of the cause” (*ʿilliyyat al-ʿilla*) requires knowledge of the cause and the effect, since causality is a relation.⁴³⁷ He does not tell us why he now deems this argument sufficient to reject the principle of causal deduction when in the *Mabāḥith* he had deemed it irrelevant to the question. Only in *Sharḥ al-Ishārāt* do we find Rāzī referencing his discussion in that work, but even so, he does not explain why he had so confidently affirmed the principle of causal deduction.⁴³⁸ As in the *Mulakhkhaṣ*, he rejects the principle using the same argument from the relational structure of causality, without explaining why he had deemed this argument insufficient in the *Mabāḥith*. In my view, the reason why he reverted to his old position is not because he categorically rejected the principle, especially in view of the attending qualifications, which restrict its relevance to the single exceptional case of the Necessary Being—and perhaps to disembodied souls and celestial intellects. Rather, he did so because his argument relied on the existence of an essential cause (*al-ʿilla al-dhātīyya*). This premiss,

⁴³⁷ *Mulakhkhaṣ* II, 296–98 (Khānʿūghlū I, 496–97). The same argument is offered in *Sharḥ al-Ishārāt* vol. I, 68–70 and *Maṭālib* vol. III, 123–26.

⁴³⁸ *Sharḥ al-Ishārāt* I, 68–70. In this section of the work, Rāzī acknowledges that in his “major book (*fī kitābinā al-kabīr*)” that he had defended the principle of causal deduction by resolving several doubts regarding it: “We say: even though we had resolved (*ḥallalnā*) these doubts (*shukūk*) [regarding the principle of causal deduction] in our major work, we now say (*naqūlu ḥayḥuna*) that knowledge of the quiddity of the cause does not necessitate knowledge of the effect except after the effect has [also] been conceived” (pg. 68).

however legitimate it may seem as a theoretical postulate, may have been difficult for Rāzī defend as a metaphysical principle, for two reasons. The first is that it seems to be fundamentally incompatible with the doctrine of God as a voluntary agent (*al-fāʿil al-mukhtār*); the second is that it presumes a capacity for knowledge that is an exception to the rule and is thus practically useless for the discipline of metaphysics.

Regarding the first reason, if Rāzī holds that the “essential cause” is God—a view that he does not explicitly affirm—this would bring him in line with the *falsafa* notion of “the necessitating cause” (*al-fāʿil al-mūjib*), a doctrine that is inimical to the intuitions of the Ashʿarite theory of Divine attributes. In the Ashʿarite tradition, positing the attributes of Will (*irāda*), Knowledge (*ʿilm*), and Power (*qudra*) as having a real (not just conceptual) distinction from the essence is meant to preserve God’s freedom and awareness, insulating His agency from nature (*tabīʿa*) and the rigid chains of secondary causality. Even during the most experimental period of his early intellectual career, Rāzī adheres to his school doctrine, as shown by his *kalām* compositions such as the *Nihāyat*. In his early *ḥikma* works, such as the *Mulakhkhaṣ*, *Sharḥ al-Ishārāt*, and especially in the earliest of these compositions, the *Mabāḥith*, Rāzī would deliberately downplay his theological commitments, opting instead to approach the issues in *divinalia* from a neutral point of view—although his preferences were at times quite transparent.⁴³⁹ This doctrinal ambiguity, as we have seen on several occasions,

⁴³⁹ In the *Mabāḥith* and *Mulakhkhaṣ* Rāzī presented the Ashʿarite attribute theory as one of several models describing how God creates the world, such as when discussing the proposition “On the necessity that the effect is realized once the cause is realized” (*Mabāḥith* I, 603–09). In this section, Rāzī explicitly affirms Avicenna’s doctrine of the Active Intellect or Giver of Forms (*awḥib al-ṣuwar*) and defends it from objections. However, this is part of a report of the philosophers’ position. Rāzī devotes only a few lines at the end of the discussion to the Ashʿarite perspective, and even so, he does not explicitly affirm it as his own (see, pg. 609). Janssens in his article on the *Mabāḥith* has remarked that this discussion—and others with similar doctrinal ambiguities—requires further research (Janssens, “Ibn Sīnā’s Impact on Faḥr al-Dīn ar-Rāzī’s *Mabāḥith al-maṣriḥiyya*,” 267). In the corresponding discussion in the *Mulakhkhaṣ*, Rāzī still maintains critical distance from the various positions, but gives more emphasis and space to the position of the “religious people” (*al-millīyyūn*) as distinct from the philosophers (*Mulakhkhaṣ* II, 393–406; Khān’ūghlū II, 584–94). When discussing the *qudra* (power) of God in the theology (*ilāhiyyāt*) section, Rāzī ignores the issue of whether attributes are conceptual or real; instead, he criticizes the classical *kalām* conception of *qudra* as the ability either to do or to refrain from doing something, emphasizing instead on the necessity of the effect once all causal factors relevant to its

however, is not the effect of an inchoate approach to metaphysical inquiry. Rather, it is part of a deliberate method, which aims to minimize the use of premisses drawn from the discipline of *kalām*, except those that can be fruitfully embedded within the overarching framework of *ḥikma*.⁴⁴⁰

If, on the other hand, the “essential cause” is meant to include entities other than God, the principle still does not seem to be viable. This is because Rāzī has imposed such a strict condition for attaining knowledge of these entities, restricting it to an elite group of knowers in possession of

procession have been accounted for (*Mabāḥiṭh* II, 517). In the corresponding discussion in the *Mulakhkhaṣ*, Rāzī also does not discuss the reality of the attribute of power. However, he explicitly affirms the doctrine of God as “voluntary agent” (*al-fā'il al-mukhtār*), against the *falāsifa* who affirm the doctrine of the “necessitating agent” (*al-mūjib*) (*Mulakhkhaṣ* III, 538–40; Khān'ūghlū II, 1077–78). Rāzī defends the doctrine of “voluntary agent” in other sections of these two works (e.g., *Mabāḥiṭh* II, 535; *Mulakhkhaṣ* III, 552; Khān'ūghlū II, 1087); Cf. Griffel, *The Formation of Post-Classical Philosophy in Islam*, who holds that in the *Mabāḥiṭh* and *Mulakhkhaṣ* Rāzī supports Avicenna's theory that God creates out of the determination of His Essence rather than free will (pp. 524–31), and that he affirms the Ash'arite theory of creation only in his *kalām* works (pp. 532–41). Another section where Rāzī intimates his support for the reality of the Divine attributes is when he discusses the “division of the various names of God Most High.” Here he enumerates the various ways of categorizing the Divine names. Among these is one based on the Ash'arite model, whereby names may designate real attributes (*ṣifāt ḥaqīqīyya* or *thubūtiyya*). Another category of names is that which designate either relational or negative ascriptions (*Mabāḥiṭh* II, 524–26). Rāzī's discussion is quite neutral since he is content to simply enumerate the various Divine names and categorize them under the appropriate division. At the end of the discussion, however, he affirms knowledge (*ilm*) as an example of a real attribute. The implication here is that certain names can legitimately refer to real attributes and not just to negative or relational ascriptions. Nevertheless, Rāzī stops short from offering a more programmatic analysis of Divine attributes. This relatively neutral positioning can also be observed in the corresponding discussion in the *Mulakhkhaṣ* (vol. III, 543–55; Khān'ūghlū II, 1080–81). The same perfunctory comment can be seen in his discussion of Divine will, where he simply states that will is an attribute that is contingent in itself and is caused by the Essence (*Mabāḥiṭh* II, 512). Rāzī only once explicitly mentions the Attributionists (*ṣifātiyya*) when comparing their view of Divine attributes with that of the philosophers (*Mabāḥiṭh* II, 483–84). However, even here Rāzī tries to show that the philosophers' conception of constituent parts (*muqawwimāt*) is theoretically consistent with the Attributionists' doctrine of real attributes. Again, the discussion is not extensive, nor does it exhibit any commitment on Rāzī's part, except perhaps to highlight this possible consistency between the two groups. In my view, mentioning this possible consistency is a mere rhetorical move; it has no deeper theoretical implications, other than to provoke the most loyal of Avicennians (cf. Griffel's discussion of the same passage in *op. cit.*, 406–08). Rāzī's most extensive and programmatic discussion of Divine attributes can be found in the *Nihāyat* (vol. II, 207–63). Here, he rises in defence of his school doctrine.

⁴⁴⁰ Rāzī treats *ḥikma* as an independent branch of knowledge. He writes in the *Mabāḥiṭh* that a true name of the Necessary Being may exist, one that designates His reality (*ḥaqq*). Whether such a name does exist and what that name would be “is not [a question pursued] in the art (*ṣinā'ā*) of *ḥikma*” (vol. II, 524). For Rāzī *ḥikma* is not a universal science that governs other disciplines of knowledge. Rather, it is a historically transmitted body of knowledge, with its conventional methodology and subject-matter, scope, and framework of inquiry. See Griffel's argument that Rāzī conceives of *kalām* as a separate discipline to *ḥikma* and that he deliberately kept the two types of inquiries apart without necessarily attempting to be doctrinally consistent (*The Formation of Post-Classical Philosophy in Islam*, 308 ff). Griffel also argues that where in *kalām* works Rāzī defends Ash'arite doctrine, in *ḥikma* works Rāzī mainly “endorses” and “corrects” Avicenna's philosophy (ibid, 407–416). I subscribe to the view that Rāzī tried to keep the two disciplines apart. However, this is a stylistic and methodological choice. If we were to take stock of all Rāzī's criticism of Avicennian philosophy in both the *Mabāḥiṭh* and *Mulakhkhaṣ*, especially those that constitute fundamental metaphysical principles—such as the Rule of One—it becomes clear that Rāzī is proposing a different metaphysical system and a distinct set of doctrines that are consistent with those he maintains in his *kalām* works such as the *Nihāyat*.

“complete intellection,” such as God, and perhaps the celestial intellects and disembodied human souls. This restriction renders the theory so narrowly applicable that it is practically worthless as a general epistemic principle. All it achieves is to stress the limit of metaphysical knowledge pursued in the discipline of *ḥikma*. What is the purpose of keeping such a promising principle on so tight a leash?

This is all simply to say that by defending the principle of causal necessity Rāzī realizes that he is courting difficulty and theoretical inconsistency. By the time he was composing the *Mulakhkhaṣ*, it seems clear that maintaining the principle of causal deduction comes at too high a price. It proved incompatible with key metaphysical doctrines that he defended not only in this work but also in the *Mabāḥith*. The best solution was simply to drop the more dispensable of these doctrines. This decision is consistent with Rāzī’s approach in the *Mulakhkhaṣ*. One of the defining aspects of this work was to limit recourse to speculation in the discipline of *ḥikma*, especially regarding those doctrines that can be easily misinterpreted or potentially conflict with empirical phenomena and more well-established philosophical insights. As Rāzī writes in the *Mulakhkhaṣ*, one must leave behind claims that are beset by doubt and rely on claims that offer more certainty—even, perhaps, when this comes at the expense of reining in the ambitious claims of metaphysics.⁴⁴¹

A few examples of this more cautious approach come to mind. In the *Mabāḥith* we have seen that Rāzī takes recourse to the principle of causal deduction to explain precisely how God may have knowledge of things other than Himself, and that the content of this knowledge includes both universals and particulars. In the *Mulakhkhaṣ*, however, Rāzī reorients the inquiry to focus only on the fact that God possesses this very capacity. He deliberately avoids speculating on the reason *why* this should be the case. The only reliable approach (*al-mu’tamad*) to the question is to rely on the

⁴⁴¹ *Mulakhkhaṣ* III, 536 (Khān’ūghlū II, 1075).

intuition that (*al-bad̥hiyya shāhidatun bi-anna*) there is wisdom (*ḥikma*) in the meticulous and complex order of creation, one that cannot arise as an epiphenomenon of “dead” matter or unconscious forces.⁴⁴² The various facets of the created order must, therefore, arise from an agent that knows the minute implications of his acts and the reasons for them. Rāzī had offered this argument in the *Mabāḥith* and presented it as the “strongest” argument (*al-aqwā*) of those who uphold God’s knowledge of particulars.⁴⁴³ However, we have also seen that he provided another argument. This argument relied on two general principles: that of causal deduction and the general notion that God is the creator of the world. It also relied on another premiss unique to Rāzī’s inquiry, namely that particulars arise from a well-ordered process of individuation (*ta’ayyun*), which involves a constellation of causes that should be theoretically discernible to the mind. From these three premisses, Rāzī drew the conclusion that God must have knowledge of particulars. Unlike the first argument, which simply affirms this modality of Divine knowledge, the second argument tries to explain the underlying metaphysical principles at work, especially in relation to the Divine Essence. In the *Mulakhkhaṣ*, however, Rāzī dispenses with the latter argument, relying exclusively on the former. In fact, he would claim that upholding God’s knowledge of particulars by relying on our knowledge of the Divine Essence—rather than relying on an *a posteriori* observation of the created realm—is not established by clear proofs (*ghayr thābit bi-dalīl*), and as such is vulnerable to doubt.⁴⁴⁴ Another example of the more restrained methodology of the *Mulakhkhaṣ* is when Rāzī denies yet another proposition he had affirmed in the *Mabāḥith*, namely that all immaterial beings must be capable of self-intellection and that they must thereby be capable of knowing all effects that proceed from their respective essences. We have discussed this argument as an instance where Rāzī deploys

⁴⁴² *Mabāḥith* II, 504. The detailed exposition of this argument from design to prove that God is knowledgeable is found in the *Mabāḥith*, not in the *Mulakhkhaṣ*, where the same argument is presented in extremely condensed form (vol. III, 535; Khān’ūghlū II, 1075–76). The *Nihāyat* offers the most extended discussion on the matter (vol. II, 165–182).

⁴⁴³ *Mabāḥith* II, 504–07.

⁴⁴⁴ *Mulakhkhaṣ* III, 536 (Khān’ūghlū II, 1075–76).

the principle of causal deduction on a substantive metaphysical issue.⁴⁴⁵ In the *Mulakhkhaṣ*, however, Rāzī claims that this argument hinges on the assumption that all immaterial things are homogenous regarding their cognitive capacities.⁴⁴⁶ This proposition, however, requires a separate demonstration. As a result, it does not necessarily follow every immaterial thing should have knowledge of its effect solely from knowledge of itself.⁴⁴⁷

Thus, Rāzī's changing position on the principle of causal deduction seems to have been motivated by a desire to present a sharper and more consistent epistemology, one that removes some of the more speculative doctrines of the *Mabāḥith* and its many conciliatory gestures to the Avicennian perspective. Although these doctrines are not necessarily inimical to Rāzī's approach to metaphysical inquiry, they introduce an unwarranted ambiguity that might obscure his attempt at striking a different path within the received tradition of Eastern *ḥikma*.

By consistently rejecting the principle of causal deduction in the *Mulakhkhaṣ*, Rāzī imposes stricter conditions on what in the *Mabāḥith* was already an exceedingly difficult task of determining the

⁴⁴⁵ Rāzī consistently ignores or rejects the principle of causal deduction in the same sections where in the *Mabāḥith* he had affirmed it, such as “On knowledge of many conceptions in a single act of thinking” (*Mulakhkhaṣ* II, 295; Khān'ūghlū I, 495); “On that knowing causes implies knowing universals” (*Mulakhkhaṣ* II, 300; Khān'ūghlū I, 498); and “On whether simples are known” (*Mulakhkhaṣ* II, 318; Khān'ūghlū I, 515).

⁴⁴⁶ In the *Mulakhkhaṣ* Rāzī revises his definition of knowledge. In the *Mabāḥith* he is at pains to maintain that knowledge is a relational state that *may* be accompanied by the impression of some form. This involves the direct interface between the knower and the known, which again can be an impressed form. In the *Mulakhkhaṣ*, however, he omits the second part of the definition and maintains that it is simply a relational state. He does not speculate on the exact modality of knowledge, whether it involves impression or not, whether some species of knowers require it or not. I do not see this definition as being contrary to the one he presented in the *Mabāḥith*—in fact, I view them as being consistent with each other. The difference is not so much that Rāzī prioritizes the relationality of knowledge to the exclusion of other qualifications or conditions. Rather, he simply decided on a less speculative approach, one that refuses to determine the exact modality through which this relationality is achieved—the implication being that whatever shape it may take, the fact of relationality is the basic requirement that the metaphysician should stipulate when accounting for the nature of knowledge. I think that the best approach to examine Rāzī's theory of knowledge is not to rely on this parsimonious conception, but to examine how Rāzī conceives of different species of knowledge acquisition and then to see whether he stipulates certain conditions for their respective realizations, such as impression, whether of *sensibilia* or *intelligibilia*, and if so in what manner they interact with the cognitive faculties.

⁴⁴⁷ *Mulakhkhaṣ* II, 306. Rāzī also offers other arguments against the proposition: denying the principle of causal deduction and denying the theory that immaterial things naturally have knowledge of themselves.

metaphysical structure of efficient causality or agency. This renders his rejection of the Rule of One more definitive and uncompromising. We have seen how in his criticism of the *maṣdariyya* argument Rāzī takes what was a subsidiary objection in the *Mabāḥith* and upgrades it as the central premiss of his inquiry in the *Mulakhkhaṣ*. This premiss is the claim that causality (*mu'aththiriyya*) is a relational state (*ḥāla idāfiyya*) and cannot, as such, designate some aspect of the cause's nature; rather, it describes the cause insofar as it is conceived in relation to its effect. Causality is a creature of this external contingency. Furthermore, given Rāzī's categorical denial that knowledge of the cause leads to knowledge of the effect, there is no avenue for the metaphysician even to entertain the possibility that a systematic analysis of causal relations may reveal the nature of the agent.⁴⁴⁸ The essence, for Rāzī, is a closed book.

In this perspective the Rule of One becomes an irrelevant principle because the acts produced by the agent cannot be used to describe the essence in the first place. Any concern for preserving the unity of the agent—given its essential oneness—or for stipulating its plurality—given the procession of many acts—becomes a trivial point. The metaphysician is free to establish as many causal relations as necessary to account for the procession of effects from a given cause. This affords a high degree of freedom for him to stipulate new causal relations in light of ever-changing and newly discovered empirical or theoretical data. This flexibility is especially relevant in the case of celestial entities, which possess a lesser degree of composition and internal complexity than sublunary entities, but whose domain of existence exhibits a high degree of complexity, due to the sheer number of fixed stars and the various orbs the astronomer must posit in order to account for the irregularity of planetary motions. Rāzī argues that the rigid structure of causality imposed by

⁴⁴⁸ This possibility was already unlikely based on the restrictions imposed in the *Mabāḥith*, where Rāzī argues that certain entities, such as God, celestial intellects, and disembodied souls, can achieve knowledge of essences. His uncompromising stance in the *Mulakhkhaṣ* does not necessarily negate this looser restriction. He seems to have withheld from speculating on what transcendent entities *should* be capable of doing and focused instead on the well-attested limits of what most human beings can understand of reality.

the Rule of One would not be able to account for the kaleidoscopic complexity of the heavenly host. The precise character of celestial topography is always subject to debate by astronomers who are constantly revising their theories and observations. The limitations of the principle's explanatory force in the face of this extreme complexity and the ever-changing nature of empirical data are some of the major reasons behind his criticism.⁴⁴⁹

3.4. Doctrinal implications of denying the Rule of One: Intimations of a Rāzian cosmic system

I had previously argued that Rāzī saw the Rule of One as a principle that permeates the deeper structures of the Avicennian cosmic system, from the transcendent heights of Divine creation and the celestial host to the soul's governance of the corruptible body. In his works of *ḥikma*, Rāzī often proposes alternative cosmological doctrines to those that rely on the principle. In isolation, these doctrines do not seem to form a systematic perspective. However, when we gather together all the substantive philosophical doctrines that Rāzī was able to affirm in the wake of rejecting the Rule of One, can we claim that they amount to a distinct vision of the cosmic system, one that would rival that of his predecessor? We have seen that the epistemic implications of his criticism of this causal principle were quite radical and original; we can expect no less in their application to the domain of speculative cosmology.

A thorough discussion of Rāzī's cosmological doctrines would require us to examine his middle-career and late works. In fact, only in *al-Maṭālib al-ʿāliya*—his last work devoted to metaphysics—

⁴⁴⁹ Rāzī did not fail to mention this point in all his early *ḥikma* works (*Mabāḥiṭh* II, 533; *Mulakhkhaṣ* III, 549–50; *Khān'ūghlū* II, 1085; *Sharḥ al-Ishārāt* II, 497). This line of criticism began with Ghazālī and was further buttressed by Abū al-Barakāt al-Baghdādī (see Chapter 2.2). In Rāzī's commentary on chapters (*fiṣṣal*) 40–42 of *namaṭ* 6 of the *Ishārāt* (pp. 504–12), Rāzī hints at the necessity of constructing a different model of celestial and sublunary procession that does not rely on the triadic structure of emanation imposed by Avicenna's adherence to the Rule of One. This project, however, is fulfilled only in Rāzī's final *ḥikma* work, the *Maṭālib*. In the *Mabāḥiṭh* and *Mulakhkhaṣ*, Rāzī was simply content to replace the triadic structure of emanation with God's will and power (*Mabāḥiṭh* II, 535; *Mulakhkhaṣ* III, 552; *Khān'ūghlū* II, 1087).

does he developed a consistent and complete picture of the universe.⁴⁵⁰ Nevertheless, the seeds of this project were already established in his early philosophical works. I will discuss some of Rāzī's early cosmological doctrines, especially those that he upholds precisely because they do not adhere to the Rule of One. Three doctrines will suffice for an outline of the basic features of Rāzī's cosmic system, each representing the three domains of reality: the Divine, the celestial, and the sublunary.

The most obvious and oft-cited implication of denying the Rule of One is that it removes several restrictions to God's agency. The first restriction is that God may directly create only a single entity, i.e., the First Intellect, for fear of compromising His absolute Oneness. The second is the subsequent implication that God creates everything else by the mediation of celestial entities. These restrictions contradict Ash'arite theological principles, and it is tempting to think that Rāzī rejected the Rule of One for precisely this reason. Indeed, in both his *kalām* and *ḥikma* works, he repeatedly drew the connection between denying the Rule of One and affirming Divine omnipotence. When discussing the topic of "the procession of acts from God" (*ṣūdūr al-af'āl min Allāh*) in the *Mabāḥith* and the *Mulakkhkhaṣ*, for instance, he argues that the only reason why the *falāsifa* had to affirm the theory of triadic emanation and the Active Intellect was because they had to adhere to the theory of celestial mediation, which, in turn, is necessitated by Rule of One. Since this principle is false, we can hold instead that God—a voluntary and omnipotent agent (*fā'il mukhtār wa-qādir*)—is responsible for celestial and sublunary phenomena.⁴⁵¹ In this argument, the Rule is treated as an obstruction separating Avicenna's emanationism from an occasionalist account of the world where all events are dependent directly on Divine will.

⁴⁵⁰ See vol. VII, which is devoted to the nature of celestial and sublunary spirits, and vol. VIII (pp. 137–196), where he discusses the nature of magic (*siḥr*) and celestial mediation.

⁴⁵¹ "The truth in my view is that nothing prevents [the possibility that] all contingent things depend on God Most High" (*Mabāḥith* II, 535; *Mulakkhkhaṣ* III, 552; Khān'ūghlū II, 1087). The discussion here concerns the nature of God's act. See also *Mabāḥith* II, 462–63; *Mulakkhkhaṣ* III, 397; Khān'ūghlū II, 1050. Rāzī also highlights this theological implication in the *Maṭālib*, when discussing the nature of celestial entities: vol. VII, 344, 375, 378, 379, 391–92.

Focusing solely on this theological motivation, however, would be a partial reading of what is a nuanced and subtle perspective. For one, Rāzī does not claim that God must be the only causal principle at work in the natural world; rather he says that God *can* be the only source of efficient causality: “nothing prevents (*lā māniʿa*) [us] from [holding that] all contingent things depend on God Most High.” Furthermore, at the end of this discussion, Rāzī proposes an alternative system to Avicenna’s triadic structure of celestial mediation. He argues that God can govern the created order in two distinct but complementary ways.⁴⁵² The first is one where He acts as the sole and immediate cause for the procession of some effect. The second is one that requires the formation of preparatory causes, before the effect in question is existentiated by God. Rāzī describes the Divine role in this second model as providing a “general” procession (*ʿāmm al-fayḍ*). He writes:

If you do not affirm [the Rule of One], then there is nothing to prevent you from affirming that the principle [of the created order] is the Necessary Being by means of a general emanation. Each celestial orb has its own unique quiddity, distinct from the quiddities of other orbs, each one of them being disposed enacting a specific motion. Thus, the general emanation from the Creator is specified based on the distinct properties of the receiver.⁴⁵³

The two models of creation seem to reflect a hierarchical structure. Causal events that require preparatory factors are sublunary phenomena and corporeal entities in general, including celestial orbs. We know this because Rāzī offers the example of celestial orbs and their motions. As for those that are the direct object of God’s act, these seem to refer to celestial intellects. They may also refer to miracles, which are events that occur outside the customary course of nature. However, since Rāzī gives us neither an example nor a criterion, we cannot reconstruct the theory with any certainty. Furthermore, this division between events that are enacted directly by Divine power and

⁴⁵² *Mabāḥiṭh* II, 535; *Mulakhkhaṣ* III, 552; *Khānʿūghlū* II, 1087.

⁴⁵³ *Mabāḥiṭh* II, 462–63.

those that are enacted indirectly is not a strict metaphysical division; it is merely a conventional one. Divine will can theoretically intervene in any event of the created order.

As for the claim that God provides a general emanation that works in tandem with physical processes such as celestial motion, Rāzī does not provide any proofs that would render it an authoritative doctrine of his early *ḥikma* works.⁴⁵⁴ He simply asserted it as a possible alternative to Avicenna's theory of the Active Intellect. Thus, the theological implications of denying the Rule of One is simply this: celestial mediation is no longer a metaphysical necessity, as was the case in Avicenna's system. Nothing here prevents the metaphysician from proposing an integrated cosmological theory of celestial and sublunary phenomena.

Let us turn to the issue of celestial mediation. In the *Mabāḥith*, Rāzī does not offer anything beyond the proposal that Divine acts may work in tandem with natural processes, and that this may be consistent with the theological doctrine of Divine omnipotence. When discussing the issue of God's governance of the world, Rāzī is content to enumerate and criticize aspects of Avicenna's theory of creation, such as the productive intellection (*ta'āqqul fā'ilī*) of God, the triadic structure of emanation, the theory of the Active Intellect, and his account celestial dynamics.⁴⁵⁵ The only work from Rāzī's early period that hints at a serious perspective on the cosmic system is the infamous work on astrology and astral magic, *al-Sirr al-maktūm fī mukhāṭabāt al-nujūm*.⁴⁵⁶ This work was most

⁴⁵⁴ Rāzī offered a systematic analysis of celestial mediation only in his final work on metaphysics, the *Maṭālib*, especially in volume VII, which is a comprehensive examination of soul and intellect, and volume VIII (pp. 137–196), which discusses the nature of magic.

⁴⁵⁵ *Mabāḥith* II, 515–518, 529–37.

⁴⁵⁶ For the historical testimonies attesting Rāzī's authorship in various biographical dictionaries and bibliographies, as well as the controversy surrounding it, see Muḥammad Ṣāliḥ Zarkān, *Fakhr al-Dīn al-Rāzī: wa-ārā'uhu al-kalāmīyya wa-l-falsafīyya* (Beirut: Dār al-Fikr li-l-Tibā'a wa-l-Nashr wa-l-Tawzī', 1963), 109–11; and Tāha Jābir al-'Alwānī, *al-Imām Fakhr al-Dīn al-Rāzī wa-muṣannifātuhu* (Cairo: Dār al-Salām li-l-Tibā'a wa-l-Nashr, 2010), 211–14. Rāzī's engagement with astrology and astral magic was a serious preoccupation, especially of his early and middle period during his association with the Khwarazmshāhs. No less than six works on the topics are attributed to him: *al-Sirr al-maktūm*, *al-Ikhtiyārāt al-'Alā'iyya fī al-a'lām al-samāwiyya*, *Muntakhab daraj Tanklūshā*, *Jadāwal bi-arwāḥ li-kulli daraja min darajāt al-*

likely written during Rāzī's youth before the *Mulakhkhaṣ* and *Sharḥ al-Ishārāt*. We know this because in these two works Rāzī advises the readers to directly consult the *Sirr* for an extended discussion of the topics of magic (*siḥr*) and talismans (*tilismāt*).⁴⁵⁷ The greater part of the work is doxographical, in that it reports on the transmitted knowledge of astrologers and the high magical tradition, especially those preserved in the Arabic Hermetica and other sources of the occult sciences, including texts associated with the star-worshipping religion of the so-called Sabians of Ḥarrān.⁴⁵⁸ These sources include such works as *Sirr al-khalīqa* (*Secret of Creation*) by pseudo-Apollonius of Tyana (Balīnūs), *Kitāb al-Filāḥa al-nabaṭiyya* (*Nabatean Agriculture*) of Ibn Waḥshiyya, and the various pseudo-Aristotelian works that expound Hermetic wisdom, such as the famous *Sirr al-asrār* (translated into Latin as *Secretum secretorum*), *K. Ustuwḥātās*, *K. Madṭīs*, and *K. Iṣṭamātīs*, the last three of which are among the sources of the famous Latin magical text of the 12th or 13th century *Liber Antimaquis*. Rāzī also engages with the standard astrological authorities, such as Ptolemy, Thābit ibn Qurrā al-Ḥarrānī (211/826), and Abū Ma'shar al-Balkhī (d. ca. 272/886).

In the *Sirr*, Rāzī mostly reports and systematizes the content of these sources. However, he also intervenes in some sections to modify or strengthen certain doctrines, determine authoritative positions, and even integrate metaphysical insights from his *ḥikma* works into the body of

ḥayawānāt wa-ʾatharuhā wa-ahammīyyatuhā, al-Mulakhkhaṣ fī al-tanjīm. Of these works only the first two are extant; see Altaş, "Fahreddin er-Rāzī'nin Eserlerinin Kronolojisi." We must also include his inquiry into the nature of magic (*siḥr*) in vol. VIII of the *Maṭālib*, 137–196.

⁴⁵⁷ *Mulakhkhaṣ* III, 442; Khān'ūghlū II, 1011; *Sharḥ al-Ishārāt* II, *namaṭ* 10.30, 664. Rāzī also refers to the *Sirr* in a late work, the commentary on Avicenna's *Sharḥ Uyūn al-ḥikma*, 193–94. For the chronology of the *Sirr* relative to the *Mabāḥith* and *Mulakhkhaṣ*, see Eşref Altaş, "Fahreddin er-Rāzī'nin Eserlerinin Kronolojisi," in *İslām Düşüncesinin Dönüşüm Çağında Fahreddin er-Râzî*, ed. Ömer Türker (Istanbul: İSAM Yayınları, 2013), 106–07.

⁴⁵⁸ Charles Burnett, "Arabic, Greek, and Latin Works on Astrological Magic Attributed to Aristotle," in *Pseudo-Aristotle in the Middle Ages: The Theology and Other Texts*, eds. Jill Kraye, W. F. Ryan, and C. B. Schmitt (London: The Warburg Institute, University of London, 1986), 84–96; "Aristoteles/Hermes Liber Antimaquis," in *Hermetis Trismegisti: Astrologica et Divinatoria*, ed. Paolo Lucentini and Vittoria Perrone Compagni (Turnhout: Brepols, 2001), 175–221. See also Kevin van Bladel, *The Arabic Hermes: From Pagan Sage to Prophet of Science* (Oxford; New York: Oxford University Press, 2009), 92, 121–135; David Pingree "The Ṣābiāns of Ḥarrān and the Classical Tradition," *International Journal of the Classical Tradition* 9, no. 1 (2002): 8–35; and Michel Tardieu, "Ṣābiens Coraniques et 'Ṣābiens' de Ḥarrān," *Journal Asiatique* 274 (1986): 1–44. On Rāzī's adoption of Hermetic cosmological doctrines see Noble, *Philosophising the Occult* and "Sabian Astral Magic as Soteriology"; and Obuchi, "Fakhr al-Dīn al-Rāzī and Occult Science as Philosophy."

astrological teachings. This is especially evident in the theoretical portion of the work. As Michael-Sebastian Noble has argued, Rāzī contributed to the science of astrology and astral magic not as an outsider concerned only with reporting or refuting, but as an insider.⁴⁵⁹ While acknowledging that many aspects of astrological knowledge are not established by demonstration (*burhān*), Rāzī repeatedly defended astrology as a legitimate science.⁴⁶⁰ He argues, for instance, that astrological principles derive from observations that have been accumulated by numerous scholars over ages.⁴⁶¹ The value of this “experiential” knowledge (*tajriba*) progressively sharpens with new generations of astrologers. In addition to the systematic observation of a sample (*tajriba al-ba‘d*) of celestial phenomena, the teachings of astrology are also often based on revelation (*wahy*) and divine inspirations (*ilhāmāt*). These further solidify its status as a reliable source of knowledge. Rāzī, however, is well-aware of the inconsistency of astrological readings and various other problems associated with the practice of the science. Astrology is not inviolable; rather it is a science that can be improved over time.

As for the high magical tradition, which involves the invocation of celestial spirits, ritual ceremonies, and the construction of talismans, Rāzī also acknowledges that many of its sources contain mistakes and are often misused by lesser practitioners. Nonetheless, they are also

⁴⁵⁹ Michael-Sebastian Noble, *Philosophizing the Occult: Avicennan Psychology and “The Hidden Secret” of Fakhr al-Dīn al-Rāzī* (De Gruyter, 2020), 5, 26, 229–49, 239–45, 250–58, 226–28, 128, 133–34, 213, 250, 253. Cf. M. Fariduddin Attar, “Review: Michael-Sebastian Noble. *Philosophizing the Occult: Avicennan Psychology and ‘The Hidden Secret’ of Fakhr al-Dīn al-Rāzī*,” *Nazariyat* 7, no. 2 (2021): 253–59. The following scholarship holds that Rāzī’s intention was only to report on the astrological and astral magic traditions to refute them and uphold Ash‘arite doctrine: Sa‘īd Fūda, “Introduction,” 47–86; ‘Uthmān al-Nāblusī, *Mawqif al-imām Fakhr al-Dīn al-Rāzī min al-sihr wa-da‘wat al-kawākib*.

⁴⁶⁰ *Sirr*, 9 line 10–11 line 16; MS Paris: BnF Arabe 2645, f.11r line 10–f.15r; MS Berlin: Staatsbibliothek Petermann I 207, f.6r line 12–f.8v; MS Istanbul: Aya Sofya 2796, f.8v line 14–f.11r.

⁴⁶¹ “There is no doubt that [the positions of the ancient astrologers] produce only preponderating opinion (*al-ẓann al-ghālib*). However, when some of [their positions] are combined with others, the first may corroborate what the other has proven by way of assured opinion (*ta’akkud al-ẓann*). This [combination of proof and corroboration leads to a] strong [evidentiary status]. If [this process is] repeated by [the practice of] methodical experience many times over (*al-tajārib al-kathīra*) in previous ages (*min al-zamān al-aqdam wa-l-‘ahd*), [and the judgement] regarding these [positions] remains true (*iltasaqat ilayha*); and if the generality of the practitioners (*al-umam*) are [also] inclined [to accept] this arrangement (*tartīb*), then [we would obtain] a conviction that approximates certainty regarding these positions” (*Sirr*, 67 line 4–6; MS Paris: BnF Arabe 2645, f.114r line 7; MS Berlin: Staatsbibliothek Petermann I 207, f.52v, line 12; MS Istanbul: Aya Sofya 2796, f.68r, line 4).

repositories of human knowledge of the natural world that cannot be pre-emptively rejected. To the contrary, contributing to a deeper understanding of the art (*al-ṣināʿa*) is a worthwhile endeavour.⁴⁶² Mastering this knowledge is notoriously difficult, since it requires precise knowledge of the natural world and physical laws, from the composition and virtues of plants and minerals to the movement and influences of the celestial bodies. The *Sirr* can be viewed as Rāzī's attempt to systematize the knowledge of astral magical operations transmitted in authoritative sources into a single comprehensive tome, as it adjudicates the correct theoretical basis of occult phenomena and prescribes the correct procedure by which these may be successfully exploited by a practitioner of the art.

What renders this adjudication a uniquely Rāzian contribution to the science of astrology and astral magic, however, is the rejection of certain beliefs found in occult texts that contradict Ashʿarite theological principles, such as the worship of celestial entities as deities, the eternity of the world, and the notion of God as a necessitating agent (*al-fāʿil al-mūjib*) rather than a willing agent

⁴⁶² Rāzī quotes the Babylonian sage Tanklūshā (Teucros) in defending astral magic, who argued that the misuse of the science by lesser practitioners should not imply the falsity of the science itself: “The ignorant ones are those who, having seen that some practitioners of this art are not prospering on account of it, infer that the art must therefore be false. He [Tanklūshā] said that this is incorrect. For we have mentioned that it is necessary to evaluate whether this in itself indicates fabrication (*al-adillā ʾā ilā al-ṣiḡha*) or not. For two human beings (*insānāni*) may endeavor to learn a single trade (*al-ḥirfa al-wāḥida*), yet the one proves capable of attaining its optimal advantages in a short time, while the other attains only scant benefits, and this after an extended period [of learning] and with much toil. If this is the case for a lowly trade, then is even more relevant in regard to this art, which is the most noble of arts” (*Sirr*, 13 line 18–line 22). Note that the text of the lithograph version quoted here contains three mistakes. What should have been read as “*insānāni*,” “*al-adillā*,” and “*al-ḥirfa*,” is transmitted as *insānan*, *al-arā* and *al-kharqa*, respectively. The correct reading is attested in the following witnesses: MS Paris: BnF Arabe 2645, f.18r line 17–f.18v line 9; MS Berlin: Staatsbibliothek Preussischer Kulturbesitz P 207, f.9r line 14–line 19. The same errors (except *insānāni*) can be found in MS Istanbul: Aya Sofya 2796, f.13v, line 6–line 15). On Tanklūshā, see Ullman, *Die Natur- und Geheimwissenschaften im Islam*, 278–79, 375, 368. In the Arabic world, Tanklūshā or Teucros is known for his astrological nativities; indeed, Rāzī quotes him above in the context of discussing the nature and origins of the human soul. See Abū al-Faraj Muḥammad al-Nadīm, *The Fihrist of al-Nadīm: A Tenth-Century Survey of Muslim Culture*, trans. Bayard Dodge, 2 vols. (New York and London: Columbia University Press, 1970), 573, 643. A commentary on Tanklūshā's work on the degrees of stars and planets, most likely for nativities, is ascribed to Fakhr al-Dīn, entitled *Muntakhab daraj Tanklūshā*, as attested by al-Qifṭī, Ibn Abī Uṣaybīʿa, and al-Ṣafadī; see Zarkān, *Fakhr al-Dīn al-Rāzī: wa-ʾarāʾuhu al-kalāmīyya wa-l-falsafīyya*, 111; and al-ʿAlwānī, *al-Imām Fakhr al-Dīn al-Rāzī wa-muṣannafātuhi*, 211.

(*al-fāʿil al-mukhtār*).⁴⁶³ However, Rāzī offers these criticism not to refute astrology and astral magic as working disciplines, but to establish the correct metaphysical basis for occult phenomena. For instance, practitioners of the art must leave behind the polytheistic doctrines of the transmitted sources and recognize that the celestial entities possess influence over natural phenomena only by God's permission. Thus, while these entities possess some measure of Divine power and are deserving of veneration, it is only the one God who is deserving of worship. Rāzī states:

[The Sabians] claim that these stars are the proximate deities of this world. Thus, it was certain that the people of this lower world ought to preoccupy themselves with the worship and invocation of [the stars] by performing suffumigation and ritual sacrifice. Since [the Sabians] knew that these stars are hidden from sight, they took graven images and idols in their place. They preoccupied themselves with glorifying these stars. This is the religion of image-worshipping (*ʿibādat al-awthān*). Know that this perspective (*mashhad*) is false. However, it is impossible to falsify it by the reports (*akhbār*) of the prophets alone, may peace be upon them. This is because the proof of prophecy is based on miracles that God performs. However, this premiss hinges on the stars' governance of the world. Thus, if we were to reject this perspective through the statement of the prophets, peace be upon them, we would be appealing to circular reasoning, and this is incorrect. In fact, this perspective is rejected only with what I had established by [rational] proof, which is that the world is contingent (*ḥādith*) [rather than eternal]. As a result, the causal principle [of the contingent world] must be that which is in possession of (autonomous) power (*qādir*). If it possesses this power, then it is necessary that it exerts power over every contingent thing. If it exerts power over all

⁴⁶³ For his criticism of the eternity of the world, see *Sirr*, 19 line 9–20 line 15; MS Paris: BnF Arabe 2645, f.28r line 8–f.30r line 2; MS Berlin: Staatsbibliothek Petermann I 207, f.13v line 1–f.14r line 20; MS Istanbul: Aya Sofya 2796, f.19r, line 15–f.20v line 9. For his criticism of the doctrine of the necessitating agent, see *Sirr*, 110 line 10–line 19; MS Paris: BnF Arabe 2645, f.184r line 5–f.184v line 12; MS Berlin: Staatsbibliothek Petermann I 207, f.89r line 29–f.89v line 12.

contingent things, then it is necessary that it is the creator of all contingent things. Based on [these considerations], the status of the stars as objects of worship and their status as [independent] governors of this world are falsified. However, if [the Sabians] believe that the movement of the stars and their conjunctions are causes for the origination of the contingent things of this world by way of habit (*al-majrā al-‘āda*), then this is not unbelief, nor is it misguided.⁴⁶⁴

Rāzī’s intent in this passage is to divorce the rituals and practice of astral magic from the religious doctrine of deifying the celestial entities. Exploiting physical principles to perform magical operations does not inherently depend on the worship of the stars.

The same reasoning can be found in Rāzī’s discussion of the eternity of the world and God’s status as a necessitating agent. In the theoretical portion of the *Sirr*, he offers an extended criticism of these doctrines directed against the philosophers (*falāsifa*) and the Sabians who embrace their metaphysical principles.⁴⁶⁵ This criticism, however, is not directed against all Sabians and

⁴⁶⁴ *Sirr*, 113 line 17–line 26; MS Paris: BnF Arabe 2645, f.189r line 12–f.190r line 4; MS Berlin: Staatsbibliothek Peterman I 207, f.92r line 23–f.92v line 13. From this passage we see that Rāzī attributes the occurrence of miracles to the mediation of celestial phenomena. This is the reason why refuting polytheism by relying on prophetic reports—whose authority is guaranteed by miracles—is circular. Criticizing polytheism relies solely on rational proofs. Rāzī offers an expanded and more systematic analysis of “polytheism” in the *Maṭālib* VII, 387–91.

⁴⁶⁵ This refutation appears in *faṣl* 6 of *maqāla* 1 of the *Sirr* (pg. 19 line 9–20 line 15; MS Paris: BnF Arabe 2645, f.28r line 8–f.30r line 2; MS Berlin: Staatsbibliothek Peterman I 207, f.13v line 1–f.14r line 20; MS Istanbul: Aya Sofya 2796, f.19r, line 15–f.20v line 9). The heading of the discussion reads: “On making clear the weakness of that which we have related of these Philosophers (*falāsifa*) and Sabians and explaining the soundness (*ṣiḥḥā*) of the religion of Islam.” Saʿīd Fūda relies on this section to prove that Rāzī’s intention in writing the *Sirr* was simply to refute astrology and astral magic and that he is not committed to any of the doctrines expounded in the work. See Saʿīd Fūda, “Introduction,” in *Nihāyat al-ʿuqūl fī dirāyat al-uṣūl*, vol. 1, 4 vols. (Beirut: Dār al-Dhakhāʾin, 2014), 58–59. He also quotes Rāzī’s concluding statement to the refutation, which seems to suggest a decisive and thorough dismissal: “it is [now] established that the world is originated, and every originated thing has a beginning. If the root of the argument is rejected as false, then the branches are also rejected as false; and with God is guidance” (emphasis mine). The implication for Fūda is that we should be reading the *Sirr* in the same manner we would be reading Ghazālī’s *Tahāfut* and *Maqāṣid al-falāsifa* (ibid, 49). However, as we see in the many translated passages of the *Sirr* provided in this chapter, Rāzī’s aim in the work is far more complex. It is characterized by the overarching outlook that the discipline of astral magic and astrology are legitimate repositories of knowledge of the natural world that can be subject to criticism, elaboration, revision, reorganization, etc. Note, however, that Rāzī’s qualified refutation of Sabian knowledge of celestial mediation concerns aspects of their teachings that are theologically problematic. His qualified acceptance of the Sabian worldview concerns aspects of their theoretical doctrines that are *not* theologically problematic. However, the issue of actually *practicing* Sabian ritual magic, whether this is licit according to Islamic law or not, are issues I have set aside in this discussion.

practitioners of astral magic. Rāzī writes that among the adherents of the Sabian religion are those who embrace the contingency of the world, God's status as a voluntary agent, and His sovereignty over all natural phenomena. These practitioners of astral magic are exempted from his criticism.⁴⁶⁶ Thus, we can envision an astrological system that is not founded on the metaphysics of the *falāsifa*. This system would adopt a theory of celestial mediation that does not assume the eternity of the world and whose underlying theory of causation is not based on inherent natures, but on the accidental regularity guaranteed by Divine permission.

Another metaphysical doctrine that produces a uniquely *falsafa* astrological theory is the Rule of One. In a passage in the *Sirr*, Rāzī compares two astrological systems. The first is based purely on speculative reason (*ʿuqūl*) and relies on the Rule of One as a necessary metaphysical principle. The other is based purely on Divine revelations (*sharāʾiʿ*) and does *not* rely on the Rule of One as a necessary metaphysical principle. Despite this, Rāzī argues that the two systems basically propose the same model of celestial-sublunary correspondences. Rāzī writes:

Know that rational speculations and divine revelations (*al-ʿuqūl wa-l-sharāʾiʿ*) both affirm (*mutābiqa*) that the governors of all classes of originated entities of this world are the celestial spirits (*arwāḥ falakiyya*), each of which [governs] a specific type [of existent]. These spirits are called in the language of the Law as “Angels.” We [may] affirm this [doctrine] solely through rational consideration (*maʿqūl*). For it was established by rational proofs (*al-dalāʾil al-ʿaqliyya*) that the governor of the lower world is the spirits of the higher world, and that the single

Currently, two monographs discuss the legal aspect of the issue: Saʿīd Fūda's study quoted above and ʿUthmān al-Nābluṣī, *Mawqif al-imām Fakhr al-Dīn al-Rāzī min al-siḥr wa-daʿwat al-kawākib wa-radd takharruṣāt al-tayyimiyyah*.

⁴⁶⁶ *Sirr*, 110 line 10–line 19; MS Paris: BnF Arabe 2645, f.184r line 5–f.184v line 12; MS Berlin: Staatsbibliothek Preussischer Kulturbesitz, P 207, f.89r line 29–f.89v line 12. Here, Rāzī describes three groups of Sabian religion. The first holds that celestial entities are eternal and necessary existents in themselves; the second holds that celestial entities are contingent entities that depend upon a Necessary Being, whose acts of causation are comparable to the light radiated by the Sun; the third holds that God is a voluntary agent who assigned specific powers to different celestial entities. Rāzī might have considered this third group as a sect of Sabian religion that remained loyal to the primordial faith.

principle cannot be the cause of many differentiated effects. Thus, it is necessary that each [species of] effect depend on a single celestial soul. [Such is the case] according to those who hold that only one proceeds from the one, and this is evident. As for those who do *not* affirm this [principle], there is [still] no doubt that a single principle cannot be the source of many actions that are contraries, [e.g.,] of what is beneficial and malefic, of the male and female, and of the hot and cold. However, we affirm [this restriction] (*qulnā bi-dhālika al-amr*) only by way of the Divine Law. For God has directed our attention to it, as revealed in the Quran: “By the scatterers as they scatter; by those that bear a burden; by those that course with ease; and by those that apportion the Command,” and “By those that wrest violently; by those that draw out quickly.”⁴⁶⁷ He also says [in the Quran], “By those ranged in ranks,” which refer the angels residing in the sphere of Saturn (*falak al-zuhal*), fixing and delaying its motion; as for [the next verse] “the drivers driving,” these are angels of the sphere of Mars.⁴⁶⁸ [God] combined these two [sets of angels together] because they are responsible for good and beauty (*li-kawnihima taḥsīn*). As for [the next verse] “the reciters of a reminder,” these are the angels of the sphere of Jupiter.⁴⁶⁹ [...] ⁴⁷⁰ If this is established, [we find that there is] agreement between the prophets (*anbiyāʾ*)—upon whom be peace—and the philosophers (*ḥukamāʾ*)—upon whom be God’s contentment. Furthermore, each one of [the celestial spirits or angels] have a specific name. This allows human beings to invoke them by their names, ask assistance from them, and entreat them (*taḍarraʿa*). [Human beings] are ordered under the names of their governors (*ruʾūsihā*) and masters (*mustawlīna*), who love (*yuhibbu*) [them] and perform that which [these human beings] bid (*iltamasa*) them to do. The practitioners of

⁴⁶⁷ These are respectively al-Dhāriyyāt (the Scatters): 1–4 and al-Nāziʾāt (the Wrestlers): 1–2.

⁴⁶⁸ Al-Ṣaffāt (Those Ranged in Ranks): 1–2.

⁴⁶⁹ Al-Ṣaffāt (Those Ranged in Ranks): 3.

⁴⁷⁰ Rāzī offers additional references in the Quran to the titles of other angels, the heavenly body in which they reside, and the various cosmic functions and Divine errands they fulfill.

magic (*aṣḥāb al-sihr*) offer an exhaustive account [of these invocations] when explaining this kind of magic.⁴⁷¹

In this passage Rāzī makes several crucial claims. The first is that celestial mediation is acceptable to both independent reason and divine law. The difference between them is a matter of terminology. The second is that astrological systems may differ depending on the causal principles underlying them. However, he finds that there is a fundamental consistency between a system that is based on pure reason, represented here by adherence to the Rule of One, and a system that is based only on revealed knowledge, represented here by the Quran. This consistency concerns the doctrine that every species of effect is governed by a unique celestial principle. Those who hold the Rule of One will claim that this stipulation is a metaphysical necessity inherent in nature; while those who base their astrological system on revealed knowledge will interpret it as a function of Divine habit. Both perspectives converge in proposing an integrated cosmic system based on astrological principles.⁴⁷² Nevertheless, we must keep in mind that this separation of a purely speculative system from a purely revealed system serves only to illustrate the basic agreement between these two sources of knowledge when considered in isolation. As Rāzī argues in the *Sirr*, reliable astrological inquiries make use of both sources in a complementary manner.⁴⁷³

We must keep in mind, however, that what Rāzī outlines as the philosopher's model of celestial mediation is what an astrological system *can* look like had it adhered to the Rule of One. In the model presented in the passage above, the Rule is taken to imply the following, that “from one entity only a single entity may proceed.” This, however, produces a highly rigid structure of

⁴⁷¹ *Sirr*, 109 line 23–110 line 9; MS Paris: BnF Arabe 2645, f.183r line 2–f.183r line 4; MS Berlin: Staatsbibliothek Petermann I 207, f.88v line 19–f.89r line 21.

⁴⁷² Rāzī also affirms this fundamental agreement between reason and divine law regarding the legitimacy of the astrological cosmic system in the *Maṭālib* VII, 330–347.

⁴⁷³ *Sirr*, 10 line 27–11 line 4; MS Paris: BnF Arabe 2645, f.14r line 2–line 16; MS Berlin: Staatsbibliothek Petermann I 207, f.7r line 21–f.7v line 6; MS Istanbul: Aya Sofya 2796, f.10v, line 8–line 17).

causation, one that does not reflect Avicenna's original conception. How does multiplicity occur at all if "the one" in the original formula is taken as referring to "a single individual"? In this case only a single vertical line of causation would ensue from the Divine principle.

Rather, as we have seen in chapters 1.1 and 2.2, the Rule as conceived by Avicenna should be glossed as "from a single causal factor inherent in the agent, only a single effect may proceed." Thus, it is theoretically possible that more than a single effect proceed from a single entity, as long as this entity is not one in all respects but exhibits some aspect of multiplicity. This interpretation of the Rule allows multiplicity to proceed from the highest levels of emanation, which in Avicenna's theory is triadic in structure. Indeed, there is only one instance of a single entity being restricted to the production of a single effect, this being the First Cause.

Thus, we ought to read the passage above as Rāzī's attempt to conceive of a *hypothetical* astrological system that happens to adhere to the metaphysical principles of the *falāsifa*—the Rule of One being a paradigmatic example thereof. It is also an attempt to show that this hypothetical system may still be consistent with one that is intimated by Divine revelation. Rāzī's intention was *not* to claim that applying the Rule to a theory of celestial mediation necessarily leads to an astrological cosmos. Thus, Rāzī's hypothetical *falsafa*-based astrology seems to be a perfunctory and hasty construction, as it is not clear how the Rule of One—which is interpreted in the rigid fashion—can account for the multiplicity of celestial entities in the first place, useful though it might be in accounting for the procession of sublunary forms. Thus, the overriding intent of the passage seems to be rhetorical and conciliatory. He wanted to show that astrological teachings can map onto different metaphysical blueprints, whether this be those of the philosophers or those of the prophets.

What is striking about his thought here is that instead of trying to adjust a religious doctrine on angels to fit into an important philosophical idea on causation (i.e., the Rule of One), Rāzī is

aggressively modifying that philosophical idea to fit into the mold of an astrological theory that is consistent with Quranic angelology.⁴⁷⁴ Indeed, when we combine this passage with his defence of astrology and astral magic as legitimate disciplines, it is clear that he accepts the viability of key astrological principles, namely, (1) that sublunary phenomena are governed by celestial principles, (2) that these celestial-sublunary correspondences occur regularly—*via* a high-functioning occasionalism—and can therefore be regarded as expressing a natural “law,” and (3) that human beings can gain knowledge of these correspondences and systematize them into different disciplines of knowledge, such as astrology and astral magic.⁴⁷⁵ Since these disciplines are not inherently dependant on metaphysical doctrines or religious beliefs that contradict the tenets of revelation, we can uphold their insights regarding the natural world. The only relevant criterion in Rāzī’s perspective is whether their theories present a reliable and defensible picture of the natural world.

Rāzī’s adoption of astrological principles is a difficult issue to discuss, especially when we limit ourselves to his early *ḥikma* works. Consulting the *Sirr* has allowed us to be more precise and definitive regarding Rāzī’s doctrinal commitments. However, this text is difficult to interpret since it is interlaced with doxography, philosophical inquiry, and heresiology. A more comprehensive and in-depth study would require us to also consider his later works, such as *al-Maṭālib al-ʿāliya*, especially in volumes VII and VIII, where he systematically deals with the Sabian worldview as a source for cosmological speculation.

⁴⁷⁴ Rāzī’s appeal to Quranic authority in the *Sirr* to substantiate celestial mediation is not an exceptional approach. He does this in the *Maṭālib* when discussing the same issue, see vol. VII, 387–88. The verses quoted here are al-Nabāʾ: 38, al-Zamar: 75.

⁴⁷⁵ We have already discussed at length the passages in the *Sirr* where Rāzī defended these principles. In a late work, *Sharḥ ʿUyūn al-ḥikma*, Rāzī directs the readers to *al-Sirr al-maktūm* three times for a more complete discussion on the various types of effects that certain celestial entities exert on the sublunary realm (pg. 193 f). In this section, Rāzī is commenting on Avicenna’s statement that the planets and stars exert influence over the earth, the prime examples of which are the Sun and the Moon.

The final doctrinal implication of the Rule of One concerns the nature of the soul. In the psychology section of the *Mabāḥith* and *Mulakhkhaṣ* Rāzī criticizes Avicenna's view that the soul performs its activities through various corporeal faculties (*al-quwā al-jismāniyyā*).⁴⁷⁶ The theory of psychic faculties is founded on the principle of faculty differentiation, which holds that for every species of psychic action a distinct faculty (*quwwa*) must be posited to serve as its principle.⁴⁷⁷ Following Abū al-Barakāt, Rāzī holds that this premiss derives from Avicenna's adherence to the Rule of One.⁴⁷⁸ In their view, Avicenna needed to introduce this principle because the human soul cannot function as the immediate source of activities that involve the body, as this would compromise its status as an abstract (*mujarrada*) and simple entity.⁴⁷⁹ This concern is especially pertinent in the case of perceiving *sensibilia* since for Avicenna perception consists in the realization (*ḥuṣūl*) of the impression (*inṭibāʿ* or *irtisām*) of forms in the perceiving substrate. If the soul directly perceives *sensibilia*, then the forms must have been impressed on it. However, this cannot be the case without subjecting the soul to internal division. As such, the locus of perception and consciousness must be delegated to other percipient substrates that may accept internal division. These are the faculties. Furthermore, given the Rule of One, each species of *sensibilia* requires a distinct faculty of perception. This leads to a proliferation of percipient faculties, not to speak of other faculties of the soul, such as the various capacities that enact different kinds of motion (*taḥrīk*).

⁴⁷⁶ *Mabāḥith* II, 251–57, 414–18.

⁴⁷⁷ As we have discussed at length in Chapter 2.2.

⁴⁷⁸ *Mabāḥith* II, 251–57 and 416; *Mulakhkhaṣ* III, 350–52 (Khān'ūghlū II, 950–51). As we have seen, the concept of faculty (*quwwa*) is synonymous with the concept of the causal *ḥaythiyyāt*. However, this overlap concerns a specific conception of *quwwa* as possibility (*imkān*), that is, as the “possibility” (*ṣiḥḥa*) for a certain species of action. This notion of *quwwa* is thoroughly conceptual. If we interpret the term as designating a function enacted by the essence, then Rāzī would accept its status as a real extramental attribute mediating the agent and its effects. In this model of the faculty, the metaphysician does not need to abide by the principle that a single faculty is responsible only for a single species of action.

⁴⁷⁹ *Mabāḥith* II, 254; *Mulakhkhaṣ* III, 350–52 (Khān'ūghlū II, 950–51). Rāzī's analysis of Avicenna's theory is extensive and shows that he has read the authoritative discussion on the matter, such as *K. al-Nafs* I.4–5, 33–51; V.7, 249–262; see *Mabāḥith* II, 251–57. The issue is complex and Rāzī's theory of psychic action is much more detailed. We are highlighting only aspects of his analysis that deal with the Rule of One.

For Rāzī this model of psychic action is unconvincing because Avicenna seems to have forced himself to accept two bitter conclusions. On the one hand, Avicenna cannot admit that the soul truly perceives *sensibilia qua* particulars. This is because perception is just the realization of some impression, and the impression of sensible forms in the soul would compromise its simplicity. On the other hand, he also cannot downplay the role of the corporeal faculties as true percipient agents since these are the substrate upon which sensible and imaginative forms are impressed, and perception consists in the very realization of these impressions. However, if the total experience of perception is distributed and consigned to disparate faculties in this manner (such as in the faculty of the common sense in the case of *sensibilia*, and the faculty of imagination for imaginative forms), and if our essence—our soul—cannot directly perceive these things without compromising its immaterial nature, how is it that we possess a unified and immediate experience thereof? Rāzī argues that the proliferation of these faculties compromises the unity of the soul's consciousness and introduces unnecessary complexity to the act of perception. This has resulted in a fragmented model of the soul. His solution, following Abū al-Barakāt, was to propose a new model of perception, one that does not depend on such mediating principles. Rather than defining knowledge as an epiphenomenon of the impression of *sensibilia* and *intelligibilia* on the substrate, both Rāzī and Abū al-Barakāt argue that it involves the unmediated presence (*ḥuḍūr*) of the object of knowledge to the perceiving subject. These objects of knowledge may be impressed or represented in certain percipient organs. However, the interface (*liqā'*) between the soul and this representation remains direct and immediate. In this model, perception is not an epiphenomenon of accidental change occurring to a percipient substrate, rather it is an intentional act directed towards the object of perception by a unified and sovereign consciousness that is soul.⁴⁸⁰

⁴⁸⁰ *Mabāḥith* II, 417–18; see also *Mulakhkhaṣ* III, 421–22 (Khān'ūghlū II, 999–1000).

Although Rāzī rejected the Avicennian conception of faculties to explain psychic action, he held that the physicist can still organize his analysis of soul in abstract terms by proposing, for instance, a taxonomy of psychic capacities based on the corporeal organs used or the various effects they enact. Nothing prevents the physicist from positing as many faculties that are necessary to differentiate, say, the activities uniquely possessed by plant-soul as distinct from animal-soul. However, in doing so, he does not need to posit a distinct faculty for every species of action, nor does he need to worry about the ontological implications of positing certain faculties, whether they directly or indirectly interact with the agent, whether they are confined to distinct corporeal organs that serve as their substrate, or whether they must abide by other restrictions imposed by the Rule of One.⁴⁸¹ This taxonomy may be as broad or as specific as necessary to accurately describe the agent in question based on the present state of research. Some of these faculties may arise from pure speculation or theoretical supposition, perhaps due to a lack of sample cases necessary for appropriate generalization, or the absence of hard empirical observation. However, when a certain evidentiary threshold has been fulfilled, the physicist may assert them as real accidents that are caused by the essence (*lawāzim thubūtiyya*). Unlike Avicenna's causal *ḥaythiyyāt* these concomitants do not reveal the nature of the soul. Rather, they are part of the concrete structure of a causal event that has taken place. Though the metaphysician may legitimately speculate on the reasons why *X* necessarily produces *A*, the resulting judgment remains just that—speculative.

Although gaining knowledge of the soul's concomitants is within the reach of the physicist, the conditions for determining whether some of them are real attributes as opposed to being merely conceptual attributes, are still quite strict. Rāzī uses this attributive framework of analysis to designate only the most basic and well-attested capacities of an entity, such as the power to perceive

⁴⁸¹ Rāzī suggests this model when refuting Avicenna's theory of faculty differentiation in *Mabāḥith* II, 251–57.

and to move (*al-idrāk wa-l-tahrīk*) on the part of soul, as well as features that distinguish certain entities from others of the same class, such as the capacity for rational thought and managing the animal body in the specific case of human souls.⁴⁸² In this framework, capacities that for Avicenna constitute the species (*muqawwimāt*) do not describe the inner reality of the substance in question, but must be conceived as necessary concomitants.

This attributive framework of inquiry was already at work in Rāzī's discussion of psychic action in both the *Mabāḥith* and *Mulakhkhaṣ*. His criticism of Avicenna's theory of faculty differentiation appears in chapter five of the first section of the psychology. The chapter is entitled, "On enumerating the different aspects of psychic action;" whereas the broader section is entitled, "On the universal principles of the soul."⁴⁸³ In the next section Rāzī enumerates the various faculties and types of soul. Although some of the subject headings in this section seem to be indistinguishable from Avicenna's in the *K. al-Nafs*, one question that Rāzī brings up repeatedly is whether a certain faculty can be conceived as a relational description (*wasf idāfi*), negative description (*wasf salbi*), or a real attribute (*ṣifa thubūtiyya*). This is particularly the case with respect to the faculty of perception, where Rāzī takes pains to show that it is a real accident.⁴⁸⁴ Furthermore, in the *Mulakhkhaṣ* Rāzī makes this perspective explicit by substituting the term *quwan* (faculties) with the terms *ṣifāt* (attribute) and *lawāzim* (concomitants) when announcing at the beginning of the psychology section of the work that he will discuss the various capacities of the soul.⁴⁸⁵ Thus, when

⁴⁸² "The human soul is common in being able to perceive universals and in being able to manage the body. However, it is possible that these things are concomitants (*al-lāzima*) of the substance of the soul (*li-jawhar al-nafs*) and are not constitutive (*muqawwima*) of it. To this extent, souls will differ in the perfection of their quiddity. They have in common the extrinsic necessary concomitants (*lawāzim khārijīyya*) in a similar way that the differentiae that are constitutive of the species of a single genus have this genus in common [as *per* Avicenna's theory]" (*Mabāḥith* II, 386). Rāzī affirms the same insight in *K. al-nafs wa-l-rūḥ wa-sharḥ quwāhumā*, 87. It also forms the basis of the claim, coming from Abū al-Barakāt, that human beings can be further classed into different species; they are not homogenous. See *Mabāḥith* II, 398; *Sirr*, 111 line 4–112 line 1 (MS Paris: BnF Arabe 2645, f.185v line 16–f.187v line 16; MS Berlin: Staatsbibliothek Petermann I 207, f.90r line 13–f.91r line 3); *Maṭālib* VII, 141–149, 149–159, and 263–269.

⁴⁸³ *Mabāḥith* II, 335–58.

⁴⁸⁴ *Mabāḥith* II, 365, 525. See also vol. I, 458–59.

⁴⁸⁵ *Mulakhkhaṣ* III, 249 (Khān'ūghlū II, 874–76).

reading Rāzī's discussion of the psychic faculties, we should keep in mind the *proviso* that none of these ascriptions should be taken as describing the inner nature of the soul in the manner suggested by Avicenna. Rather, they represent the provisional state of contemporary knowledge regarding the various attributes predicated of soul. The task of the physicist is to determine which among these attributes can be safely designated as real concomitants and which are conceptual. Producing this judgement requires a thorough investigation that considers the authoritative teachings of the transmitted tradition in light of independent empirical and theoretical considerations.⁴⁸⁶

The Rāzian approach of designating all the capacities of the soul as concomitants permits a more radical revision to Avicenna's psychology. Since we can ascribe many attributes to the essence of the human being without compromising its simplicity and immateriality, we can entertain a conception of humanity that is distinct from what Avicenna had proposed. According to Avicenna the terms "rational" and "animal" are special kinds of predicates because they constitute the species (*muqawwimāt*). Thus, the essence of the human being—the species—is homogenous. All members of the species share the ability to perceive universals and the ability to manage the body.⁴⁸⁷ Following Abū al-Barakāt, however, Rāzī argues against this doctrine based on the empirical observation that human beings are essentially differentiated.⁴⁸⁸ Certain traits of character are immutable, and their persistence cannot be explained by "accidental" features, such as the

⁴⁸⁶ On knowledge, see *Mabāḥiṭh* I, 437–59. On causality, see our discussion in the previous subchapter. On power, see *ibid*, 502–09, 368–73; *Mulakhkhaṣ* II, 321–26; Khān'ūghlū I, 517–22.

⁴⁸⁷ *K. al-Nafs* V.1, 204–08; V.3, 223–24

⁴⁸⁸ *Mabāḥiṭh* II, 398; *Sirr*, 111 line 4–112 line 1 (MS Paris: BnF Arabe 2645, f.185v line 16–f.187v line 16; MS Berlin: Staatsbibliothek Petermann I 207, f.90r line 13–f.91r line 3); *K. al-Nafs wa-l-rūḥ*, 85–88; *Maṭālib* VII, 141–59, and 263–269. In the *Sirr*, Rāzī argues that the heterogeneity of the human soul is one of the proofs for the validity of thaumaturgical powers in human beings. Certain types of souls are essentially predisposed to exerting their will on the natural course of events. This typological disposition is not a function of a strong and perfected material disposition, as in Avicenna's theory of prophecy and thaumaturgy. Rather, it is a function of the inherent nature of certain souls. Rāzī cites the Prophet Muhammad and his cousin 'Alī ibn Abī Ṭālib as examples of such exceptional souls; see *Sirr*, 12 line 24–13 line 17; MS Paris: BnF Arabe 2645, f.17r line 8–f.18r line 17; MS Berlin: Staatsbibliothek Petermann I 207, f.8v line 11–f.9r line 14; MS Istanbul: Aya Sofya 2796, f.12v, line 10–f.13v line 6). For Abū al-Barakāt's pioneering discussion, see *K. al-Mu'tabar* II.6, 379–88; II.6, 423–27.

variation of temperamental mixtures (i.e., the four humors of phlegm, black bile, yellow bile, and blood) or by social circumstances. Rather, these traits seem to be caused by a person's irreducible nature. Since in Rāzī's attributive framework of analysis, no certain knowledge about the nature of essences can be ascertained by the metaphysician, we may entertain the *possibility* that human beings are heterogenous in nature as long as adequate empirical evidence can be supplied. This is precisely what Abū al-Barakāt and Rāzī set out to do in their respective works.⁴⁸⁹ Using insights and observations from the science of medicine and physiognomy, they argue that certain traits of character are inherent in the individual and cannot be explained by the variation of temperamental mixtures.⁴⁹⁰ These enduring traits make up the baseline personality of an individual that distinguishes him from another person. Furthermore, these traits can be inferred from observable characteristics. Abū al-Barakāt points out, for instance, that intelligence and quick-wittedness remain in individuals who undergo temporary change in their humoral balance, like becoming hotter, colder, or drier than usual. Exposure to strong external stimuli does not seem to entail an automatic change in a person's personality, such as from being disposed to anger to being disposed to passivity and patience. They may cause some physiological alteration that induces a psychic *reaction*, but a reaction does not endure. Baseline personalities seem to remain stable no matter the physical changes a person undergoes. Both Abū al-Barakāt and Rāzī seem to be speaking from

⁴⁸⁹ *K. al-Mu'tabar* II.6, 379-388 and 423-27. Rāzī followed much of Abū al-Barakāt's discussion; but it is also possible that he was informed by his own physiognomic observations: *Mabāḥiṭh* II, 393 ff. See below for Rāzī's contribution to the science of physiognomy.

⁴⁹⁰ Rāzī wrote an influential treatise on physiognomy, entitled *Kitāb al-Firāsa*; see *La Physiognomie Arabe et le Kitāb al-Firāsa de Faḫr al-Dīn al-Rāzī*, ed. Youssef Mourad (Paris: Geuthner, 1939). For the influence of Rāzī's work on the later physiognomic tradition, see Abdulai M. Kaba, "Physiognomy and Its Applications: A Study and an Annotated Translation of al-Rāzī's *Kitāb al-Firāsah*" (Kuala Lumpur, International Institute of Islamic Thought and Civilization, International Islamic University Malaysia, 2010); Emin Lelić, "Physiognomy (*ʿilm-i firāsat*) and Ottoman Statecraft: Discerning Morality and Justice," *Arabica* 64, no. 3-4 (September 13, 2017): 609-46, and "Ottoman Physiognomy (*ʿilm-i firāset*): A Window into the Soul of an Empire" (PhD, Illinois, The University of Chicago, 2017); Muhammad Khalidi and Tarif Khalidi, "Is Physiognomy a Science? Reflections on the *Kitāb al-Firāsa* of Fakhr al-Dīn al-Rāzī," in *The Occult Sciences in Pre-modern Islamic Cultures*, ed. Nader El-Bizri and Eva Orthmann (Beirut; Würzburg: Ergon Verlag, 2018), 67-82.

their experience as physicians.⁴⁹¹ They argue that any substantial alteration to a person's native humoral balance leads not to an alteration of character, but to the decay and expiration of the body. Rather, the main factor of any physical alteration to the human body seems to be psychic states. Heat arising in the heart does not cause courage in lions; it is the lion's courage that causes the excess of heat.⁴⁹² And finally, moral character—though stable and difficult to change—can still be altered with strength of will and force of habit. This would have been impossible had the native humoral composition been the essential determinants of moral character. Thus, what causes the stable personality of a person is the individual soul. Furthermore, since there exist different personality types, these must arise from different types of human souls.⁴⁹³

Despite essentializing what Avicenna had considered to be accidental aspects of the human being, Rāzī believed that the metaphysician can still account for the fact that all human souls display the common trait of rationality. However, instead of conceiving of this trait as an essential component of a single species, the metaphysician should conceive it as a necessary concomitant or attribute of a differentiated essence. The difference between the predicates “rational” and “having black hair” is that rationality seems to be possessed by virtually all human beings, while having black hair does not. The essence can also be responsible for personality-defining virtues such as courage or vices such as stinginess. The only difference between these idiosyncratic characteristics and commonly shared attributes such as rationality is statistical: the former is not as

⁴⁹¹ This appeal to the science of physiognomy is congruent with Rāzī's contribution to medicine. Indeed, the immediacy and detail of these observations suggests that it may arise directly from clinical practice or at least some acquaintance with it. Arabic practitioners and theoreticians of physiognomy—in particular, Zakariyya al-Rāzī and later Fakhr al-Dīn al-Rāzī—are distinguished by their efforts to integrate the science into the larger body of medical knowledge of the time; see Khalidi and Khalidi, “Is Physiognomy a Science? Reflections on the *Kitāb al-Firāsa* of Fakhr al-Dīn al-Rāzī.” Abū al-Barakāt seems to have been part of this development in medicine. The fact that he was a practicing physician explains the thoroughness and precision by which he analyzed the relationship between the humoral balance and its relationship with psychic states.

⁴⁹² *K. al-Mu'tabar* II.6, 384.

⁴⁹³ *K. al-Mu'tabar* II.6, 386.

comprehensively distributed across human individuals as the latter.⁴⁹⁴ The physicist can then arrange his knowledge of human attributes based on statistical regularity, assigning species-defining attributes to those that exhibit a high degree of distribution, and assigning the category of accidental attributes to those that do not. The resulting picture still tells us something meaningful about the human being, even if it offers a *conventional* taxonomy rather than one grounded in metaphysical knowledge of essences. Rāzī held that this attributive framework offers more explanatory power than Avicenna's hylomorphism: whereas Avicenna's theory of the human soul as "rational animal" can account for the unique functions possessed by all members of the species, it cannot explain the fact that human beings possess seemingly innate traits of character that are reducible neither to their upbringing nor physiological make-up. On the other hand, Rāzī believed that *his* theory of the human soul, which assigns the factors of differentiation to intrinsic, essential causes, can account for both the phenomena of commonality and differentiation among human beings.

The ontological implication of denying the Rule of One as a principle of psychic action and the resulting attributive framework of analysis is twofold. The first is that since the essence of a human being cannot be further analyzed *qua* form (*sūra*) into internal constituents (*muqawwimāt*) and any attributes predicated of it must therefore be conceived as external accidents (*lawāzim*), it is best to conceive of the human soul (and other souls in general) as monads. What I mean by this term is that the "substance of the soul" (*jawhar al-nafs*)—as Rāzī often puts it in his psychological works—must be interpreted as a self-subsistent entity (*qā'im bi-nafsihi*) that is indivisible and is essentially differentiated from other entities. Unlike the human soul in Avicenna's conception, the monad is

⁴⁹⁴ Rāzī writes in *K. al-Nafs wa-l-rūh*, 87: "There is no meaning in their being souls except that they administer [their respective] bodies. However, their being administrators of their bodies is a relational and accidental attribute. So why is it impossible to say that the substance of the soul (*jawhar al-nafs*) differs in the perfection of their essences? Their being in common is only with respect to this accidental and external attribute. Based on this opinion, composition in their quiddities is not necessarily entailed."

not a universal species-form that is accidentally individualized by its inherence in a material substrate; rather it is already a concrete entity from its celestial origins to its sublunary embodiment.⁴⁹⁵ Furthermore, while monads seem to behave like the atoms of the *mutakallimūn*, they are conceptually distinct in that they are not homogenous and are not necessarily physical entities that occupy space. Rather, they could be immaterial entities like human and celestial souls.⁴⁹⁶ I argue that Rāzī's monadic theory of the soul is motivated by two philosophical imperatives. The first is an epistemic imperative, namely that the essence is practically unknowable to the metaphysician, much less the physicist. As a result, all attributes predicated of it must be treated as external accidents of an entity that is, from an epistemic point of view, indivisible and

⁴⁹⁵ As mentioned in Chapter 2.1, Henry Corbin is the first to have described Fakhr al-Dīn's and Abū al-Barakāt's theory of the soul as a "monadology." See *Avicenna and the Visionary Recital*, translated by Willard R. Trask (New Jersey: Princeton University Press, 1960), 77-93 (first published in Téhéran/Paris, Adrien-Maisonneuve, coll. « Bibliothèque iranienne » no. 4 et 5, 1954); 'Herméneutique Spirituelle Comparée,' in *Face de Dieu, Face de l'homme: Herméneutique et soufisme* (Paris: Entrelacs, 2008), 78 (first published in Eranos-Jahrbuch, XXXII/1964, Zurich, Rhein-Verlag, 1965. In-8°, pp. 71-176); *En Islam Iranien II, Aspects spirituels et philosophiques: Sohrawardī et les platoniciens de perse* (Paris: Gallimard, 1971), 135 (first published in Gallimard (coll. « Bibliothèque des idées »), 1971). Corbin holds that Rāzī should be counted along with Abu al-Barakāt and Suhrawardī as proponents of what he calls a "pluralistic and monadological philosophy" (*Avicenna and the Visionary Recital*, 88). He also argues that this theory presumes a doctrine of celestial-sublunary correspondences also explains Rāzī's openness towards astrological doctrines; on transcendental individuation and correspondences or analogical reasoning see Corbin, "Herméneutique Spirituelle Comparée," 78 and 105. Richard Frank, when describing Ash'arite ontology of substance and accidents also used the term "monadic entities" to describe the substance that is the locus of accidents; see Richard Frank, "The Aš'arite Ontology: I Primary Entities," *Arabic Sciences and Philosophy* 9 (1999), 196, 199, 201.

⁴⁹⁶ Whether Rāzī affirms the immateriality of the human soul is a controversial question because he affirms both positions in different works. In the *Mabāḥiṭh* and *Mulakhkhaṣ*, Rāzī offers arguments for and against the immateriality of the human soul but falls short of explicitly affirming his commitments. He seems to affirm it in the *Sirr*, though the main context of the discussion is to present Sabian theory of the human soul, though he seems to be sympathetic to their position; see *Sirr*, 111 line 4–112 line 1 (MS Paris: BnF Arabe 2645, f.185v line 16–f.187v line 16; MS Berlin: Staatsbibliothek Petermann I 207, f.90r line 13–f.91r line 3). He explicitly affirms the immateriality of the human soul in late works, such as *K. al-Nafs wa-l-rūḥ* (pp. 27–43) and the *Maṭālib* (vol. VII, 265–67). The authoritative arguments used in these two works are the same arguments Rāzī also adduces on behalf of the "partisans of immateriality" in the *Mabāḥiṭh* and *Mulakhkhaṣ*. These arguments are based on the unity of soul-consciousness and the nature of self-knowledge. Recent studies on the *Maṭālib* also affirm that Rāzī accepted the immateriality of the human soul, especially in his late works, including his commentary on the Quran, *Maḥāṭiṭ al-ghayb*; see Ahmed Oulddali, *Raison et révélation en Islam: Les voies de la connaissance dans le commentaire coranique de Fakhr al-Dīn al-Rāzī (m. 606/1210)* (Leiden: Brill, 2019), 28 ff; Jacobsen Ben Hammed, "As Drops in Their Sea: Angelology through Ontology in Fakhr al-Dīn al-Rāzī's *al-Maṭālib al-ʿāliya*"; Amal A. Awad, "Al-Rāzī on the Theologians' Materialism," *Arabic Sciences and Philosophy* 33 (2023): 83–111. The issue is complex and requires a systematic discussion of all relevant works. The most comprehensive assessment of the issue is provided by Muḥammad Abū Sa'da in his 1989 monograph, *al-Nafs wa-khulūdihā ʿinda Fakhr al-Dīn al-Rāzī* (Cairo: Dirāsa Taḥlīliyya Naqdiyya Muqārīna).

inscrutable.⁴⁹⁷ However, the results of a systematic physiognomic inquiry into the nature of human souls strongly indicate that these essences are, from an ontological point of view, essentially differentiated and irreducible to any attribute predicated of it. Rather, they seem to be the cause of their attributes, irrespective of whether these are commonly shared with other individuals or idiosyncratic to certain individuals or types. The doctrine of the soul as a monad fulfills both epistemic and ontological imperatives.⁴⁹⁸

The second ontological implication of denying the Rule of One in the domain of psychology is that it allowed Abū al-Barakāt and Rāzī to offer a distinct cosmological model for the origins of the human soul. Rāzī writes in the *Maṭālib* that Avicenna relies on a single celestial entity, the Active Intellect, to explain the origins of human souls. This is due to his adherence to the Rule of One, which stipulates that a celestial intellectual entity may govern only a single corporeal entity. As such, only a single intellectual principle may be the governor of the sublunary realm. Since Rāzī does not abide by this principle, it is possible for him to stipulate the existence of many such celestial principles responsible for the diversity of human types. He also relies on the astrological principle of celestial-sublunary correspondences, namely that the human soul must originate from a celestial archetype. This is because the human soul is an immaterial entity. It cannot, therefore, be an emergent property of matter; rather, it must owe its origins to entities that are likewise essentially immaterial, but which exist in a higher existential rank, namely, the celestial intellects. Furthermore, what the celestial archetypes produce are concrete entities, i.e., monads. This contrasts with Avicenna's theory whereby human beings are individualized only accidentally

⁴⁹⁷ We have discussed this aspect of the monad in Chapter 2.1 when outlining Abū al-Barakāt's theory of the human soul.

⁴⁹⁸ A full account of Rāzian monadology cannot be undertaken in this thesis, as it would require a systematic reconstruction of Rāzī's psychology in relation to his epistemology and ontology. Such a study should also consider the influence of Abū al-Barakāt, who must be counted as the founder of the theory. My priority here is simply to identify its basic structure and the philosophical questions motivating its conception.

through the inherence of the species-form in sublunary matter. Because of this, Rāzī's theory of the origins of the human soul can be referred to as the transcendental individuation of the human soul.

Following Abū al-Barakāt, Rāzī adopted the Hermetic term, "Perfect Natures (*al-ṭibā' al-tāmma*)," to refer to these celestial archetypes.⁴⁹⁹ These entities are responsible not only for the origination of human souls, but also for their well-being and general lot in life. He writes in the *Sirr*:

We claim that the human soul is many in number and differentiated in essence. Among them are those who are evil in nature and others who are good. Such is also the case with those who are intelligent and quick-witted and those who are slow-witted. It is necessary to assign a distinct individual cause for each of their types, for, as we have mentioned, the effect must correspond to the cause. [...] Consequently, for each class (*tā'ifa*) of human souls is [assigned] a distinct celestial soul that acts as their [existentiating] cause. [...] This is what the Ancients have called the "Perfect Nature." The Prophet, may peace be upon him, has alluded to this [entity] when he said that [God has] spirits that are guardians (*junūd*) enlisted (*mujannada*) [in His host]. What is known of these [spirits] has been widely acknowledged, while what is denied of them has been subject to dispute. These souls, which [reside in] the orbs, are mindful (*shafqa*) of human souls as a merciful (*ra'ūf*) father would be [mindful] of his children.

⁴⁹⁹ *Maṭālib* VII, 265–67. See also *Sirr*, 17 line 29 (MS Paris: BnF Arabe 2645, f.185v line 16–f.187v line 16; MS Berlin: Staatsbibliothek Preussischer Kulturbesitz I 207, f.90r line 13–f.91r line 3) where he refers to the same concept as celestial archetypes (*mithāl fī al-falak*). To my knowledge only Henry Corbin has discussed al-Rāzī's association with the doctrine of the Perfect Natures, setting it against the context of angelology and transcendental individuation: Corbin, *Avicenna and the Visionary Recital*, 51–56 and 87–90. He writes that Rāzī assented to basic tenets of 'Ismailian Gnosticism' that identifies the celestial intellects as Angels *in actu* and human souls as their individuated manifestations, being "potential Angels" by virtue of their attachment with materiality. He includes Abū al-Barakāt and Shihāb al-Dīn al-Suhrawardī in the same cluster of thinkers (51–56).

[...] They are called the Perfect Nature because, as we have explained, the cause must be more perfect in nature [than the effect].⁵⁰⁰

Despite affirming this doctrine of Perfect Natures and the transcendental individuation of human souls, Rāzī acknowledges the speculative nature of this doctrine. This is consistent with his overarching epistemology, according to which the true nature of essences is foreclosed to the metaphysician. The best he can do is to offer a theory that is consistent with the available data and has better explanatory power than other theories. Thus, he writes in the *Maṭālib*: “Know that the truth is that this type of argument is nothing but an explanation of mere possibility (*mujarrad al-istiḥmāl*). However, since the masters of unveilings (*arbāb al-mukāshafāt*) and the people of direct witnessing (*aṣḥāb al-mushāhadāt*) agree [regarding the reality of Perfect Natures], these experiences (*tajārib*) override (*taqwī*) [mere] possibility and confer strong conviction in their favour (*qawī al-ʾiṭiqād fī-hi*). Otherwise, [these judgments] remain [tainted with the] stain of possibility (*bāqīya fī buqʿat al-imkān*).”⁵⁰¹

Thus, we have seen that the doctrinal implications for denying the Rule of One are quite extensive and touch upon all major domains of the cosmos: from Divine agency, celestial-sublunary correspondences, and sublunary psychology. However, Rāzī was not the first to propose the

⁵⁰⁰ *Sirr*, 111 line 4–112 line 1 (MS Paris: BnF Arabe 2645, f.185v line 16–f.187v line 16; MS Berlin: Staatsbibliothek Petermann I 207, f.90r line 13–f.91r line 3). The same argument is offered in *Maṭālib* VII, 265–67. Note that Rāzī’s argument in the *Sirr* in favour of “Perfect Natures” is the very same argument he produces in the *Mabāḥiṭh* in support of the Active Intellect and in the *Mulakhkhaṣ* in support of the immaterial intellect. It is based on the premiss that the cause must be more perfect than the effect, and therefore the human soul, being immaterial, requires an immaterial cause of a higher order of being. Rāzī also affirms the same principle in the *Sirr* when explaining the Sabian doctrine that celestial intellects must be immaterial (ibid). Thus, I would argue that in these four works Rāzī is upholding the same doctrine, as long as the “Active Intellect” he refers to in the *Mabāḥiṭh* is understood not as *the* Active Intellect of Avicennian metaphysics that is the sole governor (*mudabbir*) of the sublunary world, but simply as a generic term designating immaterial celestial entities in their cosmic function as efficient causes.

⁵⁰¹ *Maṭālib* VII, 267. Note that in the *Mabāḥiṭh*, Rāzī does not mention this theory at all. Instead, he simply reports on Avicenna’s theory of the Active Intellect. In the *Mulakhkhaṣ* Rāzī simply affirms that the cause of human souls must be an immaterial intellect (*ʿaql mujarrad*) without specifying that it is the Avicennian Active Intellect (*Mulakhkhaṣ* III, 421; Khān’ūghlū II, 998–99).

doctrines discussed above. I have shown that Ghazālī and Abū al-Barakāt proposed similar alternatives to Avicennian theories that rely on the Rule of One. What is original about Rāzī's position is that he prioritized the theoretical and epistemic issues underlying the principle in order to spearhead his attack against the substantive content of Avicennian metaphysics. This gives a programmatic character to his criticism of the principle, as though an entirely new picture of the cosmic system can emerge once the Avicennian straitjacket is cut open. As we have seen, Rāzī tries to chart a different course to that of *kalām* and *falsafa* cosmologies, one that adopts some aspects of the Hermetic astrological tradition. However, in doing so, Rāzī treats this source as one of many authoritative cosmologies, integrating only those aspects that are compatible with his method and philosophical outlook. The result is a highly experimental, cosmopolitan, and multi-layered approach to cosmological speculation, one that can serve as the basis for a comprehensive account of the cosmic system.

Conclusion

We have seen how Fakhr al-Dīn al-Rāzī's criticism of the Rule of One implies a comprehensive revision of Avicenna's philosophy. This far-reaching implication was not an afterthought; it was strategically formulated throughout Rāzī's early *ḥikma* works.

Rāzī was the first to interrogate the Rule's theoretical underpinnings as a principle of efficient causality. Criticizing it on this basis signaled his intent to propose a theory of secondary causality that rested on a different set of metaphysical and epistemic principles. The fruit of his endeavour was a framework of inquiry that derived from the parsimonious distinction between substance (*jawhar*) and accident (*ʿarad*). By substance, he intends a self-subsistent entity that is the substrate of accidents. This conception is deliberately plain and is congruous with both the *kalām* and Avicennian notions of *jawhar*. Unlike the *kalām* conception, however, the Rāzian *jawhar* is not necessarily a space-occupying entity. It can refer to simple entities, such as souls and intellects, as well as individual members of natural kinds, i.e., *X* insofar as it belongs to species *A*. Unlike the Avicennian conception, however, Rāzī argues that the essential nature of these substances is, for all practical purposes, unknowable. Thus, the only way we gain knowledge of their essences is to systematically identify their accidents, especially those that provide some insight into their basic characteristics. By accidents, Rāzī intends any attribute predicated of the substance. These accidents may be affirmative (*thubūtī*), negative (*salbī*), or relational (*idāfī*) entities; but whichever ontological status they may have, we must conceive of them as concomitants (*lawāzim*) that are caused by the essence and are, therefore, external to it. As such, they merely circumscribe the essence; they do not express its inner reality. By conceiving of accidents in this manner, we avoid rendering judgement on the nature of the substance in question. The most we can do is to propose

what it *could* be, given our provisional state of knowledge. Nor is it possible to determine the necessary attributes it must possess given the *a priori* knowledge of its nature. The most we can do is to stipulate the necessary attributes it must possess given our *a posteriori* knowledge of its observable characteristics. According to this model, it is possible to ascribe many attributes to a substance without implying any plurality and divisibility on the part of its essence. The ascription of attributes merely delineates the cluster of concomitant accidents that encircle its indivisible and inscrutable nature. This affords the metaphysician and physicist greater flexibility in their analysis of the substance in question, in that they can easily ascribe more attributes or remove others based on new theoretical insights or empirical observations. Furthermore, in the specific case of the accident of causality (*mu'aththiriyya*), Rāzī holds that it is a purely relational attribute. It is not an affirmative attribute that is superadded to the essence of the cause (*zā'ida 'alā dhāt al-ʿilla*) and which mediates (*wasīla*) the performance of some act. Causality is what binds two events together in the mind of the observer; it is not a concrete entity subsisting in the essence of the cause.

In this attributive framework of analysis, causal principles that stipulate *a priori* knowledge of the cause as its point of departure, such as the Rule of One, are not among the repertoire of analytic tools available to the metaphysician or physicist. Despite the promise of demonstrative certainty afforded by the deductive character of the Rule, the price remains quite high. Not only is the metaphysician required to gain knowledge of the essence through *a priori* principles, which is already a very difficult task, he must also accept the rigid structure of causality that the Rule implies. For the cause can only accommodate the ascription of those effects whose procession can be *deduced* from its essence. Too much, therefore, depends on the metaphysician's intuitions regarding the nature of the essence. We have seen, however, that Avicenna explicitly recognized the epistemic limits of the Rule of One when considering the cosmic function of the Active Intellect: Why did the triadic procession of an ethereal body, a celestial soul, and a celestial intellect terminate at the

sphere of the Moon, and why do we encounter instead the procession of corporeal forms whose nature is incommensurate with that of the heavenly realm? Avicenna's solution was to admit that the deductive character of his inquiry, which led to the triadic structure of emanation, was no longer serviceable, and that the metaphysician must now rely on the *a posteriori* observation that the sublunary world obeys a set of physical principles (the four elements, their corruptible and generable mixtures, and rectilinear motion) that cannot be deduced from the nature of the celestial world. However, following Ghazālī and Abū al-Barakāt, Rāzī argues that the severe limitations of the Rule's explanatory power are already apparent at the highest levels of emanation, namely at the sphere of the fixed stars. Can a triadic structure of emanation account for the kaleidoscopic variety already present at this second phase of procession from the First Cause? Avicenna never addressed this question, where he should have, since the diversity and complexity of the sphere of the fixed stars is obvious to the naked eye. The problem seems to be insurmountable within the rigid framework of the Rule. Rāzī's solution was decisive: to abandon any recourse to deductive reasoning in the metaphysical inquiry into the concrete structure of existence, as epitomized by the Rule of One, and embrace a method that affords less certainty but has greater theoretical flexibility. Such is the advantage offered by the attributive framework of analysis.

As a result, when examining the nature and structure of the concrete realm of existence, the metaphysician or physicist should primarily rely on observed data, whether previously recorded or newly observed, as well as the various theories proposed by both ancient and modern authorities. This is distinct from the inquiry into the primary notions of metaphysics, such as existence and quiddity, necessity and possibility, the one and the many, the prior and posterior, etc., where the metaphysician appropriately relies on *a priori* analysis, as exemplified by Rāzī's own inquiry into "common matters" (*al-umūr al-āmma*) in his *ḥikma* works. These are not, however, controversial sentiments, nor are they inconsistent with Avicenna's own method. What distinguishes Rāzī's

approach to metaphysics is the absence of any intention to demonstrate the concrete structure of the universe and its operating principles solely from *a priori* premisses, this being one of the defining aspects of Avicenna's philosophical project as exemplified in *Ilāhiyyāt* IX.4. Indeed, Rāzī's discussion of cosmological issues usually begins *in media res*. The task of the metaphysician is to sift through the body of authoritative theories and propose a viable account that aims at maximum explanatory power, as well as theoretical clarity and robustness. In contributing to the study of a specific domain of existence, the philosopher must engage with the conventional framework of inquiry transmitted by the various traditions of rational speculation. These conventions would have already defined the questions that must be pursued (i.e., the "research agenda") and the intellectual tools necessary to pursue them (i.e., the method). He does not always have to abide by these conventions; but he must work through them to achieve his goals. It is within this overarching perspective that we should interpret Rāzī's polymathic contributions to the speculative sciences, whether this be the cosmological doctrines of Eastern *ḥikma*, or the occult sciences, such as astrology, physiognomy, and astral magic. It is also within this perspective that we ought to interpret the often doxographic character of his inquiries, which rely on an exhaustive interchange of propositions, objections, and counter-objections, and which often do not end at a final resolution, whether by pronouncing his own position or by affirming a preponderating argument.

The theoretical implications of Rāzī's criticism of the Rule of One in the domains of ontology, epistemology, and method represent only one aspect of its philosophical significance. Influenced by Abū al-Barakāt al-Baghdādī, Rāzī also regarded the axiom that "only one may proceed from the one" as a paradigmatic statement of Avicenna's cosmology, one that is responsible for the general structure and underlying operation of the universe. By showing how the Rule is operative in cases that Avicenna had explicitly mentioned, such as the procession of the First Intellect and the subsequent triadic procession of celestial entities, as well as in those which he had not, such as

the doctrine of the Active Intellect and the theory of faculty differentiation in animated beings, Rāzī attempted to show that the Divine, celestial, and sublunary domains of existence are bound together as a unified cosmic system. The upshot of this interpretation is that he was able to present Avicennian cosmological doctrines as forming a distinct and self-contained paradigm. However, by criticizing the very principle that is responsible for the architecture of the system, he wants to show that any attempt at enhancing its viability or repairing its weaknesses is a futile endeavour. Rather, it was necessary to propose a new paradigm from the ground up.

We have seen, however, that Rāzī did not offer a methodical account of his own cosmic system in his early *ḥikma* works. By gathering the relevant discussions in the *Mabāḥith*, *Mulakhkhaṣ*, and *Sharḥ al-Ishārāt*, I was able to offer a sketch of the basic elements at play. This task was further aided when we also consulted the cosmological speculations contained in his infamous work on astrology and astral magic, *al-Sirr al-maktūm*. We have seen that three fundamental doctrines emerge in the wake of refuting the Rule of One. Against Avicenna's theory of God as a necessitator of existence and the naturalistic account of secondary causation, Rāzī argued that God is a voluntary agent (*al-fā'il al-mukhtār*) who delegates causal powers to other entities, such as celestial souls. This theological doctrine provided the overarching causal framework of the system, namely, that is based on a high-functioning occasionalism sustained by Divine custom (*ʿāda*). From the perspective of the underlying operation of the observable world, however, it makes no difference whether affirming the accidental regularity of natural phenomena is the function of some theological imperative or the function of some epistemological insight regarding the nature of causality. Both perspectives question the metaphysical necessity of causal relations and are content to rely on the conventional regularity of natural events as the basis of scientific observation. Indeed, we have seen that Rāzī adduced both theological and epistemic considerations to uphold a non-realist approach to causality.

The second is a model of celestial mediation based on the astrological and astral magical teachings of the Sabians, who posit the existence of celestial archetypes known as Lords of Species (*arbāb al-anwāʿ*). This doctrine provided Rāzī with an alternative to Avicenna's model of celestial mediation, which is characterized by the triadic structure of procession and the cosmic role of the Active Intellect as the giver of sublunary forms. In the Hermetic astrological system of the Sabians, sublunary forms do not originate from a single celestial intellect presiding over our sphere of existence. Rather, a multitude of such entities residing in various strata of the heavenly realm are responsible for their procession. Knowledge regarding the precise character of these cosmic correspondences is preserved in authoritative astrological texts. Perceiving them requires not only precise astronomical observation and authoritative astrological data, but also intuitive knowledge gained through non-discursive means, such as divine inspiration. However, we saw that Rāzī's recourse to occult texts was selective and philosophically motivated. He regarded them as reservoirs of knowledge that preserved the teachings of the ancient sages and prophets, especially those concerning the natural world. Indeed, the composition of *al-Sirr al-maktūm* can be regarded as an attempt to sift through the authoritative sources and systematize their contents into a coherent cosmological perspective; and where he affirms a positive doctrine, he integrated only those elements of Hermetic cosmology that are consistent with his philosophical and theological principles.

The final doctrine is the monadic theory of soul. The theory has two aspects: the first concerns the nature of psychic action; the second concerns the nature of the soul and its celestial origins. The soul, according to Rāzī, interacts directly with the organs of perception and movement in order to perform its various activities. This contrasts with the Avicennian model of psychic action, which relies on the mediating role of psychic faculties. A major reason why Avicenna had posited the existence of these intermediary principles was to preserve the transcendence, unity, and

simplicity of the rational soul. These faculties created the necessary buffer between it and its corporeal organs. Rāzī, however, held that this model of psychic action compromises the unified and immediate experience of agency, since the soul would need to rely on a host of intermediary principles both to perceive and to act. Instead, he argues that it is possible to affirm the soul's unmediated control over its corporeal organs while maintaining its status as an immaterial, self-subsistent, and simple entity. This is because, as we have seen, the capacity to exert causal influence over some object (*mu'aththiriyya*) is something that an external observer posits as a purely theoretical construct, one that describes the relation between two sequential events. Since the observation that *X* causes *A* does not necessarily reveal an immanent feature of *X*'s essence, the mere fact of producing multiple acts cannot serve as an epistemic basis to infer a corresponding multiplicity and divisibility in the cause's essence. Furthermore, within the attributive framework of analysis, ascribing attributes to the essence does not reveal its internal nature; it reveals only an external cluster of concomitants. The essence is structurally insulated from the attributes that it causes and the effects that it enacts. The resulting monadic theory of soul allowed Rāzī to uphold four non-negotiable psychological doctrines that had been mutually exclusive in Avicenna's model, namely, the soul's unified agency, its unmediated control over its corporeal organs, its simplicity, and its transcendence from the body. The theory's superiority consists in its ability to uphold these doctrines when describing the various aspects of psychic action.

In addition to these epistemic considerations, Rāzī also arrived at the monadic theory of soul directly from psychological inquiry. Drawing from physiognomic analysis of human behaviour, he held that individual human souls are essentially distinct from each other. Enduring traits of character seem to derive from an irreducible make-up of the individual, rather than being a contingent feature of humoral composition or social upbringing. Thus, instead of sharing a common nature, such as "rational animal," each human soul "constitutes its own species," to

borrow an Avicennian expression. In this model, the capacity for rational thought is just one of a person's essential features, which may include other traits such as courage or generosity. The difference between rationality and courage is merely statistical; the former is evenly distributed among human individuals in a manner that the latter is not. Thus, despite being heterogenous, souls may be grouped together as distinct species of animals, as long as this is presented as a purely conventional taxonomy. Furthermore, Rāzī connected the monadic theory of soul with the Hermetic doctrine of celestial archetypes. The human soul originates not from a single celestial entity known as the Active Intellect, but from a multitude of celestial entities known as Perfect Natures (*al-ṭibā' al-tāmma*). This transcendental individuation of the human soul, its essential heterogeneity as individual monads, as well as the rejection of psychic faculties as mediating principles of soul-action, all amount to a radical break from Avicennian psychology.

Thus, our study of Fakhr al-Dīn al-Rāzī's reception of the Rule of One has allowed us to explore a side of his intellectual project that has not yet been fully investigated, namely, his attempt to inaugurate a framework of scientific and philosophical analysis that departs substantially from Avicenna. At the same time, it has also allowed us to recognize his serious attempt at proposing a new picture of the cosmic system. While focusing on the Rule of One is not the only way to highlight the methodological and doctrinal aspects of Rāzī's philosophical project and how the two are connected, it has facilitated the endeavour. His pioneering interpretation, which systematically highlighted the Rule's pivotal role as both a general metaphysical principle and a governing rule of cosmological speculation, allowed us to link the theoretical and applied implications of his criticism in a single stroke. As we have seen, however, this programmatic aspect of his inquiry required a great deal of reconstructive work on our part. It is not found ready-made in his writings.

Rāzī's criticism of the Rule of One has often been portrayed as another episode in the Ash'arite opposition to Avicenna's metaphysics. Although this is certainly an important aspect of his critique, we have seen that Rāzī deliberately expanded the terms of the debate from the narrow theological concerns of his predecessors, such as Ghazālī, Shahrastānī, and Sharaf al-Dīn al-Mas'ūdī, to the broader domains of epistemology, philosophical method, fundamental ontology, psychology, and cosmological speculation. Indeed, I argue that we should regard his reception of the Rule as belonging to the *internal* development of Eastern *ḥikma*. More specifically, it should be regarded as being part of a broader attempt by other thinkers of the period, such as Abū al-Barakāt al-Baghdādī, to propose a new approach to metaphysics and cosmology, one that looked beyond Avicenna's system and the Peripatetic tradition underlying it to other sources of knowledge, such as *kalām* ontology and Hermetic cosmology.

In this regard, Rāzī's project is comparable to that of another 6th/12th century thinker who also studied in Maragha during his youth, namely, the Master of Illumination (*shaykh al-ishrāq*) Shihāb al-Dīn Yaḥyā al-Suhrawardī (d. 587/1191). Both Rāzī and Suhrawardī were wary of what they considered to be the Avicennian tendency to reify abstract concepts and sought to "concretize" substances into variations of light, as in the case of Suhrawardī, or into individual monads, as in the case of Rāzī. Both thinkers asserted a theory of knowledge based on the immediate "presence" (*ḥudūr*) of the object of knowledge to the knower. Both rejected Avicenna's theory of faculty differentiation and asserted that the soul is the nexus of all psychic activities and interacts directly with all objects of perception and act. Both adopted the Hermetic theory of Perfect Natures and Lords of Species in their respective theories of celestial mediation. Indeed, they deliberately drew from the teachings of ancient *ḥikma*, represented by figures such as Hermes, Plato, and pseudo-Apollonius of Tyana, to countervail the contemporary authority of Avicennian Peripateticism. Both were intensely preoccupied with the high magical tradition, alchemy, and

other disciplines of the occult sciences, and sought to integrate aspects of their cosmology into their respective physical systems. And finally, both were heavily influenced by Abū al-Barakāt al-Baghdādī, who pioneered some of these very insights. Contemporary studies often present Rāzī and Suhrawardī as representing two diverging bequests of the Avicennian inheritance: the one more analytic and theologically inclined, the other more visionary and mystical. In broad strokes, this view has some justification. However, I hope that my sketch of Rāzī's speculative cosmology and the theoretical considerations underlying it have made the need for a systematic comparison of its convergences with Illuminationist metaphysics a more inviting and promising endeavour. Perhaps these convergences reveal a distinct development of 6th/12th century Eastern *ḥikma* that has not yet been recognized, one that reflects the cosmopolitanism of the learned communities where Rāzī moved around as both a student and scholar.

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