DENYING THE ETERNITY OF THE WORLD:

CREATION AND EMANATION IN THE EPISTLES OF IKHWAN AL-SAFA

Ву

Abdulrahman Ayman Bajodah

Submitted to

Central European University

Department of Philosophy

In partial fulfillment of the requirements for the degree of Masters of Arts

Supervisor: István Bodnár

Budapest, Hungary

ABSTRACT

The aim of my inquiry is to examine Ikhwan al-Safa's ("Brethren of Purity") creationist arguments against the Aristotelian doctrine of the world's eternity. Arguing for creationism, Ikhwan al-Safa employ the Neoplatonic emanation theory as it is developed in their tenth-century Arabic encyclopedia. However, some historians have claimed that Ikhwan al-Safa's emanation theory is a veiled attack on creationism that embraces the Aristotelian doctrine of the world's eternity. Ikhwan al-Safa's philosophical project is thus characterized as a project that aims either to reconcile or propagate a presupposed conflict between philosophy and religion, expressed for instance in this tension between Aristotelianism and creationism. This characterization allegedly lurks behind opposing historical testimonies regarding Ikhwan al-Safa's identity and doctrine which I claim is contemporarily reproduced in similar terms with Ikhwan al-Safa's scholarship.

While both historical and contemporary characterizations tempt a double reading approach to Ikhwan al-Safa's philosophy, I consider their philosophical project within the tradition of early Arabic philosophy, whose enterprise can be characterized as a natural theology project which does not presuppose a conflict between philosophy and religion. While Ikhwan al-Safa identify the philosophical tension between creationism and the world's eternity doctrine, I demonstrate that Ikhwan al-Safa use emanation theory rather to substantiate their creationist arguments in light of their overall identification of creation with emanation. Consequently, Ikhwan al-Safa's reception of Aristotelian and Neoplatonic sources should be recognized as a particular philosophical synthesis of both with creationism, for they did not merely transmit these sources, but assimilated them into the Islamic context of 10th century Iraq.

ACKNOWLEDGEMENT

إلى

إخوان لي فضلاء وأصدقاء لي كرام، أسمع أقاويلهم وأرى شمائلهم، وأعرف سيرتهم، لعليّ أتخلق بأخلاقهم وأتهذبّ بآدابهم وينشرح صدري ويصفو ذهني وتفتح عين البصيرة من قلبي، فأرى ...فتنتبه نفسي من نوم الغفلة وتستيقظ من رقدة الجهالة وأؤيد ...ما قد أبصروه بعيون قلوبهم، وأشاهد ما قد عاينوه بصفاء جواهر نفوسهم، وأنظر إلى ما نظروا إليه بنور عقولهم بروح الحياة، وأعيش عيش العلماء، وأحيا حياة الشهداء، وأوفق للصعود إلى ملكوت السماء

الرسالة ٤٨ ، رسائل إخوان الصفا

To

"...my virtuous brethren and generous friends. I listen to their utterances, observe their excellencies, and come to know their conducts, if only to embody their manners and exhibit their decencies, just so my soul is awakened from the slumber of ignorance and the torpor of negligence...Once my soul rejoices, my intellect clears, and my heart's eye opens, I shall receive what they perceive with the eyes of their heart, I shall attend to that which the pure essence of their selves attends to, and I shall behold what the natural light of their reasons beholds...May I be inflamed with the spirit of life. May I follow the way of scholars. May I live the life of martyrs. And may I be rewarded with the ascent to the kingdom of heaven..."

Epistle 48, The Epistles of Ikhwan al-Safa

¹ بتصرّ رف: تم تغيير ضمائر المخاطب إلى ضمير المتكلّم.

² The first-person pronoun is a modification of Ikhwan al-Safa's usage of the second person pronoun [my translation and modification].

Table of contents

ABSTRACT	
ACKNOWLEDGEMENT	2
Table of contents	2
Introduction	
Chapter 1 - Between Philosophy and Religion: Natural Theology in Early Arabic Philosophy and Ikhwan al-Safa's Epistles	9
1.1 The Philosophical Characterization of Ikhwan al-Safa	9
1.2 The Religious Characterization of Ikhwan al-Safa	13
1.4 The Philosophical Nature of Ikhwan al-Safa's Epistles	18
1.5 Al-Kindi's and Ikhwan al-Safa's Natural Theology	22
1.6 God's Existence and Divine Independence: The Argument from Oneness	26
1.7 God's Existence and Divine Freedom: The Argument from Design	32
Chapter 2 - Ikhwan al-Safa's Arguments Against the Eternity of the World	
2.1 The World's Eternity Problem and Divine Independence and Freedom	43
2.2 The World's Eternity Arguments	45
2.3 The World's Eternity Argument from the Nature of Matter	50
2.4 The World's Eternity Argument from Potentiality	52
2.5 The Nature of Matter and Form in Ikhwan al-Safa's Epistles	53
2.6 The World's Eternity Argument from the Nature of Motion	63
2.7 The World's Eternity Argument from the Nature of Time	66
2.8 The Nature of Motion and Time in Ikhwan al-Safa's Epistles	66
2.9 The World's Eternity Argument from the Nature of the Celestial Bodies	70
2.10 The Nature of the Celestial Bodies in Ikhwan al-Safa's Epistles	71

Conclusion Bibliography		86
		83
	2.13 Muruwwa's Objection: The Eternity of Ikhwan al-Safa's Prime Matter	77
	2.12 The Vacuum in Ikhwan al-Safa's Epistles	74
	2.11 The World's Eternity Argument from the Vacuum	73

Introduction

Ikhwan al-Safa wa Khullan al-Wafa [The Brethren of Purity and Sincere Friends], the 10th century Arabic philosophy group principally based in Basra and Baghdad, unequivocally denies and provides various arguments against the eternity of the world doctrine in their Epistles of the Brethren of Purity. The Islamic monotheistic creed of creation motivates their denial and constitutes their argumentation, as monotheism asserts prima facie that the creation of the world is done by a voluntary cause, namely by God, who freely creates out of nothing and without mediation. Ikhwan al-Safa's overall metaphysical view, akin to the theory of emanation found in Greek and Neoplatonic sources, asserts that God is the causative factor in the creation of the world, but the act of creation itself must be mediated by the universal soul, which creates the world out of prime matter. The universal soul emanates from the universal intellect, which in turn emanates from the One, the Originator of the world: God. The aim of my inquiry is to examine this synthesis of the Islamic belief in creation and the Neoplatonic theory of emanation in the work of Ikhwan al-Safa. Contrary to the argument that Ikhwan al-Safa's emanationist theory undermines creationism and embraces the Aristotelian doctrine of the world's eternity, I demonstrate that Ikhwan al-Safa's employment of emanation theory instead substantiates their

³I use the term 'Arabic philosophy' instead of 'Islamic philosophy' for the same reason given by Nader el-Bizri in his essay "Corollaries on Space and Time: A Survey of Arabic Sources in Science and Philosophy." He designates the term 'Arabic' as referring to "the *lingua franca* of classical traditions in science and philosophy of medieval Islamic civilization [of the golden age of Islamic civilization as known in Arabic historiography]; it is not meant to indicate that scholarship in this intellectual *milieu* was primarily and solely associated with the Arabs, given that many thinkers were Persian and Turkish. Moreover, while the majority of the scholars of medieval Islamic civilization were Muslim, many others were Christian and Jewish." See: Nader el-Bizri, "Corollaries on Space and Time: A Survey of Arabic Sources in Science and Philosophy," *Critical Studies* 32 (June 2015), 63. In addition to el-Bizri's qualifications, the 'materialist tradition' of medieval Islamic civilization, which often refers to philosophical works and figures that rejected religion altogether, can also be subsumed under the umbrella term of 'Arabic philosophy'— despite the ambiguity of the term 'materialist.'

creationist arguments. By examining the role of emanation theory in the construction of their creationist arguments, I prove that Ikhwan al-Safa's recourse to the theory of emanation is fundamentally motivated by a deep theological commitment to creationism.

My examination of Ikhwan al-Safa's synthesis of creation and emanation understands their recourse to the theory of emanation to be motivated by their own monotheistic concerns within the Islamic context. This conclusion can be a double-edged sword. Favorably, Arabic philosophy is elevated from an intermediary role between Greek and Medieval Latin philosophy, a reductive perception dating to 19th century Orientalist scholarship. A consequence of this reduction is that Ikhwan al-Safa's defense of the belief in creation becomes a façade hiding their commitment to the world's eternity doctrine, known to them through the transmission of Greek philosophy during the 9th and 10th centuries. Contrary to this view, Ikhwan al-Safa's dealing with the ancient problem of the world's eternity, as I present it, exhibits a particular philosophical receptivity. Consequently, Ikhwan al-Safa's reception of Aristotelian and Neoplatonic sources should be recognized as a particular philosophical synthesis guided by their commitment to creationism, for they did not merely transmit these sources, but assimilated them into the Islamic context of 10th century Iraq.

My argument, however, on the unfavorable side, is susceptible to being appropriated by the proponent of religion in the presupposed conflict between philosophy and religion, in this case between Aristotelianism and creationism. Examining Ikhwan al-Safa's metaphysical view through the lens of the philosophy-religion conflict is the common denominator between historical sources and contemporary scholarship on Ikhwan al-Safa. Both attempt to explain the

group's metaphysical view by assigning them religious or philosophical chractrizations within the context of Islam. The group has been identified with opposite school of thoughts and religious sects, as rationalist Mu'tazilite and mystic Sufis, as Sunni humanists and Shia Ismailis, as rationalist philosophers and gnostic mystics. The fact that there is no consensus regarding the identity of Ikhwan al-safa deems the emphasis on their identity as counterproductive.

Nevertheless, the epistles of Ikhwan al-Safa cannot be properly read unless situated in the historical context of the 9th and 10th century Iraq, which informed and formed the early stages of Arabic philosophy. Accordingly, I read Ikhwan al-Safa's *Epistles of the Brethren of Purity* as a philosophical text in relation to possible philosophical and religious source texts drawn upon by the group. This intratextual relationship which makes up their philosophical edifice, once unraveled, I hope can illuminate the formation of Ikhwan al-Safa's philosophy from within their Islamic context.

The first chapter examines historical and contemporary approaches to the presupposed philosophy-religion conflict in Ikhwan al-Safa's epistles, which I dispense with by positioning Ikhwan al-Safa within the tradition of early Arabic philosophy and identifying their philosophy as a form of what we call today natural theology. In the second chapter, I consider Ikhwan al-Safa's arguments against the eternity of the world alongside the Aristotelian arguments for the world's eternity to which they are responding. Furthermore, I demonstrate how Ikhwan al-Safa's emanationist theory substantiates their creationist arguments against Aristotelian arguments. After discussing possible problems with Ikhwan al-Safa's recourse to the theory of emanation, I

conclude that Ikhwan al-Safa's employment of emanation theory proves their deep theological commitment to the Islamic belief in creation.

Chapter 1 - Between Philosophy and Religion: Natural Theology in Early Arabic Philosophy and Ikhwan al-Safa's Epistles

I begin this chapter by presenting various historical testimonies that characterize Ikhwan al-Safa's identity and doctrine according to the alleged conflict between philosophy and religion, leading to opposing characterizations of Ikhwan al-Safa's philosophical aim as an adherence either to philosophy or religion at the expense of the other. I then consider contemporary reading approaches, which reproduce in sophisticated but similar terms these historical characterizations. I end this chapter by situating Ikhwan al-Safa within the tradition of early Arabic philosophy, which can be characterized as a natural theology project independent of presupposing a conflict between religion and philosophy, and accordingly I proceed to examine in the next chapter Ikhwan al-Safa's denial of the world's eternity and their overall synthesis of creation and emanation.

1.1 The Philosophical Characterization of Ikhwan al-Safa

Dispute is a force which activates our capacity to know. Though intellectual disputes sometimes make us realize the limits of knowledge, we still hope our collective participation in intellectual disputes can bear fruit. There is no group of knowledge seekers, or even craftsmen and traders, without this force of dispute present among them.⁴ Following this remark in Ikhwan al-Safa's *Epistle 28* on the inevitability of intellectual dispute, the question of whether the world is eternal is given as the exemplary dispute. Their choice is not accidental. When we search for the most pressing intellectual concerns of any era, we naturally look to its most disputed problems.

⁴ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء (Epistles of the Brethren of Purity and Sincere Friends), vol. 2, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 362.

Ikhwan al-Safa speak of two parties in this dispute without aligning themselves with either of them, the philosophical party and the religious party,⁵ and even though they eventually settle this dispute by dismissing the presupposed conflict between philosophy and religion, Ikhwan al-Safa's own identity and doctrine have historically been and remain a matter of controversy. While I will go into greater detail on the dispute itself in the next chapter, the nature of the rival parties is the current focus.

The earliest testimony regarding Ikhwan al-Safa's identity and doctrine comes from the littérateur Abu Hayyan al-Tawhidi (923-1023). In his testimony, al-Tawhidi mentions in a critical tone to the vizier Ibn Sa'dan—who held office for several years around the year 983 several names to which al-Tawhidi attributes the writing of the epistles.⁶ While there is a lack of information regarding some of the names given, the little known about the rest is that they were learned men and state secretaries. Al-Tawhidi's testimony indicates that the writers of the epistles are contemporary to him, but the credibility of his testimony is questioned by some scholars who assign an earlier date to the epistles' composition—late 9th and early 10th century

⁵ Ibid.

⁶ Al-Tawhidi mentions Zayd bin Rifa'a (d. after 1009), Abu Sulayman Muhammad bin Mashar al-Busti, known as al-Maqdisi, Abu al-Hasan 'Ali bin Harun al-Zanjani, Abu Ahmad al-Nahrajuri, al-'Awfi, and others. See: Abu Hayyan al-Tawhidi, والمؤانسة (Book of Enjoyment and Bonhomie) (Beirut: Dar al-Kitab al-Arabi, 2005), 134. ⁷ Godefroid de Callataÿ, Ikhwan al-Safa': A Brotherhood of Idealists on the Fringe of Orthodox Islam (Oxford: Oneworld, 2005), 6.

as opposed to al-Tawhidi's implied late 10th century dating. Nevertheless, in his general but critical depiction of the group, al-Tawhidi tells us that Ikhwan al-Safa have come together

"in harmonious relationship and pure friendship. They have conglomerated on the basis of holiness, virtue, and counsel. They established among themselves a doctrine by which, they claimed, they get closer to the path of winning God's approval and returning to His paradise, for they used to say: the *Sharia* has been stained by ignorance and blended with errors, and there is no way to purify it and clean it except with philosophy, for it contains the wisdom of the creed and the benefit of rational endeavor. Once Greek philosophy is harmonized with Arabic *Sharia*, they claimed, perfection is attained. They composed fifty epistles on all parts of both theoretical and practical philosophy. They set apart a *Fihrist* [Table of Contents] to them and called them *Rasa'il Ikhwan al-Safa wa Khullan al-Wafa* [The Epistles of the Brethren of Purity and Sincere Friends]."9*

Al-Tawhidi's depiction already presupposes a conflict between philosophy and *Sharia*, i.e. religion, meaning the writing of the epistles can only be motivated by this conflict. If Ikhwan al-Safa conceives of a harmonious relationship between philosophy and religion, why then they still seek to purify the latter through the former? Ikhwan al-Safa, according to al-Tawhidi, hold that religion is in conflict with philosophy, and since philosophy has the ability to purify religious creeds, Ikhwan al-Safa affirm the superiority of philosophy over religion.

⁸ Scholars who assign an early chronology to the epistles' composition between 873 and 909 often assume a short period of composition, done by a group of authors living at the same time, and with minimum revisions and rearrangements. On the other hand, those who assign a late chronology between 963-984 ascribe to a long period of composition, done by several authors living at different times, and with multiple revisions and rearrangements. For thorough discussions regarding the epistles' composition, see: Abbas Hamdani, "The Arrangement of the Rasâ'il Ikhwân al-Safâ' and the Problem of Interpolations," in *The Ikhwân al-Safâ' and their Rasâ'il*. El-Bizri, Nader ed (New York: Oxford University Press in Association with the Institute of Ismaili Studies, 2008), 83–100. Abbas Hamdani, "The Name of Ikhwan al-Safa," *DOMES*, Digest of Middle East Studies, no. 9 (1999), 1-11. Godefroid de Callataÿ, "From Ibn Masarra to Ibn 'Arabî: references, shibboleths and other subtle allusions to the *Rasâ'il Ikhwân al-Safâ'* in the literature of al-Andalus," *Studi Magrebini*, 12-13 (2014-15), 217-68. Husayn Bobedie, والفلسفة في العصر الوسيط: [The Dialectic of Power and Philosophy in the Middle Ages: Ikhwan al-Safa as an Example] (Cairo: Dar al-Kalimah, 2018) 125-146.

⁹ Abu Hayyan al-Tawhidi, الإمتاع والمؤانسة [Book of Enjoyment and Bonhomie] (Beirut: Dar al-Kitab al-Arabi, 2005), 134.

^{*} All translations from Arabic texts are mine unless specified.

Affirming the superiority of philosophy, however, is problematic if not heretical for al-Tawhidi. His assessment of Ikhwan al-Safa aligns with the view of his prominent teacher, the logician Abu Sulayman al-Sijistani (923-1023), who maintains that religion is superior to philosophy because its truth springs from an uncorrupted revelation, while philosophy relies on human reason, which is fallible. For Ikhwan al-Safa to harmonize what the creator of human reason says with what created human reason says, they bear Al-Sijistani's warning that all who have tried to reconcile philosophy and religion fell short in accomplishing their aim and ended up bearing the dangerous consequence of staining the truth of religion with fallibility. 10

In the contemporary scholarship on Ikhwan al-Safa, even though those who designate rationalism as the main feature of Ikhwan al-Safa's philosophical thinking, do not see it in the same negative light as al-Tawhidi and his teacher. For contemporary readings emphasizing Ikhwan al-Safa's rationalism, Ikhwan al-Safa represent a highly esteemed intellectual thread in the Islamic context. 11 Consequently, they identify the group with the Mu'tazila, who represent a rationalist school of Islamic theology, 12 or mildly as humanists who represent the literary

¹⁰ Ibid.

¹¹ For examples advocating this view, see:

Adel al-Awwa, خفية إخوان الصفا [Ikhwan al-Safa's Truth] (Damascus: Al-Ahali Distribution and Publication, 1993). Ismail Mahmoud, إخوان الصفا: رواد التنوير في الفكر العربي [Ikhwan al-Safa: The Pioneers of Enlightenment in Arabic Thought] (Mansoura: Amir Print and Publication, 1996). Husayn Muruwwa, النزعات المادية في الفلسفة العربيّة والإسلاميّة [Materialist Trends in Arabic-Islamic Philosophy], vol. 3 (Beirut: Dar al-Farabi, 2002). Lenn Goodman, Islamic Humanism (Oxford: Oxford University Press, 2003). Georges Tarabichi, نقد نقد العقل العربي: العقل المستقيل في الإسلام critique of the critique of the Arab reason: Resigned Reason in Islam] (Beirut: Dar al-Saqi, 2004). Godefroid de Callataÿ, Ikhwan al-Safa': A Brotherhood of Idealists on the Fringe of Orthodox Islam (Oxford: Oneworld, 2005). Fuad Masum, إخوان الصفا: فلسفتهم وغايتهم [Ikhwan al-Safa: Their Philosophy and Purpose], 3rd ed (Damascus: Dar al Mada, 2008). Asghar Ali Engineer, "Ikhwan-us Safa: A Rational and Liberal Approach to Islam," Amaana, 2011, http://www.amaana.org/ikhwan/ikhwan1.html. Wael Farouk, تحليل الخطاب في رسائل إخوان الصفا [Discourse Analysis of Ikhwan al-Safa's Epistles] (Alexandria: Alexandria Library, 2018).

¹² For instance, Adel al-Awwa writes, "We confined in this chapter our research regarding the doctrine of the Ikhwan and their organization; and we concluded by identifying the nature of their thought which we think it constitutes a neo-Mu'tazila movement." Adel al-Awwa, حقيقة إخوان الصفا [Ikhwan al-Safa's Truth] (Damascus: Al-Ahali Distribution and Publication, 1993), 45.

tradition of 10th century Iraq. On the extreme end, Husayn Muruwwa, who positively conceives of Ikhwan al-Safa's rationalism suggests a reading in النزعات المادية في الفلسفة العربية والإسلامية [Materialist Trends in Arabic-Islamic Philosophy], which effectively admits that Ikhwan al-Safa's rationalism undermines religion, but contrary to al-Tawhidi, Muruwwa judges Ikhwan al-Safa's effort as a successful representation of the Arabic 'materialist' tradition. Accordingly,

Muruwwa asserts Ikhwan al-Safa's commitment to the eternity of the world's doctrine to and justifies his assertion by employing a double reading strategy, presuming a hidden rational truth of philosophy in contradiction with religion that functions as Ikhwan al-Safa's true motif. My next chapter rejects the double reading of Husayn Muruwwa in النزعات المادية في الفلسفة العربية [Materialist Trends in Arabic-Islamic Philosophy]. Muruwwa's reading, as my examination will prove, is not only erroneous but also an example of how a double reading strategy can overlook a great amount of textual evidence—for as my second chapter will show, Ikhwan al-Safa explicitly and implicitly counter six arguments for the world's eternity doctrine; and as Herbert Davidson's survey in Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy show, those six arguments were available during their time. 15

1.2 The Religious Characterization of Ikhwan al-Safa

Another possible historical contemporary of Ikhwan al-Safa, the Mu'tazilite Abd al-Jabbar Ibn Ahmad (935-1025), does not consider the group members mentioned by al-Tawhidi to be

¹³ Husayn Muruwwa, النزعات المادية في الفلسفة العربيّة والإسلاميّة [Materialist Trends in Arabic-Islamic Philosophy], vol. 3 (Beirut: Dar al-Farabi, 2002).

¹⁴ Ibid.

¹⁵ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987).

Mu'tazilites like him, although he did not necessarily read their epistles. He pejoratively considers them Ismailis, belonging to the esoteric branch of Shia Islam called Ismailism. In addition to assigning Ikhwan al-Safa a religious affiliation with Ismailism, clearly Ibn Ahmad's characterization lies on the opposite side of the spectrum from al-Tawhidi's characterization of the group as rationalist philosophers. Another figure, Al-Ghazali (1058-1111), who did not only read but also was influenced by Ikhwan al-Safa's epistles, despite not being a contemporary, depicts their philosophy as belonging to Ismailism. While Ibn Ahmad and al-Ghazali pass a negative judgment on Ismailism, Ismaili figures such as Jafar Ibn Hamza (-1430) and Idris Imad al-Din Ibn al-Hasan (-1468) positively claim the Ismailism of Ikhwan al-Safa and ascribe the writing of the epistles to Ismaili Imams.

In *Uyun al-akhbar*, which is considered to be "an irreplaceable source for Ismaili history" and was composed by multiple authors in different periods, ¹⁹ one of the authors is Ibn al-Hasan (d. 1468) who reports the following about Ikhwan al-Safa:

"When Al-Ma'mun deceived Ali bin Moussa al-Ridha bin Jafar, he [al-Ma'mun] thought that God's decree had been severed and God's ruling had been uplifted. When al-Ma'mun the Abbasid believed this reckoning of his and resigned to his illusion, he sought to alter and change the *Sharia* of Muhammad and convert people back to the Greek science and philosophy. The Imam [Ali bin Moussa al-Ridha] feared this ornamentation done by al-Ma'mun upon his grandfather's *Sharia* and composed the

¹⁶ Godefroid de Callataÿ, *Ikhwan al-Safa'*: A Brotherhood of Idealists on the Fringe of Orthodox Islam (Oxford: Oneworld, 2005), 6.

¹⁷ Yahya Michot, "Misled and Misleading... Yet Central in their Influence: Ibn Taymiyya's Views on the Ikhwān al-Ṣafā" in *The Ikhwân al-Ṣafā' and their Rasâ'il*. El-Bizri, Nader ed (New York: Oxford University Press in Association with the Institute of Ismaili Studies, 2008), 139-179. Also see: Abdullah Ozkan, "Al-Ghazālī and Rasā'il Ikhwān al-Ṣafā': Their Influence on His Thought." (PhD diss., University of California, 2016).

¹⁸ Husayn Bobedie, جدلية السلطة والفلسفة في العصر الوسيط: إخوان الصفا أنموذجًا [The Dialectic of Power and Philosophy in the Middle Ages: Ikhwan al-Safa as an Example] (Cairo: Dar al-Kalimah, 2018) 127-130.

¹⁹ "Idris 'Imad al-Din: Uyun al-akhbar [The Springs of History]," The Institute of Ismaili Studies, accessed May 1, 2019, https://iis.ac.uk/node/228551.

Rasa'il Ikhwan al-Safa [...] he confined them to the most esteemed and trusted of his followers."²⁰

This report of Ibn al-Hasan is in sharp contrast with al-Tawhidi's testimony. It is religion that is dominant in the conflict between philosophy and religion. Ikhwan al-Safa's epistles were written to preserve the superiority of religion, according to Ibn al-Hasan, and the philosophical aspect of the epistles is nothing but a façade for preserving religion against philosophy. The legitimacy of this preservation is not derived from the rational endeavor of the epistles but rather from the sacred status of its religious author, the eighth Shi'ite Imam Ali bin Moussa al-Ridha.

The Ismaili characterization of Ikhwan al-Safa is also reproduced in some of the contemporary scholarship on Ikhwan al-Safa. While it is only seen in a negative light by Mohammed Abed al-Jabri who deems, in تكوين العقل العربي [The Formation of Arab Reason], Ikhwan al-Safa's Ismailism as a form of gnosticism corrupting the early rational streams of Arabic culture,²¹ other scholars highlight Ikhwan al-Safa's fundamental role in shaping Ismailism as a rich school of Islamic thought.²² However, those scholars who admit Ikhwan al-Safa's Ismailism do not necessarily undercut the philosophical nature of Ikhwan al-Safa's epistles as does Ibn al-Hasan's report. But still, they evaluate Ikhwan al-Safa's philosophical contribution as a mystical

²⁰ Quoted in the introduction of Ikhwan al-Safa, جامعة الجامعة [The Comprehensive Comprehension], ed. Arif Tamir (Beirut: Dar Maktabat al-Hayah, 1970), 12.

²¹ Mohammed Abed al-Jabri, تكوين العقل العربي [*The Formation of Arab Reason*], 10th ed (Beirut: Center for Arab Unity Studies, 2009), 202-204.

²² For examples advocating this view, see: Henry Corbin, *Histoire de la philosophie islamique, I. Des origines jusqu'à la mort d'Averroës*, avec la collaboration de Seyyed Hosseïn Nasr et Osman Yahya (Paris: Gallimard, 1964). Yves Marquet, "Les Ihwan al-Safâ' et l'Ismaïlisme," in *Convegno sugli Ihwan al-Safa*' (Roma: Accademia nazionale dei Lincei, 1981). Seyyed Hossein Nasr, *Introduction to Islamic Cosmological Doctrines* (London: Thames and Hudson, 1981). Abbas Hamdani, "The Arrangement of the Rasâ'il Ikhwân al-Safâ' and the Problem of Interpolations," in *The Ikhwân al-Safâ' and their Rasâ'il*. El-Bizri, Nader ed (New York: Oxford University Press in Association with the Institute of Ismaili Studies, 2008), 83–100. Carmela Baffioni, "Esoteric Shi'ism in the Additions to Ancient Manuscripts of the Rasa'il Ikhwan al-Safa," in *L'ésotérisme shi'ite: ses racines et ses prolongements / Shi'i esotericism: its roots and developments* (Brepols: Turnhout, 2016).

interpretation of Islam which can be utilized against narrow orthodox conceptions. And overall, other contemporary readings which do not emphasize Ikhwan al-Safa's rationalism but remain skeptical of Ikhwan al-Safa's Ismaili affiliation, speak of the group as belonging to Neoplatonic traditions, Hermetic traditions, or Sufi traditions²³—all which are again considered to have some conceptual and sometimes historical affinities with Ismailism.

Since my overall argument in the next chapter targets the aforementioned double reading of Husayn Muruwwa, I will end this section by briefly showing how the strategy of double reading resulting from this Ismaili characterization might also skew our reading approach of Ikhwan al-Safa; specifically when extended beyond epistemological and pedagogical purposes to assertions about the exclusivity of Ikhwan al-Safa's philosophy.

With Ismailism, "The validity of the literal (*zahir*) is not denied, but it is only one aspect of an overall meaning that also has an inner dimension (*batin*)."²⁴ This inner dimension is explicated in what the Ismailis call *haqa'iq* literature "which contains the esoteric tradition" calling for the strategy of double reading.²⁵ While Ikhwan al-Safa do require a careful communication of their philosophy, their motivations are rather epistemological and pedagogical. For instance, an epistemological motivation is significant in constructing their arguments against the eternity of

²³ For examples advocating this view, see: the introduction of Ikhwan al-Safa, جامعة الجامعة [The Comprehensive Comprehension], ed. Arif Tamir (Beirut: Dar Maktabat al-Hayah, 1970), 12. Ian Netton, Muslim Neoplatonists. An Introduction to the Thought of the Brethren of Purity (Edinburgh: Edinburgh University Press, 1991). Mohammed Arkoun, نزعة الأنسنة في الفكر العربي [The Humanist Tendency in Arabic Thought] (Beirut: Dar al-Saqi, 1997). Firas al-Sawwah, طريق إخوان الصفا: مدخل إلى الغنوصية الإسلامية [Ikhwan al-Safa's Path: An Introduction to Islamic Gnosticism] (Damascus: Dar Alaa al-Din, 2008). Janne Mattila, "The Philosophical Worship of the Ikhwân al-Safâ'," Journal of Islamic Studies, 27.1 (2016), 17-38. Koroglu, Burhan. "Basra and Ikhwan al-Safa School of Thought," Acta Via Serica 2, no 1, (2017), 109-120.

²⁴ Azim Nanji "Ismailism," The Institute of Ismaili Studies, accessed May 1, 2019, https://lis.ac.uk/ismailism#anchor15.

²⁵ Ibid.

the world in which the study of physics is a prerequisite for metaphysical inquiries. Ikhwan al-Safa's pedagogical motivation, on the other hand, is stated clearly in *Epistles 48* "On the Modalities of the Call [to Go] to God," where they require the careful communication of their philosophy not because of its exclusive nature but out of pedagogical concern regarding the learner's lack of receptivity or difficulty in comprehending it. Ikhwan al-Safa conceive of the knowledge contained in their epistles as accessible to all, even if each group of learners answers to different expressions of it. They tell us,

"We have brethren and friends among noble and virtuous people in various countries. Some of them are the children of kings, governors, ministers, officials and secretaries, others of noblemen, land-owners, traders and farmers, still others of scholars, litterateurs, jurists and bearers of the religion, while others are children of craftsmen, administrators and trustees of people. To each group we have delegated one of our brethren whose clear-sightedness and knowledge we have approved, to serve them as our substitute in advising them with kindness, mercy and solicitude ..."²⁶

Ikhwan al-Safa continue to advise their brethren to consider the intellectual and social status of interlocutors when communicating their philosophy, but forbid them at the same time from keeping their doctrine to themselves when asked by a curious inquirer. If one is asked, one is obliged to answer. This obligation goes against the notion which requires the preservation of the hidden meaning by securing an exclusive communication of it.

This is not to turn our eyes away from the religious characteristic of Ikhwan al-Safa. The pursuit of knowledge, with its highest aim the purification of the soul through the embodiment of certain moral and religious teachings, is central to Ikhwan al-Safa's philosophy. Indeed, the religiosity of their subject matter is apparent for any reader of the approximately fifty-two epistles,

²⁶ Quoted in Godefroid de Callataÿ, Ikhwan al-Safa': A Brotherhood of Idealists on the Fringe of Orthodox Islam (Oxford: Oneworld, 2005): 101-102.

however, this religious character does not automatically call for a double reading strategy. Furthermore, Ikhwan al-Safa's religiosity does not have an immediate sectarian feature, whether as a work putting forward the agenda of the rationalist Mu'tazila or advocating the doctrines of Ismailis. On the contrary, sectarianism is rejected adamantly in the writings of Ikhwan al-Safa. One example among many is found in *Epistle 49*, stating, "we are not opposed to any science, we do not to cling fanatically to any doctrine, and we do not keep ourselves away from any of the books that the sages and the philosophers have written or composed..."²⁷

1.4 The Philosophical Nature of Ikhwan al-Safa's Epistles

It is important to speak of the philosophical nature of Ikhwan al-Safa's epistles. The pervasiveness, if not the centrality, of Greek philosophy throughout has been noted by various historical testimonies. For instance, the notable fourteenth century theologian Taqi al-Din ibn Taymiyyah emphasizes Ikhwan al-Safa's Ismailism but sheds light on their relationship to the Aristotelian tradition—which in the research tradition has been overshadowed by the emphasis of the secondary literature on their neoplatonic tendencies. Ibn Taymiyyah remarks on Ikhwan al-Safa's Ismailism by stating that,

"Intrinsically, the philosophers say that what the Messengers informed [us] concerning God and the Last Day has no truth in itself and only constitutes images, similitudes, and parables [...] They may also consider that the characteristic of prophethood is to make up images. This is, in sum, what the philosophers and the esotericists say, those such as the Ismaili heretics, the authors of the *Rasa'il* of the Shi'i." ²⁸

At the same time, Ibn Taymiyyah accuses Ikhwan al-Safa of dubious rationalism stating,

_

²⁷ Ouoted in Ibid, 73.

²⁸ Quoted in Yahya Michot, "Misled and Misleading... Yet Central in their Influence: Ibn Taymiyya's Views on the Ikhwān al-Şafā" in *The Ikhwân al-Safâ' and their Rasâ'il*. El-Bizri, Nader ed (New York: Oxford University Press in Association with the Institute of Ismaili Studies, 2008), 148-149.

"...if the knowledge of [the Qur'an] is not learned from the Messenger [...] will this [knowledge] then be mentioned in what is said by Aristotle and his kin, by the authors of the *Rasa'il Ikhwan al-Safa* and their like, who establish things by means of syllogism containing mere claims, [based on] no sound-transmitted tradition nor clear rationality."²⁹

My next chapter will show Ikhwan al-Safa's explicit and implicit engagement with Aristotelian arguments for the eternity of the world, validating Ibn Taymiyyah's observation regarding their relationship to the Aristotelian tradition. But generally, I depart from the controversial Ismaili characterization as guiding my study of Ikhwan al-Safa's synthesis of creation and emanation. My study limits itself to the evident observation that their epistles are first and foremost a work of philosophy, and hence it cannot be properly understood unless situated in the historical context of early Arabic philosophy.

The enrichment of this historical context is due in great part to the Greco-Arabic translation movement which made available, by the middle of the 10th century, ancient Greek philosophy and its late ancient Platonic and Aristotelian traditions, which were at that time permeating the Christian world. The epistles of Ikhwan al-Safa benefit from the richness of sources available to them, such as the "the legacies of the Stoics and of Pythagoras, Hermes Trismegistus, Socrates, Plato, Aristotle, Plotinus, Nicomachus of Gerasa, Euclid, Ptolemy, Galen, Proclus, Porphyry, and Iamblichus," as Nader El-Bizri noted.³⁰ However, this rich relationship between Arabic philosophy and its sources was also generated by a fierce intellectual, cultural, and political competition. The role of the science of *Kalam*, Islamic theology, and traditional Arabic sciences all made fundamental contributions to Arabic philosophy.

²⁹ Ouoted in Ibid, 152-153.

³⁰ Nader El-Bizri, ed., *The Ikhwân al-Safâ' and their Rasâ'il* (New York: Oxford University Press in Association with the Institute of Ismaili Studies, 2008), 11.

Focusing on the philosophical side of the coin, in her valuable study, "Textual Problems in the the Ihwān al-Sa fā's Quotations of Ancient Authors," Carmela Baffioni surveys from a historical perspective the philosophical quotations and references present in Ikhwan al-Safa's corpus.³¹ Since arguments for the eternity of the world find their origin in Aristotle, it is important to know which of the Aristotelian works or at least parts of them were available to Ikhwan al-Safa. Baffioni identifies direct quotations from Aristotle's De Caelo, Metaphysics, Physics, De Generatione et Corruptione, and De Partibus Animalium.³² Consequently, when discussing Ikhwan al-Safa's engagement with the problem of the world's eternity, the assumption of Aristotelian works being available to Ikhwan al-Safa is by virtue of the Arabic compendia of Greek works that is known to have been widespread in the 10th century. We can be rather certain of their availability to Ikhwan al-Safa and Ikhwan al-Safa's direct engagement with them. However, Baffioni shows that it is not clear if Ikhwan al-Safa are quoting from the available translations of Greek works at the time or directly translating them into Arabic by themselves. The hypothesis that they are following their own translations is due to the fact that "they do not quote precisely any of the 'canonical' [translated] versions," as Baffioni demonstrates. 33 If this hypothesis is not correct, the other possibility is that Ikhwan al-Safa are quoting other translated versions which have not come down to us. On the other hand, Ikhwan al-Safa strictly follow the "canonical" versions of Pythagoras' Golden Verses and Theologia Aristotelis, which contains parts of Plotinus's *Enneads*, attributed in the Arabic tradition to Aristotle.³⁴ Some parts of Plato's

³¹Carmela Baffioni, "Textual problems in the Iḥwān al-Sa fā's quotations of ancient authors" in *Proceedings of the 17th Congress of the UEAI*, ed. W.Madelung, Yu. Petrosyan, H.Waardenburg-Kilpatrick, A.Khalidov, E.Rezvan (Thesa, St. Petersburg: 1997), 13-26.

³² Ibid, 16-17.

³³ Ibid, 22.

³⁴ Ibid.

works are also referenced by Ikhwan al-Safa, such as *Theaetetus*, *Phaedo*, and *Republic*. ³⁵ Even though Plato's *Timaeus* is not explicitly referenced, its influence on Ikhwan al-Safa can be observed and hence should be taken in consideration.

Furthermore, if not through al-Kindi, Ikhwan al-Safa make use of some notions derived from the the defense of the world's creation by the Christian philosopher John Philoponus against the doctrine of the world's eternity found in Proclus and Aristotle. While Philoponus' influence on al-Kindi and *Kalam* is evident, his philosophical affinity, if not intimate connection, to Ikhwan al-Safa is to be further studied. They share with him a deep theological commitment to the belief in creation.

In the following, I want to pay close attention to the overlooked but indispensable affinity between Ikhwan al-Safa and al-Kindi. Their *Epistle 41*, "On Definitions and Descriptions," is almost identical with al-Kindi's "On Definitions." Moreover, a recent study suggests that his student Ahmad ibn al-Tayyib al-Sarakhsi (d.899) was the author of the epistles, or at least a particular set of them.³⁷ This link has been also observed in the early orientalist scholarship on Ikhwan al-Safa. Abbas Hamdani notes that Ikhwan al-Safa

"share with al-Kindi the doctrines of the origination and destruction of the world by God, the resurrection and the validity of the Prophetic revelation, all general Islamic doctrines imbedded in their philosophic thinking.

This is an indication that the composition of the *Rasa'il Ikhwan al-Safa* took place near al-Kindi's time. The following words of de Boer are apt in this connection: 'Quotations in the *Rasa'il*, as far as they have been identified, are mainly taken from the literature of the eighth and ninth centuries AD. The philosophical position is that of the older eclectic

³⁵ Ibid.

³⁶ Al-Kindi, *Rasa'il al-Kindi al-Falsafiyya*, ed. Abu Rida, M.'A.H, 2 volumes (Cairo: Dar al-Fikr al-'Arabi, 1950/1953) 165–79.

³⁷ Guillaume de Vaulx, تيسير رسائل إخوان الصفا وخلان الوفا [A Guide to the Epistles of the Brethren of Purity and Sincere Friends] (Cairo: General Egyptian Book Organization, 2017), 7.

translators and collectors of Greek, Persian and Indian wisdom. ... It is not impossible, however, that they had literary connections with al-Kindi and his school.' De Boer also studied this school, which included such people as Ahmad b. Muhammad al-Tayyib al-Sarakhsi (d.286/899) and Abu Ma'shar Ja'far b. Muhammad al-Balkhi (d. 272/855)."³⁸

In spite of the probability of this suggestion, the affinity between Ikhwan al-Safa and al-Kindi is most evident in their conception of philosophy and their understanding of the relationship between philosophy and religion. Significantly, al-Kindi's work illuminates Ikhwan al-Safa's continuous relationship with the tradition of early Arabic philosophy.

1.5 Al-Kindi's and Ikhwan al-Safa's Natural Theology

In *On First Philosophy*, Al-Kindi (801-873), the first Arab philosopher, defines philosophy as the "knowledge of the true nature of things, insofar as is possible for man. The aim of the philosopher is, as regards his knowledge, to attain the truth, and as regards his action, to act truthfully." However, for al-Kindi, "We do not find the truth we are seeking without finding a cause; the cause of the existence and continuance of everything is the True One." Al-Kindi here is starting from the question of "whatness." To ask, within the limits of the human capacity to know, what the world *is* and what is its *cause*. Since he takes the cause of the world to be God, maintaining Islam's fundamental tenet which is the truth of God's existence and His creation and maintenance of the world, finding the cause of the world is inseparable for al-Kindi from knowing the nature of its cause, that is God, the originator of the world.

From the preliminary paragraphs of their first epistle, Ikhwan al-Safa's defense of the monotheistic creed of God's existence and His creation of the world is explicit. Ikhwan al-Safa's

³⁸ Abbas Hamdani, "The Ikhwan al-Safa' between al-Kindi and al-Farabi" in *Fortresses of the Intellect: Ismaili and Other Islamic Studies in Honour of Farhad Daftary*. ed.Omar Alí-de-Unzaga (New York: I.B. Tauris, 2012), 195.

³⁹ Quoted in Peter Adamson. *Al-Kindī* (New York: Oxford University Press, 2007) 22.

⁴⁰ Ibid.

conception of philosophy is followed by laying down of the quadripartite structure of the epistles, which mirror this conception. The first part is arithmetics, then logic, followed by physics, all accumulating in metaphysics, which is understood as an inquiry into God, that is, theology. Those sciences, which contemplate the truth of existent beings no matter their status, whether as substances or accidents or simples or composites are essentially about knowing they could "originate and come into existence from one cause, one principle, and one originator." We can assert about Ikhwan al-Safa what Adamson notes about al-Kindi's conception of his own metaphysical project, whereby "the study of being reduces to the study of the First Cause of being." In fact, both define metaphysics as the study of things that subsist without matter, namely immaterial substances.

The aim of their epistles, Ikhwan al-Safa tell us, is paving the path for those who are beginners in the pursuit of wisdom, that is, philosophy. The destination of their pursuit is similar to the destination sought by al-Kindi's path, it is ultimately an inquiry into the cause of existent beings. Ikhwan al-Safa identify this cause with God, provide arguments for God's existence, and emphasize God's oneness. They define philosophy in the first epistle as beginning in the love of the sciences, which leads to knowing the truth of existent beings within the limits of human capacity for knowledge, and ends with thinking, acting and speaking in accord with those sciences.⁴⁵

⁴¹ Ibid.

⁴² Ibid.

⁴³ Peter Adamson. *Al-Kindī* (New York: Oxford University Press, 2007) 32.

⁴⁴Ibid; Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 67.

⁴⁵ Ikhwan al-Safa, وضَلان العِفاء وخُلان العِفاء (Epistles of the Brethren of Purity and Sincere Friends), vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 36.

Accordingly, we can understand al-Kindi's and Ikhwan al-Safa's philosophical project as a project of what we call today natural theology, defined as "the project of arguing for the existence of God on the basis of [...] using the cognitive faculties that are 'natural' to human beings—reason, sense-perception, introspection—to investigate religious or theological matters."

46 In the following two sections, I explore in detail two arguments put forth by Ikhwan al-Safa for God's existence and God's creation of the world. My reason behind this exploration is twofold. On the one hand, both arguments stand as clear examples of how the project of natural theology is a cornerstone of Ikhwan al-Safa's philosophy, while the first argument appeals to the introspective nature of human beings, the other rests on sense-perception. On the other hand, both ultimately insist upon God's absolute independence and freedom. Both attributions of God, are threatened by the eternity of the world's doctrine and thus motivate Ikhwan al-Safa's denial of such doctrine.

While Ikhwan al-Safa do not always appeal to the same arguments provided by al-Kindi, as our exploration in the next two sections of Ikhwan al-Safa's arguments for God's existence from simplicity and God's creation of the world from design shall show, they both nevertheless agree that the absolute oneness of God is not restricted to oneness as a Platonic form. To use Adamson's comment on al-Kindi's conception of oneness, God is "doing something more active than being a paradigm for other things to participate in." For both, God is the Creator and

16

⁴⁶ Andrew Chignell and Derk Pereboom, "Natural Theology and Natural Religion," *The Stanford Encyclopedia of Philosophy* (Spring 2017 Edition), Edward N. Zalta (ed.), https://plato.stanford.edu/archives/spr2017/entries/natural-theology/.

⁴⁷ Peter Adamson. *Al-Kindī* (New York: Oxford University Press, 2007) 57.

Originator of everything. Hence, they understand their philosophical inquiry into God as a natural activity of the soul, the source of which is God.

A shared fundamental point follows from this understanding for al-Kindi and Ikhwan al-Safa. The inquiry of philosophy into the One is not merely a contemplative inquiry occurring in one's soul. A true philosophical knowledge is purifying to the soul and must be embodied in one's speech and action, and this inseparability of the theoretical and practical aspects of philosophy is fundamental to the philosophy of both al-Kindi and Ikhwan al-Safa. Furthermore, as al-Kindi's definition of philosophy states, once one attains the knowledge of an existing cause of the world who continuously maintains the existence of the world itself, one's philosophical quest consists of molding one's actions in accordance with this found knowledge. There is no separation between philosophy as a quest for knowledge and as a code according to which one lives. They announce in *Epistle 52*,

"Know, O Brother, that the real meaning of this name [Ikhwan al-Safa] is an exclusive property, not merely a metaphor, inherent in those who are worthy of it. Know, O Brother, may God assist you, that the purity of the soul cannot be achieved except after attaining the utmost serenity in the articles of faith and worldly affairs. This means that one should know, according to one's ability and reach, the profession of the unity of God the Most High, knowledge of the true nature of living beings and peculiarities of created things."

⁴⁸ Ikhwan al-Safa, *On Magic*, an Arabic Critical Edition and English Translation of *EPISTLE 52*, *Part* 1, ed. and transl. by Godefroid de Callataÿ & Bruno Halflants (Oxford: Oxford University Press with The Institute of Ismaili Studies, 2011).

Ikhwan al-Safa's name is also derived, as they state, from *Kalila wa-Dimna* which was translated from Middle Persian by Abdullah bin al-Muqaffa' (724-759) "Know, O brother, may God aid you and us with a spirit from Him, that you ought to be assured that you cannot be saved by yourself alone from what has befallen you in this world[...] you need the help of those who are brothers to you, who are counsellors to you and virtuous friends, and who are knowledgeable about the articles of faith and are knowers of the truths of things[...] take heed of the tale of the ringdove that is mentioned in the book of *Kalila wa-Dimna*, and how it escaped from the net, in order you grasp the truth of what we have said," Ikhwan al-Safa, *On Arithmetic and Geometry*, an Arabic Critical Edition and English translation of *EPISTLES 1 & 2*, ed. and transl. by Nader El-Bizri (Oxford: Oxford University Press with The Institute of Ismaili Studies, 2012), 138-139.

1.6 God's Existence and Divine Independence: The Argument from Oneness

The above mentioned similarities between al-Kindi and Ikhwan al-Safa regarding their conception of philosophy as an inquiry into God and its inseparability from practice are further strengthened by the first argument provided by Ikhwan al-Safa for God's existence which analyses the concept of 'one.' Although distinct in its proceedings from al-Kindi's explicit philosophical argumentation, Ikhwan al-Safa's analysis still shares many of the grounds and conclusions found in al-Kindi's own analysis of the concept of 'one' in *On First Philosophy*. In the following paragraphs, I mainly focus on Ikhwan al-Safa's analysis while I allude to its points of convergence with al-Kindi.

In analyzing the concept of 'one,' Ikhwan al-Safa appeal to the science of numbers, arithmetic, to answer the question of "how does an infinite multitude begin with the One?" The necessity of the One for the generation of multiplicity—a multiplicity found in both the natural world surrounding us and the conceptual world within us—is a concern which goes back to Plato's *Parmenides*, available to the early Arabic philosophical tradition by way of Proclus, and is at the heart of al-Kindi's *On First Philosophy*. However, while al-Kindi aims to demonstrate via rational proofs the impossibility for multiplicity to exist without the One, Ikhwan al-Safa appeal in their argumentation to arithmetics as the most foundational of all sciences. Ikhwan al-Safa understand arithmetics as a source of a *priori* knowledge. For them, the science of arithmetics

See also: Abbas Hamdani, "The Name of Ikhwan al-Safa," *DOMES*, Digest of Middle East Studies, no. 9 (1999), 1-11

⁴⁹ Ikhwan al-Safa, *On Arithmetic and Geometry*, an Arabic Critical Edition and English translation of *EPISTLES 1 &* 2, ed. and transl. by Nader El-Bizri (Oxford: Oxford University Press with The Institute of Ismaili Studies, 2012), 17

⁵⁰ Peter Adamson. *Al-Kindī* (New York: Oxford University Press, 2007) 49-50.

⁵¹ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 84.

is "placed in every soul" and can be brought from potentiality to actuality by merely employing one's intellectual power. It is, therefore, the science from which other propaedeutic sciences take their examples and not vice versa.⁵² The argument for arithmetic in support of God's oneness is thus considered by Ikhwan al-Safa as the most evident and accessible proof for God's existence to every soul.

Ikhwan al-Safa link arithmetics with their metaphysical inquiry into God by providing mystical interpretations to its scientific entailments. Most importantly, they ground this link by elevating the status of numbers as corresponding to all classes of existent beings. However, as Nader el-Bizri notes,

"[Ikhwan al-Safa's] analogism, which was saturated with picture-based language, resulted in mistaking resemblances for explanations; consequently, their metamathematical speculation around arithmetic borders on 'empty verbalism', which produced pseudo-explanations that are hardly translatable into meaningful epistemic terms." ⁵³

El-Bizri explains this shortcoming of theirs as part of their inheritance of Pythagorean and Hermetic doctrines.⁵⁴ Ikhwan al-Safa explicitly attribute their metaphysical science of numbers, derived from arithmetics, to Pythagoras and Nicomachus of Gerasa.⁵⁵

While el-Bizri is able to trace the influence of Nicomachus' "On Arithmetics" on *Epistle 1*, he also points out where they diverge. Significant to our discussion, Ikhwan al-Safa omit Nicomachus' distinction between intelligible numbers and scientific numbers. While intelligible

⁵² Ibid

⁵³ Ikhwan al-Safa, *On Arithmetic and Geometry*, an Arabic Critical Edition and English translation of *EPISTLES 1 &* 2, ed. and transl. by Nader El-Bizri (Oxford: Oxford University Press with The Institute of Ismaili Studies, 2012), 15.

⁵⁴ Ibid.

⁵⁵ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 64.

numbers pertain to the workings of the Demiurge, play a cosmological role, and enjoy eternal and immaterial existence, scientific numbers are restricted to expressing quantity. ⁵⁶ El-Bizri points out that Ikhwan al-Safa's commitment to God as a Creator of the world *ex nihilo* is the reason behind their omission of Nicomachus' distinction. ⁵⁷ Unlike the Demiurge, God does not generate the world and order it "from pre-existing and co-eternal worldly constituents." ⁵⁸ This adds to the sum of the evidence I highlight in the next chapter, which gives little doubt to Ikhwan al-Safa's adherence to the monotheistic creed of creation. In this instance, if Ikhwan al-Safa were to admit to Nicomachus' distinction between intelligible and scientific numbers, they would undermine their various arguments against the eternity of the world, which relies on the understanding that only God can enjoy eternity at the cost of all classes of beings, including numbers.

In spite of Ikhwan al-Safa's dubious epistemological employment of arithmetics, their employment can still tell us a great deal about their way of conceiving God's oneness. The status they give to their argument from arithmetics for God's oneness and its prevalence in virtually all of the epistles should direct our understanding of their conception of God in their subsequent arguments. Ikhwan al-Safa analyze the concept of 'one' by investigating, as done by al-Kindi, the meaning of the concept 'one' when applied to any term, and they take 'thingness' to be the most general of all terms. So what does it mean when we speak of a thing as one? What can we know about a thing when we speak of it being one? Ikhwan al-Safa turn, as we have shown, to

⁵⁶ Svetla Slaveva-Griffin, "number in the metaphysical landscape" in *The Routledge Handbook of Neoplatonism*. 2014. http://public.eblib.com/choice/publicfullrecord.aspx?p=1753266.

⁵⁷ Ikhwan al-Safa, *On Arithmetic and Geometry*, an Arabic Critical Edition and English translation of *EPISTLES 1 &* 2, ed. and transl. by Nader El-Bizri (Oxford: Oxford University Press with The Institute of Ismaili Studies, 2012), 16.

⁵⁸ Ibid.

arithmetics as the foundational science which studies the attributes of numbers "in view of elucidating the properties of correlative [existent beings]."⁵⁹

The analysis of the concept of 'one' in terms of its numerical properties answers the question, "how does an infinite multitude begin with the One," by affirming the generation of all other numbers from number one *ad infinitum* without losing its essential property of oneness. While, for example, number four can be generated by multiplying number one four times, number one cannot be generated, by definition, for it is one in virtue of its own essential property of oneness. Since number one is not generated, number one is not susceptible to generation, which entails change. Furthermore, it is the unchanging cause of all generation. Without number one, all other numbers cease to be while number one remains in existence even when all numbers cease to be. Precisely, Ikhwan al-Safa are no longer speaking of number one as a number but rather as the principle from which numbers are generated and composed. This mathematical analogy is also exploited by al-Kindi in which the relationship between God and creation is like the relation between the principle one and the numbers.

Therefore, Ikhwan al-Safa identify the properties of the principle one with God, the only being who truly enjoys those properties in actuality. Ikhwan al-Safa accept a distinction made by al-Kindi between what is essentially one and what is accidentally one. ⁶²In their terms, Ikhwan al-Safa distinguish between what is truly one and what is metaphorically one. What is truly one follows our everyday conceptualization of that which cannot be divided or partitioned, and

⁵⁹ Ibid.

⁶⁰ Ikhwan al-Safa, رسائل إخوان الصفاء وخلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 2, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 64-85.

⁶¹ Peter Adamson. *Al-Kindī* (New York: Oxford University Press, 2007) 49-52.

⁶² Ibid, 53.

consequently the one can be defined as that which contains nothing but itself. The metaphorical conceptualization of the one, on the other hand, is the ascription of the one to a multitude, and therefore the one in this case acts as an undivided unity even though in actuality such unity is divisible. Accordingly, even though the one encompasses the notion of unity, in which unity is a composition of a multitude, oneness that is undivided, unpartitioned, and un-composited remains an essential property that is exclusive in actuality to the one. The one is one by virtue of its essential oneness as what is black is black due to its essential property of blackness. Unity, however, lacks the aforementioned properties of oneness for it can be divided, partitioned, and decomposed.⁶³

While the identification of God with the principle one does not constitute a proper proof, Ikhwan al-Safa's metaphysical conception of arithmetics gives their identification of the properties of the principle one with God a stronger force when understood within their overall edifice—even though such conception is dubious from an epistemological viewpoint. Ikhwan al-Safa tell us that by inducing those properties of the principle one *a priori* through the intellect, the soul cannot but recognize that those properties point to its cause and creator. This is the pinnacle of Ikhwan al-Safa's epistemology in which "it is only he who knows himself knows his God." They wonder in *Epistle 48* how can one make an inquiry into the truth of existent beings without first inquiring about the truth of one's own self.

All in all, the properties of the principle one can be summed up in the following list: unchangeability, indivisibility, and simplicity. These properties are exclusive to God, who alone

⁶³ Ikhwan al-Safa, وصائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 64-85.

enjoys them, and without the true one there cannot be a creation as there cannot be numbers without the principle one. Hence, for Ikhwan al-Safa, God is an eternal origin which causes everything while necessarily containing their potential forms within Himself, as the number one contains the potentialities of other numbers. Ultimately, all of the properties of the principle one point to God's absolute independence.

We are going to see in later chapters how this concept of God takes shape within Ikhwan al-Safa's theory of emanation from within their creationist framework. For now, generally, Ikhwan al-Safa understand the process of emanation to be analogous to the process of producing numbers from the principle one. God first invented and originated, from the light of its oneness, the universal intellect, also called the active intellect, as the number two is produced by the repetition of one. Then the universal soul emanated from the universal intellect as the number three is produced by adding the principle of one to number two. And then prime matter emanated from the motion of the universal soul as the number four is produced by adding the principle one to number three. Then the rest of the creation came into being from prime matter, as the rest of the numbers are produced by adding the principle one to number four.⁶⁴

Another consequence of the mathematical analogy between the principle one and God is worth mentioning. This point, as Adamson shows, is behind al-Kindi's exploitation of the mathematical analogy, though he does not state it explicitly. While Ikhwan al-Safa make this point outright, they proceed from the implicit mathematical analogy to an explicit statement, unlike al-Kindi who proceeds explicitly from mathematics outwards.⁶⁵ For al-Kindi, numbers refer to relative

64Ibid 67-68

⁶⁵ Peter Adamson. *Al-Kindī* (New York: Oxford University Press, 2007) 53.

and not absolute quantity since every quantity is more or less relative to another one. Nothing is absolutely large or absolutely small, but only in relation to another thing, and the measurement of something large, for example, can be a small measurement when compared to some potentially existing quantity, such as a multiple of itself. However, the principle one survives this relativity. Since the principle one does not have an opposite, it cannot be compared to anything else but itself, and hence it is neither more nor less than itself. Otherwise, it is no longer the principle one but rather a quantity which answers to measurement by the numbers. The principle one cannot be more or less than any other number, for without it numbers would lose their relation to each others as indicating larger or smaller quantities. Only numbers can be compared to numbers. As stated by al-Kindi, "the One in truth admits of no relation with anything in a shared genus, and it has no genus that admits of being in a relation to anything in a shared genus."66 This prepares us for the point, Adamson concludes, "that God, the true One, cannot be 'compared' to His creatures." Ikhwan al-Safa arrive to the same point in *Epistle 1*. God does not have a corresponding part in creation, similar to the principle one, which does not have an equivalent in numbers.⁶⁸ Both are incomparable. This indeed aligns with the traditional conception of God which is derivative from the verse in the Qur'an stating that "nothing is like to Him" (42:11).

⁶⁶ Quoted in Ibid.

⁶⁷ Ibid.

⁶⁸ Ikhwan al-Safa, رسائل إخوان الصفاء وخَلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 68.

1.7 God's Existence and Divine Freedom: The Argument from Design

In regard to the presupposed conflict between philosophy and religion, especially when it comes to the problem of the world's eternity where the philosophical party affirms what the religious party denies, Ikhwan al-Safa tell the parable of "the wise father and his cognizant and ignorant children" in *Epistle 28.*⁶⁹ The parable is an attempt to prove the existence of God from design, an argument which echoes across the epistles. Following a discussion of the parable, I will consider a further step taken by Ikhwan al-Safa in the design argument, namely, their emphasis on the relationship between an intelligent design and a free agent.

The parable concerns a wise father with two groups of children: a cognizant intelligent group and an ignorant foolish group. One day, looking through the treasures of their father, the children found them full of candies with various tastes, colors, shapes, and smells. Their amusement led them to contemplate the candy. They could not help but wonder, *Who is it who made those wonders and formed those shapes and designed those colors?* The cognizant intelligent children knew that they were made by a wise maker, while such knowledge was beyond the understanding of the ignorant foolish ones. Those who understood that the candies were made by a wise maker started then thought, *From what did he make them?* The more intelligent of them knew that he made them from other things. Having understood they are made by a wise maker from other things, some could not comprehend why and how he gave the candies those shapes and made them from other things. The foolish children had to pause and contemplate further. But

⁶⁹ Ikhwan al-Safa, وهنان الصفاء وخلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 2, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 362-365.

it was not hard for the most intelligent children to comprehend why and how. They no longer had any need for these questions.

The children then went and asked their older, rational brothers about the maker of the candies. The rational brothers explained that the confectioner made them. Not knowing who the confectioner was, the children inquired. A wise maker, said the rational brothers. Those who could neither perceive nor believe such an answer were the ignorant, foolish children, who inferred from not having seen or heard about the confectioner that he did not exist. The children then asked about the materials from which the confectioner made the candies and how he made them. He made them from sugar and oil and starch, replied the brothers, who explained how he went about mixing and cooking them. While some children believed them, others did not, for they had seen neither the materials nor did they know of them through reason alone, and so they asked the brothers to show them. The brothers replied, Nothing is left of them, for the maker has used all of them.

The children fell into disagreement about the matter, becoming different groups disputing with and arguing against each other. Witnessing the predicament of his children, the merciful, wise father felt compassion and appointed from their rational and enlightened brothers judges to guide and teach them. So when the children asked about the maker of the candies this time, the judges told them that it is their father who made the candies. Believing their father made the candies was easier for the children to comprehend than imagining the confectioner. The judges also told the children, when they wondered why, how, and from what their father made the candies, that their father made them out of something they were unfamiliar with, the way he himself wished to

make them. Contrary to the earlier replies provided by the brothers, the judges' answers finally gave peace to the hearts of the children.

Ikhwan al-Safa explain the moral of this parable. The treasures of the father are analogous to the world, the candies are the various wonders of creation found in it, and so the dispute among the children is analogous to the dispute surrounding the world's eternity. Does the world have an origin? Has the world always been like this? How was it created? The rational brothers represent the philosophers, the judges represent the prophets, and the father represents God, who sends prophets to answer each group according to their learning ability and with what is suitable to their reasoning.

The parable dismisses from the start as ignorant and unreflective those who do not wonder about the world and never ask about its cause. If wonder is the beginning of philosophy, then the cause of the world is the inherent question of philosophy. For Ikhwan al-Safa, philosophical curiosity is the prerequisite for moving from a state of ignorance to a state of knowledge about the world. Specifically, our desire for knowledge is linked with our desire to know God, who is the cause of the world. Hence, their natural theology speaks to human desires as much as it appeals to human cognitive faculties.

In *Epistle 39*, "On the Quantity of the Kinds of Motions," under the heading "On the Explanation of the Loss [occurring] to Him Who Believes or Thinks that the World is Eternal, Not Generated," Ikhwan al-Safa explain the reason behind this loss as a consequence from being blind to the understanding of philosophy as a quest for the cause of the world, namely God. For he who thinks the world is eternal, wondering about

"the modality of the making of the world and its coming-to-be neither occur to him, nor do they occupy his mind or his cogitation, nor does he ask about its maker, who he is, or who created it, or when he innovated it, or from which thing he created, how he shaped it, why he acted after he had not [...He is blind to] enquiries and questions in which and whose answers there is the awakening of the souls from the sleep of negligence, as well as a life of happiness and release for them from despair and distress."

Without philosophical curiosity, the intuition which the argument from design rests on fails to work, and without philosophy, we become blind to the design around us. While philosophical curiosity activates our intuition for design, the source of this curiosity, however, is not our own intuition but the intelligent design of the world itself. When the world gives rise to one's philosophical curiosity, one recognizes intuitively the design present in the world, while knowing that anyone else who observes the world in the same manner will also intuitively recognize the design present in it. Intelligent design cannot be but a feature of the world independent of the recognition of man, and since this observable design is both independent and undeniable, it is implausible to be a result of what Ikhwan al-Safa call our 'imaginative faculty,' as it is only implausibly the result of mere chance. Accordingly, there must be an intelligent cause behind it.

Herbert Davidson identifies two types of observable evidence for design that have been offered from the time of ancient philosophy: major scale evidence and minor scale evidence.⁷¹ We find for instance the focus on minor scale evidence by the spokesman for Stoicism in Cicero's *De Natura Deorum*, who, after inquiring into "phenomena of botany, zoology, meteorology, and geology, which have nothing to do with man and the wealth of evidence discloses that

⁷⁰ Ikhwan al-Safa, *Sciences of the Soul and Intellect, Part III. An Arabic Critical Edition and English Translation of EPISTLES 39-41*, ed. & transl. by Carmela Baffioni & Ismail K. Poonawala (Epistles of the Brethren of Purity) (Oxford: Oxford University Press with the Institute of Ismaili Studies, 2017), 167.

⁷¹ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 216.

functionality," conclude that design is ubiquitous in nature. ⁷² Similarly, Ikhwan al-Safa appeal in Epistle 21 "On the Kinds of Plants," to those minor scale phenomena to prove the existence of a wise maker who can be inferred from the witnessed wisdom of his design. 73 Ikhwan al-Safa also appeal to major scale evidence for design. Perhaps, closely following Plato's Laws and Aristotelian dialogues, they cite the utility and the beauty of the heavens and the functionality of celestial motion as major scale evidence.⁷⁴ "The Ikhwan conclude, with no ado, that the ingenious arrangement of the celestial spheres cannot have come about by chance but must have 'occurred through the intention of an intending agent . . . [who is] wise and powerful." As stated in *Epistle 39*, this is evident when one sees that "the rule [that governs] the world with all its parts and affairs is like [the rule that governs] a single city, or single animal, or a single man, which is inseparable from [the rule of] motion and rest, either in its universality or in its particularity."⁷⁶ Similar analogies are used by ancient authors who "compare the heavens or the entire universe to a house... a city, a ship, a book," and articulate the macrocosm-microcosm mirroring the world and human beings to express their harmonious, if not identical, purposefulness.⁷⁷ Ikhwan al-Safa explicate in detail this notion of macrocosm-microcosm

⁷² Ibid, 217.

⁷³ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 2, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 116-133.

⁷⁴ Both sources are quoted by Ikhwan al-Safa. See: Carmela Baffioni, "Textual problems in the Iḥwān al-Sa fā's quotations of ancient authors" in *Proceedings of the 17th Congress of the UEAI*, ed. W.Madelung, Yu. Petrosyan, H.Waardenburg-Kilpatrick, A.Khalidov, E.Rezvan (Thesa, St. Petersburg: 1997), 13-26.

⁷⁵ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 225.

⁷⁶ Ikhwan al-Safa, *Sciences of the Soul and Intellect, Part III. An Arabic Critical Edition and English Translation of EPISTLES 39-41*, ed. & transl. by Carmela Baffioni & Ismail K. Poonawala (Epistles of the Brethren of Purity) (Oxford: Oxford University Press with the Institute of Ismaili Studies, 2017), 148.

⁷⁷ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 218.

mirroring in Epistle 34 titled "On the Meaning of the Claim of the Sages That the World is a Macranthrope."

Davidson points out an advantage monotheistic philosophers gain when they appeal to major scale evidence for design. This advantage is demonstrating the oneness of God. "If the universe exhibits a single overall design, the conclusion is more easily drawn—although it is not necessarily drawn—that a single designer is responsible,"78 states Davidson. Ikhwan al-Safa do indeed take the presence of single design on a cosmic scale as an evidence for a single creator. They write,

"And know, O my brother, may God help you and us through a spirit coming from Him, that when the wise Creator, high be His praise, originated the existing beings and invented the generated beings, he made the root of them all from a single matter, but contrasted them through various forms, made them different, variegated, and distinct as genera and species, distinguished between their extremities, but linked their beginnings with their ends with a single link according to a disposition and an order proper to the arrangement of [His] wisdom and the perfection of [His] work that are [manifest] in them, so that all existing beings are a single world, ordered according to a single order and a single disposition, as a sign of a single Artisan."79

Ikhwan al-Safa fall short, like other monotheistic medieval philosophers, in specifying the criteria for a design evidence, in making explicit the step from proving design to inferring an Artisan, and in entertaining the thought that a single design can be the work of multiple Artisans. Nonetheless, Ikhwan al-Safa explain the step from design to an Artisan according to astrological assumptions, which they consider proved by means of geometrical rational demonstration in

⁷⁸ Ibid.

⁷⁹ Ikhwan al-Safa, On the Natural Sciences. An Arabic Critical Edition and English Translation of EPISTLES 15-21, ed. & transl. by Carmela Baffioni, foreword by Nader El-Bizri (Epistles of the Brethren of Purity) (Oxford: Oxford University Press with The Institute of Ismaili Studies, 2013), 340.

astronomy.⁸⁰ In other words, their arguments were supported by the science of the time—and Ikhwan al-Safa's appeal to science in supporting their design argument is not far from the appeal to science made by today's proponents of teleological arguments for God's existence, much like those who appeal to the concept of the fine-tuned Universe today.

Ikhwan al-Safa employ the design argument for God's existence to highlight, as the parable states, their ardent opposition to the eternity of the world doctrine. However, even though the argument from design aims to prove the existence of an intelligent cause behind the world's design, it does not entail the creation of the world as much as it presupposes it. Namely, if there is an intelligent design present in the world, then there must be an intelligent cause of the world. Without assuming that the world is a creation, explaining the existence of a cause behind its evident design as a Creator becomes difficult. Furthermore, even though intelligent design appeals strongly to our intuition, making the argument from design the most plausible argument for God's existence, it is still not clear what attributes of God are meant to be deduced from it. Of course, it might not establish anything besides the existence of an intelligent cause behind an intelligent design. Hence, it fails to establish God's volition, which motivates Ikhwan al-Safa's argumentation against the world's eternity, but we must take in consideration that during their time what constituted a full proof of God was neither clear nor settled.

Nevertheless, Ikhwan al-Safa push the design argument one step further by looking at it not from the viewpoint of our sense-perception, but rather from the conceptual viewpoint of how such an intelligent design can come into existence independent of an agent who freely decides the

⁸⁰ Ikhwan al-Safa, وهنلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 117.

purpose which underlies the world's intelligent design. Accordingly, Ikhwan al-Safa seem to require, as a minimum for proving God's existence, proof of His free volition.

Davidson states that often the focus on major scale evidence for design seeks to emphasize orderliness and regularity, while the focus on minor scale evidence pays attention to purposefulness. However, Ikhwan al-Safa find orderliness and regularity to be indicators of greater design as much as difference and arbitrariness, and with them, both major and minor scale evidence emphasizes purposefulness. They quote Aristotle's aphorism that "nature does nothing in vain," and exploit this principle to push the argument from design further, toward a demonstration of the generation and perishing of the world, in defense against those who believe it to be eternal.

By employing the terms of the Aristotelian theory of four causes distinguishable in things—material cause, formal cause, final cause, and efficient cause—Ikhwan al-Safa want to argue that anything disclosing a final cause must also have an efficient cause which does not only decide its final cause but also that its final cause exists in virtue of the efficient cause's determination of it. Namely, everything which manifests a purpose must necessarily have a maker who is not only the source of its purpose but also, since its purpose is one of the causes for its existence, it depends for its existence on a maker who freely decides, or ceases to decide, the existence of its purpose. If we take the design of a chair as an example, it manifests a purpose which is decided upon by the carpenter who makes it. Without the carpenter deciding the purpose of the chair, the

⁸¹ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 216.

⁸² Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 200.

chair would have not existed, since everything which exists must exist in virtue of its four causes, including its final cause, that is, its purpose. If the carpenter decides to make a table of the chair, the chair will cease to exist because the carpenter stopped determining its purpose as that which is meant to be sat on.

In other words, since design is evident in the world, the world shows evidence of a final cause, and since a final cause depends on the decision of an efficient cause, the world hence must belong to the set of things that have an efficient cause for them to exist. In this case, this efficient cause of the world is God, whose volition is capable of choosing to be or ceasing to be the efficient cause for the existence of the world, due to His capability to decide the existence of the world's final cause. In Ikhwan al-Safa's words, five premises make this true:

- I. The cause of the world is a free wise agent.
- II. A free agent is the one who is capable of initiating or stopping an action as he pleases.
- III. Every wise free agent does not act without a purpose.
- IV. Once the purpose of an action is accomplished, the agent stops acting any longer.
- V. Every wise free agent refrains from action if he knows it to be impossible to accomplish the purpose of his desired action.⁸³

Accordingly, the moment God as a free agent accomplishes the purpose of creating the world, he will stop being its efficient cause, and hence the world will cease to be. Ikhwan al-Safa consider this a proof against the eternity of the world because the world exists on account of its purpose, which was decided upon by God one day, and hence the world came to be, and this purpose will be accomplished one day, and then the world will cease to be. It would have been impossible for God as a wise free agent to create the world if He knew His action of creation would not

⁸³ Ikhwan al-Safa, وهنان الصفاء وخلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 3, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 127.

accomplish its purpose. Since He already has created the world, certainly he will accomplish His purpose and thus the world must have an end.

Chapter 2 - Ikhwan al-Safa's Arguments Against the Eternity of the World

I open this chapter by bringing forth the tension between Ikhwan al-Safa's conception of God as an absolutely independent agent, and the Aristotelian doctrine of the eternity of the world. After I briefly discuss the background, number, and types of the world's eternity arguments available during Ikhwan al-Safa's time, I examine Ikhwan al-Safa's general refutative strategies. However, the main objective of my thesis is to show that Ikhwan al-Safa are not only committed to creationism, but also substantiate their arguments for the creation of the world against the world's eternity via their theory of emanation, contrary to the claim of Husayn Muruwwa.⁸⁴ My objective cannot be accomplished without first presenting Ikhwan al-Safa's targeted arguments, either explicitly stated or implicitly assumed by them. After I present the arguments of their presumably Aristotelian interlocutors, I explicate Ikhwan al-Safa's counter arguments with an emphasis on the role of the principles of their emanation theory, including God—the One, the universal intellect, the universal soul, and prime matter—in substantiating them. Even though Ikhwan al-Safa's counter arguments are dispersed throughout their approximately fifty-two epistles and are not always straightforward, I reconstruct them and thereby prove Ikhwan al-Safa's indubitable philosophical and theological commitment to the creation of the world. I undermine Husayn Muruwwa's objection which is based on a double reading approach. I respond to it at the end of the chapter.

⁸⁴ Husayn Muruwwa, النزعات المادية في الفلسفة العربيّة والإسلاميّة [Materialist Trends in Arabic-Islamic Philosophy], vol. 3 (Beirut: Dar al-Farabi, 2002).

2.1 The World's Eternity Problem and Divine Independence and Freedom

The problem of the world's eternity became central to Aristotle in his quarrel with Plato's *Timaeus*. Until the emergence of the monotheistic religions, the question had not been whether the world was created from nothing, for even Plato's divine demiurge makes the world out of a pre-existing chaotic matrix. Aristotle, on the other hand, conceived of both matter and the world as eternal. Aristotle's eternalist theory was contested on the grounds of whether human beings can comprehend and demonstrate how the heavens, distinct from the sublunary region which humans inhabit, "ought to be made so as to enjoy an eternal life." Nonetheless, leaving the creation of the universe *ex nihilo* aside, if Aristotle's theory holds water, then it poses a challenge for the monotheistic religions whose traditional conception of God is that of a voluntary and absolutely independent cause, a free willing creator—as the previously discussed two arguments of Ikhwan al-Safa exemplify.

The Aristotelian view takes an eternal existence to imply necessary existence, that is, if the world is eternal, then its causal relationship with an eternal God must have ontological necessity. This ontological necessity between God and the world was later on accepted by central figures in the tradition of Arabic philosophy, such as al-Farabi and Ibn Sina. They generally maintained God's creation of the world, but conceded that He does not create the world out of His own volition. Their position goes against the traditional Islamic understanding of God's divine nature and His attributes in which, in the words of Herbert Davidson, "the decision on the creator's part to bring a world into existence where no world existed before would constitute a supreme and

⁸⁵ Cristina Cerami, "The Eternity of the World" in *The Routledge Companion to Islamic Philosophy*. Taylor, Richard C. & López-Farjeat, Luis Xavier, eds (New York: Routledge, 2015) 141.

paradigmatic act of volition."⁸⁶ The acceptance of the world's eternity has a "strong implication" because "the attribution of certain attributes to God follows directly upon the system of the world that we accept," as described by Cristina Cerami.⁸⁷ An understanding of the relationship between God and the world was in direct relationship to one's stance on the eternity of the world.

Some of the arguments provided by Ikhwan al-Safa, like the majority of the arguments for God's existence common in their era, take "either eternity or creation as a premise, and require a resolution of that issue before their own proper subject can be broached," as noted by Herbert Davidson in his *Proofs for Eternity, Creation, and the Existence of God in Medieval Islamic and Jewish Philosophy*. Whether the world is eternal determines not only one's conception of the relationship between God and the world, but also the kind of proof one seeks as proof for God's existence, such as the Aristotelian proof of the prime mover proceeding from the world's eternity. Nonetheless, the proof is not accepted in its Arisotelian form by Ikhwan al-Safa for their proof from design, rather, proceeds from the world's creation.

Like al-Kindi,⁸⁹ Ikhwan al-Safa dismiss the possibility of maintaining both the eternity of the world and the existence of God, which was later held by al-Farabi and Ibn Sina. For them, the world is not eternal and instead has a beginning, and it was from this premise that they inferred the existence of a creator. This inference from the coming of the world from nothing that God exists, who brings about the becoming of the world, was uncontroversial in their time. Creation

⁸⁶ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 2.

⁸⁷ Cristina Cerami, "The Eternity of the World" in *The Routledge Companion to Islamic Philosophy*. Taylor, Richard C. & López-Farjeat, Luis Xavier, eds (New York: Routledge, 2015) 141.

⁸⁸ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 2.

⁸⁹ Peter Adamson. *Al-Kindī* (New York: Oxford University Press, 2007) 96.

entailed a creator. Furthermore, for Ikhwan al-Safa, volition is an irreducible part of the concept of a deity, who freely chooses to bring the world into existence, as we noticed with their argument from design.

2.2 The World's Eternity Arguments

By the time of Ikhwan al-Safa, there were various available arguments for the eternity of the world and also for the creation of the world. The proofs and their refutations, which invoked further refutations, were standardized and accumulated. The model of this process is the Christian philosopher John Philoponus, whose influence on al-Kindi is fundamental—if not directly through al-Kindi, it is possible that Philoponus' impact to have reached Ikhwan al-Safa independently, as a source common to them. Correctly, Davidson observes the general status Philoponus' arguments had on Islamic philosophy, and Ikhwan al-Safa is not an exception in being receptive to Philoponus' arguments:

"Philoponus had painstakingly refuted all the arguments for eternity which he had discovered in Aristotle and Proclus, and his refutations of Aristotle and Proclus together with his own arguments for creation were known to, and used by, the Islamic and Jewish philosophers."

Davidson also elucidates a category of arguments for the world's eternity, namely comprehensive arguments, 91 which aim to prove the eternity of the world, as opposed to simply the eternity of matter. An example of a non-comprehensive argument would be in Plato's *Timaeus*, where the creation of the world by the Demiurge is from a pre-existing, eternal chaotic matter.

⁹⁰ Ibid, 9.

⁹¹ Ibid.

On the side of creation, comprehensive arguments aim to prove the creation of this world *ex nihilo* while less comprehensive ones leave open the possibility of an eternal matter from which the form of the world is created—as with al-Razi's argument. While Davidson objects that during the medieval period, "both adherents of eternity and adherents of creation often fail to state explicitly what a given proof is intended to accomplish," Ikhwan al-Safa are indeed explicit about their intent. They state the objective behind nearly every argument they provide, giving us clues to understand the methodological starting points, as I will demonstrate in the following sections. For instance, *Epistle 40* directly addresses the difficulty of conceiving creation out of nothing, but nevertheless insist on rejecting the position of those who, due to this difficulty, adhere to the eternity of matter.

Another point worth mentioning is the variation in arguments put forth by the proponents of the world's eternity, which were later categorized by Maimonides into two groups: either eternity based on the nature of the world itself, or eternity based on the nature of God. Ikhwan al-Safa do not discuss the arguments for eternity from the nature of God, since they take an eternal world to be contradictory to an eternal independent God with volition, they are only concerned with arguments concerning eternity from the nature of the world. I focus my discussion on those arguments from the nature of the world mentioned explicitly by Ikhwan al-Safa, or those implicit in their own refutations seeking to affirm creation. Since the counterarguments Ikhwan al-Safa provide throughout the huge corpus of the epistles are spread out, their full force can only be felt

⁹² Ibid, 14.

⁹³ Ibid, 20.

⁹⁴ Ikhwan al-Safa, وسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 3, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 133.

⁹⁵ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 11.

by bringing the arguments of their assumed interlocutors to the forefront. Hence, before I collect and reconstruct their counterarguments in full exposition, I must briefly lay out the arguments they are countering.

Davidson distinguishes six arguments for the world's eternity from the nature of the world, all of which have either explicit or possibly reconstructed implicit counterarguments in Ikhwan al-Safa's epistles: The argument (1) from the nature of matter, (2) from the concept of potentiality, (3) from the nature of motion, (4) from the nature of time, (5) from the nature of the celestial spheres, and (6) from the vacuum. Even though they overlap at times, the somewhat arbitrary distinctions made by Davidson have the merit of organizing a complex web of arguments. While Davidson claims his discussion of the Islamic tradition to be comprehensive, he only mentions Ikhwan al-Safa in passing and does not offer a thorough treatment of their response to those arguments, as he does with al-Kindi and other Islamic philosophers. In the

.

⁹⁶ Although there is a growing body of literature examining various aspects of Ikhwan al-Safa's epistles, their denial of the eternity of the world and overall belief in creation have not been investigated in relation to their theory of emanation with the exception of Husayn Muruwwa's very brief discussion in النزعات المادية في الفلسفة العربيّة والإسلامية [Materialist Trends in Arabic-Islamic Philosophy] and whose conclusion as I shell show is erroneous—Husayn Bobedie retraites in short pages Muruwwa's discussion without further comments in جدلية السلطة والفلسفة في العصر [The Dialectic of Power and Philosophy in the Middle Ages: Ikhwan al-Safa as an Example].

Ikhwan al-Safa' theory of emanation is often discussed in general terms. For instance, Nasr's *Introduction to Islamic Cosmological Doctrines*, Netton's *Muslim Neoplatonists: An Introduction to the Thought of the Brethren of Purity*, and Baffioni's introduction of *Epistle 40* "On Causes and Effects" only gloss over Ikhwan al-Safa's creed of creation and exclusively study their theory of emanation, overlooking the possible tension between the two views. This observation run almost across most of the secondary literature written in Arabic and English examining the philosophy of the Ikhwan al-Safa.

Furthermore, all of the entries discussing the problem of the world's eternity within the context of Arabic philosophy, such as *The Cambridge Companion to Arabic Philosophy*, *The Oxford Handbook of Islamic Philosophy*, and *The Routledge Companion to Islamic Philosophy* completely neglect mentioning Ikhwan al-Safa as part of the development of early Arabic philosophy which engages directly with the world's eternity problem. Ikhwan al-Safa's wide influence possibly on al-Farabi but most certainly on al-Ghazali, Ibn Sina, and the Arabic philosophical tradition of Iberia undermines justifications for overlooking their role.

sources, including Davidson's book, in stating those arguments, before I discuss Ikhwan al-Safa's response or possible response to each argument.

Generally, as Davidson observes, arguments from both side, the side of the creationists and the side of the eternalists, utilize indirect reasoning. The eternity of the world is affirmed indirectly by demonstrating the impossibility of creation. Similarly, the creation of the world is asserted indirectly by proving the impossibility of eternity.⁹⁷ The general line behind the first four arguments, as Davidson comments, is the acceptance or rejection of the applicability of the laws of nature, specifically the laws of Aristotelian physics. Aristotelian arguments take "the assumption of an absolute beginning of matter or an absolute beginning of the world" as self-contradictory when accepting those laws, hence, "the world, or matter, must exist from eternity." Ikhwan al-Safa, in turn, reject the applicability of the same laws to God. They state in *Epistle 40*,

"Know that the cause of the difficulty in conceiving the becoming of the world and how the Originator, honoured be His majesty, created it from nothing is because of the habitual observation that behind every creation is a creator who makes it from a given matter, in a given space, in a given time, and through given motions and tools.

But the becoming of the world and its creation and innovation by the Originator is not similar to that, for He brought from nothingness the existence of the aforementioned things; I mean matter, space, time, motions, tools, and accidents. Because of this reason it is hard to conceive of the becoming of the world and its creation."⁹⁹

This statement by Ikhwan al-Safa can be considered as a general response to the Aristotelian arguments for the eternity of the world. We will see how they insist, following an attitude

 ⁹⁷ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 12.
 ⁹⁸ Ibid, 13.

⁹⁹ Ikhwan al-Safa, *Sciences of the Soul and Intellect, Part III. An Arabic Critical Edition and English Translation of EPISTLES 39-41*, ed. & transl. by Carmela Baffioni & Ismail K. Poonawala (Epistles of the Brethren of Purity) (Oxford: Oxford University Press with the Institute of Ismaili Studies, 2017), 181.

springing from Philoponus, that matter, space, time, and motion are part of this world, and hence they cannot be treated as more fundamental than the world itself. In other words, Ikhwan al-Safa conceptualize the laws of nature as not preceding nature but as co-originating with it.

The quoted passage also references the response advanced by Kalam against Aristotelian arguments, namely that arguments for the world's eternity jump from what is observable to what is not observable. However, Ikhwan al-Safa do not completely reject analogous reasoning. If they did so, then they would have been undermining their argument for God's existence from design which moves from an observable intelligent design to the existence of an unobservable intelligent cause. In Epistle 14, Ikhwan al-Safa attribute the false application of analogous reasoning to incompleteness, haste, ignorance, or deception. They give as an example Aristotle's conception of the world as a plenum from which he drives the world's eternity. 101 Ikhwan al-Safa identify the false analogous reasoning of Aristotle's conception as a consequence of the following inference: when we leave our houses or travel to other countries, we never encounter anything not being in place, and hence we infer that the world is a plenum. We wrongly apply this inference to God. Namely, due to our ignorance of His nature, and since everything is in place, we think He is in need of place to bring about creation, falsely applying our analogous reasoning that proves the world is a plenum—in sections 2.11 and 2.12 I discuss this argument in detail.

In addition to these two general strategies employed by Ikhwan al-Safa against the world's eternity arguments, Ikhwan al-Safa recall all four principles of their emanation theory—the One,

¹⁰⁰ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 348.

¹⁰¹ Ibid, 350.

the universal intellect, the universal soul, and prime matter—to further substantiate their counterarguments. In the following sections, I highlight the various roles the four principles of Ikhwan al-Safa's emanation theory play in countering Aristotelian arguments for the world's eternity. While emanation theory is often taken to be on the side of the world's eternity, as with Proclus, my discussion of Ikhwan al-Safa's emanation theory demonstrates not only their philosophical ingenuity but also, with further reflection, uncovers their epistemological rather than ontological understanding and employment of emanation theory this latter point is not elaborated in my essay, but should be kept in mind throughout the following arguments and counterarguments.

2.3 The World's Eternity Argument from the Nature of Matter

In *Physics* I.7-I.9, according to Aristotle, the cycle of generation and perishing, of coming and ceasing to be, already exists in matter as a potential. Yet, the becoming of the world as an enmattered form would not have occurred if there were no underlying matter from which the form of the world originates. Aristotlians call this already existent matter 'the primary substratum,' and its fundamentality is derived from Aristotle's definition of matter as "the primary substratum of each thing, from which it comes to be, and which persists in the results, not accidentally" (*Physics* I, 9, 192a30-34). The fundamentality of the primary substratum grounds his argument for the world's eternity from the nature of matter itself. If the underlying

¹⁰² And hence I do not capitalize in writing the principles—and I call them so—of Ikhwan al-Safa's emanation theory, the universal intellect, the universal soul, and prime matter as does Seyyed Hossein Nasr in *Introduction to Islamic Cosmological Doctrines* (London: Thames and Hudson, 1981) or Ian Netton in *Muslim Neoplatonists. An Introduction to the Thought of the Brethren of Purity* (Edinburgh: Edinburgh University Press, 1991). I exempt the One from this practice because Ikhwan al-Safa equivocate the One with God and they ascribe an ontological status to Him. However, even this latter point might not be accurate. As I mention in section 2.5, Ikhwan al-Safa absolve God from the ontological category of existence for they argue it contains the possibility of its opposite, nonexistence, and the One is beyond both existence and nonexistence.

matter of the world came into existence, then it must have come from an already existing substratum. The nature of matter, however, is to be the substratum from which other things come to be. Therefore, it is self-contradictory to state that matter both comes into existence and is that from which everything comes into existence. If matter does not come to be, but is that from which the world comes to be, then by definition matter has always been. Meaning, matter is timeless and thus eternal.

This argument, Davidson points out, was strengthened by the medieval adherents of the world's eternity doctrine. Still following the Aristotelian stream, they further pushed the assertion that matter does not exist in actuality without form. The world in its actuality is always an enmattered form. The world's process of generation and perishing, of becoming actual, is the world receiving and exchanging form as an enmattered form. ¹⁰³ If the world is an enmattered form, then assuming this matter-form compound to have appeared *ex nihilo* not only violates the fundamentality of the primary substratum, but also requires the assumption of an underlying compound of matter and form. If we do not accept the matter-form compound as fundamental, then the actual process of generation and perishing, of coming to be and ceasing to be, must necessarily begin with another previously existing enmattered form. If it is so, then from where does this previously existing enmattered form come from? We fall into an *infinite regress* because we are contradicting the basic assumption: matter is that from which things come to be, and since things come to be by receiving and exchanging forms, then matter has also always

¹⁰³ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 14.

been an enmattered form which allows the reception and exchange of forms by things. Therefore, not only matter but also the world as an enmatterd form must be eternal.

The general notion behind both versions of the argument for the eternity of matter is that something cannot come from nothing. Davidson notes that this notion is sometimes taken as self-evident by Aristotle, while other times he seems to rely on induction or analogy, as in the observation that "we find in every case something underlies from which proceeds that which comes to be; for instance, animals and plants from seed" (*Physics* 1.9, 191b1-4).

2.4 The World's Eternity Argument from Potentiality

As Davidson notes, matter and potentiality are closely related to each other in the Aristotelian scheme. For Aristotle, the process of coming to be necessarily requires "the prior presence of something existent potentially, but not existent in actuality" (*De Generatione* I, 3, 317b16-17). From this it follows that nothing can exist *ex nihilo*. For instance, a child owes her potential existence to her parents. Without them, she would not have come into existence. Similarly, as the strengthened version of the previous argument shows, the world only comes into existence in actuality because its form already existed potentially in matter; without matter, it would be impossible for the world to come to be. Since the world exists, matter, which contains the world's potential existence, cannot in turn come from nothing. If matter comes from nothing, then we are violating the Aristotelian principle of things having to have their potential existence in something else prior to their actual coming to be. If matter has a potential existence prior to its actual existence, then this potential existence must also subsist in something else, and so *ad infinitum*. Accordingly, matter must be eternal to carry the potential existence of the world.

While the previous argument secures an underlying substratum for the actual existence of things, the latter preserves the necessary potential existence of things for their actual existence. Both arguments are taken to prove the eternity of matter, for otherwise admitting the existence of things from nothing leads to the *infinite regress* of seeking an underlying matter, to matter itself and of an actual matter which brings matter itself to actuality.

2.5 The Nature of Matter and Form in Ikhwan al-Safa's Epistles

Before explicating Ikhwan al-Safa's views on the nature of matter and form and how their views can provide a reply to the previous two Aristotelian arguments, it is important to note that Ikhwan al-Safa do not explicitly attribute the world's eternity doctrine to Aristotle. However, under the heading "A Chapter on the Meaning of the Wise Men's Saying: Is the World Eternal or Generated?" they differentiate between two meanings: a metaphorical meaning which indicates that the world has been existing for a long time, and a literal meaning which indicates that the world has been existing as such eternally without any alterations. While they do not contest the metaphorical meaning, they explicitly reject the second meaning if it is what the wise men, the philosophers, mean by eternal—and accordingly Aristotle's arguments are clearly a target of their counterarguments. 105

Ikhwan al-Safa do not dispute the notion that something cannot come from nothing, that is, they agree with Aristotle that the notion is self-evident to our natural reason.¹⁰⁶ Nonetheless, they do not adhere to Aristotle's insistence on the fundamentality of matter as the primary substratum

¹⁰⁴ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 358.

105 Ibid.

¹⁰⁶ Ikhwan al-Safa, رسانل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 4, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 55.

that must have necessary and eternal existence if we are to make sense of the world as being generated from something and not ex nihilo. Ikhwan al-Safa admit, however, that knowing that matter rather undergoes the process of generation and perishing is not as self-evident. They state that "regarding the generation of hulê, it cannot be known through natural reason but rather through acquired reason," in which they understand by the latter to be the kind of reason that involves itself with demonstration.¹⁰⁷ Hence, they identify the mistake behind the reasoning of Aristotle's argument to a demonstration which results from false analogies, such as his analogy of plants coming from seed. The falsity of these analogies is due to the conception of matter as artificial, natural, or universal. 108 What Ikhwan al-Safa mean by artificial matter is what human artisans make their artifacts from. Natural matter is identified with the four elements: fire, air, water, and earth. Everything found in the sublunary sphere—the animals, plants, and minerals are generated from these four elements and return to them when they perish. On the other hand, universal matter—they also call it secondary matter—constitutes the entire physical universe whose characteristics are length, width, and depth which includes both the sublunary sphere and the celestial sphere—for as section 2.10 will show, Ikhwan al-Safa reject Aristotle's identification of the celestial sphere with the fifth element. In all of these cases, drawing the inference that an artifact is in need of pre-existing matter, that nature is in need of pre-existing matter, and that the physical universe is also in need of pre-existing matter is a correct inference according to Ikhwan al-Safa. However, the analogy ignores a fourth kind of matter which is prime matter. 109

0

¹⁰⁷ Ibid.

¹⁰⁸ Seyved Hossein Nasr, *Introduction to Islamic Cosmological Doctrines* (London: Thames and Hudson, 1981), 58.

¹⁰⁹ Ikhwan al-Safa, رسانل إخوان الصفاء وخلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 4, ed.

Even though Ikhwan al-Safa accept prime matter as the fundamental substratum of the physical world, they have a distinct notion of what prime matter is. The fourth principle of Ikhwan al-Safa's emanation theory is prime matter, which they characterize as an immaterial substance,

110 stating,

"Know, O brother, that the first thing which the Creator originated and invented from the light of His unity was a simple essence called the Active Intellect, just as He produced two from one by repetition. Then He created the Universal Celestial Soul from the Light of the Intellect, just as He created three by the addition of one to two. Then He created Prime Matter from the movement of the Soul, just as He created four by adding one to three."

While Ikhwan al-Safa's follow "the Neoplatonists in erecting an emanationist hierarchy of which the first three members [correspond] to the Plotinian triad," the fourth principle, prime matter, is:

"a full member of the emanation hierarchy, whereas with Plotinus it is excluded from his triad of principles, being itself a principle of evil and the cause of any weakness or evil in the soul. However, Plotinus's view that Matter was intrinsically evil was rejected by later Neoplatonists such as Proclus (412-85) and this is, of course, much nearer to the standpoint of the Ikhwan, who never regarded Prime Matter as principle of evil but rather as 'a positive spiritual principle." 112

While there is a problem of interpretation when it comes to prime matter in the Aristotelian scheme—whether prime matter in the Aristotelian scheme is a substance or not, is material or not based on the interpretation, Ikhwan al-Safa can be understood as either contradicting or providing an exposition of the Aristotelian notion of prime matter; especially since parts of Plotinus's *Enneads* were known to Ikhwan al-Safa as *Theologia Aristotelis*.

11

¹¹⁰ Ibid.

¹¹¹ Quoted in Ian Netton, *Muslim Neoplatonists*. *An Introduction to the Thought of the Brethren of Purity* (Edinburgh: Edinburgh University Press, 1991), 34.

¹¹² Ibid.

¹¹³ Thomas Ainsworth, "Form vs. Matter," *The Stanford Encyclopedia of Philosophy* (Spring 2016 Edition), ed.Edward N. Zalta. https://plato.stanford.edu/archives/spr2016/entries/form-matter/.

In either case, Ikhwan al-Safa do not quite reject Aristotle's insistence that prime matter is not generated in time. Yes, prime matter is free from time for Ikhwan al-Safa, however, since time is integral to the physical universe, co-originating with it, the fact that prime matter is both external to the physical universe for it is its fundamental substratum and that prime matter is a principle of the emanation hierarchy entails that prime matter emanates apart from time. Timelessness, however, does not entail necessity or eternality for Ikhwan al-Safa. Prime matter is still one of God's creations, not through the process of generation and perishing, as with the world, but instead is one of God's originations through the process of emanation. The existence of prime matter is dependent on God, but is not necessary as God is, nor is it necessary in spite of God. Ikhwan al-Safa affirm that, "as for the Creator, may He be glorified and honoured, He is the One who freely chooses His act: when He wishes, He acts, and when He wishes, He refrains from acting[...] when He wished, He emanated His goodness, His overflow,"114 which argues for God's absolute independence and freedom. In the argument from oneness and design discussed in the previous chapter, Ikhwan al-Safa do not submit to the equivocation of 'timelessness' with eternity and thus also not with necessity. For them, since time is a concept only applicable to the physical world, the three principles of emanation, the universal intellect, the universal soul, and prime matter all enjoy non-temporal existence. This non-temporal existence can be made sense of as signifying the nature of dependent substances free from the notion of time. Even though they enjoy a non-temporal existence, they still depend for their existence on the One. On the other hand, the One does not depend for its existence on anything. They describe the One in

¹¹⁴ Ikhwan al-Safa, *Sciences of the Soul and Intellect, Part III. An Arabic Critical Edition and English Translation of EPISTLES 39-41*, ed. & transl. by Carmela Baffioni & Ismail K. Poonawala (Epistles of the Brethren of Purity) (Oxford: Oxford University Press with the Institute of Ismaili Studies, 2017), 164.

Epistle 26 as "the necessary existent in every aspect." Ikhwan al-Safa are anticipating, although implicitly, the modalities of necessity and possibility brought forth by Ibn Sina, who was aware of their epistles. Moreover, for Ikhwan al-Safa, when one is speaking of the existence of the One, one is only speaking metaphorically. They take ascriptions such as generation and existence to be always in conjunction with their opposites, perishing and nonexistence. In this way, to speak of the One as existing is to imply the possibility of its nonexistence. Therefore, Ikhwan al-Safa assert that these ascriptions cannot describe the One, for "He is the Creator of existence and nonexistence and hence creation is His distinction. [He] is the determinant of life and death and hence eternity is His distinction."

Still, what is exactly prime matter's relationship of dependence on God—and by extension the other two principles of emanation, the universal intellect and the universal soul, which are also not generated in time? What is the difference between God creating the physical universe and God emanating prime matter, and the other two principles, since Ikhwan al-Safa understand also emenation as distinctive of God as a Creator? Ikhwan al-Safa distinguish between "الكون و الخلق [generation and creation]" and "إلاختراع والإبداع [origination and innovation]." This distinction, which is also made by al-Kindi, is the cornerstone of their reconciliation between creation and emanation without violating the creed of creation in which God is the ultimate Creator, of everything existing and of existence and nonexistence themselves—Ikhwan al-Safa use the term creation in two senses: as distinct from innovation and as an umbrella term for both. The

رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 2, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 340.

¹¹⁶ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 4, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 264.

¹¹⁸ Peter Adamson. *Al-Kindī* (New York: Oxford University Press, 2007) 61-62.

distinction between generation or creation and origination or innovation allows them to safeguard the principle that something cannot come from nothing, and at the same time, hold together their denial of the world's eternity.

For Ikhwan al-Safa, generation and creation refer to the process of making something out of something else, as an artisan makes a table from wood, while origination and innovation refer to the process of making something out of nothing, which is exclusive to God. When it comes to material substances, such as the nature of substances constituting the physical world, then their creation does require the process of generation and creation from something. This something, for Ikhwan al-Safa, is prime matter, which is in turn an immaterial substance. While immaterial substances, in this case prime matter, do not enjoy independent existence, things made of material substances according to the analogy of the artisan seem to enjoy an independent existence after their generation. They do not need the artisan for their existence to be sustained. Even if they still depend on the matter from which they are made, which is specified by Ikhwan al-Safa's as prime matter, the moment the creation of the artifact is completed, the artifact can remain in existence even when the artisan ceases to exist. If God's relationship to creation is analogous, then the divine attribute of freedom is threatened, for it is not because of His freedom that He has power over His creation, but rather only because of His eternal existence can He end His creation.

Ikhwan al-Safa, however, are not vulnerable to this objection. God's absolute freedom is fundamental for Ikhwan al-Safa. For them, the relationship God has to creation is not exactly analogous to the relationship the sun has to light, which is a Plotinian analogy. Ikhwan al-Safa

accept Plotinus as long as the relationship between the sun and its light is not a necessary relationship. God is not disposed to create as the sun is disposed to bestow light. 119 A better analogy of the relationship between God and creation which Ikhwan al-Safa employ is the relationship a speaker has to speech. For them, God creates, and when He wishes, He ceases to create, "like a speaker who has power over his speech: when he wishes, he speaks, and when he wishes, he is silent. The same rule applies to [the way in which] the Creator, praise Him, brought the world into existence and invented it." ¹²⁰ It follows harmoniously from this, although the link is not made by Ikhwan al-Safa, that the relationship God has to creation, as long as the creation in mind is an immaterial substance, is analogous to speech. Speech, understood not as just the spoken voice but as meaningful utterances, i.e., language, seems to enjoy an immateriality which is free from the natural laws governing material substances, i.e., the physical world. This is why Ikhwan al-Safa explain, if not understand, the process of emanation through the Islamic notion of divine command, in which the world has come into existence due to God's linguistic command: be.¹²¹ As the Qur'anic verse states, "Originator of the heavens and the earth. When He decrees a matter, He only says to it, "Be," and it is" (2:117). 122

¹¹⁹ Ikhwan al-Safa, *Sciences of the Soul and Intellect, Part III. An Arabic Critical Edition and English Translation of EPISTLES 39-41*, ed. & transl. by Carmela Baffioni & Ismail K. Poonawala (Epistles of the Brethren of Purity) (Oxford: Oxford University Press with the Institute of Ismaili Studies, 2017), 164.

¹²¹ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 2, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 54.

¹²² An evidence for my interpretation of Ikhwan al-Safa in these paragraphs is their position regarding a central problem in Islamic theology which is the problem of the creation of the Qur'an. Ikhwan al-Safa's position as summarized by Abbas Hamadani is that "The Ikhwan reject the idea of the creation of the Qur'an (*khalq al-Qur'an*). They speak of *ibda' Qur'an* (the origination of the Qur'an). They say that if by *khalq al-Qur'an* is meant the recitation of its words and sounds, then the Qur'an is created (*makhluq*), but if these words and sounds are only tools of expressing what is in 'the meaning and the thoughts of souls' (*al-ma'ani allati fi afkar al-nufus*), then the Qur'an is not *makhluq*[...]. The Ikhwan state that because *khalq* is the creation of a thing from another thing (*ijad al-shay' min shay' akhir*) and *ibda'* is creation *ex nihilo* (*ijad al-sahy' min la shay'*), the Qur'an is not *makhluq* but *mubda'*. Thus the Ikhwan implay a position on the Qur'an's origination by God unlike the Mu'tazilis, but not quite in a later Ash'ari manner." See: Abbas Hamdani, "The Ikhwan al-Safa' between al-Kindi and al-Farabi" in *Fortresses of the*

Nevertheless, if creation, both of immaterial and material substances, is not necessary, then how do we explain it? To this, Ikhwan al-Safa evoke in an abbreviated version Plato's argument for goodness in the *Timaeus*, as did al-Kindi, who also exploits its relationship to God's divine freedom. It is in the nature of the Good to overflow with goodness, and because of God's necessary goodness, wisdom, and overall providence, which is self-chosen, he freely emanates the world as long as He deems its coming to be as good. It is not necessary goodness.

On the other hand, with Ikhwan al-Safa, the relationship God has to material substances is not direct. Rather, God's creation and maintenance of material substances is akin to a ruler who commands the building of a city and maintains its order through his ruling. While a ruler would not build and maintain the city directly, the oneness of his command and ruling is what brings its multiplicity into existence and maintains its continuity. Since it is someone other than the ruler who is going to directly build and maintain the order of the city, such as the builders and the soldiers, then by analogy it is the process of emanation which brings about the existence of the world. Emanation, which is the becoming of immaterial substances from nothing via the divine command, occurs directly from God. Creation, in the sense of making something out of something else, however, is not a direct action taken by God. As I will elaborate in section 2.8, it is the universal soul which bestows the form of motion into prime matter, setting it in motion, and hence the generation of time, space, and matter—matter understood as a material substance.

_

Intellect: Ismaili and Other Islamic Studies in Honour of Farhad Daftary. ed.Omar Alí-de-Unzaga (New York: I.B. Tauris, 2012), 193.

¹²³ Peter Adamson. *Al-Kindī* (New York: Oxford University Press, 2007) 205-206.

¹²⁴ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 2, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 22.

¹²⁵ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 3, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 38.

In short, it is the universal soul which creates the world. This move made by Ikhwan al-Safa indicates their awareness of the problem of articulating how the immateriality of language can give birth to material existence, namely, how the immateriality of the divine command can bring about the creation of material substances constituting the world. Even though Ikhwan al-Safa assign direct creation to the universal soul and not to God, it is not clear how can the universal soul materialize the forms of things through prime matter, which Ikhwan al-Safa have determined is an immaterial substance. Emil L. Fackenheim points out the same tension which he finds already implicit in the very distinction between the universal soul and prime matter as simple substances and the creation of bodies as enmatterd forms, i.e., composite substances, constituting the world resulting from the emanation of prime matter from the universal soul. He writes,

"For the *Brethren of Purity* do not succeed in establishing continuity between the levels above and beneath prime matter. By making a radical distinction between simple and composite substances they implicitly admit that, although on the one had God, intellect, soul and prime matter differ in degree of simplicity, on the other hand the different kinds of matter in degree of formation, these two processes do not form one homogeneous process from simplicity to multiplicity. Production of differentiated levels differs in kind from formation of matter, and while e.g. soul continues to exist if matter disappears, not body, but merely the form of body must disappear if matter is to continue to exist without that form. Thus the *principle of composition*, different in kind from multiplication concerning the variation of essences, remain ultimately undeduced and, entailed thereby, corporeality which is to result from the composition of a spiritual matter and a spiritual form." ¹²⁶

On the other hand, Muruwwa exploits this tension, and through the strategy of double reading, he comes to conclude that Ikhwan al-Safa hold the presupposition of eternally existing prime matter understood by them rather as a pre-existing eternal substance. I return to this tension in my

¹²⁶ Emil L. Fackenheim, "The Conception of Substance in the Philosophy of the *Ikwan as-Sefa'* (Brethren of Purity)." *Mediaeval Studies* 5: (1943), 120.

discussion of Muruwwa's conclusion in the next chapter, after having further explained the role of the universal soul in section 2.8.

Nevertheless, does this scheme entail that the potential existence of things resides in prime matter? Or if the universal soul is what actualizes the existence of things via prime matter, then does this mean that the potential existence of things resides instead in the universal soul? Ikhwan al-Safa need to answer to Aristotle's argument for the world's eternity from potentiality since they agree with him that the process of coming to be necessarily requires "the prior presence of something existent potentially, but not existent in actuality" (De Generatione I, 3, 317b16-17). For Ikhwan al-Safa, that which God makes himself is a simple substance, such as the universal intellect, the universal soul, and prime matter. 127 On the other hand, what is created by the universal soul is a composite substance. Everything exists in the world, and upon the reflection of natural reason, Ikhwan al-Safa define it as a composite of form and matter. 128 For them, matter is the material substance shared by everything in the world. However, form is what distinguishes one thing from another. 129 Hence, the potential existence of things resides in their forms, and they become actualized once their forms become enmattered form, an actualization which results from the emanation of prime matter from the universal soul, which passes the forms of everything to it. In turn, the universal soul gains the forms of everything from the universal intellect which has the privilege of being the first emanation from God, from whom it was given the forms of everything. Eventually, the forms of everything reside in God and

¹²⁷ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 2, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 221.

¹²⁸ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 4, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 54.

¹²⁹ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 2, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 10.

overflow from Him alongside His emanation of the universal intellect. Overall, since God is the principal one, whose existence is necessary and is not contrary to nonexistence, they locate the potential existence of everything, namely the forms of everything, within God, and since they take God to have necessary existence, they do not fall in an *infinite regress*. In short, Ikhwan al-Safa do not violate the Aristotelian requirement of potential existence prior to actual existence while, at the same time, maintain God as the Creator of the world, denying the world's eternity.

2.6 The World's Eternity Argument from the Nature of Motion

In a commentary attributed to Alexander of Aphrodisias, available in Arabic during the time of Ikhwan al-Safa's emergence, we find an elaboration of Aristotle's argument in *Physics* III for the eternity of motion as a proof that entails the eternity of the world; an argument which will also be a basis for proving an unmoved mover for the world. In the Aristotelian scheme, motion is the type of change occurring to things in the world. When we observe any change, for Aristotle, it is the actualization of a potentiality insofar as it is a potentiality, that is, susceptible to becoming actualized through motion, even if the final actualization is contrary to the potentiality motivating the occurring change. This definition of motion presumes the prior existence of those things susceptible to motion, in short, the prior existence of the world.

In turn, the presumption of the prior existence of the world leads to two consequences: either the world has come into existence through the process of generation, or it enjoyed an eternal existence in a state of rest before being moved at a specific time. If the world exists through the process of generation, it requires an independent first motion to initiate it. This requirement

¹³⁰ Istvan Bodnar, "Aristotle's Natural Philosophy," *The Stanford Encyclopedia of Philosophy* (Spring 2018 Edition), ed.Edward N. Zalta. https://plato.stanford.edu/archives/spr2018/entries/aristotle-natphil/.

results in a self-contradiction, for the initiation of the world into existence by a first motion would require another motion, and hence it is no longer a first motion. Without attaining this first motion, the world would have failed to come into existence, however, the world does exist. The alternative is, therefore, that a cause maintained the resting state of the eternal world prior to its being moved at a specific time. To awake the world from its state of rest, there must have been either another cause to overcome the cause of rest or the cause of rest must have undergone a change and became the cause of motion. In both cases, the emergence of a new cause or the change of the relationship the cause has to the world requires a prior motion. However, the cause of this prior motion must either have been generated or eternal. If generated, then it is ruled out by the impossibility of attaining a first motion for the process of generation. If it is eternal, then it must have been in a state of rest before being moved, and accordingly, the cause of motion would demand another cause of motion, and so *ad infinitum*. Since all possible alternatives of attaining a first motion produce an *infinite regress*, motion, which presupposes the existence of the world, must be eternal, and hence the world it presupposes is eternal as well.¹³¹

Motion, for Aristotle, is integral to the nature of things. Thus, to consider their nature is to wonder about the four causes explaining the different aspects of their coming to be. They are the material, formal, efficient, and final cause. This means the nature of things can be explained in terms of the formal and efficient cause moving them from a state of being potential in a material cause to being fully actualized according to their final cause. Since motion has proven to be eternal, Aristotle in Book 8 of the *Physics* puts forth the additional thesis that there must be a

¹³¹ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 17-24.

mover behind every motion, i.e., a formal and efficient cause. While the formal and efficient causes are the same in the case of living things, they are distinct when it comes to other natural things. Human beings, for example, can be moved by their soul instantaneously, in which case the soul is both the formal and the efficient cause. Other natural things can be moved by a living body or another natural body, but since their motion is eternal, there must be a formal cause sustaining their motion and a chain of efficient causes leading to it. Either those causes of motion are forced or natural. If they are natural, Aristotle observes two kinds, namely, "celestial motion, which is uniform, circular and eternal, and terrestrial motion, which is rectilinear (straight up or down), and finite in both time and distance." While the argument from the nature of the celestial bodies in section 2.9 will show how the circular motion of celestial bodies expresses their eternity, their eternal motion can be identified as the initial cause in the chain of efficient causes moving all other natural things with rectilinear movement, such as the sublunary elements, "In particular the Sun's course along the ecliptic is responsible for many sublunar changes, the rotating seasons being foremost among them." 133

Nevertheless, if there is a mover behind every motion, who is the mover behind the eternal motion of the celestial bodies? Even though celestial bodies enjoy eternal motion, recalling the definition of motion as a change occurring by virtue of a potentiality becoming an actuality, celestial bodies "include some component of potentiality, which is actualised in the motion, and hence this potential component is in need of an actuality as a mover."¹³⁴ Since this mover does not need any other mover to become actual, otherwise an *infinite regress* is awaiting, the

¹³² Edward Craig, Routledge Encyclopedia of Philosophy (London: Routledge, 1998), 249.

¹³³ Istvan Bodnar, "Aristotle's Natural Philosophy," *The Stanford Encyclopedia of Philosophy* (Spring 2018 Edition), ed.Edward N. Zalta. https://plato.stanford.edu/archives/spr2018/entries/aristotle-natphil/.

¹³⁴ Ibid.

actuality of an unmoved mover of the celestial bodies is unrestricted. "All this testifies to the exceptional status of the first movement, and behind it, of the first mover in the universe." This exceptional status is derived from the Aristotelian assertion of motion being eternal as well as the world it presupposes; which raises the question of whether a rejection of the world's eternity entails the rejection of the often employed argument for the existence of God as an unmoved mover.

2.7 The World's Eternity Argument from the Nature of Time

If motion is change, and change is measured by time, then the eternity of time entails the eternity of motion which expresses the nature of the world. Aristotle gives the following argument for the eternity of time from the notions of before and after. Namely, there can be no before and after without time because time refers to the now, which is the end of one period and the beginning of another. Since every now implies a before and an after, then there can be no first or last now. Hence, time is eternal. In other words, time does not have a beginning, when there was no before, nor an end without an after (Physics VIII, 1, 251b29-252a6). Time is "infinite a parte ante and a parte post, as the Latins would say, and as the Arabs would say, both azalī and abadī."136

2.8 The Nature of Motion and Time in Ikhwan al-Safa's Epistles

In Epistle 39, "On the Quantity of the Kinds of Motions," Ikhwan al-Safa opt for the following definition of motion: motion is an immaterial form supervening on bodies, the source of which is

¹³⁶ Michael Chase, "Discussions on the Eternity of the world in Late Antiquity," A ΣΧΟΛΗ Journal of the Centre for Ancient Philosophy and the Classical Tradition (Novosibirsk) 5, no. 2 (2011). Special issue: Ancient Cosmology and Astronomy, 125.

the soul. Consequently, the soul is the cause of motion.¹³⁷ Bodies without a soul are therefore devoid of motion, for motion is an action belonging to souls and not bodies. When the soul deprives a body of the form of motion, the body ceases to move either itself or other bodies.¹³⁸ Rest, then, is the non-existence of the immaterial form of motion.¹³⁹

Furthermore, in *Epistle 15*, "Where One Accounts for the Matter, the Form, the Motion, the Time and the Place, Together with the Meanings of These [Things] When They are Linked to Each Other," Ikhwan al-Safa argue, since bodies do not move in all directions at once, and there is no reason for one direction to be the direction of the body's movement over the other directions, rest is the likeliest potential state of a body. And if a body is moving in a certain direction, then it must be because of an external cause determining the direction of its movement and actualizing it via motion. Without an external cause, the body would not know, so to speak, in which direction to move, thus bodies need an external cause for their movement and to come into existence. 140

Now, the totality of the bodies in the world is observed to be in motion—I say the totality of bodies because as we will see in this section and the coming ones, time, space, and motion are not of the world, according to Ikhwan al-Safa, but rather are predicates of the bodies constituting what we call the world. Accordingly, being the totality of moving bodies, what moves the world? Ikhwan al-Safa take the motion observed in the world to be a result of the universal soul. The universal soul mediates God's act of creation by giving, in addition to other things, the

¹³⁷ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 3, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 115-116.

¹³⁸ Ibid.

¹³⁹ Ibid.

¹⁴⁰ Ibid, 125.

immaterial form of motion to the celestial bodies. In turn, the motion of the celestial bodies, caused by the universal soul, set the sublunary world in motion.

Even though Ikhwan al-Safa conceive of motion as integral to the nature of things, their conception is very far from Aristotle's. For Ikhwan al-Safa, what distinguishes one thing from another is its nature, expressed via its immaterial form, as we have seen in section 2.5. Motion is an additional form, which is understood by Ikhwan al-Safa to be immaterial as well, also given by the universal soul. Matter by itself, on the other hand, lacks any nature. Namely, matter alone is incapable of any motion, and therefore does not exist until it becomes an enmattred form, changing its potential state of rest to an actualized moving body. Seyyed Hossein Nasr describes this process. Thus,

"The Universe which the *Rasa'il* describe is, like the cosmos of the ancient Greeks, one which is alive, being composed of a body and the Universal Soul which animates the whole of it. Consequently, the question of motion does not have the same status with the Ikhwan as it does with either Aristotle or the Cartesians." ¹⁴¹

And overall, since the actualization of bodies does not occur without the form of motion given by the universal soul, the moment the universal soul ceases depending on God for the reception of forms, including the form of motion, the whole world perishes. The existence of the world would cease to be possible in that case. Ikhwan al-Safa's understanding of motion presupposes the existence of God's volition, contrary to Aristotle's conception, which presupposes the eternity of the world.

Furthermore, in addition to the aforementioned reason of God deciding to stop emanating the form of motion. Ikhwan al-Safa take as self-evident that it is easier to initiate the movement of a

¹⁴¹ Seyyed Hossein Nasr, *Introduction to Islamic Cosmological Doctrines* (London: Thames and Hudson, 1981), 63.

body than to stop it,¹⁴² thereby inferring that it is easier for God to stop the motion of the celestial bodies and, as it follows, the world. Hence the cessation of their existence is as probable, if not more probable, than their generation. Through this principle Ikhwan al-Safa provide another rejection of the a *parte post* notion of eternity, eternity as an *abad*.

So far, the definition of motion as an immaterial form supervening on bodies does not seem to be clear in regard to the problem of time. While it tells us about the source of motion, it does not say much about its nature and hence if motion is necessary for time. *Prime facie*, Ikhwan al-Safa do not stray far from Aristotle's identification of the nature of motion with change—and they reiterate Aristotle's classification of motion. Ikhwan al-Safa give a generative description of motion. Motion is the movement of an object from one place to another in time while rest is its remaining still in time. Hence, for them, the way to count motion is when between each counted motion there is a period of rest. "Time is coupled with the motion of bodies," Ikhwan al-Safa state, Ith in that time seems to be the number of changes occurring to a body. However, Ikhwan al-Safa do not understand this number to actually correspond to motion. Instead, Ikhwan al-Safa seem to commit to the ideality of time. As they state,

"Time is a pure form, an abstract notion, simple and intelligible, elaborated in the soul by the faculties of the spirit. It is born there through meditation upon the regular repetition of nights and days around the earth and resembles the generation of numbers by the repetition of One." ¹⁴⁵

¹⁴² Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 3, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 120.

ي المائة الخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 186.

¹⁴⁴ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 3, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 17.

¹⁴⁵ Seyyed Hossein Nasr, *Introduction to Islamic Cosmological Doctrines* (London: Thames and Hudson, 1981), 63.

In other words, time is a predicate we ascribe to bodies as a result of our witnessing their repetitive motion. The moment bodies cease to exist is the moment time is terminated. Accordingly, Ikhwan al-Safa speak of the perishing of the world, namely of the bodies constituting it, as God's decision to bring about the last day of the world which "is not just another day in time but the termination of time itself," as Nasr points out.¹⁴⁶

2.9 The World's Eternity Argument from the Nature of the Celestial Bodies

Following Davidson's exposition, in *De Caelo I*, Aristotle argues for the eternity of the celestial bodies by analyzing the process of generation and perishing which he understands as a fundamental physical process. For him, the coming-to-be of a substance means a changeability occuring in matter. When matter goes through the change of acquiring a new form, a new substance emerges. Before acquiring this new form, matter is characterized by the lack of it. The positive process of generation rests on matter changing its character from lacking this new form to the contrary character of gaining it. Both the process of generation and the process of perishing requires, says Davidson, "a passage from one contrary to the other." In the case of perishing, matter changes from the positive character of not lacking a given form to the negative character of being deprived of it. The process of perishing is a negative process in which matter loses an acquired form and enters a state of deprivation. This Aristotelian analysis of the process of generation and perishing requires matter to be a substratum amenable to contraries. If matter

¹⁴⁶ Ibid. 64.

¹⁴⁷ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 28.

were not amenable to contraries, then acquiring or losing new forms would be impossible, and therefore the creation of substances would be impossible as well.

However, when considering the nature of the celestial bodies, one aspect is their motion. Since the celestial bodies enjoy a circular type of motion, and for Aristotle "no motion is contrary to motion in circle," then the kind of matter making up the celestial bodies is not amenable to contraries (*De Caelo I*, 4). Furthermore, Aristotle identifies this matter as having a different nature, namely the fifth element of aether distinct from the four elements of fire, air, water, and earth, the nature of which is generated from contraries. Therefore, the celestial bodies are not only free from the process of generation and perishing, so is the world, the existence and motion of which follow and depend on the existence of the celestial bodies, rendering the world free from the process of generation and perishing. Hence, the world is eternal.¹⁴⁸

2.10 The Nature of the Celestial Bodies in Ikhwan al-Safa's Epistles

Ikhwan al-Safa give two inconsistent replies to Aristotle's argument for the world's eternity from the nature of the celestial bodies. Their first reply agrees with Aristotle's notion of the fifth element constituting the celestial bodies, giving them freedom from generation, perishing, change, alteration, increase and decrease. Ikhwan al-Safa consider the fifth nature lacking in natural properties, which are generated by having a nature amenable to contraries such as heat and cold. They admit Aristotle's explanation for the celestial bodies' lack of natural bodies to be in virtue of their perfect circular motion. However, for Ikhwan al-Safa, because it is God who gave the celestial bodies their perfect status, then it is up to him to withdraw this perfect status

¹⁴⁸ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987),, 28-29.

from them and allow them to perish. The moment He stops their circular motion, their rest produces coldness, their wetness causes dissolving, and they perish.¹⁴⁹

The problem with this first reply is that it runs contrary to their conception of rest in relation to motion. If rest is a potential state while motion is the actual state of the world, then God's stopping motion means the direct deprivation of existence. The moment God withdraws the form of motion from the universal soul, who bestows it on the celestial bodies, the celestial bodies should cease to exist directly. This, however, understands depriving the celestial bodies from the form of motion as a gradual degradation, making them amenable to contrary natures before they perish. Nevertheless, despite the different conception of rest this first reply assumes, it still responds to the world's eternity argument, since motion is ultimately attributed to God's free volition, His free volition allows him to change the nature of motion He bestows as a form via the universal soul on His creation, including the celestial bodies.

Ikhwan al-Safa's second reply counters Aristotle's description of the celestial bodies. For Ikhwan al-Safa, the nature of the celestial bodies is similar to natural objects, which they deduce from sense perception. They argue that the moon, a celestial body, enjoys a transparency similar to the transparency of natural objects such as air and glass, making its nature amenable to contraries. Thus, the moon is subject to generation, a conclusion which encompasses all celestial bodies and disproves their eternity. Furthermore, Ikhwan al-Safa argue that the fifth nature is merely a reference to the circular motion of the celestial bodies, and even though this circular motion might be perfect, its perfection is attributed to God, argued in the second part of the first

¹⁴⁹ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 3, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 39.

reply. Consequently, the perishing of the world will result from the universal soul stopping the circular motion of the celestial bodies, which in turn cause the motion of the world, and hence depends on them for its generation and perishing. This reply seems to be in line with Ikhwan al-Safa's overall conception of motion discussed in section 2.8.

2.11 The World's Eternity Argument from the Vacuum

In Aristotle's *Physics* IV and *De Caelo* III, we encounter various arguments against the existence of a vacuum. By denying the existence of a vacuum, according to Davidson, Aristotle aims to prove the impossibility of bodies being generated from nothing; based on Aristotle's conception of place as the surface surrounding a body. Aristotle provides various arguments against the existence of a vacuum, based on the premise that bodies need place for their existence. That is, if bodies are generated from nothing, then "the place to be occupied by what comes into existence would previously have been occupied by a vacuum, inasmuch as no body existed" (*De Caelo* III, 3, 302a1-4). However, if Aristotle's arguments are successful in denying the existence of a vacuum, the implication is that since a vacuum is impossible, then the generation of bodies from nothing is also impossible. The Aristotelian world is a plenum consisting of an eternal matter from which bodies are made.

An objection which is raised against Aristotle by the Epicureans and the Stoics is that without the existence of a vacuum, the motion of bodies would be impossible. There would be no room for bodies to move, or contract, or expand, or absorb other things (*Physics* I, 6, 213a30-213b5-4).

¹⁵⁰ Ibid, 40.

¹⁵¹ Herbert Davidson, *Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy* (New York: Oxford University Press, 1987), 27.

Aristotle, in turn, answers this objection by advancing arguments for the impossibility of motion in a vacuum. He argues, for instance, that bodies would be able to move without resistance in a vacuum, which would entail the absurd conclusion of bodies moving from one place to another in no time. Since motion for Aristotle requires the overcoming of resistance, the lack of resistance equals the lack of motion, and as Aristotle's argument from motion has shown, time is the change occurring because of motion.

2.12 The Vacuum in Ikhwan al-Safa's Epistles

While Ikhwan al-Safa agree with Aristotle's denial of a vacuum, they provide their own distinct argument. They do not employ an Aristotelian argument due to his assumption that the world is a plenum. As the world is not a plenum to Ikhwan al-Safa, they can distance themselves from the Aristotelian conclusion that the denial of a vacuum entails the existence of an eternal matter to constitute the world as a plenum. Following the line of thought advanced by Philoponus and al-Kindi, Ikhwan al-Safa conceive of being in place as a property pertaining to material substances. Namely, being in place is one of the body's properties, meaning there is no empty place in the world because the world is fully populated with bodies—including air and the three other elements, which are subsumed under their definition of bodies as three-dimensional entities with width, length, and depth.¹⁵²

For Ikhwan al-Safa, the error in the Aristotelian argument is due to the power of the intellect. Because the intellect has the power of abstraction, when it perceives particular bodies, it abstracts their forms from their matter, and as a result mistakenly identifies their form with the

¹⁵² Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 3, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 10.

vacuum and their matter with place as a plenum, while instead they are one and the same thing.

Ikhwan al-Safa provide a *reductio ad absurdum* argument for the impossibility of a vacuum. Since a vacuum is an empty place devoid of bodies, and we cannot conceive of an empty place that is devoid of both light and darkness, then an empty place is either lit or not. If both light and darkness are substances, then they are substances occupying every place, leaving no possibility for a vacuum. If one or both of them is a substance while the other is an accident—an accident being that which supervene on a substance for Ikhwan al-Safa—and since everything is either a substance or an accident, then we are always conceiving of a substance when we are conceiving of an empty place, lit or not. Therefore, a vacuum does not exist.¹⁵⁴

The form of this argument does not necessarily contradict Aristotle's arguments against the vacuum because Ikhwan al-Safa do not specify the kind of substances light and darkness are. Darkness, for instance, can be identified as supervening on the eternal matter constituting the Aristotelian world understood as a plenum. However, the aim of Ikhwan al-Safa's argument is to arrive at a conclusion opposite to that of the eternity of matter. We find a qualification to this argument which aligns with Ikhwan al-Safa's conception of space as the property of being in place of the bodies populating every inch of the world, to use their metaphor, like the layers of an

¹⁵³ Ikhwan al-Safa, رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 2, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 14-15.

¹⁵⁴ Ikhwan al-Safa, رسانل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 1, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 385.

onion. In another epistle, after briefly reiterating the previous argument regarding light and darkness, they assert that light and darkness are nothing but properties of bodies.¹⁵⁵

Ikhwan al-Safa also provide an answer to the objection raised by the Epicureans and the Stoics for the necessity of vacuum to the motion of the bodies. They appeal to the observed differences in the nature of natural bodies in which, for example, soft and liquid bodies like air and water allow other bodies to permeate through the parts constituting them. They take this conclusion as apparent when observing the movement of fish in the water, birds in the air, and other animals on earth.¹⁵⁶

So far, Ikhwan al-Safa's argument denies both the existence of a vacuum and a plenum but does not show why the totality of the bodies constituting the world is not made of eternal matter, despite their avoidance of the Aristotelian argument against the vacuum entailing such a conclusion. The aforementioned Aristotelian argument against the existence of a vacuum demonstrates the impossibility of bodies being generated from nothing, due to the requirement of an empty place for their generation to take place. Since Aristotle denies the existence of an empty place, it follows that it is impossible for bodies to be generated. However, Ikhwan al-Safa's argument against the existence of the vacuum, also applicable, as we saw, against the existence of a plenum, still leaves the possibility for three-dimensional bodies with one of their properties being in place to be made of eternal matter. To this, Ikhwan al-Safa's requirement for the actualization of those bodies provides an answer to this possible objection, namely, the becoming of prime matter and the universal soul together. As shown in the previous section, both

¹⁵⁵ Ikhwan al-Safa, رسائل إخوان الصفاء وخَلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends], vol. 2, ed. Khair al-Din al-Zirikli (United Kingdom: Hindawi Foundation C.I.C., 2018), 26.

156 Ibid.

prime matter and the universal soul lack eternal existence because of their dependence on God, and because He has made them, the world is generated from their relationship because of Him.

2.13 Muruwwa's Objection: The Eternity of Ikhwan al-Safa's Prime Matter

In his النزعات المادية في الفلسفة العربية والإسلامية [Materialist Trends in Arabic-Islamic Philosophy] Husayn Muruwwa correctly emphasizes Ikhwan al-Safa's distinct conception of motion. While he rejects their conception of motion as an immaterial form necessary for the actualization of the world, he concedes that their world is never at rest. Ikhwan al-Safa do not understand the world's perpetual motion to mean its eternity, and indeed Muruwwa is aware that Ikhwan al-Safa put motion against eternity; that is, eternity is only ascribed to that which does not undergo any change, motion, or alteration. 157 However, Muruwwa goes through another route to assign the doctrine of the world's eternity to Ikhwan al-Safa. As I alluded in section 2.5, Muruwwa exploits the following tension in Ikhwan al-Safa's counter-argument to the eternity of matter from the impossibility of its generation, since being 'the primary substratum' of the world, matter is that from which everything is generated. For Ikhwan al-Safa, the direct generation of the world is a consequence of the universal soul materializing the forms of things through prime matter. Since Ikhwan al-Safa understands both the universal soul and prime matter as immaterial substances, then how can the actual world be generated from the coming together of two immaterial substances? To resolve this tension, Muruwwa gives special attention to this puzzling passage:

"Know that a long age passed for the [Universal] Soul before she was attached to the [Absolute] Body endowed with dimensions, and she, in her spiritual world, on her luminous seat and in her abode of life, turned towards her cause, the Active Intellect, from whom she received the emanation, as well as virtues and merits, and was gratified,

¹⁵⁷ Husayn Muruwwa, النزعات المادية في الفلسفة العربيّة والإسلامية [Materialist Trends in Arabic-Islamic Philosophy], vol. 3 (Beirut: Dar al-Farabi, 2002), 348.

delighted, merry, joyous, and glad. And when she had received those emanations and merits, a kind of labour gripped her, and she began to [fa-aqbalat] search for something into which she [could] emanate [in her turn] those merits and virtues. Before that, the [Absolute] Body was void of shapes, forms, and imprints. Then the Soul approached [fa-aqbalat (...) 'ala, here and later] Matter, the dense was distinguished from the rare, and [she] emanated into it those virtues and merits. And when the Creator, exalted be He, saw what she had done, [dhalika minha] He provided her with a body and disposed it for her, and created from that body the world of the spheres and the strata of heavens, beginning with the all-encompassing sphere up to the utmost centre of the Earth. He set the spheres above each other, fixed the stars in their centers, and arranged the elements in their degrees in the best order and arrangement, as they are now, so that the Soul might have power over their rotation and over setting their stars on their courses [...]. It was this that was the reason for the generation [kawn] of the world — namely, of the world of bodies — after it was not" 158 (my emphasis).

Muruwwa interprets the emphasized lines as indicating the pre-existence of matter. He states,

"The celestial sphere was created from 'something else' meaning from another 'existent', and it was not created 'from nothing'. They mean—of course—by 'body' the 'absolute body' distinct from the sensible material body. These available variables, therefore, allow us to conclude that 'the absolute body' in Ikhwan al-Safa's theory is akin to Aristotle's 'hulê', or they are the same thing, namely this 'absolute body' enjoys an eternal potential existence similar to the existence type of Aristotle's 'hulê'."

Muruwwa seems to rely on a particular understanding of Aristotle's notion of matter. Despite its accuracy, he misidentifies the absolute body with prime matter. Ikhwan al-Safa's usage of the past tense speaks of the absolute body in a state prior to becoming itself, and as Nasr explains, the absolute body is identified with the entire physical universe with its characteristics of length, width, and depth which includes both the sublunary sphere and the celestial sphere. Muruwwa's misidentification results from Ikhwan al-Safa's unusual description of the process of emanation—but luckily, this passage is consistent with Ikhwan al-Safa's conception of motion as

¹⁵⁸ Ikhwan al-Safa, *Sciences of the Soul and Intellect, Part III. An Arabic Critical Edition and English Translation of EPISTLES 39-41*, ed. & transl. by Carmela Baffioni & Ismail K. Poonawala (Epistles of the Brethren of Purity) (Oxford: Oxford University Press with the Institute of Ismaili Studies, 2017), 194.

¹⁵⁹ Husayn Muruwwa, النزعات المادية في الفلسفة العربيّة والإسلامية [Materialist Trends in Arabic-Islamic Philosophy], vol. 3 (Beirut: Dar al-Farabi, 2002), 253-352.

¹⁶⁰ Seyyed Hossein Nasr, Introduction to Islamic Cosmological Doctrines (London: Thames and Hudson, 1981), 59.

an immaterial form given by the universal soul, for they even mention here that God's generation of the world is for the sake that "the Soul might have power over their rotation," 161 namely, the motion of the celestial bodies. Since the process of emanation described in this passage is a bit different from Ikhwan al-Safa's usual description, God is understood by Muruwwa to be Aristotle's unmoved mover whose unrestricted actuality brings about, in this case, matter from potential existence to an actual existence. God has a direct relationship, not in the creation of the world from nothing, but instead in generating it from a pre-existing matter. Accordingly, Muruwwa concludes, Ikhwan al-Safa are committed to the eternity of the world. Even if we accept Muruwwa's interpretation, the conclusion which should be drawn is that Ikhwan al-Safa accept the eternity of matter while maintaining the generation of the world, namely its creation. This is clear from the passage in which Ikhwan al-Safa states that their description of the universal soul's role in the process of emanation is to explain "the reason for the generation [kawn] of the world—namely, of the world of bodies—after it was not." Moreover, Muruwwa's interpretation does not even resolve the tension of how two immaterial substances, the universal soul and prime matter, generate the existence of a material substance—matter which allows the actualization of the forms of everything, for Ikhwan al-Safa's world is the totality of bodies as enmattered forms.

Muruwwa's interpretation of the passage does not only ignore Ikhwan al-Safa's established description of the emanation process, but also undermines their whole philosophical system, which is centered on the thesis of creation, as I have proved in the previous sections. Often,

¹⁶¹ Ikhwan al-Safa, *Sciences of the Soul and Intellect, Part III. An Arabic Critical Edition and English Translation of EPISTLES 39-41*, ed. & transl. by Carmela Baffioni & Ismail K. Poonawala (Epistles of the Brethren of Purity) (Oxford: Oxford University Press with the Institute of Ismaili Studies, 2017), 194.

¹⁶² Ibid.

Ikhwan al-Safa take prime matter to be emanating from the universal soul, in which the universal soul bestows the forms of things on prime matter for the sake of their actualization. They write, "Then He created Prime Matter from the movement of the Soul, just as He created four by adding one to three." ¹⁶³ They explain somewhere else that "The Abstract Form consists of the imprints, the hues, and the shapes the Soul produced in Matter by the Will of God."164 The quoted passage suggests a different formulation than these descriptions, but it does not explicitly violate Ikhwan al-Safa's deep theological commitment to creationism. Since God is the ultimate Creator, prime matter emanates from the universal soul because of Him, and the dependent chain of emanation ends up in Him as the necessary existent One. Indeed, Muruwwa is right in pointing out that Ikhwan al-Safa have an understanding of creation distinct from the traditionalist understanding. As we have seen in the previous sections, Ikhwan al-Safa understood the generation of the world to be a result of the actualization of the forms of everything as enmattred form through the emanation of prime matter from the universal soul. While the generation of the world as enmattred form, in which matter is understood to be a material substance, remains an unresolvable tension in Ikhwan al-Safa's philosophical system, the status of the universal soul and prime matter as non-temporal immaterial substances originated by God is no longer disputable, as I have elaborated in section 2.5. Ikhwan al-Safa's deep theological commitment to creationism motivates their employment of emanation theory and preserves their conception of

10

¹⁶³ Quoted in Ian Netton, *Muslim Neoplatonists. An Introduction to the Thought of the Brethren of Purity* (Edinburgh: Edinburgh University Press, 1991), 34.

¹⁶⁴ Ikhwan al-Safa, Sciences of the Soul and Intellect, Part III. An Arabic Critical Edition and English Translation of EPISTLES 39-41, ed. & transl. by Carmela Baffioni & Ismail K. Poonawala (Epistles of the Brethren of Purity) (Oxford: Oxford University Press with the Institute of Ismaili Studies, 2017), 192.

God, who enjoys not only free volition but also absolute independence and necessity entailing His eternity. Only God is eternal.

However, Muruwwa does not see the quoted passage as an anomaly because of his double reading approach, for example, he states that "Ikhwan al-Safa's explicit position in defending the creation of the world does not express their true and decisive position on the problem." ¹⁶⁵ For him, the passage demonstrates that Ikhwan al-Safa's scientific quest, free from any theological concerns, is the cause behind the motion of matter which they link with the order of the whole universe. 166 He states that "even though their quest did not find a decisive conclusion—for it was impossible within their historical circumstances, they added to the chain of human knowledge," by insisting on the perpetuity of motion, "until the discovery of the perpetual motion of matter." Muruwwa's approach to Ikhwan al-Safa overemphasizes their rationalism as a subversion of the whole social order organized by the principles of religion. While he does not fully absolve Ikhwan al-Safa from religiosity, he understands their philosophy as fundamentally scientific in nature. For him, "[Ikhwan al-Safa] depend fundamentally on reason[...] they were not representative of a sect following Ismailis as depicted by most scholars and historians. They were a full expression of one of the most significant phenomena in their age, meaning the phenomenon of encyclopedic research." 168 While Ikhwan al-Safa are indeed an expression of such phenomena, their natural theology project, however, as I have shown in section 1.5, is an inseparable aim of their encyclopedic research. By preempting their project of natural theology,

النزعات المادية في الفلسفة العربيّة والإسلامية (Materialist Trends in Arabic-Islamic Philosophy), vol. 3 (Beirut: Dar al-Farabi, 2002), 356.

¹⁶⁶ Ibid, 360.

¹⁶⁷ Ibid.

¹⁶⁸ Ibid. 1.

Muruwwa's double reading approach justifies a reading of an isolated passage, which ultimately runs counter to many pieces of textual evidence for Ikhwan al-Safa's creationist arguments against the eternity of the world.

Conclusion

Contemporary scholarship on Ikhwan al-Safa generates a reproduction of historical testimonies, presumably later in time than the emergence of Ikhwan al-Safa, that presuppose a lurking conflict between philosophy and religion that motivates Ikhwan al-Safa's philosophical project. This presupposition has led to characterizations of Ikhwan al-Safa's philosophy as either propagating religion in the form of esoteric Ismailism or reconciling religion with philosophy in the name of rationalism. Consequently, Ikhwan al-Safa's reception of Greek and Neoplatonic sources and also their overall positions on central philosophical problems of the time—such as the eternity of the world problem—are read through the lens of these characterizations. While I do not dispense with locating Ikhwan al-Safa within their historical Islamic context of 10th century Iraq, known for its fierce intellectual, cultural, and political competition, I preserve their close conceptual, if not historical, relationship to the early tradition of Arabic philosophy that originated with al-Kindi. By identifying the project of this tradition as one of natural theology independent of presupposing a conflict between philosophy and religion, I secure a philosophical approach to my inquiry into Ikhwan al-Safa's position on the problem of the world's eternity and of their overall synthesis of emanation theory and the Islamic belief in creation.

The conclusion of my inquiry and examination further supports the validity of my identification against other characterizations, especially the matrilaist rationalism characterization of Husayn Muruwwa. In the context of the world's eternity problem, Muruwwa is a scholar who explicitly discusses Ikhwan al-Safa's stance and its relationship to their synthesis of emanation and

creation. 169 Due to his characterization, Muruwwa concludes by assigning the Aristotelian doctrine of the world's eternity to Ikhwan al-Safa. My conclusion, on the other hand, proves with little doubt Muruwwa's conclusion to be erroneous. While Ikhwan al-Safa do not commit themselves to a traditionalist understanding of creationism, their employment of emanation theory is nevertheless motivated by their deep theological commitment to the Islamic belief in creation. My objective is accomplished by first presenting Ikhwan al-Safa's six targeted Aristotelian arguments, which are either explicitly stated or implicitly assumed by them. After I present the arguments of their presumably Aristotelian interlocutors, I explicate Ikhwan al-Safa's counter arguments with an emphasis on the role of the principles of their emanation theory in substantiating them. It is implausible to assign Ikhwan al-Safa a commitment to the world's eternity doctrine against their ardent defense of creationism. Ikhwan al-Safa's philosophical system which provides answers to six Aristotelian arguments, in addition to several proofs for God's existence as an absolutely independent free willing eternal Creator, leaves little room for depriving Ikhwan al-Safa from their commitment not only to the generation of matter but also to the creation of the bodies constituting the totality of the materialized world. My examination only gives a synopsis of Ikhwan al-Safa's philosophical system which synthesizes emanation and creation for the sake of the latter. While I point out some of its internal tensions, those tensions do not affect my conclusion.

Consequently, Ikhwan al-Safa's reception of Greek and Neoplatonic sources shows a particular philosophical synthesis, and should be recognized as such, for they did not merely transmit these

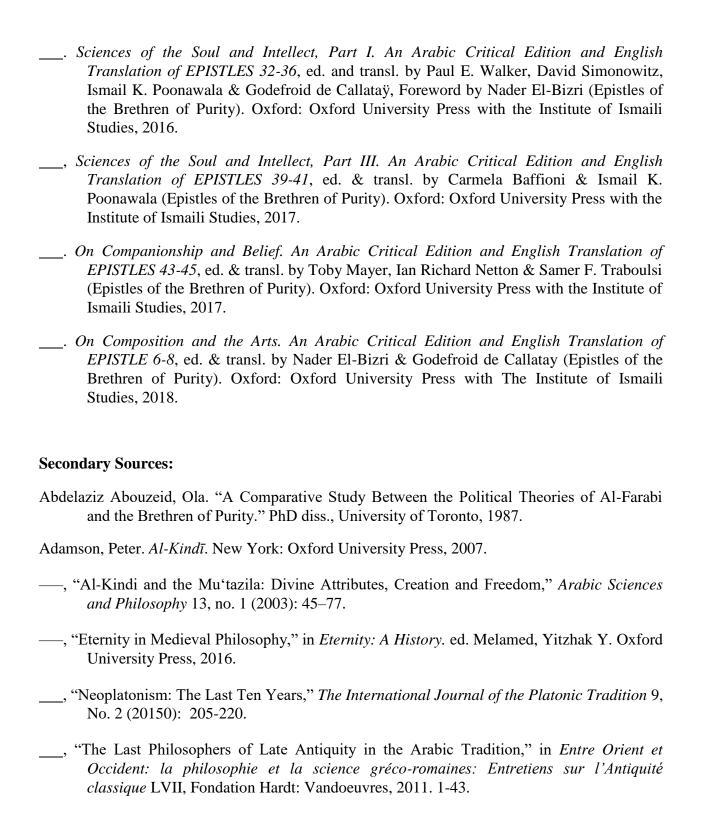
النزعات المادية في الفلسفة العربيّة والإسلامية [Materialist Trends in Arabic-Islamic Philosophy], vol. 3 (Beirut: Dar al-Farabi, 2002), 269-376.

sources, but assimilated them into the Islamic context of 10th century Iraq. Furthermore, by identifying Ikhwan al-Safa's philosophy as a natural theology, new insights into their intricate philosophical systems and elaborations of their positions on the philosophical problems of their time are expected to be fruitful.

Bibliography

Primary Sources:

- Aristotle. *Complete Works of Aristotle: The Revised Oxford Translation*. Ed. J. Barnes. 2 Vols. Bollingen Series. Princeton: Princeton University Press, 1995.
- Ikhwan al-Safa. رسائل إخوان الصفاء وخُلان الوفاء [Epistles of the Brethren of Purity and Sincere Friends]. 4 Vols. Edited by Khair al-Din al-Zirikli. United Kingdom: Hindawi Foundation C.I.C., 2018.
- Ikhwan al-Safa. *The Case of the Animals versus Man Before the King of the Jinn*, An Arabic Critical Edition and English Translation of *EPISTLE* 22, ed. and transl. by Lenn E. Goodman & Richard McGregor, foreword by Nader El-Bizri. Oxford: Oxford University Press with The Institute of Ismaili Studies, 2009.
- ____. *On Logic*, An Arabic Critical Edition and English Translation of *EPISTLES* 10-14, ed. and transl. by Carmela Baffioni. Oxford: Oxford University Press with The Institute of Ismaili Studies, 2010.
- ____. *On Music*, an Arabic Critical Edition and English Translation of *EPISTLE 5*, ed. and transl. by Owen Wright. Oxford: Oxford University Press with The Institute of Ismaili Studies, 2011.
- ____. *On Magic*, an Arabic Critical Edition and English Translation of *EPISTLE 52*, *Part* 1, ed. and transl. by Godefroid de Callataÿ & Bruno Halflants. Oxford: Oxford University Press with The Institute of Ismaili Studies, 2011.
- _____. *On Arithmetic and Geometry*, an Arabic Critical Edition and English translation of *EPISTLES 1 & 2*, ed. and transl. by Nader El-Bizri. Oxford: Oxford University Press with The Institute of Ismaili Studies, 2012.
- . On the Natural Sciences. An Arabic Critical Edition and English Translation of EPISTLES 15-21, ed. & transl. by Carmela Baffioni, foreword by Nader El-Bizri (Epistles of the Brethren of Purity). Oxford: Oxford University Press with The Institute of Ismaili Studies, 2013.
- ____. *On Geography. An Arabic Critical Edition and English Translation of EPISTLE 4*, ed. & transl. by Ignacio Sánchez & James Montgomery (Epistles of the Brethren of Purity). Oxford: Oxford University Press with The Institute of Ismaili Studies, 2014.
- ____. On Astronomia. An Arabic Critical Edition and English Translation of EPISTLE 3, ed. and transl. by F. Jamil Ragep & Taro Mimura, Foreword by Nader El-Bizri (Epistles of the Brethren of Purity). Oxford: Oxford University Press with the Institute of Ismaili Studies, 2015.



- _____, "The Arabic Plotinus: A Study of the "Theology of Aristotle" and Related Texts" PhD diss., University of Notre Dame, 2000.
- Adamson, Peter, and Richard C. Taylor, eds. *The Cambridge Companion to Arabic Philosophy*. *Cambridge Companions to Philosophy*. Cambridge: Cambridge University Press, 2004.
- Adamson, Peter, and Pormann, P.E., trans. *The Philosophical Works of al-Kindi*. Karachi: Oxford University Press, 2012.
- Ainsworth, Thomas. "Form vs. Matter," *The Stanford Encyclopedia of Philosophy* (Spring 2016 Edition), ed.Edward N. Zalta. https://plato.stanford.edu/archives/spr2016/entries/form-matter/.
- Ali Engineer, Asghar. "Ikhwan-us Safa: A Rational and Liberal Approach to Islam," Ismaili Web Amaana, http://www.amaana.org/ikhwan/ikhwan1.html.
- Almutawa, Shatha. "The Death of the Body is the Birth of the Soul': Contradictory Views on the Resurrection in Rasā'il Ikhwān Al-Ṣafā," *Studia Islamica* 113, no. 1 (2018): 56-75.
- Arkoun, Mohammed. نزعة الأنسنة في الفكر العربي [The Humanist Tendency in Arabic Thought].

 Beirut: Dar al-Saqi, 1997.
- al-Awwa, Adel. حقيقة إخوان الصفا [Ikhwan al-Safa's Truth]. Damascus: Al-Ahali Distribution and Publication, 1993.
- al-Azmeh, Aziz. Arabic Thought and Islamic Societies, 2nd edition. London: Routledge, 2013.
- Baffioni, Carmela. "Textual problems in the Iḥwān al-Ṣa fā's quotations of ancient authors" in *Proceedings of the 17th Congress of the UEAI*. ed. W.Madelung, Yu. Petrosyan, H.Waardenburg-Kilpatrick, A.Khalidov, E.Rezvan. Thesa, St. Petersburg: 1997. 13-26.
- ____, "Ikhwân al-Safâ'," The Stanford Encyclopedia of Philosophy. Fall 2016 Edition. Edward N. Zalta (ed.)
- , "Esoteric Shi'ism in the Additions to Ancient Manuscripts of the Rasa'il Ikhwan al-Safa," in L'ésotérisme shi'ite: ses racines et ses prolongements / Shi'i esotericism: its roots and developments. Brepols: Turnhout, 2016.
- Bertolacci, Amos. "On the Arabic Translations of Aristotle's *Metaphysics*," *Arabic Sciences and Philosophy* 15 (2005): 277-327.
- Bobedie, Husayn. جدلية السلطة والفلسفة في العصر الوسيط: إخوان الصفا أنموذجاً [The Dialectic of Power and Philosophy in the Middle Ages: Ikhwan al-Safa as an Example]. Cairo: Dar al-Kalimah, 2018.

- Bodnar, Istvan. "Aristotle's Natural Philosophy," *The Stanford Encyclopedia of Philosophy* Spring 2018 Edition, ed.Edward N. Zalta. https://plato.stanford.edu/archives/spr2018/entries/aristotle-natphil/.
- Butorac, David D., and Danielle A. Layne, eds. *Proclus and his Legacy*. Berlin, Boston: De Gruyter, 2017.
- Bradie, Michael and Duncan, Comer. "Aristotle on Space, Time, and Motion," *Physics and Philosophy of Space and Time 1998 Course Web Page*. Accessed May 1, 2019 http://physics.bgsu.edu/~gcd/Spacetime5.html.
- de Callataÿ, G. *Ikhwan al-Safa'*. A Brotherhood of Idealists on the Fringe of Orthodox Islam, Oxford: Onerowrld, 2005.
- —, "Did the Ikwân al-Safâ' inspire Ibn Tufayl to his *Hayy Ibn Yaqdhân*?," *Ishraq*, 4 (2013): 82-89.
- _____, "From Ibn Masarra to Ibn 'Arabî: references, shibboleths and other subtle allusions to the *Rasâ'il Ikhwân al-Safâ'* in the literature of al-Andalus," *Studi Magrebini*, 12-13 (2014-15): 217-68.
- _____, "The Two Islands Allegory in the *Rasâ'il Ikhwân al-Safâ'*: a walk through philosophical metaphors and literary motifs," *Ishraq* 4 (2013): 71-81.
- Chase, Michael. "Discussions on the Eternity of the world in Late Antiquity," *A ΣΧΟΛΗ Journal of the Centre for Ancient Philosophy and the Classical Tradition* (Novosibirsk) 5, no. 2 (2011). Special issue: Ancient Cosmology and Astronomy, p. 111-173.
- —, "Discussions on the eternity of the world in Antiquity and contemporary cosmology, I-II,"
- A $\Sigma XOAH$ Journal of the Centre for Ancient Philosophy and the Classical Tradition 7, no. 1 (2013): 19-68.
- —, "Philoponus' cosmology in the Arabic tradition," *Recherches de Théologieet Philosophie Médiévales* 79, no. 2 (2012): 271-306.
- —, "Creation in Islam from the Qur'n to al-Farabi" in *The Routledge Companion to Islamic Philosophy*. Taylor, Richard C. & López-Farjeat, Luis Xavier, eds. New York: Routledge, 2015.
- —, "The Medieval Posterity of Simplicius' Commentary on the Categories: Thomas Aquinas and al-Fârâbî", *Medieval Commentaries on Aristotle's Categories*. Lloyd A. Newton, ed. Leiden: Brill, 2008. 9-29.

- Chignell, Andrew and Pereboom, Derk. "Natural Theology and Natural Religion," *The Stanford Encyclopedia of Philosophy*. Spring 2017 Edition, Edward N. Zalta (ed.), https://plato.stanford.edu/archives/spr2017/entries/natural-theology/.
- Daftary, F. *The Isma'ilis. Their history and doctrines*, Second Edition, Cambridge University Press, 2007.
- Davidson, Herbert. "John Philoponus as a Source of Medieval Islamic and Jewish Proofs of Creation," *Journal of the American Oriental Society* 89, no. 2 (April-January, 1969): 357–91.
- —, Proofs for Eternity, Creation and the Existence of God in Medieval Islamic and Jewish Philosophy, New York: Oxford University Press, 1987.
- D'Ancona, Cristina, eds. *The Libraries of the Neoplatonists*. Leiden, The Netherlands: BRILL, 2007.
- Demichelis, Marco. "Baúra, the cradle of Islamic culture. A reasoned analysis of the urban area that was the early home of Islamic Studies" in *Le vie del sapere in ambito siro-mesopotamico dal III al IX secolo: atti del convegno internationale tenuto a Roma nei giorni 12-13 maggio 2011*. Edward G. Farrugia, S.J, eds. Roma: Pontificio Istituto Orientale, 2013.
- El-Bizri, Nader ed., *The Ikhwân al-Safâ' and their Rasâ'il*. New York: Oxford University Press in Association with the Institute of Ismaili Studies, 2008.
- _____, "Corollaries on Space and Time: A Survey of Arabic Sources in Science and Philosophy." Critical Studies 32 (June 2015): 63. https://doi.org/10.1163/9789042031425.
- El-Rouayheb, K., & Schmidtke, S, Eds. *The Oxford Handbook of Islamic Philosophy*. Oxford: Oxford University Press, 2016.
- Endress, Gerhard, eds. Organizing Knowledge: Encyclopædic Activities in the Pre-Eighteenth Century Islamic World. Leiden, The Netherlands: BRILL, 2006.
- ______, "The New and Improved Platonic Theology. Proclus Arabus and Arabic Islamic Philosophy," in *Proclus et la Théologie Platonicienne*. H D. Saffrey, and Leendert G. Westerink, eds. Paris: Belles Lettres, 1981.553-570.
- Fackenheim, Emil L. "The Conception of Substance in the Philosophy of the *Ikwan as-Sefa'* (Brethren of Purity)." *Mediaeval Studies* 5: (1943), 115-122.
- Fares, Michael James. "Letters from the Goodwill Brothers of Basra: a medieval Islamic message of tolerance and pluralism." MA diss., The University of Texas, 2012.

- Farouk, Wael. تحليل الخطاب في رسائل إخوان الصفا [Discourse Analysis of Ikhwan al-Safa's Epistles]. Alexandria: Alexandria Library, 2018.
- Gerson, Lloyd P., ed. *The Cambridge History of Philosophy in Late Antiquity*. Vol. 1. Cambridge: Cambridge University Press, 2000.
- Goodman, Lenn E. Islamic Humanism. Oxford: Oxford University Press, 2003
- Gutas, Dimitri. Greek thought, Arabic culture: the Graeco-Arabic translation movement in Baghdad and early 'Abbāsid society (2nd-4th/8th-10th centuries). London: Routledge, 1998.
- _____, "The Study of Arabic Philosophy in the Twentieth Century: An Essay on the Historiography of Arabic Philosophy," *British Journal of Middle Eastern Studies*, Vol. 29, No. 1, 2002.
- Hamdani, Abbas, "The Arrangement of the Rasâ'il Ikhwân al-Safâ' and the Problem of Interpolations," in The Ikhwân al-Safâ' and their Rasâ'il. El-Bizri, N. ed. New York: Oxford University Press in Association with the Institute of Ismaili Studies, 2008. 83–100.
- _____, "Time According to the Brethren of Purity / الزمن عند اخوان الصفا"." Alif: Journal of Comparative Poetics 9, (1989): 98-104.
- ____, "The Name of Ikhwan al-Safa," DOMES, Digest of Middle East Studies, 9, 1999. 1-11.
- _____, "The Ikhwan al-Safa' between al-Kindi and al-Farabi" in *Fortresses of the Intellect: Ismaili and Other Islamic Studies in Honour of Farhad Daftary*. ed.Omar Alí-de-Unzaga. New York: I.B. Tauris, 2012.180-212.
- Husseini, Sara Leila. "Early Christian explanations of the Trinity in Arabic in the context of Muslim Theology." PhD diss., University of Birmingham, 2011.
- Ikhwan al-Safa. جامعة الجامعة [The Comprehensive Comprehension]. ed. Arif Tamir. Beirut: Dar Maktabat al-Hayah, 1970.
- Izdebska, Anna. "Pythagoreanism in Arabic, Arabic Pythagoreanism Transformations of a philosophical tradition." PhD diss., Uniwersytet Warszawski, 2016.
- _____, "The Attitudes of Medieval Arabic Intellectuals towards Pythagorean Philosophy: Different Approaches and Ways of Influence," in *Cultures in Motion: Studies in the Medieval and Early Modern Periods*. Adam Izdebski and Damian Jasiński eds. Jagiellonian University Press, 2014. 25–44.

- _____, "Man, God and the Apotheosis of Man in Greek and Arabic Commentaries to the Pythagorean Golden Verses," *The International Journal of the Platonic Tradition* 10, no. 1 (2016): 40-64.
- , "The Pythagorean Metaphysics of Numbers in the Works of the Ikhwān al- S afā ' and al- Shahrastāni" in *Pythagorean Knowledge from the Ancient to the Modern World: Askesis, Religion, Science*. Renger, Almut-Barbara, and Alessandro Stavru, eds. Wiesbaden: Harrassowitz Verlag, 2016.
- al-Jabri, Mohammed Abed. تكوين العقل العربي [The Formation of Arab Reason]. 10th ed. Beirut: Center for Arab Unity Studies, 2009.
- Janos, Damien, eds. *Ideas in Motion in Baghdad and Beyond*. Leiden, The Netherlands: BRILL, 2015.
- Krinis, Ehud. "Al-Risâla al-jâmi'a and its Judeo-Arabic Manuscript," in *Islam: Identité et altérité*. Turnhout: Brepols Publishers, 2013. 311-29.
- Koroglu, Burhan. "Basra and Ikhwan al-Safa School of Thought," *Acta Via Serica* 2, no 1, 2017. 109-120.
- Mahdi, Muhsin. *Alfarabi and the Foundation of Islamic Political Philosophy*. Chicago: University of Chicago Press, 2010. Print.
- Masum, Fuad. إخوان الصفا: فلسفتهم وغايتهم [Ikhwan al-Safa: Their Philosophy and Purpose]. 3rd ed. Damascus: Dar al-Mada, 2008.
- Mattila, Janne. "The Philosophical Worship of the Ikhwân al-Safâ'," *Journal of Islamic Studies*, 27.1 (2016): 17-38.
- ____, "The Ikhwān al-Ṣafā' on Religious Diversity," *Journal of Islamic Studies* 28, no 2 (2017): 178-192.
- McGinnis, Jon, and David C. Reisman. *Classical Arabic Philosophy: An Anthology of Sources*. Indianapolis: Hackett Pub. Company, 2007.
- Melamed, Yitzhak Y., ed. *Eternity: A History*. Oxford University Press, 2016.
- Michot, Y.J. "Misled and Misleading... Yet Central in their Influence: Ibn Taymiyya's Views on the Ikhwân al-Safâ" in The Ikhwân al-Safâ' and their Rasâ'il. El-Bizri, N. ed. New York: Oxford University Press in Association with the Institute of Ismaili Studies, pp. 139–179.
- Mohamed, Yasien. "The Cosmology of Ikhwān al-Ṣafā', Miskawayh and al-Iṣfahānī" *Islamic Studies* 39, no. 4 (2000): 657-79.

- Muruwwa, Husayn. النزعات المادية في الفلسفة العربية والإسلامية [Materialist Trends in Arabic-Islamic Philosophy]. Vol. 3. Beirut: Dar al-Farabi, 2002.
- Nasr, Seyyed Hossein. *Introduction to Islamic Cosmological Doctrines*. London: Thames and Hudson, 1981.
- Nanji, Azim. "Ismailism," The Institute of Ismaili Studies, accessed May 1, 2019, https://iis.ac.uk/ismailism#anchor15.
- Netton, Ian. Muslim Neoplatonists. An Introduction to the Thought of the Brethren of Purity, Edinburgh: Edinburgh University Press, , 1991.
- —, "Private caves and public islands," in *The afterlife of the Platonic soul: reflections of Platonic psychology in the monotheistic religions*, M. Elkaisy-Freimuth, J.M. Dillon, eds. Leiden–Boston: Brill, 2009. 107–120.
- Nokso-Koivisto, Inka. "Microcosm-Macrocosm Analogy in the Rasā'il Ikhwān aṣ-Ṣafā' and Certain Related Texts." PhD diss., University of Helsinki, 2014.
- Ozkan, Abdullah. "Al-Ghazālī and Rasā'il Ikhwān al-Ṣafā': Their Influence on His Thought." PhD diss., University of California, 2016.
- Qutbuddin, Bazat-Tahera. "Healing the Soul: Perspectives of Medieval Muslim Writers," *Harvard Middle Eastern and Islamic Review* 2, no.2 (1995): 62-87.
- Roberts, Alexandre M. "The Crossing Paths of Greek and Persian Knowledge in the 9th-century Arabic 'Book of Degrees'" in *Le vie del sapere in ambito siro-mesopotamico dal III al IX secolo: atti del convegno internationale tenuto a Roma nei giorni 12-13 maggio 2011*. Edward G. Farrugia, S.J, eds. Roma: Pontificio Istituto Orientale, 2013.
- al-Sawwah, Firas. طريق إخوان الصفا: مدخل إلى الغنوصية الإسلامية [Ikhwan al-Safa's Path: An Introduction to Islamic Gnosticism]. Damascus: Dar Alaa al-Din, 2008.
- Strauss, Leo. *Persecution and the Art of Writing*. Chicago: University of Chicago Press, 2010. Print.
- Stroumsa, Sarah. "The Beginnings of the Mu"tazila Reconsidered," *Jerusalem Studies in Arabic and Islam* 13 (1990): 265–93.
- —, "Comparison as Multifocal Approach: The Case of Arabic Philosophical Thought," in: *Comparative Studies in the Humanities.* Guy. G. Stroumsa, ed. Jerusalem: The Israel Academy of Sciences and Humanities, forthcoming.

- —, "Philosophy as Wisdom: on the Christians' Role in the Translation of Philosophical Material to Arabic," in *Exchange and Transmission across Cultural Boundaries: Philosophy, Mysticism and Science in the Mediterranean.* H. Ben-Shammai, S. Shaked and S. Stroumsa, eds. Jerusalem: The Israeli Academy of Science, 2013. 276–93.
- ______, "Philosopher-king or philosopher-courtier? Theory and reality in the *falâsifa's* place in Islamic society," in *Identidades marginales*, (Estudios onomástico-biográficos de al-Andalus, XIII), C. de la Puente (ed.), Madrid: Consejo Superior de Investigaciones Cientificas, pp. 433–459.
- Tarabichi, Georges. نقد نقد العقل العربي: العقل العربي: العقل المستقيل في الإسلام [A critique of the critique of the Arab reason: Resigned Reason in Islam]. Beirut: Dar al-Saqi, 2004.
- al-Tawhidi, Abu Hayyan. الإمتاع والمؤانسة [Book of Enjoyment and Bonhomie]. Beirut: Dar al-Kitab al-Arabi, 2005.
- Taylor, Richard C. & López-Farjeat, Luis Xavier, eds. *The Routledge Companion to Islamic Philosophy*. New York: Routledge, 2015.
- Tlili, S. "All Animals Are Equal, or Are They? the Ikhwān Al-Safā's Animal Epistle and Its Unhappy End," *Journal of Qur'anic Studies* 16, no. 2 (2014): 42-88. Print.
- Tzamalikos, Panayiotis. Anaxagoras, Origen, and Neoplatonism. The Legacy of Anaxagoras to Classical and Late Antiquity. Berlin, Boston: De Gruyter, 2016.
- Urbano, Arthur. "Read It Also to the Gentiles': The Displacement and Recasting of the Philosopher in the Vita Antonii." *Church History* 77, No. 4 (2008).
- Van, Koningsveld P. S. "Greek Manuscripts in the Early Abbasid Empire." *Bibliotheca Orientalis* 55, no. 3 (1998): 345-372.
- _____, "The Apology of al-Kindi" in *Religious Polemics in Context*. Hettema, Theo, and Christine Kooi, eds. Leiden, The Netherlands: BRILL, 2005.
- de Vaulx, Guillaume. تيسير رسائل إخوان الصفا وخلان الوفا [A Guide to the Epistles of the Brethren of Purity and Sincere Friends]. Cairo: General Egyptian Book Organization, 2017.