$Al-Kind\bar{i}$ by Peter Adamson

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This book is a monographic presentation of the thought and work of the ninth century philosopher al-Kindī. Al-Kindī, whose complete name is Abū Yūsūf Yaʻqū ibn Ishāq al-Kindī, is usually considered to be the first Arabic philosopher and is known by the great public as the one who drove at its peak the translation of scientific and philosophical works from Greek into Arabic.¹ Nevertheless, the presentation of al-Kindī proposed by Peter Adamson goes far beyond the preconceived image and aims to shape a more comprehensive portrait. Despite the loss of a great part of al-Kindī's literary production, the author manages to provide a complete and unified presentation of an intellectual personality that ranges over almost all scientific and philosophical disciplines. Such a brilliant outcome benefits from the critical studies carried out last century that led to the fundamental edition of al-Kindī's scientific and philosophical works by R. Rashed and J. Jolivet. In actual fact, Adamson's study-unlike several recent presentations that just take into account al-Kindī's metaphysical thought and the Greek Neoplatonic influences on it—has the great merit of investigating and elucidating all the areas and aspects of al-Kindī's philosophical and scientific production.

Al-Kindī was born in Baṣra at about AD 800. He moved to Baghdad early in his life to receive his education and to pursue his intellectual career under the caliphates of al-Ma'mūn and al-Mu'taṣim. Actually, al-Kindī's family was linked to political power from the outset of the Muslim empire since one of his ancestors was the king of Kinda and a companion of the prophet. Moreover, his proximity to

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¹ Actually, the such translation had already begun under the caliph al-Mansūr (reigned AD 754–775) but it reached its peak by the time of al-Kindī.

the caliph's family is attested by the numerous letters and treatises dedicated to the caliph or to his son. Several of these essays, as well as many other works by al-Kindī, have not reached us but we are acquainted with them thanks to the 10th-century book merchant Ibn al-Nadīm, who transmitted to us a list of al-Kindī's works. This list shows the astonishing range of his interests since it includes about 300 titles of works on philosophy, mathematics in its various branches, medicine, optics, and astronomy. To this, Ibn al-Nadīm added a series of titles concerning different topics such as astrology, meteorology, zoology, mirrors, jewels, perfumes, and glass.

Adamson assumes, as do most specialists, that despite the great breadth of al-Kindī's learning, there is a common denominator to almost all of his works, namely, the project of promoting and interpreting Greek scientific culture. He makes it clear, though, that al-Kindī's production reveals another mark of his historical position and intellectual personality that should not be underestimated: his eagerness to contribute to all the branches of knowledge of 'Abāssid culture as well as to the theological doctrines professed by the caliphs. This explains at the same time al-Kindī's keen interest in mathematics, his unceasing dialogue with the representatives of Islamic theology, as well as his competences in the other topics that aroused the interests of the members of caliph's court. Moreover, Adamson assumes that some of al-Kindī's philosophical tenets can be interpreted in the light of this same hypothesis. This is the case of his well known philosophical doctrine according to which God alone is eternal. Actually, Adamson suggests that al-Kindi's insistence on this doctrine reflects, and is in a way influenced by the theological belief supported by the caliphs that the Koran is not eternal but created.

Concerning al-Kindī's cultural engagement, Adamson assumes that, from al-Kindī's point of view, the translation project aimed chiefly to demonstrate how Greek wisdom and knowledge could be integrated with the Arabic language and the teachings of Islam. The basic assumption is that philosophy was for al-Kindī a tool for proving the central truths of Islamic theological dogma as well as for interpreting the ambiguous or difficult passages of the Koran. This is quite a traditional thesis about al-Kindī's idea of the relationship between Islam and philosophy. However, Adamson's approach has the merit of proving this thesis with regard to the several truths of Islamic revelation concerning divine predication, the creation of the world, the immortality of the soul, and divine providence, by drawing support from a considerable number of texts newly translated from Arabic.

This same knowledge and handling of al-Kindī's corpus allows the author to portray his intellectual stature faithfully. To this end, Adamson deals with the dominant areas of al-Kindī's competence (metaphysics, psychology, ethics, mathematics, astronomy) and devotes a chapter to each one of them. This reconstruction is founded on the hypothesis that al-Kindī's interests moved from philosophical topics to more scientific and technical issues. This hypothesis, though, given what the Adamson himself says, remains pure speculation.

In chapters 3–5, Adamson reconstructs al-Kindī's theory concerning the unity, the ineffability, and, more generally, the nature of God and his causal relationship with creatures. To this end, in chapter 3, he examines in detail the third section of *On First Philosophy* and the philosophical arguments that are found in this treatise. This survey aims to answer one of the most challenging questions of al-Kindī's metaphysical inquiry:

What is the exact relationship between God and (the) creatures? and Where does multiplicity come from?

The answer was probably in the lost part of the treatise On First Philosophy but Adamson tries to reconstruct al-Kindī's theory drawing on other texts that deal with the same topic. Thus, he singles out the different doctrines and authors that influenced al-Kindī on the topics of creation and God's causality. He concludes that al-Kindī's theory is close not only to Neoplatonic tradition but also to Aristotelian physical doctrine. Even if al-Kindī shares most of Philoponus' criticisms of Aristotle's belief in the eternity of the world, he admits some of the major postulates that ground the Aristotelian theory of substantial generation. Concerning Neoplatonic influence, Adamson traces a leading thread between the theory exposed in the *De causis*, which distinguishes proximate and remote causes, and al-Kindī's theory of God's causality on the created world.

Concerning the eternity of the world, the subject of chapter 4, Adamson explains that al-Kindī sides against Philoponus and with Aristotle and Simplicius on the issue of the composition of the heavens, in denying that they have the same nature as the sublunary bodies. The position that al-Kindī finally takes is that the heavens have a finite existence, even if their constitution never changes during the interval of time that God's will appoints for them. Adamson elaborates his analysis of this topic on the assumption that the rebuttal by al-Kindī of the eternity of the world expounded in On First *Philosophy* is based on a mathematical method. Actually, al-Kindī's refutation in this treatise is preceded by a methodological section in which he affirms that, in demonstrating the non-eternity of the world, we have to pursue intellectual 'perception', i.e., a purely conceptual investigation. In order to explain this method, al-Kindī takes as an example the argument leading to the impossibility of conceiving void and, therefore, to the refutation of a spatially and temporally infinite world. Adamson deduces that this type of argument is an intellectual one since it is founded on the definition of void considered as something conceptually impossible and not on (some) empirical premises. He concludes that this kind of investigation could be properly defined as mathematical, even if in another passage of On First Philosophy al-Kindī affirms that it is not permissible to use mathematical investigations when studying 'natural things'. In fact, Adamson's analysis leaves open a question concerning the relationship between physics and metaphysics and, more precisely, the problem of their place in the order of the theoretical sciences that make inquiry pertaining to the eternity of the world. The answer to this question is not of minor importance since it entails establishing the horizon of physics and metaphysics, and remains a major desideratum.

Chapter 5 is devoted to the exposition of al-Kindī's psychological doctrine. Through a survey of all the texts dealing with this topic, Adamson connects al-Kindī's theory of the soul to his epistemological teaching. As a matter of fact, the greatest interest of this survey is that it does not take into account just al-Kindī's theory of intellect, as most scholars have done, but covers all the aspects of his theory of knowledge, including the relationship between mathematical knowledge and sensation. In this context, Adamson manages to give a unitary and coherent account of the role that al-Kindī ascribes to the sensible world and to divine action in the process of cognition and prophetic dreams.

In chapter 6, Adamson proposes a survey of al-Kindī's ethical theory. The reconstruction of his ethical corpus, even if much of his works on this topic are lost, confirms the unitary portrait that Adamson sketches. In opposition to some recent interpretations, Adamson shows how al-Kindī's moral theory is linked to or, more precisely, dependent on, his metaphysical theory. According to Adamson's hypothesis, al-Kindī's aim is to draw ethical conclusions from theoretical principles about the immortal soul and the intelligible world.

The last two chapters of this volume are devoted to al-Kindī's scientific works. Though al-Kindī's recognized no firm division between science and philosophy, his scientific production is here studied just to highlight the aspects that are most relevant to his philosophical doctrine. Adamson admits that this corpus is so vast and requires such a technical and wide expertise that is almost impossible to give a thorough survey of it in a single chapter of a book. For this reason, he restricts himself to considering the philosophical questions that arise from al-Kindī's scientific production.

The most important of these questions concerns al-Kindī's methodology, i.e., the kind of procedure by which we can reach scientific primary principles and theories. Adamson insists that al-Kindī attributes an important role to empirical observation in the process of confirming scientific theories, even if the theories themselves are not reached by it. He concludes that al-Kindī's scientific conclusions are most frequently driven by abstract mathematical reasoning and that observation is used chiefly to check the accuracy of the application of its truths.

Then, Adamson organizes the extant material in accordance with al-Kindī's own division of mathematical sciences and presents in this light his doctrine of medical proportion, his theory of vision, and his cosmology. He explains in detail how al-Kindī's medical doctrine is founded on his theory of arithmetic progression. He concludes that, even if in some texts al-Kindī approaches pharmacology from a practical perspective, his theory is in a sense non-empirical in so far as it rests on the assumption that the proportions between chemical properties must be governed by the doubling progression, which is for al-Kindī the 'most natural' of the arithmetical relations.

Next, Adamson shows the role of geometry in the explanation of al-Kindī's theory of vision and colors. Concerning optics, he informs us that al-Kindī's conclusion that light is propagated in all directions along straight lines is considerably influenced Ibn al-Haytham's theory of vision. Finally, in stressing the importance of Plato's *Timaeus*, Adamson provides evidence concerning al-Kindī's assumption that harmonic theory, viewed as the science of quantity in so far as one quantity is related to another, should be regarded as the science of everything.

The volume ends with a discussion of the study of the heavens that could be considered as the culmination or the synthesis of al-Kindī's philosophical system. Actually, al-Kindī uses his psychology to explain why the heavens move as they do. His physics explains why the sublunary world is affected by the celestial motion. This in turn grounds his use of astronomical observation to predict the future. The entire theory thus provides the basis for al-Kindī's theory of providence that leads, in turn, to grasping God's creative activity.

To conclude, this monographic presentation has at least two virtues: it not only offers valuable information about the formation, organization, and structure of the works of one of the most influential Arabic philosophers, it also affords new insights into his entire philosophical project. For this reason, the results presented in this volume will be extremely helpful to specialists as well to less advanced students who want to break through into the complex and rich history of Arabic philosophy.