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PHILOSOPHY, LOGIC AND COSMOLOGY

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Introduction

In the course of the seventh and eighth centuries, the spiritual life of the countries of Central Asia that had been conquered by or exposed to the influence of the Arab caliphate underwent changes; ethics began to give way to ontological and epistemological considerations in the eighth and ninth centuries, and to paraphilosophical doctrines, including $kal\bar{a}m$ (dialectical theology) and Sufism. Philosophical thinking acquired a mystical, esoteric quality. In syncretic teachings such as the philosophy of Illuminationism ($Ishr\bar{a}q$), which endeavoured to combine apodeictic and esoteric philosophy, there was an attempt to develop a universal style of thinking constructed upon both apodeictic and esoteric types of reasoning.

Philosophical thought in the region essentially went through two stages of development. The first stage spanned the eighth to the eleventh century, when the currents of philosophical and religious/philosophical thinking referred to above first took shape, flourished and spread. Thus *kalām*, which emerged in the second half of the seventh century as an offshoot of the scholastic disputes of the Jabrites and Qadarites, passed through Mu^ctazilite and Ash^carite phases to the work of al-Ghazālī. Similarly, Sufism, which began as a movement of *zāhids* (ascetics), had developed into a fully fledged mystic philosophy by the

tenth and eleventh centuries with its own ontological, epistemological, ethical, aesthetic and social aspects.

One of the distinguishing features of the second stage in the development of philosophical thinking, which extended from the twelfth to the fifteenth century, was the fact that one of the schools of philosophy, that of the Materialists (*Dahriyya*), went into decline. Another feature of the period was the tendency of different philosophical schools to become reconciled and combine with each other. This trend had started in the previous period but became more marked in the second stage. The Aristotelian philosophy of the eastern Peripatetics (*Mashā'iyya*) thus acquired some features of *kalām* and Sufism, *kalām* was influenced by the Peripatetics, and the Sufis and Sufism absorbed elements both of *kalām* and of the teachings of the Peripatetics. philosophy was becoming even more strongly influenced by the Islamic religion: the constant references to the Qur'an, to *hadāth* and to religious authorities were an outward sign of this process, which also involved attempts to bring philosophical concepts into line with religious dogmas and basic tenets.

Another particularity of philosophical thought from the twelfth to the fifteenth century was the appearance and development of commentaries. Many scholars see this as denoting a lack of creativity, but this is not entirely correct. One need only compare the *Lubāb al-Ishārāt* [The Quintessence of (the Work Called) the Indications] of Fakhr al-Dīn al-Rāzī (1148–1209) and the *Sharh al-Ishārāt* [Commentary on (the Book Called) the Indications] of Nasīr al-Dīn al-Tūsī with Ibn Sinā 's own *Kitāb al-Ishārāt wa 'l-tanbīhāt* [Book of Indications and Admonitions] to see that works described as commentaries were often entirely original.

Striking proof of the creativity of philosophical thinking at the time was the philosophy of Illuminationism, founded by Shihāb al-Dīn Yahyā al-Suhrawardī in the twelfth century; the subsequent development of philosophical thought was greatly influenced by the ideas and concepts of this outstanding thinker. The natural sciences and mathematics also flourished from the eighth to the fifteenth century in the regions of Central Asia and scholars there contributed much to the establishment and advancement of these branches of knowledge (see further in Chapter 6).

Classification of the sciences

The problem of the classification and subdivision of the sciences was posed by various scholars. One of the first models was proposed by Abū Nasr al-Fārābī (d. 950), who viewed philosophy as the sum of all knowledge, dividing it primarily into theoretical and practical

¹ See Ziai, 1990; El², 'Ishrakiyyūn' (R. Arnaldez).

or civic philosophy. For him, theoretical philosophy was concerned with the knowledge of things that were independent of human action and embraced mathematics, physics and metaphysics. Practical or civic philosophy, divided into ethics and political philosophy, dealt with the knowledge of subjects that were a consequence of human action. He proposed the following classification of the sciences in his *Majalla fī ihsā ' al-culūm* [Collected Work on the Enumeration of the Sciences]:

- 1. The science of language (*cilm al-lugha*): the science of simple words and of word combinations, of the laws governing simple words and word combinations; the science of the laws of writing (orthography); and the science of the rules of correct pronunciation and of the rules of prosody.
- 2. logic (*mantiq*): the science of all laws conducive to the improvement of the intellect, setting human beings on the path towards the truth, protecting them from error, enabling them to check the accuracy of knowledge and consisting of the study of the processes of conceptualization and judgement, syllogism, the rules of proof and dialectical, sophistical, rhetorical and poetic expressions of judgement.
- 3. mathematics (*cilm al-riyāda*): arithmetic, geometry, optics, astral sciences (astronomy and astrology), music and musical instruments, the science of weights, the science of mechanics.
- 4. physics (c *ilm al-tabī* c *a*): the study of the general principles underlying simple and complex natural bodies; of the heavens and the earth; of origination and annihilation; of actions and experiences; of compounds; of minerals; of plants and of animals.
- 5. Divine science (*al-cilm al-ilāhī*) or metaphysics (*mā bacd al-tabīca*): the science of the general principles of being; of existing entities; of the foundations and principles of specific theoretical sciences; of non-material, supernatural beings (particularly, the First Being, i.e. God).
- 6. civic science (*al-cilm al-madanī*) or civic philosophy (*al-hikma al-madaniyya*): the science of happiness; of virtues, and virtuous and non-virtuous societies.
- 7. jurisprudence (*fiqh*): the science assessing any action or deed lacking clear definition in the canon law of any religion.
- 8. *kalām*: the branch of knowledge concerned with defending the views and actions of the Prophet of the Muslim religion and rejecting all that ran counter to his teachings.²

² Netton, 1992.

This type of classification of the sciences, which was based on the principle of the segmentation, co-ordination and subordination of the sciences according to the particular object and subject of study, was adopted and extended by Ibn Sinā and Nasīr al-Dīn al-Tūsī, who did not, however, include *kalām* in their category of the sciences and omitted the section on the science of language. Ibn Sinā in his *al-Hikma al-sharqiyya* [Eastern Philosophy] or *Hikmat al-mashriqiyyīn* [Philosophy of the Easterners] divided metaphysics into theology and universal science (philosophy proper), which was a significant step in achieving independent status for philosophy. In this work, he decided to make law a fourth subdivision of practical philosophy, but his proposals here did not find favour.³

Another type of classification of the sciences was developed by Abū ^cAbd Allāh al-Khwārazmī (d. 997). It was based on the view of science not just as a knowledge of things but also as knowledge of God and divine prescriptions, and also as the property of a particular people. The general outlines of his classification are as follows:

I. The Arabic or religious sciences:

- 1. *Figh*,
- 2. Kalām,
- 3. Grammar.
- 4. The secretarial art.
- 5. Poetry and prosody.
- 6. History.

II. The non-Arabic sciences:

- 1. Theoretical philosophy: (a) physics medicine, meteorology, mineralogy, alchemy, mechanics; (b) mathematics arithmetic, geometry, astronomy, musical theory; (c) metaphysics or theology; (d) logic.
- 2. Practical philosophy: (a) ethics; (b) stewardship; (c) politics.

This suggests that for al-Khwārazmī, the Muslim peoples had no knowledge of the natural sciences or of philosophy, which was therefore taken from other peoples, such as the Greeks, reflecting the origin of the Arabs in their Arabian environment, but this was not entirely true.⁴

A third type of classification of the sciences was established by Muhammad al-Ghazālī (1058–1111), Fakhr al-Dīn al-Rāzī and Qutb al-Dīn Shirāzī (1236–1311). It is found in its

³ EIr, 'Avicenna. vii. Practical Science' (M. Mahdi et al.).

⁴ Bosworth, 1963.

most highly developed form in al-Shīrāzī's *Durrat al-tāj* [The Pearl of the Crown], which divided the sciences into two main categories, the philosophical and the non-philosophical. The philosophical sciences were the eternal verities which were unaffected by the passage of time and changes of place or from one people or country to another. The non-philosophical sciences were types of knowledge liable to change with the passage of time and from one place, people or country to another. Al-Shīrāzī divided the latter group into religious and non-religious sciences. The non-philosophical sciences were religious if they were based on the *sharī*^c *a* (religious law), and non-religious if that was not the case. Although giving no clear definition of the concept of the non-religious sciences, al-Shīrāzī provided a detailed classification of the philosophical and religious sciences. As his classification corresponds almost exactly to the Peripatetic tradition, and particularly to the classification of rationalistic sciences offered by Ibn Sīnā, there is no need to reproduce it here.

Al-Shīrāzī divided religious scholarship into two sections, each of which consisted of several disciplines.

The first section, the science of the foundations of religion (c *ilm* $us\bar{u}l$ al- $d\bar{u}n$), comprised: (a) study of the nature of the Creator; (b) study of the attributes of the Creator; (c) study of the action and being of the Creator; and (d) study of prophecy.

The second section, the study of the branches of religion (c ilm fur \bar{u}^c al-d \bar{u} n), comprised: (a) study of the ends ($maqs\bar{u}d$) of religion: (i) study of Scripture (i.e. of the Qur'an); (ii) study of the traditions of the Prophet (c ilm akhb \bar{u} al-ras \bar{u} l); (iii) study of the bases of jurisprudence (c ilm us \bar{u} l al-fiqh); (iv) study of jurisprudence (c ilm al-fiqh); and (b) study connected with religion, that is the study of literature (c ilm al-adab) including, in particular, lexis (c ilm matn al-lugh \bar{u} t), morphology (c ilm al-abniy \bar{u} t), etymology (c ilm al-ma c a \bar{u} n), stylistics (c ilm al-bay \bar{u} n), syntax (c ilm al-nabw), metrics or prosody (c ilm al- c ar \bar{u} d) and metre (c ilm al-q \bar{u} fiya).

Al-Shīrāzī emphasized that the study of the bases of religion, such as of the nature and attributes of the Creator, was on a far higher plane than the study of the branches of religion. He did not consider the matter of the relationship between philosophical and religious studies. However, no aspect of that question escaped the attention of al-Ghazālī. Essentially, he held that the fundamental forms of knowledge that set human beings on the path of truth and brought order to their lives in both this world and the next were forms of religious learning. mathematics and physics had no bearing on religion, tending neither to negate nor to confirm it. Their demonstrative nature could, however, lead to unbelief and their development should therefore be subject to strict religious supervision. All the evils of unbelief derived from metaphysics, which should therefore be rejected.

Schools of philosophy from the eighth to the fifteenth century

During this period the most widely known schools of philosophy were those of the Materialists (Dahriyya or $As'h\bar{a}b$ $al-Hay\bar{u}l\bar{a}$), the Peripatetics ($Mash\bar{a}'iyya$), $kal\bar{a}m$, Sufism, Isma^cilism and Illuminationism ($Ishr\bar{a}q$).

THE MATERIALISTS (DAHRIYYA)

The philosophy of the Materialists was formulated by such figures as Abū Bakr al-Rāzī (865–925), and of this group it is only his philosophical works that have survived, including his al-Sīra al-falsafiyya [The Philosophical Mode of Life] and al-Tibb al-rūbānī [Spiritual Medicine]; otherwise the school's ideas can only be reconstructed from the scattered information found in the works of its adversaries and critics. According to these sources, the basis of the philosophy of the Materialists, and particularly of al-Rāzī, was the recognition of five primordial principles: matter, time, space, the soul and God. According to the eleventh-century Ismacili writer Nāsir-i Khusraw, however, the doctrine of matter constituted the heart of this teaching. Matter was the primordial substance and the foundation of all being. It consisted of so many primordial, indivisible particles (i.e. atoms), each of which had its own magnitude and could not be divided into smaller parts. The world with all its diversity came into being as a result of the combination of these atoms. Its disintegration, together with the bodies it contained, did not constitute a loss without trace, but a process of decomposition into the original atoms. On the basis of this view, the supporters of the philosophy of Materialism considered that creation from the void ($ibd\bar{a}$ ') was impossible and that it was out of the question that God could create something from nothing. While they considered that space and time, like matter, were primordial substances, they argued that these two substances were closely related to matter and derived their eternal quality from it. From their viewpoint, God as a primordial substance was not the Creator of a world out of nothing but a wise steward who had helped the soul to unite with the body.

In epistemological matters, the Materialists were rationalists. Without denying the role of the senses as links between human beings and the external world in acquiring knowledge of the world, they held that theoretical knowledge and active, creative action were only possible on the basis of reason and thought. All our knowledge and all the sciences at our disposal were the product of the cognitive action of reason. In questions of ethics, the protagonists of this philosophy espoused the principles of hedonism and eudemonism, and considered that moderation should be observed in all things, including pleasure. Only

through moderation, the study of philosophy and virtuous conduct could human beings secure happiness. Depravity, on the other hand, resulted in unhappiness.⁵

Analysing the question of religion, both the earlier scholar Ibn al-Rāwand $\bar{\imath}$ (d. c, 899) and Ab $\bar{\imath}$ Bakr al-R $\bar{\imath}$ z $\bar{\imath}$ concluded that it was a fraudulent fabrication with which the prophets deluded the ignorant masses. Al-R $\bar{\imath}$ z $\bar{\imath}$ argued that, as religions and religious sects were the main causes of war, they were contrary to philosophical and scientific principles. Books described as divine were devoid of content and did not deserve to be taken seriously. On the other hand, the works of such thinkers of the ancient world as Plato, Aristotle, Euclid and Hippocrates had rendered great service to humanity.

THE PERIPATETICS (MASHĀ'IYYA)

The philosophy of the Mashā'iyya (i.e. that of the Muslim Peripatetics) first appeared as a school of thought in Central Asia in the course of the ninth century. It developed in the tenth century under Abū Nasr al-Fārābī and appeared in one of its most highly developed forms in the work of Ibn Sīnā. Both these scholars, having absorbed Aristotle's ideas, developed them in accordance with the spirit and the state of knowledge of their day in order to meet the requirements of a new age. This is immediately obvious from their approach to logic, which introduces their philosophical system and is used to build up knowledge by a process of deduction. The creative approach adopted by them to the problems they studied is apparent even in their definition of logic. Whereas Aristotle viewed logic as the study of procedures for the construction of syllogisms, they argued that logicians should also be familiar with the principles of judgement and proof and the methods for their construction; above all, they should explain the essence of the basic concepts used to construct definitions and syllogisms. In addition to definition by genus and class, they looked in detail at description as a mode of definition, and they greatly elaborated (independently, it would seem, from the Stoics) the theory of conditional (implicational) judgements, which Aristotle did not consider as a form of apophatic discourse (judgement). On that basis, they also made a sizeable contribution to the theory of the syllogism, identifying types that consisted of categorical and conditional judgements and developing the theory of apagogic proof, widely employed in science, the foundations of which had been laid by Aristotle.

The starting-point of the Peripatetics was the doctrine of the Necessary and the Contingent Being. The Necessary Being is an indisputable, self-sufficient being that is *causa sui* and the cause of all other reality. It does not come within the limits of any genus and is not subject to any definition or proof; it is not subject to motion; it is incomparable, has no

⁵ Al-Rāzī, 1950; Watt, 1962, pp. 47–8.

associate or antagonist, is one in all respects and is actually, potentially and conceptually indivisible, for its nature is composed of spiritual essences: it is neither solid nor material but pure good, pure truth and pure reason. The Contingent Being is something that involves no necessity either from the standpoint of being or from the standpoint of non-being and cannot be *causa sui*, only becoming a real and necessary being through that which exists necessarily. Consequently, according to this principle of the philosophy of the Peripatetics, the foundation of being, the demiurge of reality, is that which necessarily exists, i.e. God.

The principle of the Necessary Being and the Contingent Being in the philosophy of the Peripatetics found expression in the theory of emanations, according to which the Necessary Being creates the original intelligence; the other intelligences and their souls then emanate in succession one from another. One might therefore conclude that the philosophy of the Peripatetics was fused with religion. This conclusion would, however, be unwarranted for, unlike religion (and Islam in particular), the philosophy of the Peripatetics did not hold the relation between the necessary and the contingent to be one of creator and creation but rather one of cause and effect. It did not consider the Necessary Being as Sovereign Creator, but made its action subject to necessity and limited its strength and power by the proposition that God has no power over the impossible. Hence the philosophy of the eastern Peripatetics was fiercely criticized by the *mutakallims* (speculative theologians) for its incompatibility with Islam.

One of the key principles of the Peripatetics was the doctrine of the eternal nature of matter and the world. According to its adepts, the world was eternal because of the eternal nature of the cause which produced it, the Necessary Being. It was also eternal because of the primordial and infinite nature of time and motion, which could not exist without a moving element, i.e. the world and matter. The eternal nature of the world was also attested by the fact that matter preceded any and every nascent object. Another of the basic tenets of the eastern Peripatetics' philosophy was the doctrine of matter and form. They considered matter to be the substrate, the foundation of the being of all objects, processes and phenomena in the world without exception; the existence of this substrate became real and complete by its assuming a variety of forms. The specific, elementary forms of matter were the elements, fire, air, earth and water, which were constantly changing and being transformed from one into the other. As the foundation of being, matter was eternal and indestructible whatever form it took. Form was the configuration of an object, all that was assumed by matter. Matter turned into a specific object – a table, a chair or a bed – thanks to form. It was only in that sense that form was more active and had a greater and more elevated role than that of matter, and not in the sense that matter acquired being through form. In taking the idea of corporeal form and the definition of matter and form one by

the other further than had Aristotle, the Peripatetics established a basis for the idea of an indissoluble link between matter and form.

They also devoted a great deal of attention in their works to the problem of cognition. They viewed this as the reflection of the image of an object in the senses and the mind of the subjects of cognition, which occurred as a result of their exposure to real objects and phenomena. In their analyses of the problem of sensory and rational cognition, al-Fārābī and Ibn Sīnā argued, in line with the basic premise of their gnosiology (cognition as reflection), that sensory cognition was attributable to the effect of objects on the sense organs and consisted in the apprehension of the separate qualities of substances (sensation), differentiation between the matter and the form of the object (representation) and the formation of an idea and concept of the object on the basis of specific perceptions (imagination). The apprehension of the essence of an object and the formation of a general concept of it were the prerogative of rational cognition, which had two forms: conception and judgement. The conception of an object was formed with the aid of definition and description, and a judgement of it by means of syllogism, induction and analogy.

One of the great achievements of the Peripatetics here was their doctrine of intuition. In their view, this was the highest cognitive faculty in humans, consisting in the immediate discovery of the third term in a syllogism without any study or instruction. Here they grasped a number of essential aspects of intuitive knowledge: the rapidity with which the new knowledge was acquired and its non-empirical nature, the involuted nature of intuitive as opposed to discursive knowledge and the varying strength of people's powers of intuition. However, they did exaggerate the role of intuition, assuming that all knowledge was obtained by that means and that the basis of all acquired (i.e. empirical) knowledge was unacquired (intuitive) knowledge.

A key component of the Peripatetics' philosophical system was their practical or civil philosophy, which al-Fārābī divided into ethics and political philosophy, whereas Ibn Sīnā's categories were ethics, stewardship and civil politics. They endeavoured to prove that society and social life had their origin in people's needs in respect of the production of material wealth. They considered that, individually, people were unable to produce all of the necessities of life: they could only do so by joining forces; and society was a comingtogether of individuals for the purpose of producing material wealth. Of great significance was the criticism levelled by them against those theories which likened human society to a community of animals in which a fierce struggle was waged for existence. Against the theory of a brutish, cut-throat struggle for existence, they set the idea of mutual aid and fellowship, holding that 'the entire world will be virtuous if its peoples help one another to attain happiness'. Both rejected slavery and wars of conquest; they advocated provision for

the maintenance of the disabled as well as state education and instruction for the younger generation, irrespective of the social status of its various strata.⁶

The most important ideas advanced by the Peripatetics in the field of ethics were the freedom of human will and the variability of customs and manners. The development of ethics in the tenth and eleventh centuries also owed much to Ibn Miskawayh (d. 1030), the author of $J\bar{a}w\bar{\iota}dh\bar{a}n\ khirad\ [Eternal\ Reason]$ and the $Tahdh\bar{\iota}b\ al-akhl\bar{\iota}aq$) The Perfection of Morals].

The tradition of the philosophy of the Peripatetics was upheld after al-Fārābī and Ibn Sīnā by such thinkers as cumar Khayyām (c. 1048–1123) and Nasīr al-Dīn al-Tūsī, who defended the doctrine against the onslaughts of al-Ghazālī and Fakhr al-Dīn al-Rāzī, and also by Qutb al-Dīn al-Shīrāzī, Bābā Afdal Kāshānī, Kātibī (thirteenth century), Qutb al-Dīn al-Rāzī (fourteenth century) and Jalāl al-Dīn al-Dawānī (fifteenth century).

PHILOSOPHICAL PROBLEMS

A series of key questions in natural philosophy were raised and discussed in the works of the Materialists, and in those of the Peripatetics and a number of other scholars, including Abū Rayhān Muhammad al-Bīrūnī (973–1048). Among these questions were:

- (a) re cognition of the universal material operation of cause and effect and the investigation of all phenomena without exception from that stand point: the transformation of one element into another, the nature of light and heat, changes in the earth's surface and in the living organism, the nature of motion, space and time, earthquakes and fountains, lunar and solar eclipses, the causes of life and death, health and illness, sickness of the body and of the mind;
- (b) recognition of the idea of mutability, which was demonstrated by the transmutation of the elements, the evolution of the earth's crust, changes in the vital fluids and their relationships within the living organism, changes in human nature according to living conditions and age; and
- (c) a realistic treatment of the relation between the spiritual and the material (the psychic and the somatic) in which the locus of spiritual forces and the source of their action was held to be the brain and, hence, the psychic activity of the cerebrum.

To support the idea that the psychic processes had their seat in the cerebrum, the natural philosophers formulated and comprehensively argued the thesis that psychic states were

⁶ Madkour, 1934; Gutas, 1988; Netton, 1992.

dependent on physiological activity and the physiological condition of the brain: psychological health was a consequence of the brain's physical perfection; psychological ailments were caused by its physical indisposition. Although the natural philosophers recognized the dependence of the psychic on the physical, they did not deny the action of the former on the latter through the operation of an inverse effect. These ideas, which were expounded in the medical works of Abū Bakr al-Rāzī and Ibn Sīnā, were subsequently expanded in the writings of Muhammad Jurjānī (twelfth century), the author of the nine-volume *Dhakhīra-yi Khwārazmshāhī* [Repository of the Khwarazm Shahs], Mahmūd al-Jaghmīnī (thirteenth century), author of *The Little Canon*, and in the little-studied medical works of Nasīr al-Dīn al-Tūsī (see further in Chapter 12).

PHILOSOPHICAL KALĀM

Kalām, which came into being by the ninth century to defend Islam against various heresies, passed through several phases: Mu^ctazilite, Ash^carite and philosophical *kalām*. Among those who made major contributions to its development in the countries of eastern Persia and Central Asia were al-Bāqillāni, al-Juwaynī, al-Ghazālī, al-Māturidī al-Samarqandī, Fakhr al-Dīn al-Rāzī and al-Taftazānī.⁷

Philosophical *kalām* largely developed in order to combat eastern Peripatetic philosophy and what remained of Zurvanism and the philosophy of the Materialists. The founders of philosophical *kalām*, particularly al-Ghazālī, were especially aroused by the idea of the co-eternal nature of God and the world which was espoused by the Peripatetics, seeing in it an element of dualism which undermined the basis of monotheism. Al-Ghazālī also rejected the idea because it contradicted the fundamental doctrine of religion and *kalām*, according to which God had created the world out of nothing, the views of the Peripatetics being contrary to all religion.

The philosophizing *mutakallims* also discounted the theory of emanations proposed by the Muslim Peripatetics which, in their view, led only to an allegorical acknowledgement of God, subjecting His action to the law of necessity. It denied the omnipotence and omniscience of the Creator and put him in the position of a dead man, knowing nothing of what is happening in the world. Al-Ghazālī and his companions and followers also rejected the theory of causality, which was a fundamental feature of the philosophy of the Zurvanists, the eastern Peripatetics and the natural philosophers. The *mutakallims* believed that the refutation of the principle of causality would help to prove the existence of miracles. Al-Ghazālī's followers, and in particular Fakhr al-Dīn c, Muhammad al-Shahrastānī (twelfth

⁷ El², 'cIlm al-kalām' (L. Gardet).

century) and al-Taftazānī, considered the theory of hylomorphism advanced by the Peripatetics as unfounded, and countered it with the doctrine of indivisible ethereal particles (atoms), constantly perishing and being created anew by the Creator.

The epistemology of the philosophizing *mutakallims* was fraught with inconsistencies and contradictions. In some of their works they asserted that the world is knowable and recognized the cognitive force of human cognitive faculties. Elsewhere, they questioned whether the world is knowable or denied that it can be discovered by means of the senses and reason. Scepticism and agnosticism not infrequently led the *mutakallims* to intuitionism, from which standpoint they criticized the fundamental principle in the gnosiology of the Muslim Peripatetics, the doctrine according to which cognition was the reflection of the image of things in the senses and the mind.

The philosophizing *mutakallims* were also concerned with the problems of social philosophy. The following were the main tenets of their social teachings as expounded by al-Ghazālī: (a) society, like the world as a whole, is the fruit of divine wisdom, which predetermines all of its structures and institutions; (b) the basis for the existence of society is the need for its members to help each other in order to enable all to acquire the means of subsistence; (c) the main regulators of life in society are religion and politics, which are closely related; and (d) the best form of state structure is the theocratic state. The well-being and prosperity of the state depend on the ruler, the vizier and the senior officials, and the bureaucratic and military classes are the two pillars of the throne.

SUFISM

Sufism, which emerged during the eighth century as a movement of ascetics, subsequently developed considerably. By the thirteenth century, a variety of Sufi orders and tendencies had sprung up and Sufi doctrine was developed comprehensively in the works of al-Kalābadhī, ^cAbd Allāh al-Ansārī, al-Qushayrī, al-Ghazālī, Sanā'ī, Farīd al-Dīn ^cAttār, Jalāl al-Dīn Rūmī, ^cAlī al-Hamadānī, ^cAbd al-Rahmān Jāmī and others.

A basic tenet of Sufism is that the physical world was created by God through a number of levels of emanation in which the divine spirit gradually acquired substance. This spirit strives constantly to free itself from its material shackles and return to its eternal source, God, who, according to the doctrine of the Sufis, is the sole real essence. Like the world, human beings too are made of spiritual essences but are unable, by virtue of their earthly existence, to achieve direct communion with the deity. The aim of human existence must therefore be to annihilate the transient self and unite with the divine being. The Sufis consider that to attain this goal it is necessary to pass through certain stages. The first stage, that of the *sharī*^c a, is obligatory for all Muslims, including the Sufis. The Sufi is required

to demonstrate obedience to the $shar\bar{i}'a^c$ in all external matters, but internally remains free from all but God and submission to Him. The individual reaching the stage of $haq\bar{i}qa$ (divine truth) is so absorbed by the goal of achieving union with the divine being that his external surroundings lose all meaning. At the stage of $ma^c rifa$ (gnosis), he experiences divine truth and acquires wisdom. On achieving $baq\bar{i}qa$, the seeker loses his individual self and enters into communion with God, merging with and losing his self in the deity. However, $fan\bar{a}'$ (annihilation) does not constitute the end point of human existence for many Sufi theorists but rather the beginning of $baq\bar{a}'$ (eternity), since the individual, on experiencing the loss of the transient self, is immersed in the sea of the Absolute and thereby acquires a clear sense of being eternal like the divine essence. In that sense, $haq\bar{i}qa$ constitutes real, true existence for the Sufis, the state in which they apprehend their participation in the divine essence. Sufi thinkers who engage in philosophizing have developed their own theory of how knowledge can be acquired of God and of the world. God can only be apprehended by means of intuition, inspiration, revelation, illumination and ecstatic experiences, and the world by the senses and the mind. §

ISMA^CILISM AND ITS COSMOLOGY

The religious and philosophical doctrine of Isma^cilism, which came into being in the eighth century, was developed in the works of three thinkers from the eastern Iranian world, Abū Hātim al-Rāzī (ninth century), Abū Ya^cqūb al-Sijistānī (tenth century) and Nāsir-i Khusraw Qubādiyānī (1004–80). The philosophy of Isma^cilism was based on the Peripatetic conception of the relation between Necessary and Contingent Being and the Neoplatonist theory of emanations, according to which the Creator created universal reason; universal reason generated the universal soul and the universal soul engendered primary matter, the elementary forms of which were fire, air, earth and water. Various combinations of these elements gave rise to the world of minerals, plants, animals and humanity, to which corresponded mineral, plant, animal and human souls. The human soul, as the highest form of soul, encompassed the lower forms but could not be reduced to them: it was eternal. Many Isma^cili philosophers categorically rejected the migration of souls into other bodies.

Abū Hātim al-Rāzī and Nāsir-i Khusraw were quite firm in their opposition to the views of the Materialists and the Peripatetics in respect of the eternal nature of matter, space and time, and argued that the world was created within time. However, they were not unsympathetic to the idea of the mutability of the material world, the infinite nature of space and time and the changing state of objects and processes.

⁸ El², 'Tasawwuf. 1' (L. Massignon and B. Reinert).

In their doctrine of cognition, the Isma^cili philosophers admitted the cognoscibility of the world and considered that in the material world, starting with the heavens and the planets, everything is determinable and all earthly things and minerals, plants and animals in all their variety may be determined and known by man. The world was knowable through the senses and the mind. Science, as the result of knowledge, was the comprehension of things as they were in reality. The most important feature of Nāsir-i Khusraw's epistemology was his recognition of the infinite nature of the cognitive process. He wrote:

It is unthinkable that the human soul should become incapable of absorbing more knowledge, for its substance is such that there is no end to its ability to perceive all properties. Everything that is known helps the soul to know other things and does not hold it back. It is therefore impossible that human beings should reach a state in which they have nothing further to learn.

In spite of this, he took the view that cognition was a particle of divine light implanted in man by God.

The philosophy of the Isma^cilis subsequently found expression in Nizārī poetry (thirteenth century) and in such anonymous treatises and books as the *Risāla-yi ^cAqā'id Ismā* ^cīliyya [Treatise on the Tenets of Isma^cilism], the *Kalām-i pīr* [Sayings of the Mentor] and the *Sahīfa* [The Writing Leaf], and in the work of Fidā 'ī, the *Kitāb bi-Hidāyat al-mu'minīn al-tālibīn* [Book with Guidance for the Believers Seeking Knowledge]. It should be noted that the philosophical views of Isma^cili thinkers were not uniform. In particular, Abū Ya^cqūb al-Sijistānī, unlike Nāsir-i Khusraw, admitted the eternal nature of the world and its attributes, and later Isma'ili treatises recognized metempsychosis (the transmigration of the soul), which had been also rejected by Khusraw. This illustrates not only the existence of different groupings within Isma^cilism but also its historical evolution.⁹

ILLUMINATIVE PHILOSOPHY

With the development of indigenous forms of economic and political sovereignty in the countries of Central Asia, the revival of pre-Islamic strains of thought appears. Thus Shihāb al-Dīn Yahyā al-Suhrawardi (executed for his beliefs in 1185) combined ancient Iranian, Platonic and certain Peripatetic conceptions with an admixture of Islamic ideas, producing a distinctive, original doctrine which he himself referred to as Illuminative philosophy (hikmat-i Ishrāq).

Expounding the essence of his doctrine in the work entitled *Hikmat al-Ishrāq* [The Philosophy of Illuminationism], al-Suhrawardī emphasized that his philosophy was a form of wisdom based on inspiration, experience, revelation and the direct perception of the

⁹ Nasr, 1977; Stern, 1983; El², 'Ismā^cīliyya' (W. Madelung).

truth, and not on proof and argument. In this it differed from apodeictic philosophy, which is built entirely on proof and argument. Al-Suhrawardī did not reject this last, since it was certainly capable of revealing the substance and secrets of the material world, and was therefore the first essential stage in the science of philosophy. But it was quite unable to distil the essence and divine the symbols of the supernatural world, and the disclosure of these was the prerogative of Illuminationism. The true philosopher, who laid claim to the title of God's representative on earth, was required to be equally well versed in apodeictic philosophy and in the philosophy of *Ishrāq*. 'The surest seekers of divine truth', wrote al-Suhrawardi, 'are those who seek both divine and apodeictic wisdom.' This is probably why he included in his system of Illuminative philosophy a synthesis of certain tenets of Aristotelian/Avicennan apodeictic philosophy.

At the heart of his ontology was the theory that the foundation and origin of being was the non-material, absolute, eternal, self-sufficient and necessary light of lights. From that source emanated successively: (a) the proximate (first) light; (b) celestial inextinguishable lights; (c) earthly inextinguishable lights; (d) abstract lights governing material existents; (e) heavenly independent and dependent material existents (respectively, spheres and stars); and (f) earthly material existents (matter, bodies, elements: fire, air, earth and water).

In accordance with these concepts, al-Suhrawardi divided the 'world into the realm of spiritual lights and that of material darkness, the former being unchanging and eternal and the latter a world of movement, change, origination and annihilation. It is thus not difficult to conclude that he essentially revived a Mazdaist- Platonic and Neoplatonic philosophy. Further evidence of this view is provided by his defence of Plato's theory of ideas, his demolition of the Peripatetic critique of that theory and his rejection of Aristotelian-Avicennan hylomorphism and the atomism of Democritus.

However, the old doctrines could not be revived in their pure state in the new conditions. Al-Suhrawardī therefore attempted to clothe Mazdaist and Platonic ideas in Islamic garb in order to obtain contemporary legitimacy for his doctrine, emphasizing that God was referred to in the Qur'an as the light of heaven and earth. But neither this nor his effort to distance himself from the dualism of light and darkness associated with the Magians and the Manichaeans could save him from the accusation of heresy and eventual martyrdom. Nevertheless, his influence on the subsequent development of philosophy in the countries of Central Asia was considerable and is plainly visible in the works of such authors as Qutb al-Dīn Shirāzī, Lāhijī, ^cAzīz Nasafī, Mīr Dāmād, Hādī Sabzawārī and Sadr al-Dīn Shīrāzī. ¹⁰

¹⁰ Ziai, 1990; EI², 'Ishrāk', 'Ishrākiyyūn' (R. Arnaldez).