

and oneness is applied to the whole. But the true oneness (*waḥdah*)³⁴ is not of the intellect."

Following the doctrine of Plotinus, al-Kindi passed on to the metaphysical plane of the One. As mentioned above, he confused Aristotle's metaphysics of Being with that of Plotinus. For this reason he was unable to elaborate a coherent system of his own. This was what al-Fārābī, the Second Master, was able to do.

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³⁴ The term *waḥdah* means here oneness, not unity. At the beginning of this same paragraph he speaks about "the true one," and says it is not soul.

Chapter XXII

MUḤAMMAD IBN ZAKARIYA AL-RĀZI

A

LIFE

According to al-Bīrūnī,¹ abu Bakr Muḥammad ibn Zakariya ibn Yahya al-Rāzi was born in Rayy on the first of Sha'bān in the year 251/865. In his early life, he was a jeweller (Baihaqi), money-changer (ibn abi Uṣaibi'ah), or more likely a lute-player (ibn Juljul, Sa'id, ibn Khallikān, Uṣaibi'ah,

¹ *Épître de Beruni, contenant le repertoire des ouvrages de Muḥammad ibn Zakariya ar-Rāzi*, publiée par Paul Kraus, Paris, 1936, p. 4.

al-Ṣafadi) who first left music for alchemy, and then at the age of thirty or (as Ṣafadi says) after forty left alchemy because his experiments in it gave him some eye disease (al-Bīrūnī), which obliged him to search for doctors and medicine. That was the reason, they (al-Bīrūnī, Baihaqi and others) say, he studied medicine. He was very studious and worked day and night. His master was 'Ali ibn Rabbān al-Ṭabari (al-Qiftī, Uṣaibi'ah), a doctor and philosopher, who was born in Merv about 192/808, and died some years after 240/855.² With ibn Rabbān al-Ṭabari he studied medicine and perhaps also philosophy. It is possible to trace back al-Rāzi's interest in religious philosophy to his master, whose father was a rabbinist versed in the Scriptures.

Al-Rāzi became famous in his native city as a doctor. Therefore, he directed the hospital of Rayy (ibn Juljul, al-Qiftī, ibn abi Uṣaibi'ah), in the times of Manṣūr ibn Ishāq ibn Aḥmad ibn Asad who was the Governor of Rayy from 290-296/902-908 in the name of his cousin Aḥmad ibn Ismā'il ibn Aḥmad, second Sāmānian ruler.³ It is to this Manṣūr ibn Ishāq ibn Aḥmad that Rāzi dedicated his *al-Ṭibb al-Manṣūri*, as it is attested by a manuscript⁴ of this book, as against ibn al-Nadīm's assumption,⁵ repeated by al-Qiftī⁶ and ibn abi Uṣaibi'ah,⁷ that this Manṣūr was Manṣūr ibn Ismā'il who died in 365/975.

From Rayy al-Rāzi went to Baghdād during the Caliph Muktafi's time⁸ (r. 289/901-295/907) and there too directed a hospital.

It seems that after al-Muktafi's death (295/907) al-Rāzi came back to Rayy. Here gathered round him many students. As ibn al-Nadīm relates in *Fihrist*,⁹ al-Rāzi was then a *Shaiḫ* "with a big head similar to a sack"; he used to be surrounded by circle after circle of students. If someone came to ask something in science, the question was put to those of the first circle; if they did not know the answer, it passed on to those of the second, and so on till it came to al-Rāzi himself if all others failed to give the answer. Of these students we know at least the name of one, i. e., abu Bakr ibn Qārin al-Rāzi who became a doctor.¹⁰ Al-Rāzi was generous, humane towards his patients,

² See on him: *Fihrist*, p. 296; al-Baihaqi, p. 22; Uṣaibi'ah, Vol. I, p. 309; Meyerhof, *ZDMG*, 85, 38 *et seq.*; Wüstenfeld, p. 55; Leclerc, Vol. I, p. 292; Brockelmann, *GAL*, Vol. I, p. 265, *Suppl.*, Vol. I, pp. 414-15; Brockelmann (*Suppl.*, Vol. I, p. 415) refutes the contention that al-Rāzi was ibn Rabbān's pupil, on the ground that the latter was in Rayy in 224/838. But this proof is not sufficient, because ibn Rabbān's life is not well known as to enable one to assert that he did not go to Rayy much later, say between 265/878 and 270/883, especially when we know nothing about his later life till his death.

³ Yāqūt, *Buldān*, Vol. II, p. 901.

⁴ In Dār al-Kutub al-Miṣriyyah in Cairo, Taimūr 129, medicine.

⁵ *Fihrist*, pp. 299-300.

⁶ Al-Qiftī, p. 272.

⁷ Ibn abi Uṣaibi'ah, Vol. I, p. 310.

⁸ Ibn Juljul, p. 78.

⁹ P. 299, Flügel; pp. 314-416, Cairo ed.

¹⁰ Ibn abi Uṣaibi'ah, Vol. I, p. 312.

and charitable to the poor, so that he used to give them full treatment without charging any fee, and even stipends.¹¹

When not occupied with pupils or patients he was always writing and studying.¹² It seems that this was the reason for the gradual weakening of his sight that finally brought blindness to his eyes. Some say¹³ that the reason for his blindness was that he used to eat too much of broad beans (*bāqilah*). It began with cataract¹⁴ which ended in complete blindness. They say that he refused to be treated for cataract saying that he "had seen so much of the world that he was fed up."¹⁵ But this seems to be more of an anecdote than a historical fact. It was one of his pupils from Tabaristān that came to treat him, but, as al-Bīrūnī says, he refused to be treated saying that it was useless as his hour of death was approaching.¹⁶ Some days after, he died in Rayy, on the 5th of Sha'bān 313/27th of October 925.¹⁷

Al-Rāzi's Masters and Opponents.—We have already mentioned that al-Rāzi studied medicine under 'Alī ibn Rabbān al-Ṭabari. Ibn al-Nadīm says¹⁸ that he studied philosophy under al-Balkhī. This al-Balkhī, according to Ibn al-Nadīm, had travelled much, and knew philosophy and ancient sciences well. Some even say that al-Rāzi attributed to himself some of al-Balkhī's books on philosophy. We know nothing else about this al-Balkhī, not even his full name.

Al-Rāzi's opponents, on the contrary, are known better. They were the following:

1. Abu al-Qāsim al-Balkhī, chief of the Mu'tazilah of Baghdād (d. 319/931), was a contemporary of al-Rāzi; he composed many refutations of al-Rāzi's books, especially his *Ilm al-Ilāhi*.¹⁹ He had controversies with him especially on time.²⁰

2. Shuhaid ibn al-Ḥusain al-Balkhī,²¹ with whom al-Rāzi had many contro-

¹¹ *Fihrist*, p. 416, Cairo ed.

¹² *Ibid.*

¹³ *Ibid.*

¹⁴ Ibn Juljul, p. 78.

¹⁵ *Ibid.*

¹⁶ *Epître de Beruni*, p. 5.

¹⁷ This is the date given by al-Bīrūnī (*ibid.*, p. 6). Other dates given are: (a) around 320/932 (Sā'id, *Ṭabaqāt*, p. 83, Cairo ed., repeated by al-Qifṭī, p. 178, Cairo ed.; repeated by Ibn Abī Uṣaybi'ah, Vol. I, p. 314, but on the authority of Bal-muza'ffar ibn Mu'arrif); (b) 295-300/907-912 and a fraction (abu al-Khair al-Ḥasan ibn Suwār, in Uṣaybi'ah, Vol. I, p. 314); (c) 311/923 (Ibn al-Imād, *Shadharāt al-Dhahab*, Vol. II, p. 263); (d) 364/974 (*History of Ibn Shīrāz*, quoted by Qifṭī, p. 178, Cairo ed.). Surely the most probable date is that given by al-Bīrūnī.

¹⁸ *Fihrist*, p. 416, Cairo ed.

¹⁹ *Ibid.*, pp. 300, 301; Uṣaybi'ah, Vol. I, pp. 317, 320; al-Bīrūnī, No. 117.

²⁰ Al-Bīrūnī, No. 62.

²¹ See on him: Qazwini on *Ḥahār Maqālah* (Gibb. Mem. Series XI), pp. 127-28; H. Ethé, *Rudagi's Vorläufer und Zeitgenossen*, Morgenländische Forschungen, Leipzig, 1875, p. 43; Yāqūt, *Udabā'*, Vol. I, p. 143.

versies;²² one of these controversies was on the theory of pleasure.²³ His theory of pleasure is expounded in his *Tafḥīl Loḥdhāt al-Najis* from which Abu Sulaimān al-Manṭiqī al-Sijistānī gives some extracts in *Shiwa'n al-Hikmah*.²⁴ Al-Balkhī died before 329/940.

3. Abu Ḥātim al-Rāzi, the most important of all his opponents (d. 322/933-934) and one of the greatest Ismā'īli missionaries.²⁵ He reproduced controversies between him and al-Rāzi in his *A'lām al-Nubuwwah*.²⁶ Thanks to this book, al-Rāzi's ideas about prophets and religion are preserved for us.

4. Ibn al-Tammār, whom Kraus believes to be perhaps Abu Bakr Ḥusain al-Tammār.²⁷ He was a physician and had some controversies with al-Rāzi as is reported by Abu Ḥātim al-Rāzi in *A'lām al-Nubuwwah*.²⁸ Ibn al-Tammār refuted al-Rāzi's *al-Ṭibb al-Rūḥāni* and al-Rāzi answered this refutation.²⁹ In fact, al-Rāzi wrote two refutations: (a) refutation of al-Tammār's refutation of Misma'i concerning matter; (b) refutation of al-Tammār's opinion on the atmosphere of subterranean habitations.³⁰

5. Those of whom we know from the titles of the books written by al-Rāzi: (a) al-Misma'i, a Mutakallim who had written against the materialists and against whom al-Rāzi wrote a treatise;³¹ (b) Jarir the doctor who had a theory about the eating of black mulberry after water-melon;³² (c) al-Ḥasan ibn Muḥārik al-Ummi, to whom al-Rāzi wrote two epistles;³³ (d) al-Kayyāl, a Mutakallim, against whose theory of the Imām, al-Rāzi wrote a book;³⁴ (e) Manṣūr ibn Ṭalḥah, who wrote a book on "Being" refuted by al-Rāzi;³⁵ (f) Muḥammad ibn al-Laiṭh al-Rasā'ili whose writing against alchemists was answered by al-Rāzi.³⁶

6. Aḥmad ibn al-Ṭayyib al-Sarakhsi (d. 286/899), an elder contemporary of al-Rāzi. Al-Rāzi refuted him on the question of bitter taste;³⁷ al-Rāzi

²² *Fihrist*, p. 416, Cairo ed.

²³ *Ibid.*, p. 416; p. 300, Flugel (Ed.); Uṣaybi'ah, p. 319.

²⁴ Manuscript No. 1408 in Muḥammad Murād in Istanbul, p. 135.

²⁵ Mentioned in *Fihrist*, pp. 188, 189; Niẓām al-Mulk's *Siyāsat-Nāmah*, p. 186, Schefer (Ed.); 'Abd al-Qāhir al-Baghdādī's *Farq bain al-Firaq*, p. 267; Ibn Ḥajar's *Lisān al-Mizān*, Vol. I, p. 164.

²⁶ Ed. by Kraus, *Opera Philosophica*, Vol. I, pp. 295-316 (*Orientalia*, Vol. V, 1926).

²⁷ *Ibid.*, p. 2, note 3.

²⁸ *Ibid.*, p. 312.

²⁹ *Fihrist*, p. 301; Ibn Abī Uṣaybi'ah, Vol. I, p. 316.

³⁰ Al-Bīrūnī, p. 79.

³¹ *Fihrist*, p. 417.

³² Al-Bīrūnī, p. 37.

³³ *Ibid.*, pp. 129-30.

³⁴ *Ibid.*, p. 147.

³⁵ *Ibid.*, p. 134.

³⁶ *Ibid.*, p. 172.

³⁷ *Ibid.*, p. 82.

refuted also his master, Ya'qūb ibn Ishāq al-Kindi, who had written against the alchemists.³⁸

7. We should add to all those known by names many others who were refuted by al-Rāzi, especially the Mu'tazilah and different Mutakallimīn.³⁹

B

WORKS

Al-Rāzi's books are very numerous. He himself prepared a catalogue of his books, reproduced by ibn al-Nadīm.⁴⁰ Here we find: 118 books, 19 epistles, then 4 books, 6 epistles, and one *maqūlah*, the total being 148 works.

After ibn al-Nadīm, al-Bīrūnī wrote an epistle on the bibliography of al-Rāzi. This epistle, found in a unique manuscript in Leiden,⁴¹ was edited by Paul Kraus,⁴² and translated into German by J. Ruska in his article: "al-Bīrūnī als Quelle für das Leben und die Schriften al-Rāzi's."⁴³ This catalogue is preceded by a short note on al-Rāzi's life. The books are classified as follows: (a) on medicine (1-56 books); (b) physics (57-89); (c) logic (90-96); (d) mathematics and astronomy (97-106); (e) commentaries, abridgments, and epitomes (107-13); (f) philosophy and hypothetical sciences (114-30); (g) metaphysics (131-36); (h) theology (137-50); alchemy (151-72); (i) atheistic books (173-74); (j) miscellaneous (175-84). In al-Nadīm's and al-Bīrūnī's lists, there are some common and some non-common titles.

Ibn abi Uṣaibi'ah (Vol. I, pp. 315-19) mentions 236 works of which some are certainly apocryphal.

The different titles given by al-Bīrūnī, ibn al-Nadīm, al-Qiftī, and ibn abi Uṣaibi'ah were assembled by Dr. Maḥmūd al-Najmābādī in his book: *Sharḥ Ḥal Muḥammad ibn Zakariya* published in 1318/1900. He gave 250 titles.

As extant manuscripts of al-Rāzi's books, Brockelmann (Vol. I, pp. 268-71, *Suppl.*, Vol. I, pp. 418-21) gives 59 titles.

Of his philosophical works, we have: —

1. *Al-Ṭibb al-Rūḥānī* (Brit. Mus. Add. Or. 25758; vat. Ar. 182 Cairo 2241 Tas).
2. *Al-Sīrat al-Falsafīyyah* (Brit. Mus. Add. Or. 7473).
3. *Amārāt Iqbāl al-Daulah* (Rāghib 1463, ff. 98a-99b, Istanbul).

These three were published by Paul Kraus: "Abi Bakr Mohammadi Filū Zachariae Raghensis," *Opera Philosophica*, fragmentaque quae supersunt,

³⁸ *Ibid.*, p. 171.

³⁹ *Ibid.*, pp. 119, 120.

⁴⁰ *Fihrist*, pp. 416-19.

⁴¹ Gohins p. 133, ll. 33-48.

⁴² *Épître de Beruni, contenant le repertoire des ouvrages de Muḥammad ibn Zakariya ar-Rāzi*, publiée par Paul Kraus, Paris, 1936.

⁴³ *Isis*, Vol. V, 1922, pp. 26-50.

Collegit et edidit Paulus Kraus, Pars Prior, Cahirae MCMXXXIX. In this edition Kraus published also fragments or *exposés* of the following books: —

4. *Kitāb al-Laḥdhah*.

5. *Kitāb al-'Ilm al-Ilāhī*.

6. *Maqūlah fi ma ba'd al-Ṭabī'ah*.

The last one is spurious; it is attributed falsely to al-Rāzi in a manuscript (Istanbul, Rāghib 1463, f. 90a-98b). Kraus gives also the *exposés* of different authors of al-Rāzi's ideas on: (a) The five eternal (God, universal soul, first matter, absolute space, and absolute time); (b) matter; (c) time and space; (d) soul and world. At the end of the volume he gives extracts from *A'ūm al-Nubuwwah* of abu Ḥātim on prophecy, followed by extracts from *al-Aqwāl al-Dhahabīyyah* of Aḥmad ibn 'Abd Allah al-Kirmānī on the same subject.

7. Besides these books and extracts contained in the first volume (the only one published by Kraus), Kraus published in *Orientalia* some other extracts concerning al-Rāzi's ideas on prophecy (Vol. V., Fasc. 3/4, Roma, 1936).

8. *Al-Shukūk 'ala Proclus* which was prepared by Kraus to be edited and was found among the papers he left after his suicide.

Nothing of these philosophical books was translated into Latin. All Latin translations of his works were confined to medicine and alchemy.

C

PHILOSOPHY

1. Method

Al-Rāzi is a pure rationalist. He believes in reason, and in reason alone. In medicine, his clinical studies reveal a very solid method of investigation based on observation and experimentation. In *Kitāb al-Faraj ba'd al-Shiddah* by al-Tanūkhī (d. 384/994) and *Chahār Maqūlah* of Niẓāmi 'Arūḍī Samarqandi written about 550/1155, we find a lot of cases attributed to al-Rāzi where he shows an excellent method of clinical investigation. E. G. Browne, in his *Arabian Medicine*, has translated a page supposed to be taken from al-Rāzi's *Hāwi*⁴⁴ which shows this method. It runs as follows:

Al-Rāzi's exaltation of reason is best expressed on the first page of his *al-Ṭibb al-Rūḥānī*. He says: "God, glorious is His name, has given us reason in order to obtain through it from the present and future the utmost benefits that we can obtain; it is God's best gift to us. . . . By reason we perceive all that is useful to us and all that makes our life good—by it we know obscure and remote things, those which are hidden from us . . . by it, too, we succeed to the knowledge of God, which is the highest knowledge we can obtain. . . . If reason is so highly placed and is of such an important rank, we should not degrade it; we should not make it the judged while it is the judge, or controlled while it is the controller, or commanded while it is the commander;

⁴⁴ Manuscript in Oxford, Bodley Marsh 156, folios 239b-245b.

on the contrary, we should refer to it in everything and judge all matters by it; we should do according as it commands us to do."⁴⁵

Even the most rationalistic mind could not exalt reason so clearly and so highly. There is no place for revelation or mystic intuition. It is only logical reason which is the unique criterion of knowledge and conduct. No irrational force can be invoked. Al-Rāzi is against prophecy, against revelation, against all irrational trends of thought.

Men are born with equal dispositions for knowledge. It is only through cultivation of these dispositions that men differ, some cultivating them by speculation and learning, others neglecting them or directing them to a practical way of life.⁴⁶

2. Metaphysics

When one begins to expound al-Rāzi's metaphysics, one at first comes across a small treatise attributed to him: *Maqālah li Abi Bakr Muhammad Ibn Zakariya al-Rāzi fi ma ba'd al-Ṭabī'ah* (Rāghib MS. No. 1463, ff. 90a-98b, in Istanbul). There is much doubt about the authenticity of this treatise, because its contents do not agree entirely with al-Rāzi's otherwise known doctrines. So, either it may belong to another period of al-Rāzi's intellectual development, as Pines supposes,⁴⁷ or it may contain only a systematic historical *exposé* of other people's ideas without reference to his own,⁴⁸ or it may not be by al-Rāzi at all.

Anyhow, the main points treated here are: (1) nature, (2) foetus, and (3) eternity of movement. The author refutes the partisans of the idea of nature as principle of movement, especially Aristotle and his commentators: John Philoponos, Alexander of Aphrodisias, and Porphyry. At first he denies that there is no need to prove the existence of nature, because it is not evident by itself. If nature is one and the same, why does it produce different effects in stone and in man? If nature permeates the body, does not that mean that two things can occupy one and the same place? Why do those partisans say that nature is dead, insensible, impotent, ignorant, without liberty and choice, and at the same time attribute to it the same qualities as to God? Against Porphyry the author says: You admit that nature acts in view of something and not by hazard or mere chance; why then do you say that nature is dead and not a living agent?

It seems that the author wants to refute all doctrines which pretend that nature is the principle of movement and creation, by showing the contradictions to which these doctrines necessarily lead. His standpoint is that there is no place for admitting the existence of nature as principle of action and

movement. But he does not define his attitude; his *exposé* is negative and destructive.

As for the question of eternity of movement and time, the author discusses especially the ideas of Aristotle and Proclus.⁴⁹ He refers to his refutation of Proclus. We know that al-Rāzi has written a treatise entitled "Doubts about Proclus," and Kraus⁵⁰ thinks that this is an argument in favour of the authenticity of the attribution of the treatise to al-Rāzi, but we think that this is a weak argument, because Proclus' *de aeternitate mundi* was much discussed by Arab thinkers after it had been translated by Ishāq ibn Hunain.⁵¹ The author's idea is that time is finite and not eternal, that the world is also finite, that there is only one world, and, lastly, that outside that one world there is no element and nothing (except God). Here he reproduces the ideas of Metrodorus and Seleucus taken from pseudo-Plutarch's *Placita Philosophorum*.

The general trend of this treatise is polemical and dialectical. It cannot be reconciled with al-Rāzi's ideas on time, space, and Deity. Therefore, we think that it is spurious and cannot even belong to another period of al-Rāzi's spiritual development.

The real doctrine of al-Rāzi should be searched for in his *Kitāb al-'Ilm al-Ilāhi*. Unfortunately, that work is lost and we have only refutations of some passages from it collected by Kraus.⁵² We do not even have textual fragments of al-Rāzi's book. With all the inconveniences of adversaries' *exposés*, we have nothing more to do than to content ourselves with these refutations. What we can conclude from these is that al-Rāzi treated in this book: space, vacuum, time, duration, matter, metempsychosis, prophecy, pleasure, and Manichaeism.

Al-Rāzi's philosophy is chiefly characterized by his doctrine of the Five Eternals. Al-Birūni says⁵³ that "Muhammad ibn Zakariya al-Rāzi has reported from the ancient Greeks the eternity of five things: God, the universal soul, first matter, absolute space, and absolute time, on which he founded his doctrine. But he distinguished between time and duration by saying that number applies to the one and not to the other, because finiteness attains numerality; and, therefore, the philosophers have defined time as the duration of what has a beginning and an end, whereas duration (*dahr*) has neither beginning nor end. He said also that in Being these five are necessary: the sensible in it is the matter formed by composition; it is spatial, so there must be a space; alternation of its modes is a characteristic of time, because some precede and others follow, and it is by time that oldness and newness, and older and newer and simultaneous are known; so time is necessary. In Being there are living things, so there must be soul; in it there are

⁴⁵ *Opera Philosophica*, Vol. I, 1939, pp. 17, 18.

⁴⁶ *Ibid.*, p. 296.

⁴⁷ Pines, *Beiträge zur islamischen Atomenlehre*, S. 36, No. 2, Berlin, 1936.

⁴⁸ *Opera Philosophica*, p. 114.

⁴⁹ Rāghib Manuscript No. 1463 (ff. 90-98b) in Istanbul, pp. 128, 129.

⁵⁰ *Opera Philosophica*, p. 114.

⁵¹ See *Neo-Platonici apud Arabes*, ed. A. Badawi, Cairo, 1955, Introduction.

⁵² *Opera Philosophica*, pp. 170-190.

⁵³ E. Sachau, *Alberuni's India*, London, 1910, Vol. I, p. 319.

intelligibles and their constitution is absolutely perfect; there must be then a creator, wise, omniscient, doing things as perfectly as possible, and giving reason for the sake of salvation."

Out of the Five Eternals, two are living and acting: God and soul; one is passive and not living: matter from which all bodies are made; and two are neither living and acting, nor passive: vacuum and duration.⁵⁴ Sometimes we find vacuum (*khālā'*) instead of space (*makān*), and duration (*dahr*) instead of time (*zamān*) or duration in the limited sense (*muddah*).

This doctrine is attributed, in some sources (al-Faḫr al-Rāzi, al-Shahrastāni, Naṣir al-Dīn al-Ṭūsī), to the so-called Ḥarrāniyyah. Who were these Ḥarrāniyyah? The word comes from Ḥarrān, the famous city of the Ṣābians and a centre of learning immediately before Islam and in the first four centuries of the Islamic era. Massignon⁵⁵ thinks that these Ḥarrāniyyah are fictitious persons, and that what we find about them in our sources is a mere "literary romance" (*roman littéraire*). Kraus is also of the same opinion, and he gives his reasons⁵⁶ as follows: (a) before al-Rāzi we find no one who attributes the doctrine of the five eternal to al-Ḥarrāniyyah; (b) al-Rāzi, in his *'Ilm al-Ilāhi* has expounded the doctrines of the Ṣābian Ḥarrāniyyah and also his doctrine of the five eternal. But then Kraus gives a third reason which proves exactly the contrary of what the first two prove: al-Birūnī, al-Marzūqī, al-Kātībī, and al-Ṭūsī say that al-Rāzi reported this doctrine from the ancient Greeks, that is to say, the early Greek philosophers, especially Pythagoras, Democritus, etc. How can we then say that al-Rāzi attributed this doctrine to a fictitious school, Ḥarrāniyyah, when he said expressly in his *'Ilm al-Ilāhi* that it was the doctrine of the early Greek philosophers? He was not in need of inventing the Ḥarrāniyyah, when he already had declared that it was the doctrine of the early Greek philosophers. For this reason, we cannot admit Massignon's suggestion, nor Kraus' evidence which are very weak. It is not right to identify what is attributed in the different sources to the Ḥarrāniyyah with al-Rāzi's ideas unless this is expressly declared in the sources themselves.

We may now describe these Five Eternals.

(i) God

God's wisdom is perfect. No inadvertence can be attributed to Him. Life flows from Him as light flows from the sun. He is perfect and pure Intelligence. From the soul life flows.⁵⁷ God creates everything, He is incapable of nothing, and nothing can be contrary to His will. God knows things perfectly well. But the soul knows only what it experiences. God knew that soul would tend to matter and ask for material pleasure. After that soul attached itself to matter;

⁵⁴ Marzūqī, *Al-Azminah w-al-Amkinah*, Hyderabad, 1332/1913, Vol. I, p. 144.

⁵⁵ *Oriental Studies Presented to E. G. Browne*, Cambridge, 1922, p. 333.

⁵⁶ *Opera Philosophica*, Vol. I, pp. 192-94.

⁵⁷ Marzūqī, *op. cit.*, Vol. I, p. 114.

God by his wisdom arranged that this attachment should be brought about in the most perfect way. God afterwards poured intelligence and perception upon the soul. That was the reason for the soul to remember its real world and the reason for it to know that so long as it is in the world of matter it will never be free from pain. If soul knows that, and also that in its real world it will have pleasure without pain, it will desire that world and, once separated from matter, it will remain there for ever in utmost happiness.

In that way all doubts can be removed about the eternity of the world and the existence of evil. Since we have admitted the wisdom of the Creator, we must admit that the world is created. If one asks why it was created in this or that moment, we say that it was because soul attached itself to matter in that moment. God knew that this attachment was a cause of evil, but after it had been brought about, God directed it to the best possible way. But some evils remained; being the source of all evils, this composition of soul and matter could not be completely purified.⁵⁸

(ii) Soul

God, according to al-Rāzi, has not created the world through any necessity, but He decided to create it after having at first no will to create it. Who determined Him to do so? There must be another eternal who made Him decide this.

This other eternal is the soul which was living but ignorant. Matter, too, was eternal. Owing to its ignorance, the soul was fond of matter and formed figures from it in order to get material pleasures. But matter was rebellious to forms; so God intervened in order to aid the soul. This aid was that He made this world and created in it strong forms wherein the soul could find corporeal pleasures. God then created man and from the substance of His divinity he created the intelligence of man to awaken the soul and to show to it that this world is not its real world.

But man cannot attain the real world except by philosophy. He who studies philosophy and knows his real world and acquires knowledge is saved from his bad state. Souls remain in this world till they are awakened by philosophy to the mystery and directed towards the real world.⁵⁹

(iii) Matter

The absolute or first matter is composed of atoms. Each atom has volume; otherwise by their collection nothing could be formed. If the world is destroyed, it too is dispersed into atoms. Matter has been there from eternity, because it is impossible to admit that a thing comes from nothing.

What is more compact becomes the substance of the earth, what is more rarefied than the substance of the earth becomes the substance of water, what

⁵⁸ See especially, Faḫr al-Dīn al-Rāzi, *Muḥaṣṣal*, Cairo 1323/1905, pp. 85-86.

⁵⁹ Nāṣir-i Khusrāu, *Zād al-Musāfirin*, ed. Kavianī, Berlin, 1341/1922, pp. 114-16.

is still more rarefied becomes the substance of air, and what is still more and more rarefied becomes the substance of fire.

The body of the sphere is also composed of the particles of matter, but its composition differs from the compositions of other bodies. The proof of this is that the movement of the sphere is not directed to the centre of the world, but to its periphery. Its body is not very compact, as that of the earth, nor very rarefied as that of fire or air.

Qualities such as heaviness, levity, darkness, and luminosity are to be explained by the more or less vacuity which is within matter. Quality is an accident which is attributed to substance, and substance is matter.⁶⁰

Al-Rāzi gives two proofs to establish the eternity of matter. First, creation is manifest; there must then be its Creator. What is created is nothing but formed matter. Why then do we prove, from the created, the anteriority of the Creator, and not the anteriority of the created being? If it is true that body is created (or more exactly: made [*maṣnū'*]) from something by the force of an agent, then we should say that as this agent is eternal and immutable before His act, what received this act of force must also have been eternal before it received that act. This receiver is matter. Then matter is eternal.

The second proof is based on the impossibility of *creatio ex nihilo*. Creating, that is to say, making something out of nothing is easier than composing it. God's creating men fully at one stroke would be easier than composing them in forty years. This is the first premise. The wise Creator does not prefer to do what is farther from His purpose to what is nearer, unless He is incapable of doing what is easier and nearer. This is the second premise. The conclusion from these premises is that the existence of all things should be caused by the Creator of the world through creation and not by composition. But what we see is evidently the contrary. All things in this world are produced by composition and not by creation. It necessarily follows that He is incapable of *creatio ex nihilo* and the world came to be by the composition of things the origin of which is matter.

Al-Rāzi adds, universal induction proves this. If nothing in the world comes to be except from another thing, it is necessary that natures are made from another thing, and this other thing is matter. Therefore, matter is eternal; it was originally not composed, but dispersed.⁶¹

(iv) Space

As it is proved that matter is eternal, and as matter should occupy space, so there is eternal space. This argument is nearly the same as that given by al-Īrānshahri. But al-Īrānshahri says that space is the manifest might of God. Al-Rāzi could not follow his master's vague definition. For him, space is the place where matter is.

⁶⁰ *Ibid.*, pp. 73 et seq.

⁶¹ *Ibid.*

Al-Rāzi distinguishes between two kinds of space: universal or absolute, and particular or relative. The former is infinite and does not depend on the world and the spatial things in it.

Vacuum is inside space, and, consequently, inside matter. As a proof of the infinity of space, the partisans (al-Īrānshahri and al-Rāzi) say that a spatialized thing cannot exist without space, though space may exist without spatialized things. Space is nothing but the receptacle for the spatialized things. What contains the two is either a body, or a not-body. If it is a body, it must be in space, and outside this body there is space or no-space; if no-space, it is a body and finite. If it is not-body, it is space. Therefore, space is infinite. If someone says that this absolute space has an end, that means that its limit is a body. As every body is finite, and every body is in space, so space is infinite in every sense. What is infinite is eternal, so space is eternal.⁶²

Vacuum has the power of attracting bodies; therefore, water is conserved (or retained) in a bottle submerged in water with the opening turned downwards.⁶³

(v) Time

Time, according to al-Rāzi, is eternal. It is a substance that flows (*jauhar yajri*). He is against those (Aristotle and his followers) who pretend that time is the number of the movements of the body, because if it were so, it would not have been possible for two moving things to move in one time by two different numbers.

Al-Rāzi distinguishes between two kinds of time: absolute time and limited (*maḥṣūr*) time. The absolute time is duration (*al-dahr*). It is eternal and moving. As for the limited time, it is that of the movements of the spheres and of the sun and stars. If you imagine the movement of duration, you can imagine absolute time, and this is eternity. If you imagine the movement of the sphere, you imagine the limited time.⁶⁴

D

THEOLOGY

Al-Rāzi was a theist, but he does not believe in revelation and prophecy. We content ourselves with giving a summary of his main ideas.

Al-Rāzi contests prophecy on the following grounds:

1. Reason is sufficient to distinguish between good and evil, useful and harmful. By reason alone we can know God, and organize our lives in the best way. Why then is there need for prophets?
2. There is no justification for privileging some men for guiding all men.

⁶² *Ibid.*

⁶³ Fakhr al-Dīn al-Rāzi, *al-Mabāḥith al-Mashriqiyyah*, Hyderabad, 1343/1924, Vol. I, p. 246.

⁶⁴ Abu Hātim al-Rāzi, *A'lam al-Nubuwwah* in *Opera Philosophica*, Vol. I, p. 304.

because all men are born equal in intelligence; the differences are not because of natural dispositions, but because of development and education.

3. Prophets contradict one another. If they speak in the name of one and the same God, why this contradiction?

After denying prophecy, al-Rāzi goes on to criticize religions in general. He expounds the contradictions of the Jews, the Christians, the Manichaeans, and the Majūsis. He gives the following reasons for the attachment of men to religion:

- (a) Imitation and tradition.
- (b) Power of the clergy who are in the service of the State.
- (c) External manifestations of religions, ceremonials and rituals, which impose themselves upon the imagination of the simple and the naïve.

He shows contradictions between religion and religion in detail.

Al-Rāzi subjects the revealed books, the Bible and the Qur'ān, to systematic criticism. He tries to criticize the one by the aid of the other; for instance, he criticizes Judaism by means of Manichaeism, and Christianity by means of Islam; and then criticizes the Qur'ān by means of the Bible.

He denies especially the miraculousness (*i'jāz*) of the Qur'ān, either because of its style or its contents and affirms that it is possible to write a better book in a better style.

He prefers scientific books to all sacred books, because scientific books are more useful to men in their lives than all sacred books. Books on medicine, geometry, astronomy, and logic are more useful than the Bible and the Qur'ān. The authors of these scientific books have found the facts and truths by their own intelligence, without the help of prophets. Science is drawn from three sources: reasoning, according to logic; tradition, from predecessors to successors according to sure and accurate testimony, as in history; and instinct which guides man without being in need of much reasoning.

After this negative criticism, he goes on to say that it would not even be reasonable of God to send prophets, because they do much harm. Every nation believes only in its own prophets and vehemently denies those of others, with the result that there have been many religious wars and much hatred between nations professing different religions.

These ideas of al-Rāzi were most audacious. No other Muslim thinker was so daring as he.

E

MORAL PHILOSOPHY

Rāzi's moral philosophy is to be found in the only extant philosophical works of his, *al-Ṭibb al-Rūḥāni* and *al-Sirat al-Falsafiyyah*. The latter work is a justification of his conduct of life, from the philosophical point of view, because he was blamed by some people for not living on the model of his master, Socrates. It is a curious and very interesting *apologia pro vita sua*.

He thinks that there should be moderation in a philosopher's life—neither much asceticism, nor too much indulgence in pleasures. There are two limits: higher and lower. The higher limit beyond which a philosopher should not go is to abstain from pleasures that cannot be obtained except by committing injustice and doing things contrary to reason. The lower is to eat what does not harm him or cause illness, and to wear what is sufficient to protect his skin, and so on. Between the two limits, one can live without becoming unworthy of being called a philosopher.

Al-Rāzi claims that he in his practical life did not go beyond these two limits. He did not live in the service of a monarch as a minister or a man of arms, but as a doctor and counsellor. He was not greedy, nor in conflict with other people but, on the contrary, he was very tolerant as regards his own rights. He never exceeded in drinking, eating, or enjoying life. As for his love of science and study, it is all well known to everybody. From the theoretical point of view too, his works entitle him to be called a philosopher.

In *al-Ṭibb al-Rūḥāni* he treats, in twenty chapters, the main points of ethics. He wants to expound what the vices are and how we are to get rid of them.

He begins with the exaltation of reason, in the manner we have seen above. Then he goes in *medius res* by treating the question of passions. He says that man should control his passions; he brings out the distinction drawn by Plato between three aspects of the soul: reasonable, pugnacious, and appetitive; and shows how justice should reign among them.

It is necessary that a man should know his own defects. For this, he can appeal to a reasonable friend who will tell him about his defects. He should get information about what other people, neighbours, and friends, think of him. Here al-Rāzi depends on two treatises of Galen: "On Knowing One's Own Defects," and "How Good People Benefit from Their Enemies."

These are the contents of preliminary chapters. In the fifth, he expounds his theory of pleasure, a theory which he treats again in a special epistle. For him, pleasure is nothing but the return of what was removed by something harmful to the previous state, for example, one who leaves a shadowy place for a sunny and hot place gets pleasure on coming back to the shadowy place. For this reason, says al-Rāzi, natural philosophers have defined pleasure as a return to nature.

Al-Rāzi condemns love as an excess and submission to passions. He condemns vanity, because it prevents one from learning more and working better. Envy is an amalgamation of misery and cupidity. An envious man is the man who feels sad when another obtains some good things, even when no harm comes to him at all. If he has been harmed, then the emotion is not envy but enmity. If a person contents himself with what is necessary for him, then there would be no place for envy in his soul.

Anger is aroused in animals to make it possible for them to take revenge on harmful things. If it is in excess, it does much harm to them.

Lying is a bad habit. It is of two sorts: for good, or for evil. If it is for good, then it merits praise; otherwise, it is blameworthy. So its value depends on the intention.

Misery cannot be wholly condemned. Its value depends on the reason for it. If it is due to the fear of poverty and fear of the future, then it is not bad. If it is for mere pleasure of acquisition, it is bad. There must be a justification for one's misery; if it is a reasonable one, it is not a vice; otherwise it is a thing to be combated.

Worry, when it is too much, is not a good thing, for its excess, without good reason, leads to hallucination, melancholy, and early withering.

Cupidity is a very bad state which brings pain and harm. Drunkenness leads to calamities and ills of body and mind.

Copulation, when in excess, is bad for the body; it causes early senility, weakness, and many other ills. One should indulge in it as little as one can, because excess in it leads to more excess.

Frivolity is also pernicious in some cases.

Acquisition and economy are good for living, but only in moderation. No more wealth should be acquired than is needed and spent, except a little saving for sudden calamities and bad future circumstances.

Ambition may lead to adventures and perils. It is well and good if we can get a better rank without adventure or peril; otherwise it is better to renounce it.

The last chapter treats a favourite theme in the Hellenistic and early medieval period, that of the fear of death. Here al-Rāzi contents himself by dealing with it from the point of view of those who think that when the body is destroyed, the soul is also destroyed. After death, nothing comes to man, because he cannot feel anything. During his life, man is submerged in pains, whereas after death there would be no pain whatever. The best thing for a reasonable man to do is to get rid of the fear of death, because if he believes in another life, he must be joyful because, by death, he goes to a better world. If he believes there is nothing after death, there is no cause for worry. In any case, one should reject every kind of worry about death, because it is not reasonable to worry.

F

CONCLUSION

Al-Rāzi had no organized system of philosophy, but compared to his time he must be reckoned as the most vigorous and liberal thinker in Islam and perhaps in the whole history of human thought.

He was a pure rationalist, extremely confident in the power of reason, free from every kind of prejudice, and very daring in the expression of his ideas without reserve.

He believed in man, in progress, and in God the Wise, but in no religion whatever.

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