A Compilation of Islamic Philosophy and Theology [Edited]

Compiled: by Aliyu Yunus Sakande

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Preface

Although most of the educated people usually have no exact definition of many of the science, except for philosophy, they are well acquainted with them. For example, psychology or biology are, but know nothing about philosophy. Some think that philosophy is a set of pompous, fallacious and meaningless words that can never be fully understood. Others hold that "philosophy is a matter of fabrication; it depends on personal taste and interest and has no standard or criterion. Therefore, with no Philosophical background, they grant themselves the right to express their views and on listening to a philosophical discussion, given their opinion, or without studying or deeply understanding an argument, reject it. When they, cannot prove their points or on meeting some objection, they say "the views of every person should be respected!

What is about philosophy that despite their ignorance of the subject most people claim to know it? What is the difference between philosophy and science? Why is it that the people do not have the same attitude toward thesciences? Why don't the same persons express their opinions onmathematics, physics and chemistry?

This may have different reasons. One reason is that many science have their own particular terminology in which they do not use common conventional words, unlike philosophy, which use such commonly used words as "existence" "non - existence "cause" "effect" "possibility" "necessity" "potential" "actual" "originated" "per - eternal" "prior" "posterior" "the knower" and "the know" Another reason is that to show their technical terms some of these science use special signs and to demonstrate their laws they use formulas, while this is not the case in philosophy.

Finally, one of the main reasons is that despite their ignorance of philosophy people are involved in a good number of philosophical questions. Most people, educated or uneducated, do not have even a general idea what philosophy is, what it investigates, its status among the various branch of the humanities, or even its use.

In shorts there are very few people who have the least knowledge of philosophy, and naturally every person fancies himself a friend of philosophy. He mistakenly imagines a formal science and thinks that this is philosophy, once honoured as the highest branch of knowledge. Nevertheless, as shall be described later, some of the questions of philosophy are commonly dealt with.

They are faced by all people and demand their response, and every person, educated or uneducated, invariably has to give a response, correct or incorrect, to them. However, most people do not know that these questions are philosophical.

Therefore, before we embark upon our discussion it is appropriate to introduce philosophy in following terms.

- 1- What is philosophy, what is the subject of study and what is its definition?
- 2- What is the research methodology followed in philosophy? Is it sensible and empirical or intellectual? Why is such approach followed?

- 3- What is the relationship between science and philosophy? In other words, what is the status of philosophy among the different fields of knowledge?
 - 4- Why should we should philosophy?
- 5- In this section and in the following four chapters we will discuss the above questions.

Chapter One: What is Philosophy?

This chapter tries to provide a definition of philosophy. Real universal sciences are often defined by their subjects. Thus, in order to define philosophy, we have to know its subject and for that purpose we have to know what the subject of science in general is. In treating the subject of science, we start our discussion by comparing philosophy with other real universal science considering the variety of questions they discuss(the scope of their realm).

The scope of philosophy To understand the range of philosophy, it is better to consider the following philosophical question:

Is there a reality outside the mind? If there is, is it a knowable reality? If so, what, essentially, is knowledge?

Is there a substance called a 'corporeal body 'or there are only corporeal accidents, such a colour, shape, heat and so on?

If there is such a substance, is it compound or simple ?if it is compound , what is its simplest part?

Do accidents have any existence other than the substance they characterize?

Does God, that is a being who is the cause of all things but needless of any cause, exist?

Doe God have attributes? if so, in what way do these attributes exist? Are they identical with existence of God or different from it? Are they limited or unlimited?

Does spirit exist? If so, is it material or immaterial? What about angles? Is there life after death?

What is movement and where does it occur? Does it occur only in the attribute and accidents possessed by bodies or it takes place in the depth of their existence as well? Do time and space exist? If so, what is their reality?

Does the world have a temporal beginning and ending?

Does it have any spatially?

Does an existent become non-existent or vice versa? Once an existent become nonexistent is it possible to bring it back into existence.

These are a few of the issue discussed in philosophy. But a careful consideration of even these few questions will show how extensive the realm of philosophy is. It discusses both the mind and the external world. Its investigations range from the simplest parts of the body to spirit, angels and god. It studies the accidents and the appearance and also the essence and the depth of things. It concerns itself with all that exists in the world and in the hereafter, from time without beginning to eternity without end. Therefore, in contrast to other fields of learning, the philosophical search is not limited to a certain pare of the universe. Why is that so? The answer should be looked for in the subject of science and philosophy. In general, each real science has certain subject, which determines the range of its issues. The subject of each of the sciences encompasses only a certain part of the universe, but the subject of philosophy is general and inclusive.

The absolute existent and its laws

As it has been mentioned above, the laws of all science deal with the special existent and the one condition for the applicability of these laws to an existent is that the existent should have a special quiddity. Now, are there any laws whose application to an existent is not conditional by the special quiddity of that existent, so that its mere; existence "would suffice and the presence or absence of a special quiddity would be irrelevant? In other words, are there any laws that are laws of "being" rather than law of "being with a special essence", laws of the absolute existent than those of an existent qua its having a special quiddity, and in philosophical term, law of "being qua being"? The answer is yes.

Philosophical laws are indeed of this nature. For example, the law of causality (every essentially possible existent needs a cause) which is a philosophical law, includes every possible existent, whether that existent has or does not have a quiddity is a man, a horse, a tree, gold, or an angel.

The subject Of Philosophy To Summarize, the laws of sciences are the laws of the special existent and apply to an existent only qua its possessing an essential determination; the laws of philosophy, however, are the laws of the absolute existent and do not require that it should possess a particular quiddity as a condition of their application. We may conclude that the subject of all other sciences is the special existent, that is, an existent qua its special essential determination. All other science study existents once their quiddities are determination. In other words, the subject of all other science is quiddity while that of philosophy is existence or being.

The Definition of Philosophy

Keeping in mind its subject, we can define philosophy as follows: Philosophy is that field of knowledge in which characteristic of the absolute existent are discussed. It is that field of knowledge in which qualities of "being" are studied, and as is commonly said, it is that knowledge in which the states of an existent qua existent are discussed.

Ouestions

- 1- Besides philosophy is there any other science that may include all things within its realm? Why?
 - 2- What is the subject of science and what role does it have in science?
- 3- What is the meaning of terms "special existent" and absolute existent?"
- 4- What is the criterion by which we can distinguish between philosophies?
 - 5- What is the definition of philosophy?
 - 6- What is the definition of philosophy?
- 7- Why the absolute existent is more general than the special existent and is there anything more general that the solute existent? Why?
- 8- Which of the following proposition are philosophical and why Every existent is either black or not black Every existent is either a cause or effects Every moving object needs a moving force The cause of the movement of many bodies is the gravity that exists between them. If some of the elements that contribute to the existence of water did not exist, water would not exist.
- 9- Consider the law ''pressure does not change the volume of water Say whether the subject of this law is the special existence and why? Rewrite it in a more form by applying the qualifiers ''qua'' to which science does it belong?

Notes

The two qualifies 'universal 'and 'real' are used in order to exclude fields of leaning that deal with particular facts, such as history and geography and conventional and arbitrary fields of scholarship, Such as literature and jurisprudence from our discussion.

For the sake of clarity in this chapter the term "science" has been used in contrast to "philosophy", and the term "knowledge" and "learning" have been used in a sense more general than the other two. Therefore, by science here we mean all science other than philosophy.

Insteadof the familiar term "the subject of knowledge or learning" so that it may include philosophy as well.

For further explanation, see Mortada Mutahari, Majmauah Asar (collected worked) (Qom, Sadra Publication 1371) vol.6 pp. 469 - 473

Changing proposition 1 into proposition 2, which is more exact shows that intellectual the true subject of this law is heart and its metaphorical (unreal) subject is man. In philosophy in order to show this kind of truth and metaphor (unreality) we use the term "qua" which is used in proposition 4 and say "man qua possessing heat is subject to the thermal exchange law. The meaning of this expression is that man's possession of heat mediates so that man can be subject to such a law. In other words, instead of ruling that heat is subject to such a law, the intellect rules that man is subject to it is man who has heat. Therefore man's possession of heat has been a medium so that the intellect can metaphorically attribute the law related to heat to man. Technically, in such cases philosophers say that heat acts as "a medium in the occurrence " or that it is "a qualifying aspect " so that the intellect could rule that man is subject to the thermal exchange law. In philosophy, distinguishing the true subject of one stipulation from its metaphorical subject and determining the medium in the occurrence are very important and the qualifier "qua" is often used for this purpose. For further treatment of this topic see Collected Works, vol. 5.n.pp.496 and 498

See Avicenna, Al-Shifa,Al-llahiyyat (Theology) ,(Qom, the library of Ayatullah al-Maraashi al-Najafi, 1404 AH) pp. 10-12.See also collected Works, Vol.5,p. 130 and also p.131

See collected Works, vol.5. 130 and 131. See also inid. Vol 6, pp. 59(No.2) - 64.

Chapter Two: Research Methodology in Philosophy

The aim of this chapter is to define research methodology in philosophy. For this purpose, we should first of all understand what is meant by "research methodology" in any particular field of study. Since research methodology in a field of knowledge is nothing other than the method of determine the truth or falsity of its constituent propositions and because the truth or falsity of the propositions of a real universal field of knowledge can only be determined by either a rational or an empirical method, we must begin by explaining this last point, according to which propositions are divided into a priori and a posterior.

Next, we shall divide different types of knowledge into rational and empirical and finally try to prove that philosophy is a form of rational knowledge.

A Priori and Posterior Propositions

Consider the geometrical proposition "the sum of the internal angles of a triangle is 180 degrees" and the physical proposition " all metals are expanded by heat." Both of which are correct and compare them with each other. It is clear that if in the course of experience we came across a triangle whose qualities are different from those stated in former proposition, we would not judge that proposition to be false and invalid; however, if we found a kind of metal which did not have the quality mentioned in the physical proposition we would consider that proposition false and they deny its universality. What is the reason for this difference? The reason lies in the methods used to prove the truth or validity of these two propositions. The truth of the first proposition is proved by a rational method while that of the second is proved by an empirical one. By a rational method we mean a form of demonstration that ultimately rests on primary, self-evident propositions. Since understanding the truth of primary, self -evident propositions and the law of reference in logic, on which this types of demonstration is based, are both independent from experience and the intellect understanding the truth prior to experience and independent of experience and does not need its

The truth of the second proposition, however can only be understood following experience and though its assistance. The some can also be said of false propositions in that the fallacy of some of them can be understood independent of experience while only the help of experience can ascertain that of others. In technical terms, proposition of the second kind are called a posterior.

Therefore a prior proposition is one whose truth or falsity can only be determined by an empirical method. It is important at this junction to consider the following point.

The first Point

The concepts employed in a proposition may have been acquired through the sense but it may still be a priori if we can determine its truth or falsity by a rational method and independent of the senses, like many geometrical propositions.

Which though contain many sensible concepts, such as dot?Line surface, circle, triangle etc. are all a priori since we can determine their truth or falsity by the rational method and without the help of the sense. In general the way parts of a proposition or the whole proposition have entered the mind, whether it is through dreams, inspiration etc. Does not make a proposition a priori or a posterior. Whether a proposition a is a posterior depends only on the way we determine its truth or falsity.

The Second Point

Aposterior proposition is exceptive; that is, observed counter - example can only question it universality while retains its validity or other cases. In other words, though that proposition is false in its universality, in its more particular form it may be true. Consequently, another universal proposition but with a particular subject replaces the invalidated universal proposition. A prior proposition, however is non-exceptive, that is a rational counter example will indicate the total invalidity of the proposition and we cannot claim its truth in any other case. For example suppose a true geometrical proof demonstrates that the total sum of the angles of an equilateral triangle is not 180 degree.

This counter example will show that triangle is 180 degree is not valid and the invalidity of that cannot rationally judge that the total sum of the angle of any triangle is 180 degree.

Rational and Empirical Forms of Knowledge

Rational knowledge is that knowledge whose proposition are a priori while empirical knowledge is that knowledge whose proposition are a posterior. In other words rational knowledge is the form of knowledge whose proposition can be proved true or false by a rational method while empirical knowledge is one whose propositions can be proved true or false only by an empirical method.

Keeping in mind that by "research methodology" in one kind of knowledge we mean that method which determine the truth or falsity of its proposition we can say. Rational knowledge is the kind knowledge is one whose research methodology is empirical. From now on we shall use the word "knowledge" to refer to all forms of knowledge and science and the word "science" in accordance with the current usage of the term to indicate empirical knowledge alone.

Philosophy is Rational Knowledge

Initially, using the reduction ad absurdum argument, we shall prove the validity of this claim in respect to a single philosophical proposition, such as the principle of causality as an example. Then in 3.2 we will prove its validity concerning all philosophical propositions.

Example: The law of Causality is not empirical

Let consider the principle of causality in it conventional sense: Every phenomenon, namely everything crated in time (temporal) needs a cause. Suppose this is and a posterior proposition and its truth or falsity can be demonstrated by experience. We will try to show that, firstly this cannot be

done without employing a prior proposition and secondly, it will lead to a vicious circle.

According to the practice followed by philosopher of science in falsifiability or verifiability of empirical proposition, the above proposition can be a posterior if is truth can be demonstrated by experience (according to the principle of verifiability in the empirical science) or its falsity could be justified experimentally (according to the principle of falsifiability in empirical science). In other words either its truth should be proved by experience and inductive generalization or certain empirical states or inductive imagined. Which if realized would demonstrate the inaccuracy of that proposition. To be more precise either we have to show phenomena and secondly need a cause and then generalize this finding to include all phenomenon needs a cause or we must imagine certain states and conditions in which we could prove by experience that is certain thing is first of all a phenomenon and secondly does not need a cause is falsifiable and a posterior, therefore in both approaches we must initially show by experience that certain thing or things are phenomena. However, we can easily prove that, firstly, this cannot be done through experience alone and without employing a prior proposition and secondly, that it entails a vicious circle.

To explain, we should say that being a phenomenon means being created in time. This in turn means that the thing in question must be initially nonexistent and then later on become existent while we con not perceive the existence to nonexistence of things through the sense (aided or unaided). This is so since perception require two preconditions: firstly, the object in question must leave a trace of its effect on the perceiving organ - of course this effects is going to be corporeal and must pass though different stages until it reaches the brain - and secondly the spirit must perceive this effects. Therefore only such things can be sensible that effect the cells of one of the sense organ. In the light of this if we look closely into our perceived we will see that the only things that can be perceived directly by the sense are colour different kinds of noises, taste, smells, cold and heat, smoothness and roughness, hardness and softness, dryness and wetness .Lightness and heaviness, Moreover there are other things which are also perceived through the sense, but not the same manner as the qualities just referred to, for these do not directly affect the sense organ rather assisted by a form of intellectual analogy, are perceived along with those things which directly affect the sense organs, Wecall this kind of perceived "indirect sense perception."

Now the things that are perceived indirectly by the sense are different kind of shaped. number, the position which things have in relation to each other, in terms of being remote ,close ,joined or separated from each other being above below to the left or to the right of each other and so on. Some philosophers also hold that temporal succession of thing and their movement can only be perceived indirectly by the sense.

Therefore certain attributes such as necessity, possibility, impossibility, causality or influence, being an effect or affectability, condition, conditioned, potentially, actuality, dependence, independenc , self- sufficiency, contrary , contradiction, temporality or being a phenomenon, pre-eternity, substantiality, accidentally, different kind of substance existence and non -

existence can neither directly nor way left to perceive the temporality of a thing and that is form the fact that we do not perceive it at first and then come to perceive it. For example, we do not initially perceive a light and then at a certain moment we begin to see it. From this we conclude that it was non-existent at the beginning and then it became existent; in other words, it is created in time and is therefore a phenomenon.

However,in order to conclude, form not perceiving a thing for example not seeing it, its non-existence and from perceiving it, for example seeing it, its existence, we have to use other intermediary propositions. 1 Every visible thing, which is not seen in a place, is non-existent in that place and 2. Everything seen in place is existent in that place. But these propositions, irrespective of their truth or falsity are firstly a prior and secondly if we assume their truth and try to prove their validity can be proved only through the laws of causality. That isevery principle in other in order words that we are trying to prove. This, needless to say is a vicious circle and impossible to attain.

Demonstration

As was stated in the definition of philosophy, philosophical propositions explain the characteristics and properties of existence and, rarely, of non-existence and its properties. It was also explained in 3.1 that neither existence, nor nonexistence, nor any of their characteristics, such as necessity, possibility, impossibility, casualty, being an effect, etc., could be experienced or perceived through the senses. Naturally, then, the relationship between existence and it characteristics or non-existence and its properties, which is the subject of philosophical propositions, cannot be understood through the senses or through experience. Therefore, these relationships can be understood only by reason and on the basis of primary selfevident propositions; in other words, it is only by the rational method that we can determine the truth or falsity of philosophical propositions

Ouestions

- 1- What do we mean by research methodology?
- 2- Define a priori and a posterior proposition.
- 3- What is the significance of the fact that posterior propositions are exceptive and a priori propositions are nonexceptive?
 - 4- Why is it that a priori propositions do not allow exceptions?
- 5- Does every a priori proposition necessarily consist of intangible conceptions? Why?
- 6- Can we change particular or existential (at least some of them) into universal propositions? If the answer is affirmative explain how? Furthermore, give at least two examples showing such change.
- 7- Which of the following concepts derive directly or indirectly from sense organs? Why? Movement, possibility, impossibility, body, shape, necessity, existence, nonexistence, water, colour
- 8- Which of the following propositions are a priori and which are a posterior? Why?
 - 9- Every moving object needs a moving force.
 - 10- Every corporeal body is either black or not black.
 - 11- All acids are sweet in taste.
- 12- No physical body has a particular colour in itself. It is our eyes that see things in different colours.
- 13- As long as an observer is looking at an object that object exists. When he stops looking at it, it ceases to exist.
- 14- Suppose you are given a sheet of paper on which a geometrical shape is printed and three specific lines in the drawing have been highlighted. You are asked to prove that the three highlighted lines in that drawing (and not in general way concerning every drawing with the same characteristics) are equal. Is it possible to prove this point simply by an exact ruler without employing any a priori propositions? Why?
- 15- Suppose in response to your friend's invitation you have decided to his house, and you go there. Keeping this supposition in mind, answer the following questions:
- 1- What a priori propositions must you assume to be true so that your action your claim to have made a decision to go to your friend's house and having carried out that decision appears as reasonable? Mention at least five propositions.
- 2- Why assuming that these propositions are true is necessary for the rationality of that action?
 - 3- To which types of knowledge does each of these propositions belong?

Notes

- 1- For further explanation, see Majmouah Asar (Collected Works), vol. 6, 'The Rational Theory', pp. 332-334.
- 2- For further illustration, see C.G. Jung, The Fundamental Questions of Philosophy, chapter 2.
- 3- For further information on Verifiability and Falsifiability, see Allen F. Chalmers, The Nature of Science, chapters 1-6; the Open University Press, 1982.
- 4- See Avicenna, Al-Shifa, Al-Tabiyat (Natural Philosophy) (Qum, Library of Ayatullah al-Maraashi al-Najafi, 1404 AH). 3 vols, vol. 2, p. 53.
- 5- Ibid. Pp. 139-141. See also Sadr al-Mutaliheen, Al-Hikma al-Mutaliyah (Transcendental Philosophy) (Beirut: Dar Ihya al-Turath al-Arabiyyah, 1981), 3rd Editon, 9 vols., vol. 8, section 4, chapter 12, pp. 201-204.
- 6. For further illustration see Collected work vol 6, "the way of Acquiring Knowledge." pp 245 254 See also indi vol 5 The Secondary Intelligible, pp 266 292 and also ibidi vol. 10, Epistemo; ogy pp.249 305
 - 7- For further illustration see Collected Works vol. The Empirical Theory, pp
 - 8-334-347
 - 9- For another explanation ob the vicious circle see Collected Work Vol 6, pp 683-684 10- For further explanation see collected work vol 6 pp . 478 480.

Chapter Three: The Relation between Science and Philosophy

In the last two chapters we learned that both the subject of science and philosophy and their research methodology are different and thus science can no more solve a philosophical problem than philosophy can solve scientificone. In short philosophy and science cannot replace each other.

However, this does not mean that the two disciplines are totally disconnected and have no influence on each other. The present chapter aims at explaining this point and is divided into three section 1The impact of science on philosophy 2 The impact of philosophy on science and 3. The priority of philosophy over science, which is the conclusion draw from the two previoussection.

The impact of science on Philosophy

Philosophy questions are divided into two groups the first group is not independent from science, in the sense that it is influenced by changes and development in scientific theories while the second group is independent for science. The first group is called philosophy after science and the second Philosophy before science lets us now consider these two types of philosophy issues.

Philosophy after Science

The reason why the change and development of scientific theories influences the outcome of the questions of 'philosophy after science' is that in this group of questions scientific theories, in different ways, are taken as presuppositions for philosophical questions. By a presupposition we mean a statement that in a certain field of learning is assumed to be true independent of any proof, for all or some of the questions in that are dependent upon it. The reason its validity is assumed independent of ay proof is either because it is self-evident, or it has been taken for another discipline where it validity has been proved already, or has been accepted with n evidence or reason whatsoever. In what follows we will discuss the different ways in which scientific theories are taken as presuppositions for philosophical questions.

The Scientific Theory raises a Philosophical Question

In some of the questions of 'philosophy after science', the philosophical question can e discussed essentially on the basis of a scientific presupposition. In such cases, science discovers a certain thing with characteristics that are either apparently contradictory to some philosophical laws so that the removal of this opposition would create some new issues for philosophy or, at the least, application of clear principles of philosophy to which will necessitate a new intellectual analysis. For example, the discovery of energy, the consequent appearance of the theory of the transformation of matter into energy and the emergence of particles of matter from condensed energy have the raised the questions in philosophy as to what the essence of energy is. Does it have mass or not? If it does, what differentiates it from ordinary bodies? If not, how can something possessing mass change into something that has no mass? In any case, a

new material form that has not been discussed in philosophy heretofore has to be accounted for.

The Scientific Theory as a step to Philosophical Demonstration

In such cases the philosophical issue is discussed on the basis of tangible or intuitive issues or according to previous philosophical discussions, rather than on the basis of scientific presuppositions.

However, the philosopher in his attempt to prove the validity of the philosophical position must depend on the scientific theory as one the premises of his demonstration. On other words, in these cases the philosophical question has only a rational-experiment solution. For example, in the philosophy of Avicenna, in order to prove that the number of the abstract immaterial incorporeal existents is ten, the Ptolemaic geocentric theory is employed.

The Scientific Theory determines the Extensions of the Philosophical Theory

In these cases, in the premises used in proving a certain philosophical theory or in the philosophical theory itself the philosopher employs a concept that has a tangible extension, such as the concept of body, the concept of expansion and the concept of contraction, which in the old physics were called 'penetration' and 'condensation'. The role of the scientific the scientific theory is to make the extension of that concept known to the philosopher. For example, the atomic theory, at the time of its advent, showed that the true extensions of the body in different philosophical precepts proved for body are not these observed bodies, but rather the electrons and nuclei. With the fission of the nucleus and the discovery of nuclear particles it has become clear that the true extensions of body are electrons and nuclear particles, and so on. In these cases, besides showing the extensions, the scientific theory often corrects mistakes made by philosophers.

It is clear that in the above cases any change or development in the scientific theory will result in a corresponding effect on the dependent philosophical question. However, it should be kept in mind that few philosophical questions fall within the category.

Philosophy before Science

It has already been said that 'philosophy before science' includes that group of philosophical questions that are independent from science and are therefore unaffected by any changes and developments that occur in scientific theories. This group in turn is divided into two further groups. One group does not take any scientific theory as a presupposition at all. Here, not only philosophical questions introduced independently from scientific theories but their solution also is purely rational. No scientific theory is used in proving them and the determination of the extension of the concept employed in them is not based on scientific concepts. The fundamentality of existence, proving the existence and attributes of God, the unity of divine essence and His attributes and actions, the possibility of resurrection predestination, freedom, and in general the most important philosophical questions are included in this group. The other group consists of those that

have both a purely rational solution and also a rational-empirical solution that depend on the scientific theories and presupposes them. It is clear that this group is also independent of science, for if developments alter the scientific theory in question and invalidate the rational empirical solution, it will not leave the question without a solution independent of all experimentation can always be relied upon; the issue of the immateriality of the soul, for example, is one such question.

The above issues, meanwhile, clearly show that the claim made in the last chapter to the effect that philosophical propositions are a priori is only applicable to 'philosophy before science', which includes the main philosophical questions, rather than to 'philosophy after science'. All the questions of 'philosophy after science' are of the posterior type, for the validity or invalidity of their presupposed scientific propositions can be determined only through experimentation. Thus, demonstrating either the truth or the falsity of these questions ultimately depends on experimentations as well.

The Impact of Philosophy on Science

In the last section we explained the different types of scientific propositions relied on in philosophy in order to investigate the way science influences philosophy. In this section, however, we shall explain the different types of philosophical presuppositions relied upon by science so as to show the manner in which philosophy influences it. For that purpose, we must first study the way in which the sciences are dependent on philosophy, for every need necessitates presupposition of particular philosophical law or laws.

The Dependence of Science on Philosophy in Proving a Subject

It was said in chapter one that every real field of learning, including every science, has a subject that in effect acts as an axis that gathers the different propositions of that discipline around itself and gives them the form peculiar to that particular field in such a way that all the propositions of that knowledge in one way or another deal with that particular subject; that is, they delineate it types and divisions, the relationship between these divisions and the laws governing each of them. It goes without saying that the subject of every field of learning must exist outside the mind; otherwise its study will be a kind of fancy rather than a scientific activity. Therefore, in every field of learning, before we begin our studies, we must make sure that its subject has objective existence.

If the existence of the subject of a certain field of learning is evident, it will not need proof; however, if it is not evident, we have to prove it or may even have to discuss its nature. Now, where can we deal this issue? Is it in the particular field of learning itself? No! For, every kind of knowledge begins with the assumption that its subject exists, and no scientist qua scientist needs to prove the existence of the subject of his study. Keeping in mind what was said in the first chapter, proving the existence of things and determining their nature are activities that belong only to the domain of philosophy and not to that of any other intellectual discipline.

Therefore, those fields of study the existence or nature of whose subject is not evident are dependent on philosophy.

Thus, the existence of the subject of these fields of learning and the nature of this existence is a presupposition taken from philosophy.

Dependence of Science on Philosophy in Ensuring the Universal and Necessity of its Laws

By law here we mean the genetic (takwini) laws employed in different fields of learning, including science, which describe phenomena and existents, rather than the conventional laws which are promulgated by the legislative bodies of different countries. The salient characteristic of every genetic law is its universality and necessity, in other words, every law is universal and necessary.

The universality of a law means that, firstly, its subject does not refer to a particular thing, or, technically speaking, it does not refer to an individual; that is, it is a universal rather than a particular concept. Accordingly, the terms used in a proposition indicating a certain law should be common names, such as man, electron, or metal rather than proper name such as Avicenna, Iran, or Rakhsh.

Therefore, the proposition 'Avicenna is a scientist' does not express a law, for the term, 'Avicenna' which is the subject of this proposition is a proper name and refers to only a particular person.

Secondly, the judgment and the predicate expressed in a law which admits no exceptions include all the extensions of the subject the law applies to, be they extensions that existed in the past, exist now, will exist in the future, or any other hypothetical extensions. Accordingly, a proposition indicating a law should be begin with a universal quantifier, for instance, a word like 'every' or 'none' or other synonymous words, but not with an existential quantifier, such as 'some' or its synonymies. Therefore, the proposition 'Some metals are expanded by heat' does not express a law, but the proposition 'every number is either even or odd' expresses a law. In logical terms, universal proposition can express a law rather than particular (existential) or personal propositions. In short, every law expresses a particular judgment that includes all the things the subject of the law is applicable to.

The necessity of a law means that once the condition is stated in the law are present that law will never be violated; that is. With the stated condition the subject of the law cannot exist without the judgment mentioned in the law.

Therefore, the fact that all the previous, present and future extensions of the subject possess this quality will not be enough for the law; rather, besides these, once the conditions are present, the law must not be violated. If we claim that the proposition 'the freezing point of all types of pure water under one atmospheric pressure if 0°C' is a law, this means that, firstly, this rule include all kinds of water in the past, present and future, and even covers everything that is supposed to be water. Secondly once the stated conditions are present, it will be impossible for any type of water not behave in that manner. The result is that in general, the universality and necessity of scientific laws indicate that in equal conditions similar natural elements

would invariably behave in a similar fashion. In short, nature always behaves in a fixed and unchanging manner.

In order to understand the importance of the universality and necessity of scientific laws it will suffice to note that all the progress man has made in industry and technology and the great civilisation he possesses today is due to the discovery of these laws, and their whole importance is due to their predictability. With their help, especially when they put into mathematical terms, we can perceive the past, the present and the future behaviours, conditions and states of phenomena, such as calculating the age of the earth, perceiving the invisible symptoms of a disease on the basis of its visible symptoms, predicting the exact time of eclipses, predicting the exact time and place of landing of a missile fired from a certain station, and so on. Finally, the power of prediction of scientific laws is due to a number of factors that include their universality and necessity. For if a scientific law were not universal or necessary, even if we knew and provided all the necessary conditions for the application of that law, there would be the probability that the law would not be valid, and, therefore, in cases that are supposedly similar to those that have been already experienced, the law would not be applicable. There would also be the probability that even in cases where the law has been applicable up to now, though nothing has changed, the law would not be applicable any longer, and it is clear that with the existence of such probabilities prediction would be impossible. Therefore, because of the possibility of prediction according to scientific laws, we cannot deny the universality and necessity of these laws.

Now, on the one hand we know that the instruments of science are sense and experience and, on the other, according to what was said in the second chapter regarding the domain of those things that are understood directly or indirectly by the senses, the universality of a scientific law (continuous invariability in the behaviour of nature) and its necessity (the impossibility of alteration in the behaviour of nature) are not tangible objects, and according to all philosophers, including the philosophers of science, they cannot be experienced. Therefore, n science can possibly provide the required universality or necessity for its laws. It is here that the sciences once again show their dependence on philosophical presuppositions. For this purpose, they take as their presupposition the three philosophical laws, namely 'the principle of casualty', 'the homogeneity of cause and effect' and 'casual necessity'.

Relying on these presuppositions, the scientist forms the scientific law in his mind in a process compromised of four stages. In the first he realizes that in general, on the basis of the principle of casualty, some natural phenomena have a causal relationship with others. In the second stage, he turns to nature and in the special samples selected for the experiment, by employing empirical methods, he discovers in detail which phenomenon is the exact cause of another phenomenon. For example, he discovers that in a few samples of tested metals, heat has been the cause of expansion. In the third stage, on the basis of the law of 'the homogeneity of cause and effect', he declares that the discovered relationship is universal (invariable and permanent); that is, in similar samples the same relationship always exist.

Therefore, when heated, all other untested metals must also expand. Finally, in the fourth stage, on the basis of the law of 'casual necessity', he declares that the stated relationship is necessary and once these conditions are present it cannot be violated.

Of the above four stages, the second stage is not certain; that is, in the tested samples the scientist cannot be certain he has discovered the real causal relationship. For example, he cannot be certain that in those samples heating has been the only real cause of the expansion of the metal. In this stage, ancient scientists used to employ the philosophical presupposition, 'something accidental cannot be persistent or nearly persistent'. The purport of this law is that two phenomena that always or often happen simultaneously, such as heating and metal expansion, would necessarily have a kind of causal relationship with each other, otherwise it would be impossible for them always o often to occur at the same time. Philosophers of science reject this law, and some famous philosophers, such as Avicenna, have also treated it with great caution. In other words, they have been hesitant to employ it. In any case, rejection of this law or hesitation over its use indicates that in the mentioned example it is possible that the cause of the expansion of the metal could be something other than heating. In that case, in the mentioned samples the coincidence of expansion and heating could be only accidental, and in some other metals that have not been tested such a thing may not happen, and, consequently, at the time of heating the metal may not expand. Therefore, we cannot be certain that in the second stage we have discovered a real causal relationship. Accordingly, though the other three stages are certain, the scientific law, which is the result of all four stages, is not certain and there will always be the possibility that certain new phenomena may be observed or new experiments may be carried out where the scientific law in question may not be applicable. In other words, a posterior proposition is falsifiable and could be invalidated, or, as was said in the previous chapter, exceptive. Therefore, this falsifibility and invalidability stem from the negation of the law, 'something accidental cannot be persistent or nearly persistent'.

One must take note of the fact that the falsifibility and invalid ability of the scientific law stems from the negation of the law 'something accidental cannot be persistent or nearly persistent' (in the second stage) and does not negate the law of 'casual necessity' (in the fourth stage).

Therefore, though the scientific law is falsifiable and can be invalidated, it is necessary, otherwise it would necessitate that the scientific law which applied to a certain number of samples in certain conditions in the first test may not apply to the same samples in exactly the same conditions in another test, and this would be unacceptable, even by the scientists.

This is proved by the way scientist deal with invalidated scientific laws. Modern science admits the invalidity of the laws of Newtonian physics, nevertheless it still employs them in a certain domain of nature where physical bodies have normal dimensions and velocity - in technology and industry, for example - and on its basis it makes predictions and is certain of the accuracy of these predictions. What is the cause of this certainty? It is their belief in the law of 'causal necessity'. The scientist unconsciously

believes that though these laws are invalid and only by approximation - apply to the domain in question, rather than exactly and without approximation, nevertheless these laws, with this level of approximation, are necessarily always true in this domain.

We cannot say that sometimes they are true in this domain and sometimes they are not, or sometimes they are true with a certain level of approximation and at other times with another level, etc. This is nothing other than the application of the law of 'causal necessity'.

We can conclude, then, that the principle of causality and the law of 'the homogeneity of cause and effect' and the law of 'causal necessity' are some of the necessary philosophical presuppositions of all sciences.

Dependence of Science on Other Philosophical Presuppositions

In addition to what has already been said, sciences are dependent on philosophy in other ways too and this indicates that sciences require other philosophical presuppositions. For example, each science studies its subject by describing it.

In fact, the goal of science is to understand the laws related to its subject. Therefore, before starting any investigation, every science must assume that it is possible to know natural phenomena - including the phenomena considered as the subject of that science - otherwise its entire would be no more than an exercise in futility. Now, the question arises as to what kind of knowledge determines the validity or invalidity of this assumption or its limits and boundaries. The answer is that field of learning that examines the question of knowledge, namely the field of "epistemology" in philosophy. Therefore, the principle of 'the know ability of the world for man' is one of the philosophical presuppositions of all sciences. Moreover, all sciences employ the 'principle of noncontradiction' and we know that philosophy is the proper place for careful investigation of contradiction and for defining its conditions. Thus, this principles is one the philosophical presuppositions of all sciences. Moreover, all sciences, more or less, employ the principles of impossibility of contrary and the impossibility of circle and infinite regress, while proving these principles and solving problems with them belong to the domain of philosophy. Therefore, these three principles are also among the philosophical presupposition of sciences.

Besides the above mentioned philosophical principles, which are needed by all sciences and are among common philosophical presuppositions, there are other principles in philosophy which are needed only by certain sciences; in other words, they are philosophical presuppositions particular to those sciences, such as the principle of simplicity, the question of the existence or non-existence of natural movements', the question of 'the existence or non-existence of absolute time', the question of 'the existence or non-existence of absolute space', which are used in nonhuman empirical sciences, and the question of 'the existence or nonexistence of the whole as something independent of the parts', the question of 'determinism versus free will', which are used in human empirical sciences.

However, here we do not intend to list all the philosophical presuppositions of sciences, and no doubt further investigation will reveal more presuppositions.

The Priority of Philosophy over Science

So far we have seen that philosophy is assisted by scientific presupposition and sciences are assisted by philosophical presuppositions, with the difference that scientific presuppositions re used only in some philosophical questions (philosophy after science) and there is no scientific presupposition on which all philosophical questions (philosophy before science) do not need the sciences all together.

However, all scientific questions use general philosophical presuppositions, such as 'the principle of noncontradiction', the principle of 'the know ability of nature', 'the principle of causality', the law of 'the homogeneity of cause and effect', the law of 'causal necessity', and so on, especially the first and the second principles. Consequently, all scientific questions without exception need philosophy. Thus, we can have philosophy without science but no science without philosophy. In other words, philosophy is not dependent on science, but science is dependent on philosophy.

Couched in philosophical terms, philosophy has priority over science. Moreover, the above distinction necessitates another difference related to the way presuppositions are used. In explanation, we can say that the general presuppositions on which all the questions of a science or a number of sciences are dependent are not used as "means", but the presuppositions on which one or some questions of a particular field of learning depends on often are. When we speak of a presupposition being used as "means" we mean that it is used as a premise in demonstrating a statement or statements in a particular field of learning. This kind of presupposition is productive, because from its combination with other premise of demonstration a kind of deduction is formed, which in turn produces a conclusion, such as the principles of Euclidian geometry, which are used as the premise of the demonstrating for proving the propositions of that geometry. When we speak of a presupposition that is not used as a "means", on the other hand, we mean that presupposition that is not used as a premise of a demonstration in any arguments; nevertheless, the truth if that presupposition must be accepted in any field of knowledge that includes it. As examples we can mention the rules of interference in logic, the 'principle noncontradiction', the principle of 'the know ability of the world', the principle of causality, the law of 'the homogeneity of cause and effect', the law of 'causal necessity', 'the principle of simplicity', assuming the existence of the subject of a field of learning where the existence is not evident, and so on. The philosophical presuppositions of the sciences are often "non-means", while the scientific presuppositions of philosophy are often "means". Closer to Islam. It is because of his endeavours that today the philosophy of Avicenna is considered the most nature complete and important expression of Peripatetic Philosophy in the Islamic world. Thomas Aquinas the great medieval European philosopher is one of his book admits this with great respect and modesty.

At the end of his life Avicenna directed his attention to a philosophy he called 'the philosophy of the select' and common people. What this philosophy of the select is, is still most entirely clear for as it has already

been motioned his Al-Hikmah al- Mashriqiyyah (Oriental Philosophy) that discussed this philosophy is not extant.

Nevertheless some philosopher in their study of the esoteric philosophy of Avicenna, have come to the conclusion that the philosophy of the select or the Oriental Philosophy is not purely demonstrative but rather a kind of philosophy whose ultimate end is resting man from the imperfect and limited either world and guiding him to the higher spiritual world and the pure light, For further explanation see.

- 1- Ibn Qifti Tarkh al-Hukama edited by bahin Daraie Tehram Tehran University press 137 pp 555 570
- 2- Hanry Corbin History of Islamic Philosophy Henry Thomas The great Philosophy M.Notahharii Collected works nol 13 pp 80-86
 - 3- See Avicenna Al-shifa section of Al-

Mantiq (Logic) and Al-Burhan (Argument) Qon the Library of Ayat Allah Al-Masrashi al-Najafi 1404 AH 4 vols 3 pp 96 - 97

- 4- for further explanation se hastishenasi (Ontology) by the present author fifty edition Chapter 4 the Second Problem pp 58-64
- 5- The principle if the Knowability of the world and the principle of noncontradiction are both self-evident and therefore do not belong to the question of any particular discipline, however because they the law and precepts of the absolute existent and therefore, naturally, defining their exact purports, investigating the condition of their validity and refuting the objections made to them mainly belong to the domain of philosophy, they are counted among the question of philosophy. Perhaps in such cases using the term 'question' denotes a 'statement' that has to be proved.

Therefore it would be better to call such principle 'philosophical statement "rather than" philosophical question "

6- According to the principle of simplicity, nature performs its task in the simplest way possible. This principle is employed in cases where in order to explain a certain nature phenomenon there are two or more acceptable theories. In such cases according to the principle of simplicity the theory that provides the simpler explanation should be preferred. The preference which scientists given to non- Euclidian geometry concerning is very vast space is based on this principle.

Chapter Four: Is Learning Philosophy Necessary?

In this chapter we shall try to discover whether learning philosophy is necessary and if it is for whom? In order to answer this question we have to enumerate all the things this field of study can accomplish and briefly explain it uses. We have to study these one by one and show whether any of these function makes learning philosophy necessary and if so will it be necessary for all people or only for certain group and in the latter case which groups are these? but before listing and discussing the use of philosophy we have to clarify what is intended by 'necessity ' and what is the standard o criterion for being necessary .Therefore , we begin our discussion by defining 'necessity ' and its criterion and then list the used of philosophy and discuss their necessity of philosophy and then explain its uses.

Necessity and its Criterion

Clearly enough what intended my 'necessity ' here is not religion necessity or legal obligation in contract to prohibition for the study of such obligation belongs to the domain of jurisprudence rather than philosophy. It is intellectual or rational necessity. For example, if the intellects determine that acquiring a certain benefit is necessary and philosophy is used to acquire such a benefit, it naturally declares that learning philosophy necessary.

Now, let us turn our attentions to this benefit and ask why it is necessary from a rational point of view, to acquire such a benefit? In other word, what is the criterion by which reason declares a certain benefit as necessary and another as unnecessary? It is certain that according to the judgement of a sound mind all those things are necessary whose absence would 1. Harm man's individual or social life, and 2 expose man to eternal punishment in the hereafter.

There is problem with the first criterion but regarding the second there is a problem in that many people do not believe in a divinely revealed faith and therefore have no reason to believe in eternal life and its rewards or punishment s. On the other hand, so far in this book we have not proved the existence of these things so that intellectually they have to accept them.

Therefore, this criterion cannot be accepted under these conditions.

However, this objection is not acceptable since acceptance if this criterion does not require certitude concerning the existence of eternal life and the mere fact that it may exist would suffice, and no doubt logically speaking such possibility exist.

The possibility mentioned above exist since, firstly no irrefutable proof or convincing reason denying God existence, the next world or other spiritual matter has been set forth. Therefore, we cannot be certain of the non-existence of these things and the negation of the certainty of their non-existence would lead to the possibility of their existence. Secondly this is not a week possibility, for history shows that even those who denied the prophet admitted that in their behaviour, intelligence, and understanding of the truth they were far ahead of their time. Thus those who have no faith in the divinely revealed religions and the prophets still cannot deny the truthfulness and intelligence of this prophet s. Moreover the holy scripture

and the history of religion show that all prophet, from Adam, peace be upon him, to Mohammed, the seal of the prophet, peace be upon him and his household, without exception have informed the people of the existence of God and his oneness, the existence of the next world, the different degrees of closeness to, or remoteness from God and paradise and hell. Moreover many mystics from different nation and sects throughout history have borne witness to some of these things. To a sound intellect his great volume of evidence greatly increases the probability that such things do indeed exist.

The reason tat for the acceptance of that criterion the mere probability of the existence of these things is enough is that firstly from a logical perspective not only preventing a definite harm is necessary but so is a avoiding a probable one. That is if someone thinks that there is a chance he be exposed to certain harm and avoiding that harm would not entail similar or greater harm, reason dictates that he should aroid that harm.

According to the Quranic verse, Prophetic tradition and the teaching of other holy scripture, the intentional denial of the spiritual truths mentioned above and disbelieving them will incur internal punishment the mildest of which is incomparably this world. The same dire consequence is also in store for those who neglect issue concerning the hereafter.

Secondly from the rational perspective the mathematical expectation (the amount of probability multiplied by the value of the probable) of dealing with spiritual and otherworld thing and also the mathematical expectation of reflecting over and investigating these matters are infinite , while the mathematical expectation of the greatest worldly pleasure and joys is limited and as any sound reason would decree, once in doubt , we should choose the thing whose mathematical expectation is greater.

We can conclude, then that the second criterion also unproblematic and on its basis we can infer the rational necessity of thing. On the ground if these two criteria we can have an assessment of the uses of philosophy and shoe that it is necessary for the following groups to learn it.

- 1- Those who fear that natural sensuality may lead them into philosophical sensationalism.
 - 2- Those who have doubt abut their worldview.
 - 3- Those whose worldview is exposed to doubts.
 - 4- Those who are obliged to defend their religion rationally.
- 5- Those who feel the necessity to search for a deeper understanding of divine knowledge.
 - 6- Those scholars who are intellectually qualified to learn philosophy.

We should not forget, however, that in cases where learning philosophy is declared to be unnecessary this should not be taken to mean that it is undesirable. In general there is no doubt that learning philosophy is desirable.

The uses of Philosophy and their evolution

1- Satisfying the Sense of Curiosity

Philosophy, like any other field of scholarship satisfies mans curiosity concerning question related o its subject matter. Clearly enough, if we overlook its other characteristics and consider only this single quality,

learning philosophy would not be necessary for, although ignoring the sense of curiosity altogether by completely repressing it is essentially impossible, satisfying it cannot be said to make the study of philosophy a necessity. Both in the past or at present there have been many people who do not study any field of scholarship. Including philosophy and so have ignored their instinctive curiosity, nevertheless, they have enjoyed relatively comfortable lives and who have attained spiritual stations.

2- Removing Double Ignorance

All forms of learning, including philosophy, put an end to man double ignorance concerning issues related to their subject. For example, many people wrongly believe in chance and accident, or mistakenly believe that spirit is material, and by philosophical demonstration we can make such people aware of their mistakes. Still however, if we overlook other characteristics of philosophy and evaluate philosophy would not be necessary. For in general man's ignorance of certain things neither disrupts his life in this world nor ruin it in the hereafter. It is true that it would be right to say that doubt ignorance about issues discussed in philosophy can be harmful to his life in this world and the another issue altogether and will be discussed in due course. Therefore the mere removal of double ignorance does not make learning philosophy necessary.

3- The Indispensable Foundation of Life.

What is meant by the above title is that life without philosophical statement would be impossible. In order to understand the turn of this claim we may consider one simple routine occurrence. Suppose that you have returned from your friend's house but you suddenly remember that you have left your ring on his dinner table. You call him, describe the ring to him and ask him if he has found it. After looking for it, he tells you, "there is no ring on the table, but there is a ring under the table which is yours." The analysis of this simple occurrence shows that it cannot be justified without presupposing a number of philosophical statements.

For example, let us consider the statement; we have to presuppose the concepts of existence, nonexistence, object or thing, essence or substance (by which is meant the body of the table or the ring), space and time. All these concepts are intellectual rather than tangible. Moreover, to make this statement true, we have to assume the truth of the following philosophical statement:

1- 'A thing that is seen in a certain place must be there'.

Without presupposing this statement we cannot accept that there is a ring under the table.

- 2- 'A visible thing which is not seen in a certain place is not there.' Without presupposing this statement we cannot accept that there is no ring on the table.
- 3- 'Behind these visible appearances, such as colour, shape and size, there is a substance or an essence, in short a body, such as a ring or a table, etc.' Without presupposing this statement we cannot speak of the ring or the table.

- 4- 'The spatial position of a particular object is an accidental issue and changing it would not result in turning that object into something else.' Without presupposing this statement we cannot be sure the ring under the table is the same that was on the table.
- 5- 'The temporal position of an object is an accidental issue and changing it would not cause the thing in question to turn into something else.' Without presupposing this statement we cannot be sure whether the present ring is the same as the one that existed before.
- 6- 'The agreement of two contradictories or their simultaneous elimination is impossible,' which, applied both true and false, or neither true nor false. It must necessary be either true or false. Without presupposing this statement we can argue that your formed statement is both true and false or it is neither true nor false.
- 7- Every body occupies a space and space is not an illusory or imaginary things. Although this statement has nothing to do for the ring here and there is based on ones belief in the existence of space.

Further reflection will perhaps rival more statement and presupposition. If we look closely into our and other daily affair, we see that we use much other philosophical statement, such ad causal necessity the law of causal homogeneity, the law of the simultaneity of cause and affect the impossibility of regress and so on. These philosophical statements exist in all human minds people believe in them and constantly use them, though perhaps not consciously. We many appreciate the function of these statement in our every life if we imagine a situation in which they were complete erased from the people minds for a shirt time or everyone seriously believed them to be false we would seaside perceive, then, that in such a situation life would degenerate into utter choa.

Does the benefit just allude to make the study of philosophy necessary? No for all people gradually perceive these statements and unconsciously use them without any need to learn philosophy. Why these statement are also called common sense conviction. Furthermore, no doubt they are not clearly or precisely understood in their common sense usage. In philosophy they become more exact, their meaning are clarified their limit and boundaries are defined and objective to be answered. In short their ambiguity is removed <Still, we do not need this clarification to manage our daily affair s and can content ourselves with their common interpretation.

Defining the Border between Sense and Reason

In order to delineate the border between sense and reason must return to the hypothetical situation mentioned above.

Prior to our analysis of that situation, we could not recognise that intellectual presupposition employed in it, believed it to be a completely sensible occurrence and thought that in similar situation, namely in simple routine events, the intellect does not play an important role.

However, after the analysis we begin to realise our mistake. Now what kind of analysis is that? Certainly it is a philosophical analyse a simple ordinary occurrence to determine precisely the contribution of intellect in that occurrence and show that even in the simplest and most sensible issues we cannot overlook the contribution of intellect and say that our only mean

id knowledge are the sense or only those statement are valid that are confirmed by sense and experience. So, one of the uses of philosophy is that it teaches man that the role of the sense in his life is much more limited and that of the intellect much greater, than what he be lives. In other words, learning philosophy liberates man from that natural sensationalism which because of our natural life affect.

However, does this benefit make learning philosophy fro all or most people, since natural sensationalism does not create any problem for our everyday life as most people are affected by it and still face no difficulties in their lives. It is also not incompatible with admitting intellectual accepts propositions or demonstrations so that it should end with blasphemy and denial of life in the hereafter, and so come under the second criterion. He who is affected by v this sensationalism also admits the self-evident intellectual concepts and proposition and accepts and employs their demonstrations that are founded on them and can prove the existence of God and the next world by them. His only mistake is that he thinks that many of these concepts and propositions are sensible and empirical rather than intellectual. it is true that those who fear that natural sensationalism nay lead them to philosophical sensationalism, according to which all intellectual concepts and study of God or the hereafter is possible, may find it necessary to learn philosophy to understand the undeniable contribution of intellect indifferent field of learning.

1- A Holistic Outlook

In the first chapter it was says that the subject of philosophy unlike the subjects of other branched of knowledge is general and logistic and therefore in contrast to other field of scholarship philosophical investigation is not limited to a particular aspect of the world. This difference makes philosophy unlike other kinds of knowledge, holistic and comprehensive in its outlook that is it give us an outline and picture of the whole world of being?

Does this characteristic make learning philosophy necessary? No for acquiring such a picture to the required extent can also be obtained through the conviction if a intellect and there is no need for learning philosophy. No doubt the picture provide by philosophy is much more exact and complete than the one set more desirable, but such an exact picture according to the two criteria set forth earlier is unnecessary.

2- A Profound Outlook

Most of the people often look superficially at the phenomena they encounter in this world. They see many things that are apparently diverse and different and see no connection or similarity between them, such as the fall of different bodies on earth the rotation of the moon round the earth the flow and ebb of the sea, the arrow -like route of the of canon shell, and the change of season . However, scholars look at these things more profoundly. On the basis of certain philosophy and non-philosophical presupposition s and by experiment and reflection, they look into phenomena are indeed similar to each other for it is only one law (that appears in different forms) such as general gravel which in one place appears in the form of the fall of

bodies to earth and in another place in the form of the rotation of the moon round the earth and so on .Second on the basis of this one dominant law all apparently diverse things and phenomena are linked with each other in a causal relationship. In short scientists do not content themselves with the appearance and the surface of things and phenomena, but by probing them deeply look at roots and see a united and coherent world. But how far does this probing and looking in depth continue? It continues until they come to presuppositions. As soon as they reach this point they stop and scientific investigation comes to an end. However, philosophy start precisely at this point and philosophical investigation begins here. In its analysis confirmation, negation, endorsement, and explanation of philosophical presuppositions of science, philosophy looks even more deeply into things. Therefore in this journey from the surface of phenomena to their depths, and in this profound investigation, philosophy begins where all other branched of learning stop. It deals with the roots on which other discipline depend and by the help of which try to explore the phenomena we encounter in the world, philosophy looks at root of all other field of learning and this is why it is deeper than other discipline. This profound approach is not limited to philosophical discussion about the presupposition of science but rather philosophy discussions and perspective in general are essentially profound and deep.

However does its deep outlook make learning philosophy necessary? The answer is negative for most people, for though the deep philosophical perspective is interesting and desirable its absence will not disturb man life either in this world or in the next. we have all know ,many people who did not have this deep outlook but incurred no great material or spiritual harm because of it , it is true that if a society lacks such deep thinkers altogether it ill face culture decay and deterioration and no doubt this decadence may disturb its social life .

Therefore this characteristic makes it necessary that in every society some learned and qualified people should study philosophy and specialise.

Providing The Presuppositions of the other fields of Study

It was explained in the last chapter that all branches of knowledge posses some general particular philosophical presuppositions without which research in those discipline would be either meaningless is impossible. The principle of non- contradiction, the principle of the possibility of knowledge, the principle of causality, the law of causal necessity, the law of causal homogeneity, the law of the simultaneity of cause and effect, the impossibility of circle and degree, the impossibility of opposition, the principle if simplicity the existence or nonexistence of nature, the existence or nonexistence of nature movement, the existence or nonexistence of absolute space the existence or non-existence of the whole as something independence from the part determinism versus free will. The existence or non - existence of quantity in the external world and many other philosophical laws and proposition are among there presuppositions. Some of these are discussed in philosophy, some other in type of philosophy that is used in genitive constructions, such as the philosophy of the empirical science, the philosophy of mathematic, the philosophy of the social science

and the philosophy of science and skill other problems, in their different aspects are studied in both. We can say, then that it is philosophy that provide many of the presupposition of the other field of study depend, each discipline is dependent on a certain form of philosophy and when that discipline is accepted and finds current and as soon as that philosophy associated with it also become as that philosophy is destroyed that particular discipline will also be undermined. In short it is not the case that every philosophy can permit any intellectual discipline to grow out of it or to be more evident in the humanities and especially in the social science.

Does this characteristic make learning philosophy necessary?

The truth is that if we consider only this characteristic and disregards the impact of these branches of knowledge on man private and social life, still according to our two criteria the answer would be in the negative, for the mere fact that philosophy provides the presupposition of the other field of learning does not make learning ir necessary. It is true, however that if we consider the impact of these intellectual disciplines on man individual and social life it world is a different story and we shall do this in 2.8.

Providing The Fundamental Principle of Systems and Movement

As every intellectual disciple is dependent on true or false philosophical presuppositions or in other words as every field of learning is dependent on a type of philosophy, every social movement and every human system are also dependent on a philosophy. The Nazi Fascist and Marxist movement were dependent on the philosophies of Nazism Fascism and Marxism. Less important movement such as those of the Hippies, the Beatles, the Punks and the Raps are also dependent on their philosophies. In general al big or small movement that have emerged or will emerge have been influenced and will be influenced by a particular philosophy. Every kind of human systems whether ethical, political, legal economic or educational also depends on principle and presuppositions most of which are essentially philosophy.

Thus it is the task of philosophy that provides the principle and presuppositions of systems and movement. In short every true or false social movement or human system is based on a particular philosophy true or false. Social philosophers deal with these philosophies directly. However other social classes also have some understanding of these philosophies and in a general way and directly are affected by them through the circulation of the ideal promoted by this philosopher and because of this influence a particular philosophy becomes current in the society and is widely accepted by the public. Clearly enough a society will accept only those movement and system that are compatible with its accepted philosophy. Accordingly, every with any type of philosophy. Form this we can understand the hidden role of philosophy in man individual and social life As we have already seen, because of this characteristic philosophy plays a hidden role individual and social life of the people so that absence of a true philosophy may lead to confusion in those spheres and even lead to their Nazim Fascim and Marxism imposed on the human society or on a part of it, proves this claim. Hence according to the first criterion, there is no doubt that the existence of a true philosophy is necessary to avoid such damages and this in true make

the study of philosophy necessary. Would it, however be necessary for all people? The answer is no .in fact the existence of a number of learned philosophy would be enough for once their thoughts circulate in the society other will be duly influence.

Therefore because of this characteristic, it is necessary that you should be some learned and well-qualified people to learned become experts in philosophy.

Laying the Foundation of Worldviews

We have all seen or heard about sages whom no worldly joy or bliss could make happily nor any misfortune or defeat downcast and forlorn. In contract, we have seen many people who have been destroyed by small miseries and misfortunes. Where is the root of this difference? it lies in their attitude towards existence, themselves their future their happiness or misfortune the world and its joy and pains. In short it lies i their attitude toward the world and the position of man in it, that is, in their "worldview" it would be no exaggeration if we say that no aspect of man could be more important than his worldview for this affects or rather determines all this action, his life in this world and in the hereafter and all his private and social affairs. Therefore in light of the two criteria already set forth, having a correct worldview is necessary for every one A worldview or as it has been described above, the individual attitude toward the world and man positions in it contain three basic questions:

- 1- Is the cause of the world phenomena, including man only material action and reaction and no non- material power has an role in their creation or even the creation of matter its If? And essentially is existence equal to matter or is it rather that the material world is only a part of the world of existence, depending for it realization on another being that lies beyond it? in other words, does the world need a god and if it does, does it need gods, or is it that the existence of gods is impossible and the one God satisfies all that needs of being including man?
- 2- Is man life confirmed to his life in this world, or does he also have another life after death? And if he has another life is it limited or eternal? In my case, what is its relationship with his life in this world? This question entails another question Besides his corporeal body does man have something else called 'spirit'
- 3- What is the surest way to find the right plan for one private and social life? Besides the conventional plans available to people, which in practice result in contradictory conclusions; is there any other plan whose validity is certain? The importance of the last question becomes more apparent when the answer to the second question is affirmative; that is, we come to the conclusion that man has an eternal life after death and he has to prepare, with his voluntary work in this mortal life, for felicity in the one to come. In that case, finding a sure means that shows the relationship between the two lives and an exact plan that can ensure eternal happiness becomes more urgent, and to the extent that life after death is valued more, finding the way to ensure happiness in it becomes more important. The first question is discussed under the title of "Monotheism", the second under 'Resurrection'

and third under 'Prophet Hood', which collectively account for the basic convictions is also necessary.

Does this make learning philosophy necessary for all people? Still the answer is negative. For most people, whose minds are not used to critiquing and raising questions can, on the basis of common sense convictions, find the correct answers to the philosophical questions related to worldview. What makes people err in their attempt to find worldview is the fact that they are prey to opposing inclinations rather than lack of proof or ignorance of philosophy? Hence, the philosophical nature of the questions discussed in worldview does not oblige people to learn philosophy. It is true, however that his characteristic makes learning philosophy necessary for the following two groups:

- 4- Those who have doubts about their worldview and are not certain whether it is right or wrong. Their mind is active and meticulous, and they cannot be satisfied with the simple proofs with which common people are contented. No doubt such people need the help of philosophy.
- 5- Those who have the right worldview, the monotheistic worldview, and have no doubt in it for the time being, but

Ouestions

- 1- How many factors does the necessity criterion include? Name them.
- 2- What are the uses of philosophy?
- 3- Which groups have to learn philosophy?
- 4- What is the difference between philosophical propositions and their corresponding common sense convictions?
- 5- By giving an example, show that philosophy looks at phenomena more deeply than science and science looks at the phenomena more deeply than convention!
 - 6- Name the essential questions of worldview and explain them briefly.
- 7- It is possible that in Muslim countries, as long as the people believe in Islam, economic systems that abolish private ownership to be established and stabilized? Why? (In your answer you may also consider the philosophical aspect of the question).
- 8- In the holy verse "When you threw, it was not you that threw, but God who threw" (Anfal "8":17) which refers to a pebble or an arrow thrown by the prophet, peace be upon him and his household, two issues have been admitted simultaneously:
- 1- Throwing is the Prophet's action, peace be upon him and his household (because of the expression "when you threw");
 - 2- Throwing is God's action (because of the expression "but God threw").

Explain on the solution of what philosophical question deep understanding of the compatibility of the two depend?

- 3- Explain how deep understanding of the verse "And God created you and what you make" (Saffat "37":96) depend on solving the philosophical problem on solving the philosophical problem of how one action may have two agents.
- 4- On understanding what philosophical issue does deep understanding of the holy verse "But you will not unless God wills" (Insan "76":30) depend?

Chapter Five: Necessity, Impossibility, and Possibility

In this chapter terms such as 'necessity', 'impossibility', 'necessity by essence', 'impossibility by essence', 'possibility by essence', 'necessity by others', and 'impossibility by others' are introduced.

Therefore, we start our discussion by giving a brief and indefinable concept in philosophy, and then we will try to explain these terms in the light of the two self-evident concepts of existence and non-existence.

Necessity

If we consider such items as 'flower', 'even', 'white', 'sweet', and 'eight', we will see that among these items only 'even' can be related to 'eight', and 'white' to 'flower', and these relationships are reflected in the mind of man in the two statements of 'eight is even' and 'flower is white'. No doubt because 'even', 'sweet' or 'eight' have nothing in common with 'flower', or 'flower', 'white', or 'eight', or finally 'white', 'sweet', and 'even' with each other, there can exist no statement in our mind describing their relationship, such as 'eight is sweet' and so on. In other words, the statement 'eight is an even number' expresses the relationship between the attribute 'even' and the number eight and the statement 'the flower is white' indicates the relationship between the attribute 'white' and the flower.

Now we turn our attention to the two mentioned relationships. It is clear that the attribute 'even' and the number eight, unlike the attribute 'white' and the flower are inseparable related to each other. We cannot imagine any number eight that is not even. However, we can imagine a flower that is not white, or even imagine certain states and conditions where the white flower loses its whiteness and acquires another colour. In philosophical terms it is said that the relationship between 'white' and 'flower' is unnecessary. We can also put the necessity or non-necessity of this relationship in a statement, and say, for example, "Eight is necessarily even," and "Flower is white but unnecessarily." In these two statements, besides showing the relationship, we have identified its kind. In technical terms, words such as 'necessity' or 'non-necessity', which show the kind of relationship, are called 'modes'.

We should know that concept such as necessity and non-necessity, or necessary and unnecessary are evident and certainly need no definition for their presence in the mind, and even such concepts cannot be defined. These concepts are gradually and automatically are formed in the human mind. Therefore, we do not intend here to define these concepts, and have only tried to show to which concepts of the mind the philosophers refer by the terms 'necessity' and 'non-necessity'.

Necessity and impossibility

The above-mentioned necessity and nonnecessity were not specific to any special attribute. In general, the relationship f each attribute with the thing it describes is either necessary or unnecessary, that is, it is either an attribute inseparable from that thing, or it is a separable attribute.

'Even', for example, is the necessary attribute of number eight, whereas whiteness is the unnecessary attribute of the flower. Now we turn our attention to existence and non-existence.

As the relationship of one thing and its attributes could be either necessary or unnecessary, the existence or nonexistence of one object could be necessary or unnecessary. In other words, the existence of one things can be necessary or unnecessary, and its non-existence can also be necessary or unnecessary. In technical terms, things that have a necessary existence are called 'necessary', and those whose non-existence is necessary are named 'impossible'. The necessity of existence is also named 'necessity', and the necessity of nonexistence is called 'impossibility'. So, when we say something is necessary, we mean its existence is necessary, it must exist, and its non-existence is impossible.

On the other hand, when we say something is impossible, we mean its non-existence is necessary, it should not exist, and its existence would be impossible.

For further clarification of the issue, let's consider one of the phenomena, the storm, for example. Suppose that we know all the factors responsible for the existence of the storm, and decisively judge that the storm must exist. In other words, with this supposition the storm will necessarily exist, and, in philosophical terms, it is necessary. Now, suppose that some or all of these factors do not exist; then, according to the judgment of the intellect, the storm should not exist. In other words, with this supposition the storm would be necessarily non-existent, and in philosophical terms it would be impossible.

Impossibility by essence and impossibility by other

If we suppose that the causes and factors necessary for the existence of a storm do not exist, the storm will never exist. With this supposition, the storm should be impossible. Moreover, we are all familiar with concepts of 'circle' and 'angle', and we know that a circle can never have and angle. Therefore, an angled circle or a circle with an angle would be impossible.

Here we are faced with two impossible things; the storm and an angled circle. Is there any difference between these two impossible things? No doubt there is a difference. Although the storm is now impossible, we can do something to remove this impossibility; in other words, its impossibility is removable and separable, whereas the impossibility of an angled circle can never be lifted.

What is the origin of this difference? What is its cause? Its cause is that the impossibility of an angled circle emanates from its essence. What we mean by the essence of a particular thing is the thing itself, regardless of the existence or nonexistence of other things. Therefore, if we want to consider the essence of a thing, we must consider only that thing, irrespective of the existence or nonexistence of any other thing. The essence of an angled circle, then, would be impossible. Why? Because it is contradictory in its essence, circle being a closed equidistant curve that has no angle. An angled circle would be, then, a curve that both possesses and does not possess an angle. This, obviously enough, is a contradiction, and every contradiction, no doubt, in essence and in itself would be impossible. The storm, however, is not contradictory in itself; its impossibility is not a part of its essence so that it should be inseparable from it and make its existence automatically

impossible; rather, its impossibility is caused by external factors, that is, things outside it have caused its impossibility.

There are certain obstacles, for example, preventing its existence, or there are certain factors that are necessary for its existence and have not been realized yet.

It is clear that once those barriers are lifted or those necessary causes are made available the storm will no longer be impossible. This is why philosophers argue that the existence of an angled circle would be 'impossible by essence' and its impossibility would be 'an impossibility by essence' or 'essential impossibility', whereas the existence of the storm, whose causes do not exist yet or there are certain obstacles preventing it, is 'impossible by other' and its impossibility is 'impossibility by other'.

From what has already been said it becomes clear that the impossible by essence can never exist, and it is impossible to find any extension for it in the external world. It would not exist simply by changing states and situations, by stipulating new conditions, or by changing particular factors. The impossible by essence is absolutely nonexistent in any state, unlike the impossible by other, which though in the present state and situation and in the present condition cannot exist and can never have an extension, in certain cases by changing the state, situation or condition, and, in short, by changing the factors responsible or its impossibility, it can exist.

Necessity by essence and necessity byother

We are already familiar with the philosophical term 'essence'. The essence of a particular thing is the thing itself regardless of other things; therefore, our conception of the essences of a thing would be equal to our conception of the thing without conceiving or stipulation the existence or non - existence of any other things. Considering the meaning of essence and the explanation given on the impossible by essence and the impossible by other, we can easily understand at the meaning of the necessary by essence and the necessary by other.

If there essence of a thing is necessary that is if exist necessary without the mediation of any other the influence of any other factor, dependence on any cause or condition or in short if it exists necessary by itself and in more simple term, if its non- existence is self-contradictory , such a thing would be necessary by essence . it is evident that if the essence of a thing is not necessary , but it becomes necessary on stipulating certain causes and factors , such as thing would be necessary by other , for in fact , it is made necessary by external causes and factors ; it's necessary is the result of those cause . Therefore necessity by essence is that necessities which results from the thing itself and is dependent no on external factor necessity by other however result from something other than the thing itself.

From what has been said we may after that it impossible to annihilate the necessary by essence. We cannot make it non-existent by simply changing some states situation as or conditional or my producing certain factors the necessary by essence enjoys absolute existence under all circumstances. However though in the present situation , state and condition the necessary by other is necessary and con not be annihilated once the situation , state and condition change or in short as soon as the removal of the cause of it

necessity become possible, it may lose its state of necessary existence and become non-existence.

We many mention many examples of the necessary by other. All the existent we may observe in our surroundings, such as different kinds of element, plants animal and men are necessary by other. The tree that we see is the effect is a claim of cause, such as water, air, certain, degree of temperature and many other factors that may not be easily enumerated. If this chain of cause stays as it is and none of the cause change, this tree will necessary continue existing, and it will never become non-existence. To destroy it, certain changes have to take place in this chain. In that case, the tree would not be necessary and is would become nonexistent.

This means that it the chain of these causes that makes the tree necessary and its non - existence impossible. Accordingly, by changing this claim its necessary might be lifted and it would become non-existent. The necessary by essence is limited to the existence of God. Philosophers have proved that it is only God who is necessary by essence.

Possibility by essence

So far we have understood that the impossible by essence is the thing which when conceived without conceiving the existence or non-existence of any other thing with itwe understand that is existence is self - contradictory, and therefore impossible In itself rather than because of any other factor. On the other hand, the necessary by essence is that which is necessary by itself - contradictory and is impossible and therefore its existence is caused by essence, that is it essence is necessary neither in its existence nor non-existence and neither its existence nor selfcontradictory such a thing would be possible by essence Possibility then means that neither existence nor nonexistence is necessary.

Therefore in order to understand whether a thing is possible by essences or not we have to conceive only that thing without considering the existence or non - existence of other things and examine it in regard to existence and non-existence and consider it position. If we find that it not contradictory i its existence that is tots existence is not impossible and also it is not contradictory in its non-existence, that is it non-existence is not impossible it will be possible by essence.

We can mention many examples of the possible by essence. All the things we find in our surroundings, including ourselves are possible by essence. However let us take the aforementioned storm as an example. you may be asked to consider only the existence of it cause or factor, or, in more philosophical; term to conceive only the essence of the storm, say if the thing you have considered can ever find an extension band whether its existence is self - contradictory. Your answer will be negative, and your reason will be that in the past there have been many storms. You might also be asked whether the non-existence if the thing you have considered is impossible, and if is non- existence will be If contradictory.

Once again your answers will be negative, for usually she weather is claim and there is no storm. Therefore, the storm is essentially neither necessary nor impossible or in other words it possible by essence.

Compatibly of possibility by essence with necessity or impossibility by other

There is no doubt that possibility by essence is incompatible with necessary or impossibility by essence. In other words, the possible by essence can never become necessary or impossible by essence, for the possible by essence is that which in itself is necessary neither in its existence nor in its non- existence, whereas the necessary by essence or the impossible by essence is that which is necessary in its existence or in its non-existence, respectively. Therefore, there would be a contradiction and an impossibility if a thing could be both possible and necessary in its existence, Similarly there would also be a contradiction and an impossibility if a single thing could be both possible and impossible by essence, that is its non = existence be both necessary and unnecessary .therefore the possible by essence cannot be necessary or impossible by essence, that is possibility by essences in incompatible with necessity or impossibility by essence.

Now is possibility by essence also incompatible with necessity or impossibly by other? In other words, will there be any contradiction if the possible by essence could be the necessary or the impossible by other? The answer is no!

from the rational perspective there is no contradiction if a thing whose existence or non- existence is essentially not necessary to become necessary in its existence or non-existence by external factors just as it is not impossible for a thing that is not luminous in itself to become luminous by external factors, like iron for example which is itself is not luminous and becomes luminous through heating. Thus possibility by essence is compatible with necessary and impossibility by other. However this is not all for as we shall demonstrate in chapter eleven by priming the law of 'causal necessary 'everything that is possible by essence is simultaneously necessary or impossible by others.

Turning to the example of the storm mentioned above, this is why once we know that all the causes and factor of the storm are realized we will judge at once that the weather must necessary be stormy, and that is impossible for it to be otherwise. In other words the storm is necessary, by which of course, we mean it is necessary by others for allegedly this necessary is imposed on it by the cause and factors that create it. Now if at the time we proclaim the necessity of the storm we are asked if the same storm, irrespective of the causes of it creation, necessarily exists and is necessary in it, we will definitely reply in the negative at say that in itself it is still only possible.

The meaning of theses two simultaneous judgements made you the intellect is that from the rational point of view the mentioned storm is simultaneously possible by essence and between these two. In the same way, possible by essence is show to be compatible with impossibility other.

Ouestion

- 1- What is the meaning of necessity, impossibility or possibility?
- 2- What is the difference between the necessary by essence and the necessity by other?
- 3- What is the difference between the impossible by essence and the impossible by other?
 - 4- Can the necessary by essence be possible by essence, too? Why?
 - 5- Can the impossible by essence be possible by essence too? Why?
- 6- Which of the following items have necessary relationship with each Earth and the situational movement Equilateral triangle and equal angles Man and existence A man whose factors of creation have all been realized and existence Dinosaurs and non- existence in the present states of nature Edible salt and saltiness.
- 6- Can the possible by essence be necessary by other, too? If so, demonstrate it by giving an example beside the one mentioned in this book.
- 7- Can the possible by essence be impossible my others, to? If yes, demonstrate it by giving an example besides that given in his book.
- 8- Give three example for things that are possible or impossible by essence.
- 8- Which of the following is necessary by essence impossible by essences our possible by essence and which are necessary or impossible my others?

A monster whose head alone is bigger than the earth, Phoenix, you dinosaur and equilateral triangle with three unequal angles, earth the movement of the earth round the sun, the movement of the sun round the earth.

Notes For further explanation

- 1- M. Motahhari, Najmooh Asar (collected works) vol. 10, pp. 77-83
- 2- We will try to prove this claim in the chapter on causal necessity we will show there that the cause and factors that make one thing necessary in its existence or nonexistence are the same cause and factors that make it existent or existent or non-existent. In other words, when the cause of a thing exists that thing will necessarily exist and will be necessary and naturally, it will become existent. When its cause does not exist, it will necessarily be non-existent or impossible and certainly will not exist.
- 3- This is one of the meanings of 'essence' in philosophy, there are other meaning for this term in philosophy ,too, including quiddity, which will be explained later (see Najmooah Asar vol. 10 notes p. 190)
- 4- Perhaps some may object that by definition the necessary b essence is the thing whose essence necessarily exists, that is, it is necessary in its existence without the mediation of anything else; in other words, it is that essence whose nonexistence would amount to a contradiction. Therefore, to realize that a thing is necessary by essence, we have to imagine its essence and compare it with existence and nonexistence; know that is existence is necessary and its nonexistence an absolute impossibility. Now how have philosopher conceived the essence of God? After all, can the essence of God be conceived so that it could be consequently compared with existence or nonexistence? This objection arise from the fact that they believe the way to understand that a thing is necessary by essence is to conceive its essence and then compare this conception with existence and nonexistence, whereas philosopher have not understood the existence of the essential Necessary in that way; rather, they have understood demonstrably that pure existence and the existence our world would be impossible unless that which is necessary by essence should have existed already. Therefore, no philosopher has ever claimed that in conceiving the essence of different things he has come across a certain thing that has necessary existence and whose non-existent is an absolute impossibility. Perhaps this mistaken conception emanates from the fact that concerning many things that are impossible by essence we usually realize their impossibility by essence by simply conceiving them.
- 5- For further explanation of the terms discussed in this chapter, see Majmooah Asar, vol. 5. pp 180 and also pp. 367, 368.
 - 6- Ibib. Vol 6, pp. 535, 536
 - 7- Ibid. Vol. 10, pp. 97 104.
 - 8- See Collected works, vol.10,pp.126

Chapter Six: Ashariyya and Mu'tazila

The M 'tazila -literally 'those who withdraw themselves'- movement were founded by Wasil bin 'Ata' in the second century AH (eighth century AD). Its members were united in their conviction that it was necessary to give a rationally coherent account of Islamic beliefs. In addition to having an atomistic view of the universe, they generally held to five theological principles, of which the two most important were the unity of God and divine justice. The former led them to deny that the attributes of God were distinct entities or that the Quran was eternal, while the latter led them to assert the existence of free will.

Ash 'ariyya-named after its founding thinker, al-Ash 'ari-was the foremost theological school in Sunni Islam. It had its origin in the reaction against the excessive rationalism of the Mu'tazila. Its members insisted the reason must be subordinate to revelation. They accepted the cosmology of the Mu'tazilites but put forward a nuanced rejection of their theological principles.

1. Historical Survey

The Mu'tazila originated in Basra at the beginning of the second century AH (eight century AD). In the following century it became, for a period of some thirty years, the official doctrine of the caliphate in Baghdad. This patronage ceased in AH 238/AD 848 when al-Mutawakkil reversed the edict of al-Ma'mun, which had required officials to publicly profess that the Qur'an was the created word of God. By this time, however, Mu'tazilites were well established in many other centres of Islamic learning, especially in Persia, and had split into two rival factions, the Basran School and the Baghdad School. Although their links with these two cities became increasingly tenuous, both schools flourished until the middle of the fifth century AH (eleventh century AD), and the Basran school only finally disappeared with the Mongol invasions at the beginning of the seventh century AH (thirteenth century AD). After the demise of the Mu'tazila as a distinct movement, Mu'tazilite doctrine - by now regarded as heretical by Sunis - continued to be influential amongst the Shi 'ites in Persia and the Zaydis in the Yemen.

Al-Ash 'ari (d. AH 303/AD 935) was a pupil of Abu 'Ali al-Jubba'i (d. AH 303/AD 915), the head of the Basran School. A few years before his master's death, al-Ash 'ari announced dramatically that he repented of having been a Mu'tazilite and pledged himself to oppose the Mu'tazila.

In taking this step he capitalized on popular discontent with the excessive rationalism of the Mu'tazilites, which had been steadily gaining ground since their loss of official patronage half a century earlier. After his conversion al-Ash ari continued to use the dialectic method in theology but insisted that reason must be subservient to revelation. It is not possible to discuss al-Ash 'ari's successors in detail here, but it should be noted that from the second half of the sixth century AH twelfth century AD) onwards, the movement adopted the language and concepts of the Islamic philosophies whose views they sought to refute. The most significant

thinkers among these later Ash 'arites were al-Ghazali and Fakr al-Din al-Razi.

2. Cosmology

Popular accounts of the teaching of the Mu'tazilites usually concentrate on their distinctive theological doctrines. To the philosopher, however, their cosmology, which was accepted by the Ash'ariyya and other theological schools, is a more appropriate starting pint.

To the Mu'tazila, the universe appears to consist of bodies with different qualities: some are living while others are inanimate, some are mobile while others are stationary, some are hot and some are cold, and so on. Moreover, one and the same body may take on different qualities at different times. For instance, a stone may be mobile when rolling down a hill but stationary when it reaches the bottom, or hot when left in the sun but cold after a long night. Yet there are some qualities which some bodies cannot acquire; for example, stones are invariably inanimate, never ability to combine living. How are the differences between bodies, and between one and the same bodies at different times, to be explained?

The answer given by the Mu'tazilites is that all bodies are composed of identical material substances (jawahir) or atoms (ajza'), on which God bestows various incorporeal accidents (a'rad). This view was first propounded by Dirar ibn Amr (d. c. AH 200/AD 815) and elaborated by Abu al-Hudhayl (d.c.AH 227/AD 841 or later), both of whom were early members of the Basran School. Abu al-Hudhayl held that isolated atoms are invisible mathematical points. The only accidents which they can be given are those which affect their ability to combine with other atoms, such as composition or separation, motion or rest. Conglomerates of an atoms, on the other hand, can be given many other accidents such as colours, tastes, odours, sounds, warmth and coldness, which is why we perceive them as different bodies. Some of these accidents are indispensable, hence the differences between bodies, whereas others can be bestowed or withdrawn, thus explaining the differences between one and the same body at different times.

This account of the world gained rapid acceptance amongst Islamic theologians, although to begin with it was rejected by two Mu'tazilites of the Basran School, al-Nazzam (d.AH 221/Ad 836) and Abu Bakr al-Asamm (d. AH 201/AD 816?). The former, who was Abu al-Hudhayl's nephew, argued that atoms which were mere mathematical points would not be able to combine with one another and that, rather than being composed of atoms, bodies must therefore be infinitely divisible. Abu al-Hudhayl replied that Gods bestowal of the accident of composition on an isolated atom made it three-dimesional and hence capable of combining (see Atomism, ancient). Al-Asamm, on the other hand, objected to the notion of accidents, arguing that since only bodies are visible their qualities cannot have an independent existence. Abu al-Hudhayl retorted that such a view was contrary to divine laws because the legal obligations and penalties for their infringement were not directed at the whole person but at one of his accidents', such as his prostration in prayer or his flagellation for adultery.

3. The Five Principles

According to the Muslim heresiographers, who are our main source of information about the Mu'tazila, members of the movement adhered to five principles, which were clearly enunciated for the first time by Abu al-Hudhayl. These were (1) the unity of God; (2) divine justice; (3) the promise and the threat; (4) the intermediate position; and (5) the commanding of good and forbidding of evil.

The first and second principles are of major importance and will be discussed in detail below. The third principle is really only an adjunct of the second, and is here treated as such. The fourth principle is a relatively unimportant doctrine which probably only figure in the list because it was thought to have been the reason for the Mu'tazila's emergence as a distinct movement; it is said that when Hasan al-Basri was questioned about the position of the Muslim who committed a grave sin, his pupil Wasil bin 'Ata' said that such a person was neither a believer nor an unbeliever, but occupied an intermediate position. Hasan was displeased and remarked, 'He has withdrawn from us (i'tazila 'annal'), at which Wasil withdrew from his circle and began to propagate his own teaching. The historicity of this story has been questioned on the ground that there are several variants: according to one version the person who withdrew was Wasil's successor Qayada. Moreover it is noteworthy that at least one influential member of the Basran school, Abu Bakr al-Asamm, rejected the notion of an intermediate position and argued that the grave sinner remained a believer because of his testimony of faith and his previous good deeds. This was also the view of the Ash'arites.

The fifth principle, which is derived from several passages in the Qur'an (for example, Surah 9: 71), and which the Mu'tazilites understood as an obligation incumbent on all Muslims to intervene in the affairs of state, was rarely put into practice. For the Ash'arites, the commanding of good and forbidding of evil was the prerogative of the head of state, who acted on behalf of the Muslim community.

4. The Unity of God

The first half of the shahada, the Muslim declaration of faith, is the testimony that there is no god besides Allah. Thus the numerical unity of God is axiomatic for all Muslims. Nevertheless, although the Qur'an explicitly asserts that God is one, and equally explicitly rejects polytheism and the Christian doctrine of the Trinity, it speaks of God's 'hands' (Surah 38:75,) 'eyes' (Surah 54: 14) and 'face' (Surah 55:27), and of his seating himself on his throne (surah 20:5), thus apparently implying that he has a body.

Moreover, in describing the radiant faces of believers 'looking towards their Lord' on the Day of resurrection (Surah 75:23), it suggests the possibility of a beatific vision.

However, the Mu'tazilites emphatically rejected such notions, insisting that God is not merely numerically one but also that he is a simple essence. This led them to deny that he has a body or any of the characteristics of bodies such as colour, form, movement and localization in space; hence he

cannot be seen, form, movement and localization in space; hence he cannot be seen, in this world or the next. The Mu'tazila therefore interpreted the Qur'anic anthropomorphisms as metaphors-God's hands' are his blessing God's 'eyes' are his knowledge his 'face' is his essence and his seating himself on his throne is his omnipotence - and argued that, since the Qur'an elsewhere asserts that 'sight cannot reach Him' (Surah 6: 103), the phrase ila rabbiha nazira means 'waiting for their Lord' rather than looking towards him.

Some of the later Ash'arites accepted the Mu'tazilite position on the Quranic anthropomorphisms. In al-Ash'ari's own view, however, they are neither to be dismissed in this way nor understood to imply that God has a body like human beings. They are 'rvealed attributes', whose existence must be affirmed without seeking to understand how (bi-la kayfa).

Furthermore, the possibility of beatific vision depends not on God's embodiment, but on his existence. God can show us everything which exists. Since he exists, he can therefore show us himself. Hence the statement that 'sight cannot reach Him' must apply only to this world, where he impedes our vision.

Much more problematic than the Qur'an's anthropomorphisms are the adjectives which it employs to describe God. He is said, for instance. To be 'living', knowing', powerful' and 'eternal'. If we deny these qualities to God, we must then attribute to him their opposites, which are imperfections. But God is by definition free from imperfections; therefore God must always have had these qualities. But does this mean that he possesses the attributes of 'life', knowledge', 'power', and 'eternity' and that they are distinct from his essence?

The Mu'tazilites reasoned that this was impossible because it would imply plurality in the Godhead. When we speak of God as 'living', knowing', 'powerful' and 'eternal', we are, in their opinion, merely considering him from different points of view. God's 'attributes of essence' (sifat al-dhat), as they are generally called, are a product of the limitations and the plurality of our own intellectual faculties; in reality they are identical with God's essence. Thus, according to al-Ash'ari (Maqalat: 484), Abu al-Hudhayl maintained that 'God is knowing by virtue of a knowledge which is His own essence' and that he is likewise powerful, living and eternal by a power, a life and an eternity which are none other than his own essence. Al-Nazzam expressed this even more forcefully when he said. 'If I say that God knows, I merely confirm the divine essence and deny in it all ignorance.

If I say that God is powerful living and so forth, I am only confirming the divine essence and denying in it all powerlessness, mortality and so forth (Maqalat: 484).

Al-Ash'ari himself rejected this reductionist account of the 'attributes of essence which made them artifacts of human reason, but his arguments for doing so are far from compelling. He alleged that since in the case of human beings knowing implies possessing knowledge as an entity distinct from compelling. He alleged that since in the case of human beings knowing

implies possessing knowledge as an entity distinct from the knower, the situation with God knew by his essence, he would be knowledge.

Finally, al-Ash'ari's assertion that attributes of essence' are neither other than God, nor identical with him is simply a retreat into paradox. However, al-Ash'ari was not alone in wishing neither to affirm the independent existence of these attributes nor to deny in outright.

Al-Jubba'i's son Abu Hashim (d. AH 321/AD 933) attempted to resolve the problem by introducing the idea of 'state' (hal). A state is not something which exists or which does not exist; it is not a thing and it cannot be known in itself, only with an essence. Nevertheless it has an ontological reality.

According to Abu Hashim, there are in God permanent states such as his mode of bring knowing' (kawnuhu 'aliman), 'his mode of being powerful' and so forth, which give rise to distinct qualitative. This compromise was accepted by many of Abu Hashim's fellow Mu'tazilites of the Basran school, but was unanimously rejected by those of Baghdad.

In addition to the attributes of essence, the Qur'an employs a whole series of adjectives such as 'providing' and forgiving', which describe God in relation to his creatures. It is easy to imagine a time when God did not have these attributes. The Mu'tazilites called these attributes of action' (sifat al-fi'l) because they deemed them to come into being when God acts. In their reckoning, God's 'speech' belongs to this category of attributes, for it does not make sense to think of his commandments as existing before the creation of the beings to whom they are addressed. Thus the Qur'an itself, although the Word of God, is temporal and not eternal. It was created initially in the guarded tablet' (Surah 85:22) and subsequently recreated in the hearts of those who memorize it, on the tongues of those who recite it and on the written page.

Although not denying the existence of attributes of action, al-Ash'ari insisted that 'speech' -along with 'hearing' and 'vision'- was an attribute of essence. He argued that if God's word were not eternal, it would have had to have been brought into being.

Furthermore, since it is an attribute, it could not have been brought into being other than in an essence in which it resides. In which case either God brought it into being in himself, or he brought it into being in another. Bur if he had brought it into being in himself, he would be the locus of things which come into being, which is impossible. If, on the contrary, he had brought it into being in another, it is the other, and not God, who would have spoken by the word.

5. Divine Justice and Human Destiny

In addition to championing the unity of God, the Mu'tazilites stressed his justice. They held the good and evil are objective and that the moral values of actions are intrinsic to them and can be discerned by human reason. Hence God's justice, he is thus bound to stand by his promise to reward the righteous with paradise and his threat to punish the wicked with hellfire.

More importantly, the reward and punishment which he metes out must be merited by creatures endowed with free will (see Free will). Thus although the Qur'an says that God guides and leads astray those whom he wills (Surah 14:4) it cannot mean that will happen after the judgment, when

the righteous will be guided to paradise and the wicked will be caused to stray far from it. With regard to our acts in this world, God creates in us the power to perform an act but we are free to choose whether or not to perform it. Many of the Mu'tazilites held that the principle of justice made it requisite for God always to do for people what was to their greatest advantage. Al-Jubba'i went as far as to claim that God is bound to prolong the life of an unbeliever if he knows that the latter will eventually repent. In view of this, al-Ash'ari is alleged to have asked him about the likely fate of three brothers: a believer, an unbeliever and one who died as a child.

Al-Jubba'i answered that the first would be rewarded, second punished and the third neither rewarded nor punished. To the objection that God should have allowed the third to live so that might have gained paradise, al-Jubba'i replied that God knew that had the child lived he would have become an unbeliever. Al-Ash'ari then silenced him by asking why in that case God did not make the second brother die as a child in order to save him from hellfire!

For al-Ash'ari, divine justice is a matter of faith. We know the difference between good and evil solely because of God's revelation, and not by the exercise of our own reason. God makes the rules and whatever he decrees is just, yet God himself is under no obligation: if he wished, he could punish the righteous and admit the wicked to paradise (see Voluntarism).

Moreover, to suppose as the Mu'tazilites did that human beings had free will would be to restrict the sovereign freedom of the creator. On the contrary, God creates in his creature both the power and the choice; then he creates in us the actions which correspond to these. Nevertheless, we are conscious of a difference between some actions, such as the rushing of the blood through our veins which are involuntary, and others, such as standing up or sitting down, which are in accordance with our own will Al-ash'ari argues that by approving of these latter actions, which God created in us, we 'acquire' them and are thus held responsible for them.

See also: Causality and necessity in Islamic thought; Free will; Islam, concept of philosophy in, Islamic theology; Karaism

NEAL ROBINSON Routledge.

Chapter Six: Ibn Sina

Life and Works

Ibn Sina, Avicenna (370/980-429/1037), also known as al-Ra' is ("Master and Head") is among the very few medieval Muslim thinkers to have written an autobiography, which was completed by his student Abu Ubayd al-Juzjani.² This autobiography was later transmitted by a number of biographers, including al-Bayhaqi (d. 565/1170), al-Qifti (d. 646/1248), Ibn Abi Usaybiah (d. 669/1270) and Ibn Khallikan (d.680/1282).

Ibn Sina was born in Afshanah (a small village neighbouring Bukhara, the capital of the Samanid dynasty), where his farther 'Abd Allah, originally from Balkh, met and married Sitarah. They had three sons, 'Ali, al-Husayn (Ibn Sina) and Mahmud. When Ibn Sina was about five years of age, the family moved to Bukhara. There the farther was appointed governor of Kharmayathnah, a village in the suburbs of Bukhara.

The rest of the story of Ibn Sina's life, education and career is well known, and there is no need to recount it here in detail. Suffice it to say that the most striking features of this story, as he and al-Juzjani tell it, are (1) his completing the study of the Qur'an and Islamic literature by the age of ten and the rest of the sciences, including Islamic law, astronomy, medicine, logic and philosophy, by the age of eighteen, and (2) his enormous productivity in spite of the unstable political conditions under which he lived that forced him at times to flee from one territory to another, to move in disguise and even to be imprisoned. His great achievement in the various branches of learning seems to have resulted from a rare memory that enabled him to retain by heart, for example, the Qur'an and Aristotle's Metaphysics; a high intellectual curiosity that helped him consider and solve difficult problems even in his sleep; and an inner determination that generated extraordinary physical and intellectual energy. The number of works he wrote (estimated to be between 100 and 250), the quality of his work and his involvement in medical practice, teaching and politics all reveal an unusual level of competence.

At a very early age, Ibn Sina was introduced to various religious, philosophical and scientific teachings. For example, he was introduced to the Epistles of the Brethren of Purity and Isma'ilism by his father, who was a member of this sect. He was also exposed to the Sunni doctrine, as his figh teacher Ismail al-Zahid, was a Sunni, and to Twelve-

Imam Shi'ism. In addition, he was given some background in logic, geometry and astronomy by his other teacher, al-Natili. He exercised his independence of though very quickly, however. First, he dispensed with reaches, continuing his education on his own; and second, he did not adhere to any of the doctrines to which he was exposed.

Rather, he drew on various sources, selecting only what he considered convincing. Thus, we see in his system traces of Platonism, Aristotelians tendency, is not purely Aristotelian, as it is usually considered. The theory of creation, for example, which is basically Neo-Platonism, and that of prophecy, which is Islamic in essence, they are but two examples of its many non-Aristotelian teachings. Al-Juzjani confirms the uniqueness of this

work and asserts that it is nothing but the product of Ibn Sina's own thought. 6 Ibn Sina himself makes a similar point, stressing his originality in this work, especially, in the Logic and Physics. 7

The most important of Ibn Sina's books are al-Qanun fi'l-tibb ("The Canon of Medicine"), al-shifa' ("Healing"), al-Najah ("Deliverance"), 'Uyun al-hikmah ("Sources of Wisdom"), Danishmama-vi- 'ala'i ("the book of Science Dedicated to 'Ala' al-Dawlah") and al-Isharat wa'l-tanbihat ("Remarks and Admonitions"). Al-Qanun fi'ltibb consists of five parts. Translated into Latin a number of times, it was considered the most important medical source both in the East and in the West for about five centuries (i.e., until the beginning of the eleventh/seventh century) and continues to be the primary source of Islamic medicine wherever it is practiced to this day, such as the Indo-Pakistani subcontinent. The enormous amount of material in al-Shifa', which is the most detailed philosophical work of Ibn Sina, is grouped under four main topics: Logic, Physic into eight, and Mathematics into four. Physics (with the exception of the two parts dealing with animals and plants, which were completed after Mathematics) was the first to be written, followed by Metaphysics, then Logic, and finally Mathematics. Al-Najah, which is a summary of al-Shifa', also consists of four parts. The Logic, physics and Metaphysics of this work were prepared by Ibn Sina and the Mathematics by al-Juzjani. 'Uyun alhikmah, known also as al-Mujaz ("Epitome"). Seems to have been intended for class instruction in Logic, physics and metaphysics. This is evident from the simplicity, clarity and drevity with which the work is presented. Danishmama-yi 'alai also consists of four parts and is particularly significant in that it is the first work of Islamic Peripatetic philosophy in the Persian language. Al-Isharat wa'l-tanbihat, which is the most mature and most comprehensive philosophical work of Ibn Sina, also consists of Logic, Physics and Metaphysics. It closes with a treatment of mysticism, a treatment in its Sufi sense than metaphysics. In addition, Ibn SIna left a number of essays and poems. Some of his most important essays are Havy ibn Yaqzan ("The Living Son of the Vigilant"), Risalat al-tayr ("the Epistle of the Bird"). His most important poems are al-Urjuzah fi'l-tibb (an iambic poem on medicine), 8 al-Qasidat al-muzdawijah (anode in couples) 9, and al-Qasidat al-'dat al-ayniyyah (an ode whose verses end with the letter').10 He also wrote a number of Persian Poems.

Division of sciences

Ibn SIna understands "the purpose of philosophy to be the determination of the realities of all things, inasmuch as that is possible for a human being". There are two types of philosophy, theoretical and practical. The former seeks knowledge of the truth; the latter of the good. 12 The purpose of theoretical philosophy is to perfect the soul through knowledge alone.

The purpose of practical philosophy is knowledge of what must be done; so that the soul acts in accordance with this knowledge 13 Theoretical philosophy is knowledge of things that exist not owing to our choice and action. Practical philosophy is knowledge of things that exist on account of our choice and action.

The individual subjects of theoretical knowledge are of two main types: those to which movement can be attached, such as humanity, queerness and unity and those to which movement cannot be attached, such as God and the intellect. The former are again divided into those that cannot exist unless movement is attached to them, such as humanity and sugariness; and those that can exist without any movement being attached to them, such as unity and multiplicity. The former of the last two types is either such that it cannot be free movement either in reality or in though (e.g., humanity and horsiness), or such that it can be fore from movement in thought but not in reality (e.g., sugariness). 14

There are, therefore three branches of theoretical philosophy: that which deals with things inasmuch as movement is attached to them both in reality and in thought; that which deals with things inasmuch as movement is attached to them in reality but not in thought; and that which deals with things inasmuch as movement is attached to them neither in reality nor in though, regardless of whether movement can be attached to them, as in the case of unity, or cannot be attached to them, as in the case of God. The first is physics, the second is pure mathematics and the third is metaphysics. 15

Practical philosophy, on the other hand, is concerned with learning one of the following: (1) the principles on which pubic sharing among people is based, (2) the principles on which personal sharing among peoples is based, or (3) the principles on which the affairs of the individual are based. The first is the management; 16 and the third is management of the individual, referred to as ethics.17The principles of practical philosophy are derived from the divine shari ah, and its complete definitions are made clear by the divine Shari'ah.18

The benefit of the science of management of the city is to make known the manner in which sharing among people accurse for the purpose of the well-being of the human body and of the preservation of humanity.

The benefit of the science of home management is to make known the type of sharing that must take place among the members of the same home in order to ensure their well-being. Such sharing occurs between husband and wife, and child, and master and slave. The science of management of the individual yields a twofold benefit-tomakeknown the virtues and the manner of acquiring them in order to refine the soul, and to make known the vices and the manner of avoiding them in order to purify the soul.19

Only an outline of the most important aspects of Ibn SIna's philosophy can be provided here. The most essential elements of this logic, which he considers the introductory part to philosophy, 20 are discussed in Chapter 48 below. Only a sketch of his general logical scheme will be given in this chapter.

Logic

Ibn Sina considers logic as the key to philosophy, whose pursuit (knowledge) is the key to human happiness. Logic performs this function by helping to derive unknown concepts and judgments from known ones, thus increasing our degree of knowledge (concepts are mental objects with no affirmation or negation; judgments are mental objects with affirmation or negation). Logic does this by acting as a set of rules for distinguishing the

valid from the invalid explanatory phrases, which embody concepts and are the instruments for moving from known concepts to unknown ones, and proofs, which embody judgment and are the instruments for moving from known judgments to unknown ones. Since the valid leads to certitude and the invalid to falsehood, knowledge is attained only through the use of logic, except when, on rare occasions, God provides this knowledge without any human effort. 21

While the logician's function is to open the way for the knowledge of the natures of things, he or she is not concerned with such natures in themselves or as they exist externally or in the mind but only with concepts, representing these natures under the aspect of being subject or predicate, individual or universal, essential or particular. 22 Only when the concepts, of the natures of things are considered inasmuch as they have certain states and a certain relationship to each other can they help to move though from the known to the unknown. Even though the primary concern of the logician is concepts inasmuch as they are arranged in a certain manner, the logician must deal with expressions, as arranged in a certain manner; the logician must deal with expressions, as they are the only way to reason about or to communicate concepts. 23 With this in mind, Ibn Sina opens his logical treatises with discussions, of expressions, beginning with single expressions, the smallest elements of the explanatory phrase and proof.

As the ultimate goal of the logician is to pave the way for knowledge of the natures of things, universal expressions that mirror universal concepts, which in turn mirror these natures, must be his or her concern.

That is why most of the discussion of the single expression focuses on the study of universal terms (the five periodical): genus, species, difference, property and common accident. The main types of the explanatory phrase, of a genus and a differences, is said to be the most reliable form of the explanatory phrase.

The proof, which utilizes explanatory phrase as its parts these are the propositions or premises - is of three types: syllogism, induction and analogy. The conjunctive, the conditional and the exceptive. The propositions that form the premises of the various types of the syllogism fall into nine categories. Each of these categories derives its assent or judgment from a different source, which will be indicated here in parentheses following the name of the category of propositions: sensible (from the external senses only); experiential or observational (from memory of repeated sense experience); based on unanimous traditions (from multiple testimonies); received (from scholars or respected religious leaders); estimative (from the estimative power); widespread (from being widely known); presumed (from the realization that the opposite is possible); imagined (from resemblance to propositions involving assent); primary (from the clarity of reason). 24

Demonstrations is the most reliable form of the syllogism composed of propositions characterized by certainty, it leads to a conclusion with certainty. Such propositions are primary, experiential, sensible or widely known. A demonstration requires three elements: those principles with which the demonstration is made (the premises), those issues that are the

object of demonstration (the problems), and those subjects in which demonstration is made.

Ibn Sina usually closes his logical discussions with a study of ambiguities, whether in expression or in meaning.

Physics

Physic is concerned with the study of certain principles and of the things that are attached to natural bodies. These intellect is considered a natural principle inasmuch as it is the cause of holding matter and form together and, as such, is the relation to the physics realm is the agent intellect discussed in physics, and not inasmuch as it has such and such a nature or such and such a relation to separate principles or intelligible. The things that are attached to natural bodies include motion, rest, time, place, void, the finite and so forth.

For example, every natural body is said to have a natural place and a natural shape. All natural motions lead to a creative, circular motion belongs to the heavenly bodies, which are followed by the bodies that are subject to generation and corruption. This first of the latter type of bodies in existence is the four elements: water, air, fire and earth. These elements are subject to the celestial influences. 26 When the four elements come together, their mixtures vary in temperament owing to the influence of the celestial powers. This variation in temperament results in the composition of these elements: minerals, plants and animals (the last and highest of whom are human beings). The closer their temperament is to equilibrium, the higher the form of the natural body. For this reason, there is a gradation in being from minerals to plants to animals, as well as a gradation of the various kinds subsumed under every level of these three types of being. The closest temperament to equilibrium causes the existence of human bodies, which have the highest form in the terrestrial sphere -this form being the human soul. This kind of soul is defined as "a primary perfection of an organic, natural body to which it belongs to perform acts of life". 27Primary perfection is what gives actuality to the species of a thing, as shape gives actuality to the sword. This is to be contrasted with secondary perfection, which is what gives actuality to the actions and reactions that follow upon the species, as does cutting for the sword. 28 The discussion of the soul takes up a large portion of Ibn Sina's Physic. We are told that if the function of the soul is limited to nutrition, growth and reproduction, it is a mere plant soul. 29 If sensation and movement are added to these, then it is a mere animal soul. 30 The soul of a human being includes these, but has a practical and the theoretical faculties or intellects. 31 When this rational part occurs to a being, that being becomes a human being. 32 Through conjunction with the agent intellect that contains the intelligible, the theoretical part of the rational soul receives its proper perfection, the perfection that makes it what it is. This perfection is the best thing a human being can achieve; at it is the best thing for any being to achieve is proper perfection, which completes its nature.

A brief discussion of the animal and rational souls is now in order, given the important role that they play in achieving this perfection. As mentioned, the animal soul has sensation and movement. The sensitive part consists of

the external and the internal senses. The external senses are, in order of necessity for animals, touch, taste, smell, hearing and sight. The internal ones are common sense, representational faculty, imagination, estimative faculty and memory. The common sense is the faculty in which external sensations or forms of external objects collect. It is the faculty that enables us to judge, for example, the honey is sweet when we perceive honey visually, without the gustatory sensation that it is sweet. The reason is that the faculty of common sense simultaneously receives from the different external senses the different sensations of the one external object, which we call honey. This makes it possible for us to distinguish between the yellow colour and the sweet taste of honey, while realizing at the same time that they belong to the same object. The representational faculty retains the forms that the common sense receives from the outside. The objects In contrast, the objects of the common sense are present only when the external objects are there - except in rare cases when they are poured into the common sense from the internal senses, which either manufacture them or receive them from the divine world. 33 The estimative faculty is said to grasp sense notions that are different from the sense forms grasped by the common sense. These notions are exemplified by the lamb's fear of the wolf. The memory retains the notions of the estimative faculty, as the representational faculty retains the sense forms. Finally, the imagination combines some objects of the representational faculty and of memory with each other, while separating the rest from each other. It must be mentioned that this faculty is called imagination, but only if employed by the estimative faculty. If it is employed by the intellect, it is called cognition. 34The locomotive part of the soul is responsible for the motion of the organs by means of the nerves and muscles due to the will. This motion is assisted by primary and secondary instruments. The primary ones, which concern us here, are either the imagination or the rational soul. These cause inclination either in the direction of or away from a perceived object. Inclination in the direction of an object is for an object that is imagined or presumed to be useful.

When a power expresses such an inclination, it is called appetitive, which the inclination itself is called a petition.

Inclination away from an object is for an object that is imagined or presumed harmful. When a power expresses such an inclinations. It is called irascible, while the inclination itself is called anger. Both intellection and motion are affected by the condition of their instruments. If, for example, the instrument of sight is diseased or has aged, then sight declines or disintegrates totally. 35 The human or rational soul performs either bodily actions and reactions, or purely intellective actions. The former do not belong to it and proceed from it and the body, whereas the latter belong to it and proceed from its essence.

The actions that the rational soul performs in conjunction with the body are exemplified by consideration of the particular matters that must be done or avoided voluntarily, including the practical crafts such as carpentry, farming and animal husbandry. Reactions, on the other hand, are states consequent upon the preparations of the body and the rational soul, such as

the preparation for crying or shyness. The purely intellective acts, which are performed by the rational soul, consist of grasping the quiddities or natures of things as universal concepts, such as "humanity" and "horsiness". Such concepts cannot be grasped by any of the external or internal powers, for these powers belong to the animal world and thus whatever they grasp must be to some degree material and particular. 36 Contrary to the animal powers, the rational soul can grasp the quiddities or natures of things apart from matter and particularity. From such universal concepts, it composes judgments possessing certainty.

As mentioned, the rational soul has two parts, one with a capacity for action and the other with a capacity for action and the other with a capacity for knowledge. The former, called the practical intellect, is directed towards the body. With it, one can distinguish between what must and what must not be done, as well as between good and bad particular things. This intellect is perfected through habits and experiences. The latter, called the theoretical intellect, is directed towards the divine world and enables one to receive the intelligible. 37

The theoretical intellect passes through four stages. Firstly, it is in potentiality and has not yet formed any concepts or grasped any intelligible. This is the potential or material (al-aql al-hayulani). This intellect is called material, not because it is material in nature but because it has the capacity for receiving intelligible forms as matter has the capacity for receiving material forms.

Secondly, it is this potentiality actualized by the occurring of primary intelligibles in it.

This is the habitual intellect (al-aql bi'lmalakah).

Thirdly, it is the acquisition of the intelligibles made constant. This is the actual intellect (al-aql bi'l-fi'l). Fourthly, it is these intelligibles themselves. This is the acquired intellect (al-aql al-mustafad). 38

For a thing to move from potentiality to actuality, another thing, which is already in actuality, must give it the form that actualizes it. What body, because it must already possess the intelligible forms, which are non-material and which it gives to our theoretical intellect. Therefore it must be an intellect-this intellect being the agent intellect. The agent intellect sheds its light on the objects of our imagination, which have been received originally from the external world, thus making them visible to our theoretical intellect, as the sun sheds its light on the external things, thus making them visible to our sight. When the light of the agent intellect reaches the objects of the imagination, it renders them intelligible to our theoretical intellect by abstracting them from matter. 39

Since the rational soul can receive the intelligible forms, it must be in its substance of the nature of these forms. If what receives the intelligible forms were a body or a power in a body, these forms would be divisible, and a simple form could not be intelligible. Arguments are advanced to show that the idea that the rational soul is immaterial. 40 It follows that the rational soul is simple, for multiplicity lies in materiality. Because it is simple, it is indestructible. Contrary to Alexander of Aphrodisias and al-Farabi, who believe that the only human soul assured of indestructibility is that which

knows at least some realities -that which is completely deficient in such knowledge is eventually destroyed-Ibn SIna considers all human or rational souls to be indestructible? To him, knowledge of the realities of things is necessary only for happiness but not for existence after death.

Metaphysics

Metaphysics 41is the science that provides knowledge of the principles of theoretical philosophy. This it does by demonstrating through the intellect the complete acquisition of these principles.42 Metaphysics deals with the existent inasmuch as it exists, that is, with the general or absolute existent and what is attached to it. In other words, the subject of metaphysics is the existent, not inasmuch as it applies to some things and inasmuch as something particular is attached to it, as in physics and mathematics (such as quantity and quality, action and reaction, which are attached to the objects of physics) but inasmuch as it applies to the principle of existence and inasmuch as something universal is attached to it (such as unity and multicity, potentiality and actuality, eternity and coming into being, cause and effect, universality and particularity, completeness and incompleteness, necessity and possibility). 43 These qualities are essential accidents of the particular existent. We understand from Ibn Sina's logic that an essential accident is one that does not constitute or enter into the essence of a thing, yet necessarily accompanies it, as "laughter" for "human being". A nonessential accident neither constitutes the essence of a thing nor necessarily accompanies it; however, it resides in it, as "white" may reside in "human being".

The existent is either substance or accident. A substance is anything that is not in a subject, whether or not it is in matter. Thus substance is of two main types: (1) that which is in matter, and (2) that which is not in matter. The latter category is broken down into three types (2a) matter, (2b) that which is accompanied by matter, and (2c) that which is neither matter nor accompanied by matter. This scheme means that substance is of four types: (1) form in matter, as the soul is in the body (2a) matter with no form-this is absolute matter, which has no existence in actuality but only in conception; (2b) the composite of form and matter, as the human being is a composite of soul and body, (2c) form separate from matter, as God or any intellect is neither matter nor in contact with matter. 44Accident on the other hand, is in a subject and is divided into nine types: quality, quantity, relation, time, place, position, condition, action and reaction.

The existence of a thing is either necessary or possible (contingent). Necessary existence is such that if the thing to which it belongs is assumed to be non-existent, impossibility arises. Possible existence is such that if the thing to which it belongs is assumed to be non-existent or existent, no impossibility arises. 45Ibn Sina mentions that in other contexts "possible, existence" could also be used in the sense of "being in potentiality". 46Necessary existences are either that which always belongs to a thing through that thing itself, or that which always belongs to it through another. For example, the existence of burning is necessary, not because of the burning itself, but because of the meeting of two things, one naturally capable of burning and the other naturally capable of being burnt. 57 What

is necessary through itself cannot be necessary through another and conversely. For example, if the existence of A is necessary through A, itself, this existence cannot be necessary through B.

Similarly, if it is necessary through B, it cannot be necessary through A, itself. This is to say that if, is the second case, one considers A in itself, one finds its existence non-necessary, or possible in itself. If this is not the case, its existence would be either necessary in itself, but this has been denied, or impossible without another. Its existence through another is other than its existence without another. By the former, it is necessary; by the latter, it is possible. 48

The existence of a being necessary in itself is determined on the basis of two principles: first, the chain of possible beings at any time cannot be infinite, thus, it must lead to a necessary cause external to this chain - this cause being the Necessary Existent or Being, otherwise known as God.

Being eternally prior in existence to everything and the source of the existence of everything, this Existent is said to be the first cause. 50 It is free from matter, one and simple in all respects. 51 Thus it has no genus or difference, the two necessary elements of a definition. Therefore there is no definition of it, but only a name. Being immaterial, it is purely good, for only in matter, the source of privation, does evil lie.52 Owing to its immateriality, it is also an intellect, and, owing to its simplicity, the intellect and the intelligible in it are one.53 In itself, it is the Beloved and the Lover, the pleasurable and the pleased. It is the Beloved because it is the highest Beauty. It is the highest beauty because there is no highest beauty than that of being a pure intellect, above all manner of deficiency, and one in all respects. Suitable and apprehended beauty or goodness is desired and beloved. The more the apprehended is beautiful, the more the power of apprehension loves it and finds pleasure in it. 54

Thus the Necessary Being, who is most beautiful, perfect, and best, who apprehends itself at this ultimate beauty and goodness and in the most complete manner of apprehension, and who apprehends the apprehender and the apprehended as one in reality is in essence, and by its essence, the greatest lover and beloved and the greatest thing pleased and pleasurable.

From this Necessary Being the rest of the existing things overflow through the process of emanation. The first things that emanate are the celestial intellects, followed by the celestial souls, the celestial bodies and finally terrestrial beings. All these things emanate from it in eternity; otherwise, a state would arise in it that was not there before. But this is impossible in a being whose existence is necessary in all respects. 56 This emanation is a necessary outcome of God's Essence and cannot be linked to any intention external to His Essence. Firstly, there is nothing in Him external to His Essence-He is a total simplicity, but He can be considered from different points of view. It is only by virtue of such consideration that one can speak of His Attributes. Secondly, even if it were possible for Him to have among such Attributes any intention relating to the world. "The reason is that every intended.

This is because if a thing is for the sake of another, that other is more complete in existence than it." 57 This is to say that whatever is more complete in existence then another cannot intend that other.

God, therefore, cannot intend the world or anything in the world, since He is more complete in existence than the world.

Even though neither God nor any other cause can be perfected essentially by its effects and therefore cannot intend its effects or anything for them, still it may lead accidentally to beneficial effects and, if it is divine, know and be pleased with these effects. Health, for example, is such "in substance and essence, not to benefit the sick; but it results in benefiting the sick".

58Similar to health, superior causes are what they are in themselves, not to benefit anything else; but they do benefit other things accidentally. They differ from health, though, in that they know the things that exist. 59Still, providence is attributed to God, the first cause of all things. Providence must be understood, however, not in the sense of divine guidance of the world or concern about it. Rather, providence is defined as God's knowledge of the order of existence and the emanation of this order inasmuch as that is possible, and His being pleased with it. 60

Ibn Sina's thought had a clear and strong impact on the East and on the West, in science, literature and philosophy. The impact of his philosophical thought, which concerns us here, was exhibited in a large number of commentaries on his works and in other forms of writings it. The best known of such commentaries are thoseof Ibn Kammunah, Fakhr al-Din al-Razi and Nasir al-Din al-Tusi on al-Isharat, and Sadr al-Din al-Shirazi on part of al-Shifa'. Among the most prominent Eastern thinkers whose thought reflects that of Ibn Sina are al-Tusi, Suhrawardi, Qutb al-Din al-Shiraz, Mir Damad, Sadr al-Din al-Shirazi (Mulla Sadra) and the Syriac Christian Ibn al-Ibri.

Suhrawardi's and al-Shirazi's theories of illumination, for example, stem from Ibn Sina's "Oriental philosophy". Also, their discussions of being and essence were generated by Ibn Sina's view on this subject.

Ibn al-Ibri too adheres closely to Ibn Sina's analysis of God's relationship to the world, the presence of evil, and the nature and unity of the human soul as well as the impossibility of the soul's pre-existence and transmigration. 61

But, as mentioned, not all those who felt the effect of Ibn Sina's thought responded to it positively. Ibn Sina had his strong critics, such as al-Ghazzali and al-

Shahrastani in the East, and William of Auvergne and Thomas Aquinas in the West.

These critics rejected primarily his ideas concerning God's nature, knowledge of particulars and relationship to the world, as well as the eternity of the universe and the denial of the resurrection of the body. Also, Ibn Rushd, who in his major work, The Incoherence of Incoherence, seeks to defend philosophy as embodied primarily in Ibn Sina's works, charges that Ibn Sina misunderstood and distorted Aristotle at times.

Such opposition to Ibn Sina's ideas, however, did not prevent even these critics from borrowing heavily from him. Al-

Ghazzali's logic and philosophical terminology, to give but two examples, are, for the most part, those of Ibn Sina. Also, the distinction Ibn Sina introduced in his theodicy, for example, between evil in itself and evil for another was borrowed by Aquinas and from him by Suarez. Because Ibn Sina's works are not sufficiently know in the West, however, the credit for this distinction is given in the West to Aquinas.

Furthermore, two of Aquinas's well-known proofs of God's existence, that from efficiency and that from contingency, as well as his distinction between essence and existence, were also borrowed from Ibn Sina. The numerous references Aquinas gives to Ibn Sina in Being and Essence and elsewhere is sufficient to show the influence Ibn Sina had on his prominent Christian philosopher and theologian whose ideas dominated Western thought for so long. Gundissalinus, Albert the Great and Roger Bacon are also among the Western thinkers whose work reflected elements of Ibn Sina's thought, especially with regard to the nature of the human soul. No doubt the following factors facilitated Ibn Sina's influence on Latin philosophical circles; first, the translation parts of al-shifa's as early as the twelfth and thirteenth Christian centuries; and, second, Ibn Sina's efforts to synthesize Greek and Islamic though, an attempt in which the West found the seed for a synthesis between Greek Philosophy and Christianity.

Notes

- 1- His full name is Abu 'Ali al-Husayn ibn 'Abd Allah ibn 'Ali ibn Sina Abu 'Ali being his nickname. Perhaps his titles, Master and Head, refer respectively to his prominent rank in learning and his high political position as a vizier (A. F. al- Ahwani, Ibn Sina (Cairo, 1958): 18). This would correspond to his other title, al-Hakim al-Wazir (Wise man and Vizier). He was also known as Hujjat al-Haqq (Proof of the truth).
- 2- He was one of Ibn SIna's closest students, who accompanied during most of his later life. For a translation of his bibliography see W.E. Golham, The Life of Ibn Sina (Albany, 1974).
- 3- See Z.D. al-Bayhaqi, Tarikh hukama' alislam, ed. M. K. 'Ali (Damascus, 1976): 52-72; A.H. al-Qifti, Tarikh al-hukama. ed. J. Lippert (Leipzig, 1903): 413-26; I.A. Usaybi'ah, 'Uyun al-anba' fi tabaqat alatibba', Part Three, ed. Samith al-Zayn (Beirut, 1987): 2-28; I. Khallikan, Wafayat al-a'yan wa anba' abna' alzaman, Part Two, ed. Ihsan 'Abbas (Beirut, 1978): 157-62.
 - 3- See Ibn Abi Usaybi'ah, 'Uyun al-anba': 5.
- 4- For a list of Ibn Sina's works, see G.C. Qanawati (Anawati), Mu'allafat Ibn Sina (Cairo, 1955) and Y. Mahdavi, Fihrist-i musannafat-i Ibn Sina (Tehran, 1954).
- 5- Ibn Sina, al-Shifa, al MAntiq, al-Madkhal (hereafter al-Madkhal), ed. G. C.Anawati, M. al-Khudayri and A. F. al-Ahwani (Cairo, 1952): 2-4. Unless otherwise specified, all works referred to in the rest of this chapter are bi Ibn Sina.
 - 5- Ibid: 10
 - 6- This is Ibn Sina's longest poem, consisting of around one thousand verses.
- 7- In this ode, which was written for al-Suhayli, Ibn Sina summarizes the study of logic in a poetic form so that his brother 'Ali could remember it easily.
 - 8- This poem on the soul is Ibn Sina's best known.
- 9- Al-Madkhal: 12. Falsafah (philosophy) and hikmah (wisdom) are used by Ibn Sina interchangeably.
 - 10- Al-Madkhal: 14
 - 11- Ibid.: 12
 - 12- Ibid.: 12-13
- 13- Ibid. 14. For the division of the sciences, see also al-Shifa', al-Ilahiyyat (hereafter al-Ilahiyyat), I. ed. M. Y. Musa, S. Dunya and S. Zayid (Cairo, 1960): 3-4; Mantiq al-Mashriqiyyin (Cairo, 1910): 6-7; and 'Uyun al-hikmah, ed. A. R. Badawi (Cairo, 1954): 17.
- 14- No specific name is given to the science of home management, but it may be referred to as social science; it corresponds to the Greek understanding of "economics".
 - 15- Al-Madkhal: 14
 - 16- Uyun al-hikmah: 16
- 17- Ibid. For the division of the sciences, see also Ti's rasa'il, ed. Hasan 'ASI (Beirut, 1986): 83-5.
- 18- For a study of the relationship of logic to philosophy, see Shams Inati, Remarks and Admonitions, Part One (Toronto, 1984): 9-11.
 - 19- Al-Madkhal: 19
 - 20- Remarks and Admonitions, Part One: 11.
 - 21- Ibid.: 12
- 22- Ibn SIna, al-Najah, ed. M. Fakhri (Beirut, 1985): 97-101; Remarks and Admonitions, Part One: 28-9 and 118-28.
- 23- The agent or active intellect (al-'aql alfa'al) is, according to Islamic philosophy, the intelligence governing the Moon. This term seems to have been coined by al-Farabi, as al-Kindi before him seems unfamiliar with it. Al-Kindi calls thisintellect instead the first intellect. In any case, according to Ibn Sina, this intelligence is caused by intellectual emanation proceeding from God and ending with the human rational soul. The agent intellect is the last divine intelligence and is responsible for administering the sublunary world. Its primary function is to give corporeal form to matter and intellectual form to the rational soul, hence its name the giver of forms (wahib al-suwar). For a summary of Ibn Sina's cosmology and natural philosophy see S.H. Nasr, An Introduction to Islamic Como logical Doctrines (Albany, 1993): 215ff
 - 24- Uyun al-hikmah: 33
 - 25- Al-Shifa', al-Tabi'yyat, al-Nafs (hereafter al-Nafs), ed. F. Rahman (London, 1959):

- 26-.See also Tis'rasa'IL: 69, where the definition of the soul is given, but there the perfection is not described as primary, and the body is described as having "life in potentiality".
- 27- Al-Nafs: 11. For the distinction between primary and secondary perfections, compare with Aristotle, De anima, 2,412A.
 - 28- Tis' rasa'il: 55 and 'Uyun al-hikmah: 35.
 - 29- Tis' rasa'il: 55-6 and 'Uyun al-hikmah: 35-7.
 - 30- Al-Nafs: 45.
 - 31- Tis' rasa'il: 51.
 - 32- Ibid. 59.
- 33- Al-Isharat wa'l-tanbihat, Part Two (published with Part Three and Part Four), ed. S. Dunya (Cairo, 1958): 382 and Tis' rasa'il:57. For a list of the faculties of the three parts of the soul; 58ff. for an elaboration of the external senses; and 152-4 and 159ff. for an elaboration of the internal senses. For a brief of the internal senses, see 'Uyun al-hikmah: 38-9.
 - 34- Ibid. 39-40.
 - 35- Tis' rasa'il: 57-8
 - 36- Ibid.: 68
 - 37- Ibid. 68-9. For a discussion of the rational soul, see 'Uyun al-hikmah: 42-3.
- 38- For the relation of the agent intellect to us, see Tis' rasa'il: 69 and Uyun alhikmah: 43.
 - 39- For the immateriality of the rational soul, see ibid. 44-46.
- 40- Ibn Sina also refers to this branch of philosophy as first philosophy, divine science or wisdom in an absolute sense (al-Ilahiyyat, 1: 5).
 - 40- Ibid.: 17
 - 41- Al-Najah: 235-6 and 'Uyun al-hikmah: 47.
 - 42- See al-Najah: 237: al-Ilahiyyat, 1: 93; and 'Uyun al-hikmah: 48.
 - 43- Al-Najah: 261.
 - 44- Ibid.
 - 45- Ibid.
 - 46- Ibid. 262 and 'Uyun al-hikmah: 55.
 - 47- Al-Najah: 271-2.
 - 48- Al-Ilahiyyat, 2: 342-3.
 - 49- Al-Najah: 264-5.
 - 50- For a detailed discussion of God's Attributes, see al-Ilahiyyat, 1: 344-69.
 - 51- Al-Najah: 280.

Chapter Seven: Mulla Sadra: His Teachings

Sadr al-Din Shirazi, known as Mulla Sadra, appeared nearly a thousand years after the rise of Islam and his works represent a synthesis of the millennium of Islamic thought which preceded him. He was thoroughly versed in the Qur'an and Hadith, Islamic philosophy and theology, Sufism and even the history of Islamic thought, and must have access to an unusually rich library. To all his knowledge must be added his own intellectual powers as a philosopher and visionary and intuitive capabilities as a gnostic ('arif) who was able to have direct experience of Ultimate Reality or what in the later school of Islamic philosophy and theosophy is called "gnostic experience" (tajruba-yi 'irfani). His knowledge of the revealed sources of Islam was probably more extensive than that of any other Islamic philosopher. It included intimacy not only with the Qur'an, but also well-known commentaries, not only prophetic Hadith but also sayings of the Shi'ite Imams whose philosophical significance he revealed for the first time.

His Qur'anic commentaries and Sharh usul al-kafi ("Commentary upon the Usul al-kafi" of Kulayni) and commentary upon the Light Verse (ayat al-nur), both among the premier masterpieces of Islamic thought; attest to his incredible mastery of the Qur'an and Hadith.

Mulla Sadra and earlier Islamic Philosophy

Mulla Sadra was also knowledgeable in the deepest sense in the schools of Islamic philosophical thoughts before him. He knew Peripatetic (mashsha'i) philosophy intimately, especially the thought of Ibn Sina, upon whose Shifa' he wrote a major commentary. But he was also well acquainted with later Peripatetic, such as Nasir al-Din Tusi and Athir al-Din abhati, upon whose al-Hidayah ("The Guide") he wrote a commentary which was destined to become one of his most popular works, especially in India. He was also a master of Ishraqi thoughts and copied a number of the visionary recitals of Suhrawardi in his own hand as well as writing a major commentary in the form of glosses upon the Hikmat al-ishraq ("Theosophy of the Orient of Light") of the master of the school of illumination. He was also well versed in both Sunni and Shi'ite kalam or theology, especially the works of al-Ghazzali and Imam Fakr al-Din Razi whom he cites often especially in the Asfar ("The Four Journeys") which is the masterpiece and like the mother of all his other books. Moreover, he was well acquainted with Shi'ite kalam which included Twelve -Imam Shi'ism to which he belonged as well as Isma'ilism whose works he studied carefully including philosophical tracts such as the Rasa'il ("Treatises") of the Ikhwan al-Safa'.

Finally, it is most important to realize Mulla Sadra's mastery of the doctrines of Sufism or gnosis especially as taught by Ibn 'Arabi.

In certain issues such as eschatology, he borrows heavily from the Andalusian master, and the last book of the Asfar, in which he deals with alma'ad or eschatology is in fact replete with extensive quotations from Ibn 'Arabi's al-Futuhat almakkiyyah ("The Meccan Illuminations").

Moreover, he had a special love for Persian Sufi poetry and quotes from its masters such as 'Attar and Rumi even in the middle of his Arabic works.

Part of this knowledge is derived from the earlier masters of the School of Isfahan such as its founder Mir Damad, a school which Mulla Sadra belonged, but his knowledge in these matters goes beyond any of his teachers and represents his own extensive study of the major works and sources of Islamic thought.

The synthesis of previous schools of thought and modes of knowing

Mulla Sadra synthesized not only various schools of Islamic thought but also the paths of human knowledge. His own life, based upon great piety, deep philosophical introspection and reasoning and purification of his inner being until his "eye of the heart" opened and he was able to have a direct vision of the spiritual world, attests to the unity of the three major paths of knowledge in his own person. These three paths are according to him revelation (al-wahy), demonstration or intellection (alburhan, al-ta'aqqul) and spiritual or "mystical" vision (al-mukashafah, almushahadah).

Or, to use another terminology prevalent among his school, he followed a way which synthesized al-Qur'an, al-burhan and al-'irfan, which corresponds to the terms above.

Mulla Sadra's epistemology is directly related to that Suhrawadi and the school of Illumination in general, a school in which distinction is made between conceptual knowledge (al-'ibn al-busuli) and present knowledge (al-'ibn al-buduri), forms of knowledge which are unified in the being of the possessor of knowledge on the highest level, a person whose Suhrawardi calls hakim muta'allih, literally a wise man, philosopher or theosophy who has become imbued with Divine Qualities and become "God-like". Conceptual knowledge is gained through concepts in the mind of that which is to be known whereas present knowledge implies the presence of the very reality to be known in the human intellect without the intermediary of mental concepts such as when one knows oneself, the intelligible or the divine realities. Such knowledge is illuminative and beyond the realm of ratiocination, but it is not without intellectual content. Mulla Sadra accepted this ishraqi thesis, to which he added the significance of revelation as a foundational source of knowledge of a philosophical or theosophical order. The tradition of Islamic philosophy in Persia accepted fully this truth and awarded to Mulla Sadra the title of Sadr al-muta'allhin, that is, foremost among those who according to Suhrawardi belong to the highest category of possessors of metaphysical knowledge. No higher title could be given to anyone in the context of the world view in which later Islamic Philosophy functioned.

In any case the grand synthesis of Islamic thought created by Mulla Sadra is based on the synthesis of these three ways of knowing through which he was able to integrate the earlier schools of Islamic schools into a unified world and create a new intellectual prospective known as alhikmat al-muta'aliyah which a number of leading scholars of Islamic philosophy who have written on him in European languages, such as Henry Corbin and Toshihiko Izutsu, have translated as the "transcendent theosophy" marks the birth of a new intellectual perspective in the Islamic world, one which has

had profound influence during the later centuries in Persia as well as in Iraq and India, while the term alhikmat al-muta'aliyah had been used in a more general and less defined sense by a number of earlier Islamic thinkers such as Qutb al-Din Shirazi. In analyzing the various aspects of Mulla Sadra's thought we are in reality studying the hikmat al muta'aliyah which became a distinct school of Islamic thought much like the Peripatetic (mashsha'i) and Illuminations (ishraqi) schools. Mulla Sadra was in fact so devoted to this term that he used it as part of the title love his major opus which is al-Asfar alarba'ah fi'l-hikmat al-muta'aliyah ("The Four Journeys Concerning Transcendent Theosophy").

The foundation of the "transcendent theosophy" and the whole metaphysics of Mulla Sadra is the science of being (wujud), which is used by him to denote both existence, in the sense of the existence of objects, and existence that is not in any way privative but which also includes the Divine Principle, bPure Being and even theAbsolute, which is beyond being as ordinarily understood. Much of his writings, including nearly all of the first book of the Asfar, is devoted to this issue and he returns again and again to it in such works as al-Shawahid al-rububuyyah ("Divine Witnesses"), al-Hikmat al-'arshiyyah ("The Wisdom of the Throne"), al-Mabda' wa'lma'ad ("The Origin and the Return") and especially Kitab al-masha'ir ("The Book of Metaphysical Penetration") which is the most important summary treatment of this subject of his writings.

The study of being

At the heart of the whole philosophical exposition of Mulla Sadra stand the gnostic experience of being as Reality. Our usual experience of the world is that of things which exist, this ordinary experience serving as the basis of Aristotelian metaphysics which is based on existents (mawjud). For Mulla Sadra, however, there occurred a vision in which he saw the whole of existence not as objects which exist or existents but as a single reality (wujud) whose delimitations by various quiddities (mahiyyat) gives the appearance of a multiplicity which "exists" with various existents being independent of each other.

Heidegger complained that Western metaphysics had gone astray since the time of Aristotle by studying the existent (das Seiende), to use his vocabulary, and that the proper subject of metaphysics was existence itself or das Sein with whose study he was starting a new chapter in Western Philosophical thought. As far as Islamic philosophy is concerned, such a distinction was made three centuries before Heidegger by Mulla Sadra who according to himself received through inspiration a vision of reality in which everything was seen as acts of existence (wujud) and not objects that exist (mawjud). The vast development of Sadrian metaphysics is based on this basic experience of Reality and subsequent conceptual distinctions made on the basis of this experience of wujud as being at once one, graded and principal.

Mulla Sadra distinguishes dearly between the concept of being (mafhum al-wujud) and the reality of being (haqiqat al-wujud). The first is the most obvious of all concepts and the easiest to comprehend while the second is the most difficult for it requires extensive mental preparation as well as the

purification of one's being so as to allow the intellect within to function fully without veils of passion and to be able to discern wujud as Reality. That is why one of Mulla Sadra's most famous followers, Hajji Mulla Hadi Sabziwari, writes in the Sharh almanzumah, which is a summary of the master's doctrines, its (wujud's) notion is one of the best known things, but its deepest reality is in the extremity of hiddenness.8

A consequence of the gnostic experience of being is the realization of its unity, which is called wahdat al-wujud. This fundamental doctrine of Sufi metaphysics is associated with Ibn Arabi but has possessed many interpretations ranging from the extreme interpretation of it by the Andalusian Sufi and philosopher Ibn Sab 'in, according to whom only God is real and nothing else exists in any way, to Ibn 'Arabi's interpretations, which sees the manifested order as theophanies (tajalliyat) of the Divine Names and Qualities upon the mirror of nothingness, to the multiplicity of existence as the rays of the sun in relation to the sun. The rays of the sun are not the sun and at the same time is nothing but the sun.

In the Asfar, which contains a history of Islamic philosophy9as well as his own teachings, Mulla Sadra deals extensively with various understandings of this central doctrine before turning to the exposition of b his own views. 10 In any case, wahdat alwujud is a cornerstone of Sadrian metaphysics without which his whole world view would collapse.

A companion doctrine is tashkik al-wujud or the gradation of being. Being is not only one but it also participates in a gradation or hierarchy from the Being of God to the existence of the pebble on the beach. Every higher level of wujud contains all the reality that is manifested below it. Here Mulla Sadra basses himself upon the Suhrawardian doctrine of differentiation and gradation according to which things can be distinct from each other through the very element that unites them such as the light of the candle and the light of the sun which are united by being both light and yet are distinct from one another also by light which is manifested in the two cases according to different degrees of intensity.

Being is like light in that it possesses degrees of intensity while being a single reality. 11 The universe in its vast multiplicity is therefore not only unified but is also thoroughly hierarchical. One might say that Mulla Sadra accepted the idea of the "great chain of being" which has had such a long life in the West from Aristotle to the eighteenth century but in the light of the unity of being which gives a completely different meaning to the doctrine of cosmic and universal hierarchy.

The views of wujud are complemented by the principle of asalat al-wujud or principality of existence. To understand this doctrine, it is necessary first of all to turn to the classical distinction in Islamic philosophy between existence (wujud in its meaning of being related to the world of multiplicity) and mahiyyah or quiddities which in its original Latin form is derived directly from the Arabic mahiyyah. 12 All objects are composed of these two components, the first corresponding to the answer given to the question "is it?", and the second to the question "what is it?" The question posed in later Islamic philosophy, and especially by Mulla Sadra, is which of these elements is principial and bestows reality upon an object. Mulla

Sadra's own teacher Mir Damad and Suhrawardi are considered as followers of the school of principality of quiddity (asalat al-mahiyyah) whiles Ibn Sina is considered as a follower of asalat al-wujud, although in his case this doctrine takes on a completely meaning than in Mulla Sadra since the former did not believe in wahdat al-wujud.

In any case in his youth, Mulla Sadra followed his teacher Mir Damad and only after another visionary and gnostic experience came to realize that it is wujud which bestows reality upon things and that the mahiyyat are literally nothing themselves and are abstracted by the mind from the limitation of a particular act of wujud. When we say that a horse exists, following common sense we think that the horse is a reality to which existence is added. In reality, however, what we perceive is a particular act of wujud which through the very fact that it is manifested is limited to a particular form which we perceive as a horse. For those who have realized the truth, the fact that a horse exists becomes transformed into the reality that the act of wujud which through the very fact that it is manifested is limited to particular form which we call horse. The form of mahiyya of the horse has no reality of its own but derives all of its reality from the act of wujud.

Reality is then nothing other than wujud, which is at once one and graded existential the reality of all things. The metaphysics of Mulla Sadra can in fact be understood by understanding not only these principles but also their interrelations. Wujud is not only once but also graded. And it is not only graded but also principal or that which bestowed reality upon all quiddities, which in themselves possess no reality at all. The vast metaphysical edifice created by Mulla Sadra and his whole theology, cosmology, psychology and eschatology rely upon the three principles of whdat al-wujud, tashkik al-wujud and asalat al-wujud and it is only in the light of these principles that his other doctrines can be understood.

Trans-substantial motion and creation of the world

One of the most striking doctrines of Mulla Sadra is trans-substantial motion (alharakat al-jawhariyyah) which is the basis of his explanation of many of the most difficult problems of traditional philosophy including the creation of the world and the whole meaning of becoming in light of the Immutable and the Eternal. As is wellknown, earlier Islamic philosophers, especially Ibn Sina, had followed Aristotelian natural philosophy in accepting motion (al-harakat) only in the categories of quantity (kamm), quality (kayf), situation (wad') and place ('ayn), all of which are accidents and denied explicitly the possibility of motion in the category of substance. Ibn Sina's main argument was that motion requires a subject that moves and if the very substance of an object changes through Tran substantial motion, and then there will be no subject for motion.

Mulla Sadra opposed this thesis directly by saying that any change in the accidents of an object requires in fact a change in its substance since accidents have no existence independent of substance. He asserts that there is always "some subject" (mawudu'un ma) for motion even if we are unable to fix it and delimit it logically. Mulla Sadra asserts that the whole of the physical or even psychic or imagine universes which extend up to the

Immutable or luminous Archetypes are in constant motion or becoming. Were it to be otherwise, the effusion (fayd) of being could not reach all things. This trans-substantial motion, which Henry Corbin calls "I'inquietude de l'etre" referring to the existence of the universe below the level of the intelligible and archetypal realities, is not to be, however, confused with the re-creation of the world in every instant as taught by the Sufis. In the Sufi doctrine at every moment the universe is annihilated and re-created.

Previous forms return to the Divine Order and new forms are manifested as the ophany. That is why this doctrine is called al-labs ba'd al-khal (literally, dressing after undressing of forms).

In contrast Mulla Sadra's doctrine has been called al-labs ba'd al-labs (that is, dressing after dressing). This implies the form and matter of an existent become themselves the matter for a new form and that this process goes on continuously as if one were to put on one coat on top of another. All beings in this world are moving vertically as a result of trans-substantial motion until they reach the plenum of their archetypal reality. The sperm become a foetus and grows to the form of a baby who then is born and continues to grow from one form to another until he or she reaches full maturity and the body becomes weaker as the soul grows stronger until one dies and reaches the "imagine world" and finally the Divine Presence. Each state of this movement contains the forms of the earlier states of existence, while this Tran substantial movement continues throughout all these stages.

It is important to emphasize that Mulla Sadra's dynamic vision of the world in constant becoming, which implies the continuous intensification of the act of wujud within a particular being, must in any way be confused with Darwinian evolution.

For Mulla Sadra, the beings of this world are manifestations of the light of wujud cast upon their archetypal realities which through the arc of descent (al-gaws alnuzuli) bring various creatures into the realm of physical existent. Trans-substantial motion marks the ascent (al-gaws al-su'udi) through which the ever increasing intensity of light of light of wujud allows existents to return to their archetypal realities in the supernal realm. For Darwinism, on the other hand, there are no such things as archetypal realities and the species, far from reflecting celestial archetypes, are merely forms generated by the flow of matter in time. Furthermore, for evolution the role of wujud, its unity, gradation and principality are meaningless whereas for Mulla Sadra they contribute the vaery foundations of his metaphysics. Also for Mulla Sadra trans-substantial motion teleological and has an important spiritual role to play. The universe is moving toward a perfection which is its purpose and end and the spiritual progress of humanity is also achieved through a mode of transsubstantial motion. A saint is not only more perfect than others. It might be said that him or her is of a more intense degree than in less perfect human beings. It would therefore be grave mistake, as committed by a number of modernist Muslim thinkers, to equate al-harakat al-jawhariyyah with Darwinian evolution.

The doctrine of trans-substantial motion is the key for the solution of many problems for Mulla Sadra, including that of the creation of the world

debated for eight centuries before him by the Islamic philosophers and theologians. As is well known, the falasifah believed the world to have had no origination in time but to have been originated beyond time by God, the world thus being eternal (qadim) while the mutakallimun claimed that the world was created in time (hadith), an issue which was discussed in many classical works of Islamic thought such as al-Ghazzali's Tahafut alfalasifah.

The philosophers claimed that if the world were created in time, it would require a change in the Divine Nature which is impossible because God is immutable.

The theologians believed that if the world were qadim, then something eternal would exist besides God and would not even be caused by Him. Different Islamic thinkers sought to solve this problem in different ways, including Mulla Sadra's own teacher, Mir Damad, who came up with the idea of al-huduth al-dabri, origination of the world not in time (zaman) nor in eternity (sarmad), but in dahr or aeon, and he became celebrated for the exposition of this doctrine.

Mulla Sadra rejected his dichotomy of views altogether by pointing to the doctrine of trans-substantial motion. If the cosmos is changing at every moment, at each instance of its being, it is different from what it was before and what it is now was non-existent before (masbuq bi'l-'adam). Therefore, one can accept the doctrine that the world was created from nothing (ex nihilo) while accepting the continuous and uninterrupted effusion (fayd) of the light of being which none other than the Divine Light is. He thus seeks to provide a philosophical explanation for one of the most difficult of philosophical issues in not only Islamic thought but Jewish and Christian as well.

The union of the intelligent and the intelligible

Another of Mulla Sadra's major doctrines, again related inextricably to the rest of his metaphysics, is that of the union of the intellect and the intelligible (ittihad al-'aqil wa'l-ma'qul). This doctrine was asserted by Abu'l-Hasan al-Amiri in the fourth/tenth century but rejected thoroughly by Ibn Sina and later Islamic philosophers. But it was resurrected by Mulla Sadra and given a new meaning in the context of the unity of wujud and trans-substantial motion.

According to him at the moment of intellection the form of the intelligible (ma'qul), the possessor of intellect ('aqil), and even the intellect itself ('aql) become united in such a way than one is the other as long as the act of intellection lasts.

This doctrine is not only important for Mulla Sadra's theory of knowledge, but is also of great significance for the understanding of the role of knowledge in human perfection.

Through trans-substantial motion the act of knowing elevates the very existence of the knower. According to a hadith of the Prophet, "knowledge is light" (al-'ilm nurun), a principle which is also foundational to Mulla Sadra's thought. The unity of the knower and the known implies ultimately the unity of knowing and being.

The being of man is transformed through the light of knowing and being. The being of man is transformed through the light of knowledge and also

our mode being determines our mode of knowledge. In this profound reciprocity is to be found the key to the significance of knowledge for Mulla Sadra and of the idea that knowledge transforms our being even in the posthumous state. The writings of Mulla Sadra are replete with various applications of this doctrine and he returns again and again to the principle of the ultimate of being and knowing.

The imaginal world and the archetypes

Mulla Sadra accepted the reality of the archetypes (al-a'yan al-thabitah or almuthul al-nuriyyah) in conformity with the view of Suhrawardi and against the claims of Muslim Peripatetics such as Ibn Sina. And he brought many philosophical arguments to refute those who have denied them.

There is in fact no doubt concerning the major role performed in Mulla Sadra's thought by the archetypes or "Platonic Idea", pure intelligible belonging to the domain of immutability which many have confused with forms in the imagine world which although beyond matter nevertheless still participate in becoming and transsubstantial motion. The latter play a crucial role in the "transcendent theosophy" without in any way replacing the immutable archetypes or luminous "ideas" in the Platonic sense.

Considering the absence of the imagine world in Western philosophy for many centuries, it is necessary to delve more deeply into the meaning of 'alam al-khayal, the mundus imaginaries, which Corbin and I have translated as the magine rather than imaginary world, considering the pejorative connotation of the latter term in modern European languages. The traditional hierarchy of being in the mainstream of Western thought goes from the realm of material existence, to the psyche, to the intelligible and angelic world with its own vast hierarchy and finally to God who is Pure Being and for some Western metaphysicians, the Beyond Being. This scheme was more or less followed by early Islamic philosophers with adjustments related to the fact that they were living and philosophizing in an Islamic universe.

Suhrawardi was the first to speak of the imagine world at least in the microcosm. He was soon followed by Ibn 'Arabi who elaborated upon this theme and expanded the understanding of the imagine universe to make it a central pillar of his understanding of the Islamic universe upon which numerous Sufis and philosophers were to write important treatises.

It was, however, Mulla Sadra who gave the first systematic and philosophical explanation of this world. He added to the view of Suhrawardi that this world was added to man's microcosmic reality (khayal al-muttasil), the thesis that the imagine world has also macros comic and objective reality independent and disconnected from man (khayal al-munfasil). He emphasized that this world has even more reality than the physical world. As for its characteristics, it is a world possessing forms called alsuwar al-khayaliyyah (imaginal forms) which, however, are not wed to matter, at least not the matter of the physical world.

That is why they are also called al-muthul al-mu'allqah (suspended forms). Nevertheless they are forms having colours, shapes, odours and everything else that is associated with the forms of this world. This is a world of concrete realities which, however, are not physical, the world

immediately above the physical, identified with the mythical cities of Jabulqa and Jublsa, a world which the seers can experience in this life and into which human beings enter at the moment of death. It is a world in which we have subtle or imagine bodies (al-jism al-khayali) as we have a physical body in this world.

Eschatology and resurrection

No Islamic philosopher has dealt in such great detail as Mulla Sadra with eschatology andresurrection (al-ma'ad) concerning both the individual and the cosmos. The fourth book of Asfra, much of it based on Ibn 'Arabi is the fastest and most detailed study in Islamic philosophy of the soul (nafs) from its birth to its final meeting with God and includes elements concerned with the phenomenology of death. If we were to seek something like the Tibetan Book of the Dead in Islamic sources, probably this fourth book of the Asfar would be the best candidate. Moreover, Mulla Sadra devoted much space in his other major writings such as al-Mabda' wa'l-ma'ad and al-Shawahid alrububiyyah to the subject and wrote separate treatises devoted only to this subject such as the Risalat al-hashr ("Treatise on Resurrection").

Basing himself completely on traditional Islamic description of the posthumous states and eschatological events, Mulla Sadra seeks to interpret such terms as the Bridge of Sirat, the Balance and lower paradise states as well as the infernal states in terms of the imagine world. All these events related to death, judgment and the like as mentioned in the Qur'an and Hadith take place in this world which itself is an intermediate realm (albarzakh) stretching from the al-barazikh al-a'la or higher intermediate realms to al-barazikh al-asfal or lower ones. The higher comprise paradise states although still not the supreme heavens and the lower the infernal ones. This realm is in fact also a kind of purgatory through which souls pass on their way to their final beatitude or damnation.

Mulla Sadra speaks of a doctrine which at first seems somewhat strange and can be understood only in the light of the doctrine of trans-substantial motion. He claims that the soul (nafs) is created with the body but becomes immortal and spiritual through the Spirit, or, using his own terminology, the nafs or soul is jismaniyyat al-huduth wa ruhaniyyat al-baqa. Its vertical ascent through transition motion in fact does not cease in this world but continues after death as the soul journeys through various intermediate realms in conformity with the types of actions it has performed and its mode of being in this world.

In the great debate about whether resurrection is spiritual (ruhani) or bodily (jismani), Mulla Sadra categorically favours badily resurrection but he points that, upon death, individuals are bestowed with subtle bodies (aljism al-latif) which correspond in many ways to the astral body or Paracelsus.

After death they are therefore not simply disembodied souls but possess bodies which are "woven" of the actions that they have performed in this world. They also enter a world which conforms to their inner nature. In a sense an evil soul chooses hell because of the nature of its being at the moment of death. Moreover, the reality of the body in this world is to form the body and not its matter. In the final resurrection all of the levels of one's

being are integrated including the form of the physical body, which is the reality of the body, so that one can definitely accept bodily resurrection as asserted by the Qur'an and Hadith and at the same time provide intellectual demonstration for it on the basis of the general principles of Sadrian metaphysics.

God's knowledge of theworld Another difficult question discussed by numerous philosophers and theologians is that of God's knowledge of the world. Al-

Ghazzali in fact considered the Peripatetic view that God only knows universals and not particulars as one of the views of earlier thinkers concerning this issue, while in al-

Shawahid al-rububiyyah he claims that God knows everything in a special way which was unveiled to him by God and because of its complexity and the difficulty of understanding it by the great majority of men he finds it wiser not to reveal it fully. In other writings, including one of his letters to his teacher, Mir Damad, he insists that he gained full knowledge of this mystery through inspiration (ilham), unveiling (kashf) and the "eye of certainty" ('ayn alyaqin).

What Mulla Sadra does reveal of God's knowledge of the world is based on the thesis that whenever wujud is not mixed with non-existence and not veiled by it, it manifests to itself never absent from itself.

Therefore the essence of this wujud knows itself and its essence is both knowledge of itself and known by itself, since the light of wujud is one, the veil covering the reality of things being nothing but non-existence.

Therefore the essence of this wujud knows itself and its essence is both knowledge of itself and known by itself, since the light of wujud is one, the veil covering the reality of things being nothing but non-existence. An since the Necessary Being possesses and Essence which is beyond all composition and contingency, it is at the highest level of perceiving and being perceived, of knowing and being known. This means that since ultimately there is but one wujud which the wujud of all things, therefore His Essence knows all beings that exist and there is not an atom that he does not know as asserted by the Qur'an. The very presence of the Divine Essence to Itself is none other than undifferentiated knowledge which is at the same time also differentiated knowledge.

And God's differentiated knowledge is none other than their wujud. God's knowledge of existents is the very cause of their existentiation.

Mulla Sadra asserts that God's knowledge of things has its own hierarchy. There is first of all the level of solicitude (al-'inayah) which is His knowledge of things on the level of His own Essence. The second level is that of undifferentiated decree (al-qada' alijmali) which is interpreted as the Pen (al-Qalam). As for forms which subsist by the Qalam, their subsistence is subsistence by emergence (al-qiyam al-suduri) for the Qalam has full dominion of all forms below it. The third level is the Tablet (al-lawh), also called differentiated decree (al-qada' altafsili), which contains the archetypes and Platonic Ideas of things, and their relation to the forms of this world is what of principles to their reflections. The fourth level is destiny through knowledge (al-qadar al-'ilm) comprising the imagine world

and that of suspended forms of the physical world. Mulla Sadra considers this last level to be below the level of direct Divine Knowledge since it marks the mixture of forms with matter. But it is indirectly the subject of Divine Knowledge since the principles of these forms belong to the worlds above which God knows in an absolute and direct sense. Moreover, every level mentioned by Mulla Sadra possesses wujud which gives it reality and, according to the arguments given above, since there is only one wujud as asserted by the doctrine of wahdat al-wujud, God knows all existents by virtue of knowing His own Essence which is none other than absolute wujud.

Some other principles of Sadrian teachings

There are numerous other principles expounded by Mulla Sadra and founding elements of the "transcendent theosophy".

In fact whereas Muslims inherited some two hundred topics from Greek philosophy, Mulla Sadra discusses over six hundred, many of which are drawn from further encounters between philosophy and the Islamic revelation and further encounters between philosophy and theosophical meditations upon the sayings of the Shi'ite Imams along the Qur'an and Hadith. Here, because of the constraint of space, we shall mention only two of the best known of these principles, not already discussed above. One is the famous thesis that "the Truth in its simplicity contains all things" (basit al-haqiqah kull al-ashya') which is the direct consequence of the unity and principality of wujud. By this principle Mulla Sadra means that the truth (alhaqiqah) in its state of pure simplicity and before becoming "combined" with quiddity (almahiyyah), that is, Pure Being, contains all things since the reality of things is their existence and Pure Being is the source of all wujud and therefore in a sense contains the reality of all things. Mulla Sadra appeals to this principle in many of his writings in solving some of the most complicated philosophical issues.

Another well-known principle is that "the soul in its unity is its entire faculty" (al-nafs fi wahdatihi kull al-quwa). This is also a consequence of his ontology as well as trans-substantial motion. It means that the various faculties of the soul are not like accidents added to the substance of the soul. Rather, the soul is each of its faculties when it identifies itself with this or that function related to a particular faculty. That is why the perfecting of any faculty affects itself in its unity and the perfection of the soul through transsubstantial motion also affects its faculties. It also emphasizes the unity of the soul above and beyond what one finds in the faculty psychology of the Peripatetic.

Also many of the older topics of philosophy are changed completely by seeing them in the light of Sadrian metaphysics. An outstanding example is the question of cause and effect or causality (al-'illahwa'1277 ma'lul or al-'alliyyah). Mulla Sadra accepts the Aristotelian doctrine of the four causes and commentaries upon it by Ibn Sina and other earlier Islamic philosophers, but transforms them completely by considering the relation between cause and effect in light of the doctrine of the principality of wujud. He thereby combines horizontal and vertical causes and his discussion if these subjects in all his works contain some of his most exalted gnostic

('irfani) expositions. In studying them one is presented with a knowledge which satisfies both the mind and the heart and can lead those who can understand and have sympathy for gnosis and sapience practically into a state of ecstasy. There are many other principles transformed by Sadrian metaphysics which we cannot discuss here because of the limitation of space. What has been presented here is only by way of example.

Mulla Sadra's Qur'anic commentaries

None of the philosophers throughout the history of Islamic philosophy has paid much attention to the Qur'an as source of philosophical and theosophical knowledge and none has written as many commentaries upon the Qur'an as has Mulla Sadra, whose commentaries are the continuation of his "transcendent theosophy" an organic outgrowth of the inner meaning of the Qur'an as understood by Mulla Sadra who asserts again and again the harmony between revelation (al-wahy) and intellect/reason (al-'aql). He in fact asserts that the intellect, of which reason is the reflection upon mental plane, is humanity's inner prophet which manifests it only in those who are, in the language of Qur'an "firmly rooted in knowledge" (alrasikhun fi'l-'ilm).

Mulla Sadra wrote commentaries upon a number of chapters and verses of the Qur'an: al-Fatihah ("The Opening"), al-Baqarah ("The Cow"), ayat al-kursi ("The Throne Verse"), ayat al-nur ("Light Verse"), Sajdah ("Prostration"), Ya Sin ("YS"), al-Waqi'ah ("The Event"), al-Hadid ("Iron"), al-Jum'ah ("The Congregation"), al-A'la ("The Most High"), al-Tariq ("The Morining Star") and al-Zalzal ("The Earthquake"). Moreover, he wrote a number of works dealing with the science of Qur'anic commentary. These include Asrar al-ayat ("Mysteries of Qur'anic Verses"), which deals especially extensively with eschatological matters to which the Qur'an refers; Mutashabih al-qur'an ("On the Metaphorical Verses of the Qur'an"), dealing with those verses of the Qur'an whose outward meaning is not clear in contrast to the muhkamat or "firm" verses whose outward meaning is clear, and Mufatih al-ghayb ("Keys to the Invisible World"), which is one of his most important works and in which he discusses his method of Qur'anic commentary.

Mulla Sadra distinguishes between commentators who see only the outward meaning of Sacred Text and who are like those who see only the shell of a nut and disregard the fruit within, and those who pay attention only to what they consider the inner meaning while disregarding the outer form. He opposes both methods and states that, if these were to be the only choices, he would prefer the exoteric commentaries because they at least preserve the outward container of the revelation. But the best method is to deal with the inner meaning without going against the external sense of the words of the Qur'an as understood by the Islamic community. And he adds that only those whom the Qur'an calls "firm in knowledge" (al-rasikhun fi'l- 'ilm), who have received their knowledge through divine inspiration without any spectre of doubt in their minds and hearts, have the right to carry out spiritual hermeneutics (ta'wil) of God's Word.

Mulla Sadra considers the Qur'an to be the same as being itself. Being, like the Qur'an, possesses letter (huruf) which are the "keys to the invisible

world' and from their combinations verses (ayat) are formed and from them the chapters (suwar) of the Sacred Book. Then from the combinations of the chapters, there results "the book of existence" (kitab al-wujud) which manifests itself in two ways as al-furqan, or discernment, and al-qur'an, or recitation (both of these terms being names of the Qur'an). The furqani aspec of the book is the macrocosm with all its differentiations, and the qur'ani aspect is the spiritual and archetypal reality of man or what is generally called universal man (al-insan alkamil).

Therefore, the keys (mafatih) to the invisible world, as far as the revealed Qur'an is concerned, are also the keys to the understanding of the invisible dimension of the world of external existence and man's inner being and vice versa. The Qur'anic commentaries of Mulla Sadra occupy an exalted place in the annals of the Qur'anic commentaries as well as in the philosophical hermeneutics of a sacred text, and it are a pity that so little attention has been paid to them in scholarships in Western languages.

The influence of Mulla Sadra

The vast synthesis created by Mulla Sadra was to have a profound influence upon later Persian thought as well as in India and Iraq. It is not true that his thought dominated the whole philosophical scene in Persia, because it has had its detractors to this day, but it has certainly been the most important influence on the intellectual scene in Persia during the past three and a half centuries. Temporarily eclipsed after his death because of adverse political conditions, the "transcendent theosophy"

was revived during the Qajar period in both Isfahan, the older centre of Islamic philosophy, and Tehran which was now becoming the foremost center for the study of hikmah. That School such as Hajji Mulla Hadi Sabziwari in Khurasan and Mulla Ali Mudarris in Tehran. They continued very much in the line Mulla Sadra although they began to write more in Persian rather than Arabic in accordance with the general tendency of the period which was witness to the revival of philosophical Persian. And this tradition has continued unbroken to this day to such an extent that the extensive group of students studying the Islamic subjects in the traditional madrasahs, especially those of Qom, and who are interested in the "intellectual sciences" (al-'ulum al-'aaliyyah), are mostly followers of Mulla Sadra.

In India the influence of Mulla Sadra began to manifest itself from the middle of the eleventh/seventeenth century almost from the time of his death. His writings, especially the Sharh al-hidayah ("Commentary upon the 'Guide' of Athir al-Din Abhati") became widespread, and the latter book even came to be known as Sadra; people received distinction by saying that they had studied Sadra. This tradition affected many later figures and has survived to this day. It is interesting to recall that Mawlana Mawdudi, the founder of the Jama'at-I islami of Pakistan and India, that is the founder of one of the most important politico-religious movements in the Islamic world in the fourteenth/twentieth century, translated parts of the Asfar into Urdu in his youth. As for Iraq, Mulla Sadra has been thought continuously during the past three centuries especially in centres of Shi'ite learning such as Najaf. One of Iraq's foremost Islamic thinkers of the fourteenth/twentieth

century, Muhammed Baqir al-Sadr, displays in a typical fashion the influence of Mulla Sadra upon contemporary Iraqi indigenous scholars with a philosophical bent.

In conclusion, it is interesting to note that the revival of Islamic philosophy in Iran during the Pahlavi period, especially from the 1950s onward even in semi-modernized circles, was primarily around the figure of Mulla Sadra, many of whose works have been edited and printed during the past forty years while numerous analyses of the "transcendent theosophy" have been made in Persian as well as Arabic. At the same time Mulla Sadra has now been introduced to the West and other parts of the non-

Islamic world by such scholars as Henry Corbin, Toshihiko Izutsu, S.H. Nasr and Mehdi Mahaghegh, , with the result that there is now a great deal of interest in his works in the West as well as in parts of the Islamic world such as the Arab countries, Turkey, Indonesia and Malaysia which did not show much interest in later Islamic philosophers in general and Mulla Sadra in particular until recently. Moreover, numerous theses are being written throughout the world on him and his school. In any case Mulla Sadra is not only one of the greatest intellectual figures of Islamic history, but his thought is very much a part of the contemporary Islamic world and continues to exercise great influence upon many aspects of current Islamic thought, especially the philosophical, theological and theosophical.

Chapter Eight: Al-Kindi

Abu Yusuf Ya'qub ibn Ishaq al-Kindi is generally held to have been the first Muslim philosopher. This does not mean, however, that the Muslims prior to al-Kindi had no cognizance at all of Greek philosophical ideas. On the contrary some philosophical knowledge, though fragmentary, can be attributed to the early Mu'tazili kalam.

Some of their main representatives - Abu'l-Hudhayl al-'Allaf and al-Nazzam -developed a theology built on certain Greek philosophical elements. Thus the theologian Abu'l-Hasan al-Ash'ari named Aristotle as the source of some of Abu'l-Hudhayl's doctrines, and al-Baghdadi blamed al-Nazzami for having borrowed from Greek philosophers the idea the idea of matter being infinitely divisible. The impact of Greek philosophy upon early Mu'tazili kalam is eveident and has been stated also by early Muslim theologians and heresiographers. But this impact remained after marginal; for none of the early Mu'tazili theologians ever elaborated an encyclopediac system of Greek philosophy as this was out the range of their interests.

It was al-Kindi who pursued this aim and who may therefore rightly be called the first Muslim philosopher, whereas the representatives of Mu'tazili kalam were theologians and no philosophers. This fact alone puts al-Kindi in some opposition to the Mu'tazili with whom he should not be identified.

Ibn al-Nadim listed some 260 titles of al-Kindi's, and ernomous scientific bibliography, even if many of the works may have been of small extent. Al-Kindi's treatises encompass the whole classical encyclopedia of sciences: philosophy, logic, arithmetic, spherical, music, astronomy, geometry, cosmology, medicine, astrology, etc., according to Ibn al-Nadim's arrangement. Ibn al-Nadim's bibliographical list reveals al-Kindi's predilection for natural science. Only few manuscripts, approximately ten per cent of all his literary output, have come to light and been edited up to now. It seems that the vast majority of the manuscripts have been lost. It is hardly surprising that later Muslim philosophers rarely quote from any of al-Kindi's philosophical treatises. Both facts -loss of the bulk of his manuscripts and the lack of reference to him by later authors -need an explanation. Some books may have been lost already during the reign of the caliph al-Mutawakkil who fought vehemently against the rationalizing tendencies of his time and confiscated for a while al-Kindi's library. The famous eighth/fourteenth century historian Ibn Khaldun adds further proof to the lack of manuscripts when he says: "We have not found any information concerning (al-Kindi's) book (called al-Jafr), and we have not seen anyone who has seen it. Perhaps it was lost with those books which Hulagu, the ruler of Baghdad threw into the Tigris when the Tatars took possession of Baghdad and killed the last caliph, al-Musta'sim." The obscurity of al-Kinda's language, due to lack of an Arabic philosophical terminology, rendered his writings hard of access and made them obsolete while al-Farabi's philosophical oeuvre eventually overshadowed them.

Abu Sulayman al-Sijistani al-Mantiqi recorded the ruler of Sijistan, Ja'far ibn Babuyah, as having criticized al-Kindi because of his bad language.

It is, nevertheless, the merit of al-Kindi to have made access to Greek philosophy and science possible and to have established from rare and

obscure sources the foundation of philosophy in Islam, partly continued and enlarged later on by al-Farabi.

Al-Kindi enjoyed the confidence and support of the seventh and eighth 'Abasid caliphs, al-Ma'mun and his brother and successor. To al-Mu'tasim he dedicated his On First Philosophy, and some other treatises to the caliph's son Ahmad with whose education he was entrusted. Unlike his contemporary Hunayn ibn Ishaq, al-Kindi knew neither Greek nor Syriac. He therefore commissioned or adopted translations, e.g. those made by Ibn Na'ima, Eustathius (Astat) and Ibn al-Bitriq. The old translations, commissioned or used by al-

Kindi, still lack the high philological standards set later on by Hunayn ibn Ishaq.

But it was al-Kindi who broke new ground in a fertile soil and introduced into the Arabspeaking world the first translations of Greek philosophy. He was above all interested in gathering and translating works of Plato and Aristotle, both of whom he mentioned by name. But under the cover of these two philosophers other pseud epigraphic works became known, e.g. Porphyry's paraphrase of part of Plotinus' Enneads known as Aristotle's Theology. Al-Kindi, however, had a good grasp of the genuine works of Aristotle. He commissioned a translation of Aristotle's Metaphysics and commented upon some of Aristotle's logical writings, such as Categorize, De interpretation, Analytica posterior and Analytica priora - and also on De caelo, as we are informed by Ibn al-Nadim. He had before him even the otherwise lost Aristotelian dialogue Eudemus, a fragment of which he transmitted.

Al-Kindi was eager to intgroduce Greek philosophy and science to his Arabicspeaking "co-linguists" (ahl lisanina), as he often stressed, and opposed the orthodox matakallimun who rejected foreign knowledge. As long as he enjoyed the caliphs' protection he was free to do so and did not feel compelled to defend his philosophical stand as was the case with so many later scientists who came under pressure at the hand of the orthodox legalists. As long as al-Kindi clung to tenets held by Late Greek Neo-Platonists, mostly Christians, who believed in one God who had created the world out of nothing, he was in apparent harmony with the divine law of Islam. But as soon as he adopted pagan philosophical doctrines, especially those of Aristotle, he openly deviated from the revealed truth of Islam. His view adduced in the name of Aristotle - that one should gratefully accept any contribution to truth, wherever it comes from, even from Greek philosophy - is incompatible with the exclusive postulate of Islam as the sole mediator of truth.

Al-Kindi's own philosophical stand reflects the doctrines he found in Greek Classical and, above all, Neo-Platonism sources. His treatises On Definitions and Descriptions of Things may be accepted on the whole as the base of his own views. He supposedly extracted the definitions from Greek literature with the intention of giving a summary of Greek philosophy in definitions.

As I have shown elsewhere, many of these definitions from Aristotelian works and his predilection for Aristotle cannot be ignored even where he

extracted from spurious sources which were at the time attributed to Aristotle. The lemmata and their arrangement correspond to a Neo-Platonist source. God is referred to in the first definition as the "First Cause", similar to Plotinus' "First Agent", an expression al-

Kindi has likewise made use of, 26or to his "the One is the cause of the cause". 27The subsequent definitions in al-Kidi's treatise are arranged in an order that distinguishes between the upper world and the lower world. The former is marked by the definitions of Intellect, Nature and Soul, followed by definitions of body (jirm), Greation (ibda), Matter (hayula). Form (surah), etc. Thus al-Kindi conceived an upper world of uncreated spiritual beings and a lower of created corporeal beings.

The soul is an un-created, spiritual being, whereas Matter, Time and Place are finite, created and corporeal. Creation (ibda) in this Muslim context is Creation from nothing in time. 28 Both worlds, the upper and the lower one, go finally back to one and the same source which is the common cause of everything. From this final source which is the Godhead everything proceeds subsequently by hypostases.

In his treatise On Definitions and Descriptions of Things al-Kindi explained the world through emanation, a system that later was adopted and enlarged also al-Farabi. 29 The Muslim orthodox, however, was on the whole irritated by the attempt to explain creation as an incessant outflow from the ultimate source, an argument that could not be upheld by scriptural evidence.

They were especially offended by extolling Intellect to immediate proximity to God as His first hypostasis. Emanating from the Uppermost Cause, everything passes through, and develops from, the reflexion of the first intellect. Thus the intellect was to replace the angels as the mediator of divine truth. Al-Farabi took the sharp edge off the doctrine of emanation by equating the Active Intellect with the Angel Gabriel and by explaining prophecy as the result of the soul's faculty of imagination.

Nevertheless, emanation could not explain the divine act of creation in a way acceptable to the orthodox community of the faithful. "It should be known," said Ibn Khaldun, "that the (opinion) the (philosophers) hold is wrong in all its aspects. They refer all existential to the first intellect and are satisfied with (the theory of the first intellect) in their progress toward the Necessary One (the Deity). This means that they disregard all the degrees of divine creation beyond the (first intellect)."

Al-Kindi did not intend to explain the "progress toward the Necessary One", i.e. the way of attaining knowledge of God, as an intellectual progress. On the contrary, towards the end of his On First Philosophy he made it clear beyond all doubt that God cannot be comprehended by intellect. 31

Account to al-Kindi the philosopher is unable to make any positive statement concerning God. All he is able to state is in the negative: that "He is no element, no genus, and no contingent accident". 32

Thus al-Kindi's philosophy leads to a negative theology, i.e. where God is described only in negative terms. In this he followed Plotinus 33who taught: "We state, what is not; what is, we do not state. 34If the intellect is

unable to lead people to knowledge of God in positive terms, philosophy is not superior to theology. On its "progress towards the Necessary One" philosophy reaches up to the intellect, but does not go "beyond the intellect", to use again Ibn Khaldun's words. 35

What is "beyond the intellect"? For the Muslim faithful it is the world of the angels.

They are God's messengers and are the mediators between humans and God. It is the Angel Gabriel, as the Muslim faithful say and not the intellect, as the philosophers have it who conveyed the divine revelation to the Prophet. The angelic essence is of "pure perception and absolute intellection". 36 Al-Kindi does not speak of angels. According to him the intellect is in immediate proximity with God. The longest text of al-Kindi's treatises that have come down to our time is his on First Philosophy (only the first part of this treatise has been preserved). This is another name for metaphysics. Aristotle had called metaphysics the "first philosophy". 37 Al-

Kindi, adopting this name, explained its meaning in the following way: Knowledge of the first cause has truthfully been called "First Philosophy", since all the rest of philosophy is contained in its knowledge.

The first cause is, therefore, the first in nobility, the first in genus, the first in rank with respect to that knowledge which is most certain; and the first in time since it is the cause of time. 38

The first cause is, therefore, explorerand it is the intellect that transmits "most certain knowledge" of it. The aim of writing his treatise was to establish "the proof of His Divinity and the explanation of His Unity" as al-Kindi declared in the introduction. 39 In spite of the intellectual certainty which can be attained of the Deity, al-Kindi admits at the end of his treatise that the intellect is able to describe God only in negative terms.

God's unity stood at the very centre of the Mu'tazili doctrine so that the Mu'tazilah were called accordingly "the people (who made) the confession of (God's) unity (the basis of their creed)" (ahl al-tawhid).

Supported by the evidence of Mu'tazili themes like God's unity in al-Kindi's philosophical writings, al-Kindi was held to be "the philosopher of the Mu'tazilite theology". 40Later researches, however, made it evident that this statement, linking al-Kindi peremptorily with the Mu'tazilah was brought to light by further research. 41

One point of dissent was the structure of matter. Most of the Mu'tazilah was of the opinion that matter consisted of small and indivisible particles, i.e. atoms. They were led to this opinion by supposing that everything created is finite in spatial and temporal extension. Hence they conclude that the divisibility of matter must also be finite. So they assumed the existence of atoms. Al-Kindi, however, denied the atomistic structure of matter, a topic he elaborated in his treatise On the Falsity of the Statement of Whoever Thinks that a Body Exists that is Indivisible. He adopted Aristotle's view of the continuous structure of matter. This difference of opinion had a great impact on many parts of the physical sciences. The Mu'tazilah accepted the discontinuity of matter and believed in the existence of a vacuum, denied by Aristotle.

Contrary to the Mu'tazilah, however, al-Kindi conceived matter as being continuous and of un-intermittent structure, but not of infinite extension. The universe is a finite body, a statement that al-Kindi expounded in a separate treatise. By its finiteness the universe is separated from the immaterial, upper world of the spiritual beings.

Right after the introduction of his treatise On Allah's Unity and the Finiteness of the Body of the Universe al-Kindi stated six primary propositions which can rationally be comprehended "without mediation" (ghayr mutawassit). Al-Kindi referred obviously to those propositions "that cannot be proved syllogistically by means of a middle term". 45 Propositions of this kind convey knowledge that cannot be proved (anapodeiktos), i.e. that is achieved a priori ('ilm awwal, ilm badihi). As an example of a proposition that conveys primary knowledge al-Kindi stated that, if one joins two finite bodies one with the other, the new body is again finite. It is, however, impossible to disjoin a certain, finite part from a body which is held to be infinite. This is to prove that the corporeal world is finite.

In the same way al-Kindi proved that time is finite. For you cannot pass a certain amount of time and suppose that rest of time is infinite and eternal.Likewise al-Kindi proved that the world cannot be eternal and that is created in time (muhdath).Al-Kindi's arguments go ultimately back to the late school of Alexandria. John Philoponus (Arabic Yahya al-Nahwi) used them in his refutation On the Eternity of the World against Proclus. 48He wrote his book in the year 529 against the Neo-Platonist philosopher Proclus. 49 Philoponus' refutation on the Eternity of the world against Proclus was translated into Arabic 50 and furnished al-Kindi with some philosophical arguments which were current among Christian Philosophers in late Hellenistic Alexandria. This has been attested by a recently found text of John Philoponus in an early Arabic translation. 51

Al-Kindi has been influenced to a great extent also by Proclus. Traces of his Institution theosophy,52 they attest to al-Kindi's efforts at harmonizing the Aristotelian and the Neo-Platonist systems of philosophy within the religious climate of Islam.

Al-Kindi's predilection for Aristotle's philosophy, witnessed already in his treatise On Definitions and Descriptions of Things is most strikingly felt also in his on First Philosophy. In writing this treatise al-Kindi lavishly quoted from Aristotle's Metaphysics. 53 But it seems that the subject matter used by al-kindi differed from the text now generally accepted. Book Alpha elatton allegedly written by Pasicles of Rhodes, a nephew of Eudemus, was apparently missing, but appears in 'Abd al-Latif Ibn Yusuf al-Baghdadi's 54 parahrase of Airstotle's Metaphysics, although in a reversed order, i.e. preceding book Alpha.55 Although al-Kindi elaborated many of the ideas that go back to Aristotle's Metaphysics, his on First Philosophy is not a mere paraphrase of this book. For him relied extensively also upon other books of Aristotle. Thus many of al-Kindi's conceptions reflect ideas expressed by Aristotle in his physics, De anima and categorised, to name only those books most quoted. 56

As well as giving a summary of Aristotle's Metaphysics he supplemented his on first Philosophy by drawing upon other writings of Aristotle.

The knowledge of the true nature of things, the foremost aim of philosophy, was not confined to the world of senses. For al-Kindi philosophy included also knowledge of the divinity. 57 This led to the merging of physics and metaphysics, science and theology. For later Muslim generations this amalgamation became offensive. The faithful accused the philosophers of valuing intellectual speculation higher than the revered tradition and establishing the articles of faith as correct through reasoning and not through tradition. 58

Thus al-Kindi's philosophy, and especially his natural theology, contained already the seeds of the later conflicts between the orthodox and the intellectuals in Islam. Only as long as he was protected by the caliph al-Mu'tasim was he safe to engage in philosophy.

Al-Kindi did not conceal his indebtedness to earlier and alien philosophers by acquiring the truth "wherever it comes from". 59 For him the truth of the philosopher cannot differ from the truth of the Muslim faithful. Philosophy and theology served one end: the knowledge of the True One, of God.

Acclimatizing philosophy in an Islamic society was made easier through the medium of texts of late Greek philosophy.

From among these texts it was the so-called Theology in which al-Kindi took an interest.

Falsely attributed to Aristotle, the Theology was in the nineteenth century identified as Porphyry's paraphrase of Plotinus' Enneads, 4-6. 60 With all these texts at his disposal al-Kindi elaborated a philosophy that was an able instrument to support by rational arguments the Muslim belief founded upon revelation and tradition, thus creating harmony between speculation and revelation.

In spite of this apparent harmony al-Kindi's language is distinct from that of the Qur'an.

Instead of "Allah", which is the common name of God in the Qur'an and even in kalam literature, al-Kindi used "al-bari" (Creator) or "al-'illat al-ula' (the First Cause).

The former name is recorded only once in the Qur'an; 61 the latter is of course completely missing from the Qur'an and the Holy Scriptures, for the faithful reject as polytheism the idea that God Almighty is the first of a series of causes that emanate from Him. God is for the faithful the only cause, the Creator of all. Al-Kindi referred to creation out of nothing by the word ibada which replaced the Qur'qnic khalq, jirm was chosen instead of jism, etc.

The choice of language gives the impression that al-Kindi deliberately avoided the corresponding Qur'anic expressions, holding aloof the language of speculation from the inimitable languages of Qur'an.

"First Philosophy" means the knowledge of the True One. Whereas everything is the effect of what precedes and the cause of what follows, the True One is the only cause. The world, emanating ultimately from the first cause, is thus dependent on, and connected with, the True One, but is

separated from Him by being finite in time and space. The oneness of the first cause is contrasted with the plurality of the created world: everything has five predicables: genus, species, difference, property and accident. The modes of existence are explained by the categories. Al-Kindi is in full harmony with Islam in Stating that the world has been created out of nothing and is created in time, having come into existence after not having existed. This is not only his religious credo but also his conviction as philosopher.

Al-Kindi was, apart from metaphysics, also interested in mathematics and natural sciences. His efforts to study the whole encyclopedic range of sciences proved him to be a true follower of Aristotle. With regard to his strong inclination towards mathematics he even surpassed Aristotle.

He wrote a treatise entitled that Philosophy cannot be acquired except with a Knowledge of Mathematics. 62 His predilection for mathematics is emphasized also in his treatise On Definitions and Descriptions of Things.

Many of the definitions are expressed in a double way: physically (minjihat) and mathematically (min jihat al-ta'lim). 63 It was also in the field of mathematical computation that he exerted his greatest authority as teacher. His two famous pupils, Ja'far ibn Muhammad ibn 'Umar al-Balkhi (Allbumasar in Medieval Latin literature) 64 and Abu'l-'Abbas Ahmad ibn al-Tayyib as- Sarkhs, 65 continued and enlarged the mathematical research of their teacher. 66

Al-Kindi's strong inclination for mathematics probably influenced also the so-called Brethren of Purity in the late fourth/ tenth century. Favouring practical application of science, al-Kindi elaborated a system of calculating the efficacy of medical drugs.

This becomes necessary since the physicians moved over from simple to compound drugs. The first physician recorded as having used compound drugs was Abu'l-Hakam from Damascus. 67 In order to achieve the intended efficacy the pharmacist had to calculate the right proportion of the ingredients of the drug.

Al-Kindi undertook to divide the medical ingredient into grades according to the strength of their curative properties. 68 He was also the author of many treatises and handbooks of medical and pharmaceutical concern. 69

In one of these medical treatises, recently found, al-Kindi again connected medicine with mathematics by giving the rule for calculating in advance the critical days of a developing disease. 70 Being the quickest planet in the firmament, the moon was held to influence acute diseases.

On certain days of the lunar monthly revolution the diseases were held to change for the better or the worse. This theory, already expounded by Galen, was further elaborated by al-Kindi.

Al-Kindi's mathematical curiosity did not halt even before the Holy Scripture. He wrote a treatise On the Duration of the Reign of the Arabs, 71 and based his calculation upon the letters at the head of twenty-nine chapters of the Qur'an. They from fourteen enigmatic words that contain fourteen different letters out of the twentyeight letters of the Arabic alphabet. By adding the numerical value of each of these letters, counting only once those

letters which are repeated several times, one receives the approximate number of years of Arab rule until the Mongols in 656/1258 conquered Baghdad and "Arab hegemony was lost.

It is generally held that al-Kindi's philosophy is in harmony with the Muslim creed. This is supported for example by the argument that al-Kindi speaks of creation out of nothing. It should be kept in mind, however, that in his treatise on Definitions and Descriptions of Things al-Kindi speaks of the existence of an upper world that is above the world of creation. This is incompatible with the Muslim faith. The same is true with regard to the theory of emanation, which opposed the article of faith that the world was created in one instant by God's command.

It is difficult, if not impossible, to give a conclusive judgment of an author whose literary work has been preserved only to a very small extent. Nevertheless, the treatises that have come down to us and Ibn al-Nadim's bibliographical list that contains the titles of al-Kindi's writings allow us to express an approximate evaluation of al-Kindi as philosopher and scientist. Such an evaluation has to take into account that al-Kindi could not have recourse to any of his "co-linguists". There were, it is true, also learned men besides al-Kindi who commissioned scientific translations or translated themselves, like the sons of Musa ibn Shakir, Hunayn ibn Ishaq, Thabit ibn Qurrah and 'Umar ibn al-Farrukhan, as we are told by Abu Ma'shar.73 But al-Kindi was the first to transfer Greek philosophy systematically from foreign literary sources and to channel it into his Islamic environment where philosophy was received with coldness and even with hostility. At some time in his life he enjoyed the support of the caliph. But, like most of the later philosophers, he had no authority as an academic teacher because there was no official philosophy teaching. He kept himself aloof through his choice of language from colliding with the orthodox faithful or the mutakallimun.

Apart from metaphysics he engaged in research on almost all the natural and mathematical sciences.

Though Latin translations, al-Kindi influenced medieval European philosophers. They became acquainted with works from the whole spectrum of his literary output, especially with those that dealt with natural sciences and mathematics. 74Gerard of Gremona 75 and Avendauth 76 translated several of al-Kindi's scientific works, among them on Optics (Deaspectibus) which Roger Bacon, 77 dealing with the speed of light, used. 78

Also translated by Gerard of Cremona were On Degrees (of compound Medicines), One Sleep and Vision, and on the Five Essences (De quinque essentiis) 79 cited also by Roger Bacon in his Nature and Multiplication of Light or species. 80 De quinque essentiis was one of the main sources for the knowledge of al-Kindi the philosopher until Abu Ridah edited in 1950 a collection of fourteen treatises mostly on philosophical subjects.

Besides these works only fragments of other works were known from medieval secondary sources. Thus for example the historian al-Mas'udi 81 cited from a treatise of al-Kindi in his Muruj al-dhahab, 82 where he denied the possibility of artificially producing gold and siver. Abu Bakr Muhammad ibn Zakariyya' al-Razi 83 wrote a refutation of this treatise. 84

Notes

1 c. 185/801-252/866.

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2 Died c. 235/849.
   3 Died between 220/835 and 230/845.
   4 260/873-324/935.
   5 Ritter (1929-39): 486.
   6 Died 429/1037.
   7 Laoust (1965):
   8 Corbin (1964): 219; lvry (1974): 22ff.
   9 Died 380/990.
   10 232/847-247/861.
   11 732/1332-808/1406.
   12 Ibn Khalbun (1970), 2: 562f 13 Died c. 375/985.
   14 Wiedemann (1970), 2: 562
   15 Died 339/950
   16 Died 218/833.
   17 died 227/842
   18 192/808-260/873.
   19 Astat/Eustatius translated Aristotle's Metaphysic; 'Abd al-Masih ibn Na'imah
translated Porphyry's interpretation of Plotinus' Enneads, 4-6, known as Aristotle's
Theology (cf. Brockelmann (1937), Suppl.
   1:364) and Yahya ibn al-Bittriq translated Aristotle's De caelo, De anima, Plato's
Timaeus, possibly also writings of Proclus, e.g the summary of his Institutio theological (cf.
Endress (1973) passim).
   20 Walzer (1963): 14.
   21 Cf. e.g Abu Ridah (1950): 260.8;
   Rosenthal (1956),2: 445.
   22 Walzer (1945), 29: 20f. Ess (1966): 235.
   23 Abu Ridah (1950): 103; cf. Gutas (1975):
   196, Nr 69
   24 Klein-Franke (1982b): 191 -216.
   26 E.g Abu Ridah (1950): 207, I. 11; cf.
   Rosenthal (1952): 474; Plotinus (1959):
   275; (1955): 184.
   27 Plotinus (1963). 8.18.
   28 Walzer (1963): 189; Endress (1973): 231.
   29 Died 313/925.
   30 Ibn Khaldun (1958), 3: 250.
   31 Abu Ridah (1950): 160, I. 6; Walzer (1963): 188
   32 Abu Ridah, op. cit.
   33 Ibid: 205-70.
   34 Plotinus (1959): 324=Enn. 5.3(49), 14.6:
   'kai legomen ho me estin, ho de estin Ou legomen:.
   35 Supra ann. 11; cf. Zintzen (1983): 312-28, esp. 314.
   36 Ibn Khaldun (1958), 1: 195.
   37 Cf. the Neoplatonic philosopher Simplicius (first of sixth century)
   commenting on Aristotle's De caelo 277b 10, in Simplicus (1894): 269.31.
   38 Ivry (1974): 56, 1. 6.
   39.Ibid.59.1.3.
   40 Walzer (1950): 9.
   41 Ivry (1974): 27ff.
   42. Ibn al-Nadim (1871): 259, 1. 19.
   43 Abu Ridah (1950): 201-7.
   44.Ibid. 202. 1.4.
   45 Aristotle (1831): Analytica Priora 72b 19:
   amesos =ghayr mutawassit, cf. Bohm (1967): 67.
   46 Abu Ridah (1950): 201-7.
   47.Ibid. 207, 1.1.
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48 Philoponus (1899)
   49 412-85. This year was remarkable also because of two other events: the Roman
Emperor Justinian closed the school of philosophers in Athens (cf. Gibbon, chapter 40) and
St. Benedict founded the religious order named after him.
   50 Ibn Abi Usaybi'ah (d. 668/1270)
   (1882/4), 1: 105, 1.5.
   51 Pines (1972): 320-52.
   52 Especially with reference to prop. 1-3
   and prop. 5; Endress (1973): 242ff.
   53 Ivry (1974): 205-7.
   54 557/1162-629/1231.
   55 Neuwirth (1977-8): 84-100.
   56 Ivry (1974): 205-7.
   57 Abu Ridah (1950): 104,1. 5.
   58 Ibn Khaldun (1958), 3: 347.
   59 Abu Ridah (1950): 103, 1. 4. This reminds one of Pliny, who admitted: "We are
swept by the puffs of the clever b INS of Greece";
   Pliny (1963), 8:188f.
   60 Steinschneider (1960): 77.
   61 Surah 59 (al-Hashr): 24.
   62. Ibn al-Nadim (1871): 255 ult.
   63. Klein-Franke (1982b): 194.
   64 Died 272/886.
   65 Died 286/899.
   66 Rosenthal (1943): 17.
   67 Fl. Second half of the first/seventh century; cf. Klein-Franke (1982a): 35.
   68 Harig (1974): 148 and 200.
   69 Sezgin (1970): 244-7.
   70. Klein-Franke (1975): 161-88.
   71 Loth (1875): 261-309.
   72 Hitti (1958): 484; Rosenthal (1949): 122;
   Plessner (1962): 184f.; Noldeke (1919), part 2: 68-78.
   73 Ibn Abi Usaybi'ah (1882/4), 1: 207;
   Wiedemann (1970), 2: 551.
   74 Thorndike and Kibre (1963), col. 1731 et passim.
   75 c. 1114-87.
   76 First half of the sixth/twelfth century; cf.
   Alverny (1954), 1: 19-43.
   77. c. 1214 too soon after 1292.
   78 Grant (19749; 396.
   79. Ibid., 494.
   80 Nagy (1897).
   81 Died 345/956.
   82 al-Mas; udi (1974), 5: 159f.
   83 Died 313/915.
   84 Ibn Abi Usaybi'ah (1882/4), 1: 316, 1. 12;
   Ranking (1913): 249, Nr 40: "Responsio ad Philosophum el-Kendi eo quod artem al-
   Chymiae in impossibili posuerit";
   Wiedemann (1970), 1: 51ff.
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Chapter Nine: Al-Farabi

Life and works

What little information there is about the life of Abu Nasr al-Farabi comes mostly from medieval Arabic biographers whose writings date from the fourth/tenth to the seventh/ thirteenth centuries. The earliest account in Ibn al-Nadim's (d. 380/990) Kitab al-fithrist gives only minimal information about al-Farabi's life; later accounts add to these bare bones extensive lists of his writings, information about his teachers and pupils and a few anecdotes of dubious reliability. Al-Farabi was probably of Turkish origin, born around 257/870 in Farab in Turkestan. Although the details of his early education are murky, he is reported to have studied logic in Baghdad under the Christian scholars Yuhanna ibn Haylan (d. 910) and Abu Bishr Matta (d. 940), one of the translators of Aristotle's works into Arabic.

Since the School of Baghdad was the principal there in the Arabic world to the philosophical and medical tradition of Alexandria, al-Farabi's connection with these teachers forged one of the earliest links between Greek philosophy and the Islamic world.Al-Farabi himself is listed as the teacher of Yahya ibn Adi (d. 974), another of the important Christian translators and a noted logician in his own right. Al-Farabi is also reported to have taught logic to the grammarian Ibn al-Sarraj, who in turn instructed al-Farabi in the science of Arabic grammar (Ibn Abi Usaybi 'ah (1965): 606; Zimmermann, Introduction to al-Farabi (1981a): cxviiicxxii).

Although there are numerous anecdotes told about al-Farabi's subsequent life and death by the later biographers, their historical accuracy is suspect. Al-Frarabi appears to have left Baghdad for Syria in 330/942, travelling to Aleppo and Damascus, and perhaps also to Egypt, between 339/942 and 337/948. He then returned to Damascus, where he died in 339/950.

From the lists of writings provided by the medieval biographers, al-Farabi's philosophical output appears to have been enormous, with over one hundred works being credited to him (Walzer (1965): 780).

If these lists are accurate, only a small portion of al-Farabi's writings has survived.

Many of these have only recently become available in modern editions, so the interpretation of al-Farabi's work is continually being revised. By far the largest part of al-Farabi's writings is dedicated to logic and the philosophy of language.

Indeed, al-Farabi's logical acumen is mentioned as the basis of his great renown by a number of the medieval biographers, and the philosopher and historian Ibn Khaldun (732/1332-808/1406 claimed that it was principally because of his logical achievements that al-Farabi was dubbed the "second teacher" (al-mu 'allim al-thani), second, that is, only to Aristotle himself (Nasr (1985): 359-60). Apart from his logical writings, which include both independent treatises and commentaries on Aristotle, al-

Farabi also wrote extensively on political philosophy and the philosophy of religion, which he treated as a branch of political philosophy, on metaphysics and on psychology and natural philosophy. 4

Logic, phIilosophy of language and epistemology

Al-Farabi's writings on logic and the philosophy of language include both loose commentaries on the Aristotelian Organon and independent treatises. In the former category al-Farabi produced a full set of epitomes of the Organon, including, as had been the custom since the days of the Alexandrian commentators, Porphyry's Isagoge and Aristotle's Rhetoric and Poetics (al-Farabi 1959; 1986-7). He also wrote a great commentary (sharh) on the De interpretation (al-Farabi 1960a; 1981a). His epitomes are not detailed efforts at exegesis of the Aristotelian texts, or mere summaries of them, but take their overall organization and inspiration from Aristotle while developing personal interpretations of Aristotelian logic and the school tradition that had developed from it. Of his more personal writings, the Kitab al-huruf ("Book of Letters" al-Farabi 1969b) and Kitab alalfaz almusta'malah fi'l-mantip ("Book of Utterances Employed in Logic", al-Farabi 1968a) are also devoted in large part to logical and linguistic topics, emphasizing the need to understand the relationship of philosophical terminology to ordinary language and grammar. 5

One of the overriding concerns of al-Farabi's logical writings is to delineate precisely the relationship between philosophical logic and the grammar of ordinary language. The historical reality of the importation of philosophy into Arabic from a foreign language and culture, that of ancient Greece, and the attendant difficulties created by the need to invent a philosophical vocabulary in Arabic, had made this issue of paramount importance for the earliest Arabic philosophers, including al-Farabi's own teachers and pupils. In addition to this, they including al-Farabi's own teachers and pupils. In addition to this, the linguistic focus of much of Aristotelian logic produced territorial disputes with the practitioners of the indigenous science of Arabic grammar, who were concerned that the philosopher' interest in Greek logic was nothing but an attempt to substitute the grammar of Greek for the grammar of Arabic Al-Farabi's logical and linguistic writings represented one of the most systematic efforts to harmonize these competing approaches to the study of language.

Throughout his linguistic writings, al-Farabi upholds a conception of logic as a sort of universal grammar that provides those rules that must be followed in order to reason correctly in any language whatsoever.

Grammar, on the other hand, is always confined to providing the rules established by convention for the use of the particular language of a particular culture. As al-Farabi puts it in a well-known passage from his Ihsa'al-'ulum ("Catalogue of the Sciences"), "this art (of logic) is analogous to the art of grammar, in that the relation of the art of logic to the intellect and the intelligible is like the relation of the art of grammar to language and expressions. That is, to every rule for expressions which the science of grammar provides us, there is a corresponding (rule) for intelligible which the science of logic provides us" (al-Farabi (1968b): 68).

By arguing in this way that logic and grammar are two distinct, rule-based sciences, each with its own proper domain and subject matter, al-Farabi strives to establish logic as an autonomous philosophical study of language that complements, rather than conflicts with, traditional

grammatical science. But though logic and grammar remain distinct and autonomous sciences, al-Farabi also holds that the logician and the philosopher are dependent upon the grammarian for their ability to articulate their doctrines in the idiom of a particular nation. Hence "the art of grammar must be indispensable for making known and alerting us to the principles of the art (of logic)" (al-Farabi (1987): 83; Black (1992): 48-56). Al-Farabi's Kitab al-alfaz is one attempt to implement this co-operation of logic with grammar. It illustrates, however, the extent of indendence from conventional grammatical constaints that the logician still retains in al-Farabi's scheme. For while the text opens with a declaration of the need to classify Arabic Particles along logically perspicuous lines, it goes on to make the bold assertion that the classification of particles offered by the Arabic grammarians themselves is inadequate for this purpose, thereby forcing al-Farabi to borrow the underlying grammatical theory from the works of Greek grammarians, a declaration hardly likely to appease the champions of Arabic grammatical theory (al-Farabi (1968a): 48; Black (1992): 77-83).

The Kitab al-huruf shows another facet of al-Farabi's approach to the philosophy of language. It opens with an extended classification of Arabic particles in relation to the Aristotelian categories. The discussions of individual particles in turn explore the relation between popular uses of these terms in non-philosphical Arabic and the modifications they undergo when they are transformed into technical philosophical terms (al-Farabi (1969b): 61-130; see Druart (1987b) for a study of al-Farabi's treatment of jawhar ("substance").

The second part of the texts presents a discussion of the origins of language, the history of philosophy, and the relations between philosophy and religion. One of its purposes is to situate the more is to situate the more abstract linguistic discussion into a historical and anthropological context, explaining how language itself originates and branches out into popular and technical forms. The theme of the relations between philosophy and religion is also cast in linguistic terms. Religion is viewed as the expression of philosophical truth in popular language, using the tools provided by the logical arts of rhetoric and poetics. There is also a normative side to this discussion, in so far as it lays out the ideal scenario for the development of a philosophical vocabulary from ordinary language, and for the establishment of a religion suitable for translating the fruits of that philosophy back into popular terms. In passages that are meant to evoke the historical reality of Islam's encounter with Greek philosophy, al-Farabi also identifies and ranks a variety of possible deviations from the ideal development pattern, in which neither the philosophy not the religion of a nation springs from its indigenous linguistic and logical development; they are instead imported from another culture (ibid.: 131-61). In the third and final part of the kitab al-huruf al-Farabi returns to the theme of phlosphical terminology, offering an elaborate classification of interrogative particles, their uses in different types of philosophical inquiry and their relations to the types of explanations offered by Aristotle's four causes (ibid.: 162-266).

Although a large proportion of al-Farabi's logical output is dedicated to logical linguistic topics, he also made important contributions to the formal

aspects of logic, such as syllogistics, the theory of demonstration and related epistemological issues. A predominant strand in al-Farabi's logic and epistemology is the adoption of a hierarchical interpretation of the syllogistic arts (including rhetoric and poetics), in which demonstration is identified as the proper method of philosophy, and all communication. This strand is most evident in those writings where al-Farabi is echoing the logical theory of the Alexandrian commentators, although it is also closely linked to al-Farabi's personal teaching that religion is a popular imitation of philosophy whose tools are the non-demonstrative arts (Black (1990): 1-19, 31-51, 63-71, 78-94). An One important facet of this interpretation is al-Farabi's analysis of the certitude in terms of what we would now call second-order knowledge, arguing that certitude comprises both (1) a belief that the truth to which we have assented cannot be otherwise; and (2) a belief, in addition to this, that no other belief that the one held is possible. (Al-Farabi adds that this process can in fact go on ad infinitum.) Certitude, in short, requires no merely out knowing that something is the case but also our knowledge that we know it (al-Farabi (1986-7), 4:20). Having defined certitude in this way, al-Farabi is able to free it from its traditional modal interpretation, thereby allowing for the existence of both necessary certitude, in which what one believes to be the case cannot be otherwise at any time; and non-necessary certitude, which is certitude "only at some (particular) time".

Necessary certitude requires an object which exists necessarily and immutably; non-necessary crtitude does not: "Necessary certitude and necessarily certain is necessarily existent" (ibid. 22).

Despite this broadening of the notion of certitude, al-Farabi holds with Aristotle that demonstration in the strictest sense pertains only to matters that can be known with necessary certitude. But al-Farabi has none the less added a new dimension to the theory of demonstration that takes account of the subjective element within certitude - one's awareness of and knowledge that one knows - as well as the more traditional objective element rooted in the necessity and immutability of the object known.

Psychology and philosphy of mind

With the exception of his Risalah fi'l-'aql ("Treatise on the Intellect"), al-Farabi left no indendent treatises on philosophical psychology and the philosophy of mind. His views on these topics are contained in his metaphysical and political writings. The most detailed presentation of his views on the human soul occurs in the Madadi' ara' ahl al-madinah alfadilal ("Principles of the Opinions of the People of the Virtuous City"), where al-Farabi adopts an Aristotoelian approach to psychology. The soul's principal faculties are identified as the nutritive, sensitive, imaginative and rational; they are ordered hierarchically to one another, and within each there are "ruling" and "subordinate" elements. Al-Farabi does not separate the common sense off as a distinct faculty, but treats it simply as the ruling faculty within the sensible soul "in which everything that is apprehended by (the five senses) is collected" (al-Farabi (1985): 166-9). Nor does al-Farabi have any doctrine of "internal senses" The kitab al-buruf shows another facet of al-Farabi's approach to the philosophy of language. 6 It opens with

an extended classification of Arabic particles in relation to the Aristotelian categories. The discussions of individual particles in turn explore the relations between popular uses of these terms in non-philosophical Arabic and the modifications they undergo when they are transformed into technical philosophical terms (al-Farabi (1969b): 61-130; see Druart (1987b) for a study of al-Farabi's treatment of jawhar ("substance").

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Although a large proportion of al-Farabi's logical output is dedicated to linguistic topics, he also made important contributions to the more formal aspects of logic, such as syllogistics, the theory of demonstration and related to the status of tools for non-philosophical communication.

This strand is most evident in those writings where al-Farabi is echoing the logical theory of the Alexandrian commentators, although it is also closely linked to al-Farabi's personal teaching that religion is a popular imitation of philosophy whose tools are the non-demonstrative arts (Black (1990): 1-19, 31-51, 63-71, 78-94). An to unify his treatment of the common sense, imaginative and memorative faculties, and he does not mention anything like the faculty that Ibn SIna (Avicenna) will later call "estimation" (wahm). 10 Like Aristotle, he locates the physiological seat of the common sense and the imagination in the heart, a tradition that later internal sense philosophers will modify in the light of Galenic physiology, placing the organs of these faculties in the brain. As for the appetitive activities of the soul, al-Farabi views them as intimately tied to the activities of the corresponding cognitive powers which give rise to them. Thus, for every cognitive faculty-sensation, imagination and reason-an a petition towards the objects perceived naturally supervenes upon their acts of all

sensible and rational voluntary acts, but it does not serve to explain the actual arousal which the soul controls the body, enabling it to seek what the soul perceives as desirable, and to flee what it perceives as harmful.

Al-Farabi's view of the imaginative faculty deserves special attention because of the role assigned to imagination in prophecy and divination. According to al-Farabi, imagination (takhayyul, equivalent to Aristotle's phantasia) is a retentive and a judgmental faculty, responsible both for the retention of the images of sensible things after they have absented themselves from the senses and for exercising control over them by composing and dividing them to form new images (ibid.: 168-9). To these two functions al-Farabi, also adds a third function, that of imitation (muhakah), using the Arabic term equivalent to mimesis as it had been used in Aristotle's Poetics. By means of this ability, the imaginative faculty is able to represent objects with the images of other objects, and thereby to extend its representative ability beyond the depiction of sensible qualities to encompass the imitation of bodily temperaments, emotions and desires, and even immaterial realities (ibid.: 211-19). This mimetic ability of the imagination provides the psychological underpinnings of al-Farabi's claim in his logical writings that the art of poetics has as its goal the evocation of acts of imagination, takhyil. In the context of psychology, al-Farabi also employs it to explain prophecy and divination. To understand this explanation, however, one must first understand al-farabi's conception of the rational faculty and the process of intellectual cognition.

Al-Farabi's account of the faculties and stages which characterize intellectual cognition belongs to a tradition of interpreting Aristotle's de anima that goes back to the Greek commentators. Within this tradition, Aristotle's rather loose descriptions in DE anima, 3.4 and 5 of an intellect which "becomes all things" and an intellect "which makes all things" are given the standard labels "potential" and "agent" intellect. 11 The potential intellect is identified as a faculty within the individual human soul; the agent intellect, however, is treated as an immaterial, eternal substance that functions as the efficient, moving cause of human intellection, enabling universal concepts to be abstracted from sensible images.

In addition to the potential and agent intellects, this tradition also identified a variety of distinct stages between potency and actualization within the human intellect and affixed them with own labels. In al-

Farabi's psychology, this development yields four different meaning for the term "intellect" ('aql):12 (I) the potential intellect (al-'aql bi'l-quwwah); (2) the actual intellect (al-'aql bi'l-fi'l); (3) the acquired intellect (al-'aql almustafad); and (4) the agent intellect (al-'aql al-fa'al). Following Alexander of Aphrodisias, al-Farabi identifies the potential intellect as a pure disposition for abstracting the forms or quiddities of the object to be known from their corresponding sensible images. As this potential intellect comes to acquire intelligible concepts, it passes from pure potency into actuality, and thus becomes the second type of intellect, an actual intellect. The process of actualizing intelligible is of course a gradual one, which has at its goal the acquisition of all the intelligible and all the sciences available to human knowledge. When eventually the intellect reaches this goal (which

probably only few individuals can achieve), it loses all remaining tinges of potency, and thus is rendered pure form and pure actuality.

Since on Aristotelian principles anything is intelligible to the degree that it is form and actuality, only at this point does the intellect realize its full capacity for selfcontemplation.

This, then, marks the attainment of the third stage of intellect, the acquired intellect. At this stage, by virtue of having become fully actualized, the individual human intellect attains a rank akin to that of the other immaterial intellects, including the agent intellect, and becomes one or similar in species with them. As a consequence, it is now able to contemplate not only itself and the intelligible it has acquired from material things, but also the agent intellect and the other separate, immaterial substances (al-Farabi (1985) 196-207, 240-5; (1948): 12-32 and (1973): 215-20; see also Davidson (1972): 134-54; Jolivet (1977).

This last consequence of the doctrine of the acquired intellect is upheld, with only minor variations, in all of al-Farabi's extant discussions of intellectual cognition, and it is implied by the eschatological theories of his political philosophy (discussed under "Practical Philosophy" below). But mention must be made of the conflicting evidence provided by later philosophers such as Ibn Tufayl, Ibn Bajjah, and Ibn Rushd (Averroes), who tell us that in a commentary on Aristotle's Nichomachean Ethics al-Farabi repudiated the possibility of a direct cognitional union or "conjunction" (ittisal) with the agent intellect (see Pines (1972)).

More precisely, according Averroes al-Farabi rejected the ontological transformation that the doctrine appeared to require, that is, its assertion that, through intellectual development, a generable and corruptible mortal human being could become and eternal and incorruptible separate intellect (Ibn Rushd (1953): 433, 481, 485). How al-Farabi would have reconciled this claim with the doctrines expressed in his surviving works, and whether it represents al-Farabi's mature and considered view on the matter, must remain an open question, however, given the lamentable loss of the Nichomachean Ethics commentary itself.

Against the backdrop of al-Farabi's teachings on the acquired and agent intellects, and on the imaginative faculty, the psychological aspects of his theory of prophecy can now be outlined. According al-Farabi, prophecy in its various manifestations is the result of an interaction between the intellect and the mimetic capacities of the imaginative faculty. What makes prophetic knowledge unique is not its intellectual content per se, for that belongs equally to the philosopher and the prophet: true prophecy, like the true religion based upon it, is a symbolization and imitation of the selfsame truths known demonstratively and intellectually in philosophy? But all prophets possess, in addition to their intellectual capacities, the gift of an especially keen imaginative faculty. This gift allows their imaginations to receive an influx or emanation of intelligible from the agent intellect, an emanation that is normally reserved for the intellectual faculty alone. Since by its nature the imagination cannot, however, receive abstract intelligible as abstract, the prophet exploits the mimetic abilities of the imagination to represent these intelligible in concrete, symbolic form. In this way, what is

normally available only to the select few who can attain the level of the acquired intellect can be communicated by the prophet, under the guise of sensory images, to a much wider, non-philosophical public (al-Farabi (1985): 210-27, 240-7; see also Rahman (1958), Walzer (1962), Macy (1986), Daiber (1986b).

Metaphysics

Al-Farabi's metaphysical teachers have posed certain interpretive difficulties to modern scholars, not only because of the attribution to him of the works mentioned above which are now generally believed to reflect Avicenna teaching but also because of the ambiguity of the attitude he takes in his authentic writings towards Aristotelian and Neo-Platonist metaphysics. Recent scholarship has shown that al-Farabi very carefully avoids mentioning Neo-Platonistemanation metaphysics in his accounts of Aristotelian philosophy, and that, with the exception of the Kitab al-jam '("Harmonization of the Opinions of Plato and Aristotle", al-Farabi (1960b), he never treats the spurious Theology of Aristotle as an authentic work. The most observations is that recently proposed by Druart, arguing that al-Farabi personally upheld the emanation cosmology central to Neo-Platonism, even while he recognized that it was not Aristotelian.

Emanation was, in short, adopted to fill in the lacuna that al-Farabi felt had been left by Aristotle's failure to complete his account of the part of metaphysics that comprises theology or divine science, in which the causal relations between divine and natural being is set forth (Druart 1987a).

Viewed from this perspective, al-Farabi's emanation theories form an integral part of his contribution to the discussion within Islamic philosophy of the nature and scope of metaphysics and its relation to natural philosophy. Al-Farabi's influence on subsequent developments in this area is attested to in a well-known episode from Avicenna's autobiography, in which Avicenna relates how he had read Aristotle's Metaphysics forty times and yet still remained confused as to its purpose.

Only after chancing upon a copy of al-Farabi's opusculum Fi aghrad al-Hakim fi kitab al-huruf ("On the Aims of Aristotle's Metaphysics") was his perplexity finally dissolved. Although Avicenna does not make explicit exactly how al-Farabi's exceedingly short treatise resolved his mental impasse, it appears that Avicenna was impressed by al-Farabi's remarks regarding the relationship between Aristotle's Metaphysics and the science of theology or "divine science" (al-'ilm al-ilahi).

For al-Frabi opens his treatise by noting that while Aristotelian metaphysics is often described as "divine science", the text is in fact dedicated to the study of being and its principles and properties, not to the study of divine, separate substances. Al-Farabi observes that many readers have been confused by this point, expecting the entire text to be about God, the soul and the intellect, and finding that these topics are all but missing, save from book lambda (Gutas (1988): 238-42). Al-Farabi then proceeds to outline conception properties of being qua being. He affirms that theology is indeed a part of this science, not as its primary subject but rather only to the extent that "God is a principle of absolute being" (al-wujud al-mutlaq) (al-Farabi (1890): 34-7, Trans. In Gutas (1988): 240-2).

In these corrections of what he takes to be the previous misreading of Aristotle's Metaphysics, al-Farabi affirms that divine science is indeed an important part of metaphysics, while acknowledging that only a very small portion of Aristotle's text - a single book-is devoted to the topic. Perhaps this is why al-Farabi declared at the end of his Falsafah Aristutalis ("Philosophy of Aristotle") that "we do not possess metaphysical science" (1961a): 133; (1969a): 130; cf. Druart (1987a): 35). But major doctrine of Neoplatonic metaphysic known to al-Farabi, the theory of emanation has as its focal point divine beings and their causal links to the sublunar world. And it is this doctrine that provides the metaphysical foundations for al-Farabi's two most important personal works, al-Madinah al-fadilah and al-Siyasah almadaniyyah ("The Political Regime"), also known as the Mabadi' al-mawjudat ("Principles of Beings") in virtue of its metaphysical parts.

The theory of emanation espoused by al-Farabi in these works rests upon the twin pillars of Ptolemaic geocentric cosmology and the metaphysics of the divine. The framework of emanation is provided by cosmology. The universe is viewed as a series of concentric spheres: the outermost sphere, called the first heaven; the sphere of the fixed stars; and the spheres of Saturn, Jupiter, Mars, the Sun, Venus Mercury, and fainally, the Moon. The mechanics of emanation as a theory of sources. In its basic premise it represents a radical departure from Aristotle, for whom God was not an efficient cause of the very existence (wujud) of all other beings, but only the first cause of motion in the universe. Many of the properties of al-

Farabi's emanational God are Aristotelian, however: God is one, immaterial, eternal, and acts of necessity. Most importantly, however, God is characterized by the activity of self-contemplation; there is an overflow or emanation (fayd) from God of a second intellect. The second intellect, like God, is characterized by the activity of selfcontemplation; but it must, in addition to this, contemplate God himself. By virtue of its thinking of God, it generates yet a third intellect; and by virtue of its selfcontemplation, it generates the celestial sphere that corresponds to it, the first heaven. Al-Farabi then repeats this dyadic pattern of emanation for each sphere in the cosmology and its corresponding intellect, arriving at a total of ten intellects other than God. 13 The terminus of the emanation process is our own sublunary world, whose corresponding intellect is none other than the agent intellect familiar from Aristotle's De anima (al-Farabi (1985):88-107; (1964)47-8, 52-3).

Through its culmination in the agent intellect, al-Farabi's adoption of the Neo-Platonist metaphysics of emanation provides the means whereby Aristotelian philosophy can be placed in a more systematic framework than the Stag rite's own writings allow. For in Aristotelian terms, natural philosophy includes the study of psychology: hence one and the same being, the agent intellect, represent the upper terminus of physics and the lower terminus of metaphysics. In this way, emanation allow al-Farabi not only to fill in the gap between the theological and ontological elements within metaphysics but also to forge a link between the theoretical sciences of metaphysics and physics that is not clearly articulated by Aristotle himself.

Practical philosophy

The unity that al-Farabi forges between the theoretical sciences of metaphysics and psychology is also mirrored in al-Farabi's political philosophy which, along with logic, represents the major focus of his philosophical writings. While the rest of al-Farabi's philosophy is generally Aristotelian in character, supplemented by the Neo-Platonist elements that have already been noted, al-Farabi's political philosophy is Platonic, and reflects Plato's ideal of basing political philosophy upon metaphysical foundations. Thus, al-Farabi's two principal works on political philosophythe Siyasah madaniyyah and the Madinah fadilah -also contain the fullest expression of his metaphysical views. Although al-Farabi does devote some attention in these and other works of practical philosophy to ethical issues such as the nature of practical wisdom, the moral virtues and deliberation, most of al-Farabi's interest is on political theory, in particular the requirements of the ideal state and its ruler, and the question of the relationship between philosophy and religion within such a state.

In his work the Tahsil al-sa'adah ("Attainment of Happiness"), al-Farabi argues for the real and conceptual identity of the notions of philosopher, legislator and Imam, and claims that the diversity of religious and philosophical labels reflects nothing more than different emphases on distinct aspects of a single reality. This means, in good Platonic fashion that those who do not attempt to apply their theoretical perfection to practical and political pursuits cannot claim to be true philosophers: such people remain what al-Farabi calls "vain" or futile philosophers.

Given the need to communicate this philosophy to the general populace, such a philosopher must presumably also have rhetorical perfection to practical and political pursuits cannot claim to be true philosophers: such people remain what al-Farabi calls "vain" or futile philosophers.

Given the need to communicate this philosophy to the general populace, such a philosopher must presumably also have rhetorical poetic and imaginative abilities, and thus fulfil as well the conditions of prophecy outlined in the psychological portions of al-farabi's political works (al-Farabi (1981b) 89-97, (1969a): 43-9; cf. Mahdi (1972a): 188-92).

Of course, al-Farabi recognizes that the ideal combination of prophecy and philosophy, religious and political leadership, and moral and intellectual virtue in a single ruler is something that is seldom if ever realized in political practice. 15As a result, the harmony between philosophical and religious elects that is theoretically possible, but which requires a very specific historical development and fulfilment of these ideal conditions, is not easy, and perhaps even impossible, to realize in practice (al-Farabi (1969b): 152-7). Thus both of al-Farabi's major political treatises also outline the varieties of departures from the ideal state that may occur, following the model of Plato's discussion of virtuous and vicious political regimes in the Republic. Al-Farabi classifies the corruptions of the ideal political union into three general categories: ignorant, wicked and errant cities, each of which has several different types within it. The ignorant cities all have in common their failure to comprehend the true nature of humanity, its place in the cosmos and, hence, its natural end. Their ignorance of human theology, they substitute some other false goal for the true end discerned by

philosophy. Al-Farabi isolates the following varieties of ignorant cities: (1) indispensable cities, which seek mere subsistence as their goal; (2) vile cities, which seek only to accumulate wealth; (3) base cities, which exist solely for the sake of sensual gratification; (4) democratic cities, whose goal is honour and fame; (5) tyrannical cities, in which power and domination of others is the principal goal; and (6) democratic cities, in which there is no single motivating end, but each citizen is left to seek whatever he or she deems best.

The wicked and errant states are those which possess now or once possessed some sort of knowledge of the true human end, but fail none the less to follow that knowledge. Wicked cities are those in which the virtuous end is deliberately abandoned for another one, whereas errant cities are those in which the leader personally has true knowledge of the proper end that his city should follow, but deceives the citizens by presenting them with false images and representations of that end. Finally, al-Farabi also gives some attention to those whom he calls "the weeds" in the virtuous cities, people who, for lack of ability or other baser motives, inhabit the virtuous city and conform to its laws, while failing to participate personally in its goals (al-Farabi (1964): 74-108, Mahdi and Lerner (1963):35-56; (1985)" 228-59). 16

Although one purpose of the foregoing classification of corrupt states is clearly to educate philosophers so as to enable them to become virtuous leaders of virtuous regimes, al Farabi's focus upon the proper discernment of the true human end as the defining characteristic of the virtuous city reminds us that the ultimate motivation of his political philosophy is to ensure that the conditions for happiness are met by all people as far as possible. For this reason, al-Farabi concludes his classification of cities and citizens with a consideration of human happiness in eschatological terms, in which reward and punishment in the afterlife is interpreted in accordance with al-Farabi's belief that human happiness ultimately consists in the assimilation with the agent intellect that is achieved when one reaches the stage of acquired intellect. 17Only the citizens of the virtuous city will be able to achieve this goal and thereby survive after death when their actualized intellectual souls separate from their bodies. Al-farabi implies that this immortality is not personal, however, since the body, the principle of numerical diversity within the human species, is no longer present, and hence "the differences of the souls are equally indeterminable in number" (1985: 264-5).

Those who lived in ignorance were not culpable: they will simply be annihilated as a natural consequence of their failure to actualize their intellectual powers, which is the condition for the soul's survival after death. The same is true for the citizens who have been misled by their leaders in the errant cities. Punishment in the afterlife is reserved for the citizens of the wicked cities and the rulers of the errant cities, who possessed knowledge of the true end but deliberately rejected it to pursue other ends. Their punishment consists in the simple continuance of their corrupt desires after death, desires which, because of their bodily roots, can no longer be fulfilled and so eternally torment their possessors (al-Farabi (1985): 258-77).

Al-Farabi's subsequent influence

The picture that emerges from the variety of al-Farabi's writings is an impressive one.

Al-Farabi's logical and epistemological achievements, which have only recently come to light, have a very modern ring to them: his interest in careful linguistic analysis as an essential tool for philosophical precisions, and his broadening and evaluated, have a strong affinity with recent trends in philosophy, in particular within the Anglo-American world. But in al375

Farabi these interests were as much a result of the peculiar historical circumstances in which he practiced philosophy as were his political and metaphysical teachings. They reflected the need to address seriously the sometimes competing claims between philosophy and religion, and to find a niche for philosophy and its discourse in an Arabic and Islamic milieu. Al-Farabi's interest in types of rationality, in modes of discourse and argumentation, and in the relations between ordinary and philosophical challenge, although they remain philosophically important in their own right.

The linguistic sensitivity that al-Farabi displays, his concern to communicate philosophy to a wide variety of audiences and his careful efforts to assimilate the Greek philosophical tradition into an Islamic context are all hallmarks of al-Farabi's writings that help to explain the high esteem in which he was held by subsequent philosophers in the Islamic, Jewish, and to a lesser extent Christian, traditions. We have seen the debt that Avicenna openly acknowledged to al-farabi up as a key authority, especially in logic, psychology and political philosophy. In the Jewish philosophical tradition, Moses Maimonides gave al-Farabi the highest praise among all his predecessors, once again in the area of logic in particular: "As for works on logic, one should only study the writings of Abu Nasr al-Farabi. All his writings are faultlessly excellent.

One ought to study and understand the. For he is a great man" (Introduction to Moses Maimonides (1963) Ix). In the Latin West, although al-Farabi's writings were less extensively translated than those of Avicenna and Averroes, works like his Ihsa'al-ulum and Risalah fi'l-aql were of central importance in the early transmission of Aristotelian thought, and gave Christian thinkers their first glimpse of the wealth of new philosophical material that was to follow.

Notes

- 1- Al-Farabi's full name was Abu Nasr Muhammad ibn Muhammad ibn Tarkhan ibn Awzalugh (or Uzlugh) al-Farabi. The principal medieval biographies from which information on his life are: Ibn al-Nadim (d.380/990) (1979): 599-602, 329-31; al-Mas'udi (d.345/956) (1960): 39-41; Sa 'id ibn Ahmad ibn Sa'id al-Taghlibi (d.463/1070) (1985): 137-40; Ibn Abi Usaybi'ah (d. 646/1248) (1903): 277-9. For convenient summaries of this data see Walzer (1965): 778-9, as well as Walzer's Introduction to al-Farabi (1985): 2-5; Fakhry (1983): 107-9; and Madkour (1963): 450-2.
 - 2- On the School of Baghdad see Meyerhoff (1930).
- 4- See Walzer, Introduction to al-Farabi (1985): 2-5 for a summary of these tale; convincing arguments against their historicity are given in Mahdi (1990):693-4, 705-7, 712-13.
- 3- Scholarly Interpretations of al-Farabi's metaphysical and psychological views written before the mid twentieth century must be approached with caution because of the attribution to al-Farabi of a number of treatises now believed to have been written by Avicenna or one of his later followers.

These treatises include the Fusus alhikam (in al-Farabi (1890); see Georr (1941-6) and Pines (1951); the Ta'liqat fi'lhikmah (in al-Farabi (1927); see Michot (1982); the Zinunal-kabir alyunani (in al-Farabi (1927); see Druart (1987a): 25 n. 9); and Ithbat (in al-Farabi (1927); see madkour (1963): 452). The 'Uyun al-masa'il and the related Da'awi qalbiyyah are also of doubtful authenticity (see Cruz Hernandez (1950-1); Rahman (1958): 21-2), although recently Lameer has argued for restoring the 'Uyun as genuinely Farabian (Lameer (1994): 24-30).

Rahman's arguments against this text remain compelling, however. Marmura (1985): 347 and Lameer (1994): 33-43 have questioned as well the authenticity of the Kitab al-jam 'bayna ra'yay alhakimayn Aflatun al-ilahi wa- Aristutalis (al-Farabi 1960b), a work in which the traditional Neoplatonic theme of the identity of Aristotle's and Plato's teachings is upheld, and the sole text in which al-Frabi treats the spurious Theology of Aristotle (based on Plotinus, Enneads, 4-6) as a genuinely Aristotelian Text.

- 4- For general discussions of al-Farabi's logic in its historical context see Abed (1991), Elamrani-Jamal (1983), Eskanasy (1988), Gatje (1971a), Hasnawi (1985), Langhade (1981) and Zimmermann in al-Farabi (1981a).
- 5- The title of the work is usually translated as Book of Letters, although Book of particles is equally possible. For studies of this text see Arnaldez (1977), Vajda (1970), Mahdi (1972b).
- 6- For further consideration of al-Farabi's poetics, see Black (1989 and 1990), Galston (1988), Heinrichs (1978) and Kemal (1991).
- 7- In addition to the discussion in the Kitab al-burban, al-Farabi also wrote a short independent work on this topic, called the Shara'it al-yaqin ("Conditions of Certitude", in al-Farabi (1986-7) 4: 97-104).
- 8- For a discussion of other aspects of al-Farabi's treatment of Aristotelian demonstration, see Galston (1981).
- 9- The only appearances of this term occur in the spurious 'Uyun almasa'il and Fusus al-hikam.

- 10- Often these are rendered as "possible" and "active". In the Madinah fadilah, al-Farabi also uses the Alexandrian term "material intellect" as a synonym for the potential intellect.
- 11- These are the subdivisions of the meanings of "intellect" within psychology, which is itself only one of six meanings of the term identified in the Risalah fi'l-aql-aql.
- 12- The use of a dyadic model separates al-Farabi from earlier Neoplatonic thinkers and from the later Avicenna, who use triadic models to account for the emanation of a distinct rational soul for each celestial body. Al-Farabi does not distinguish the soul as mover of the sphere from its intellect. See, for example, al-Farabi (1964): 34-5; 53.
- 13- Thereare numerous studies of al-Farabi's practical philosophy, including Butterworth (1983): 226-30, Daiber (1986a), Mahdi (1975a and 1975b) and Strauss (1945 and 1957). The most comprehensive is Galston (1990).
- 14- Al-Farabi also allows a plurality of rulers to pool their diverse talents if no one person can be found to combine all of the qualities needed by the virtuous ruler (al-Farabi (1985): 253-4).
- 15- Al-Farabi also outlines in some detail the nature of the false religious beliefs that underlie the ignorant and errant views of the human end in al-Farabi (1985): 286-329.
- 16- Of course, the reports about al-Farabi's views in his lost Nicomachean Ethics commentary have made the interpretation of these passages problematic.

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 - 3- (1948): Risalah fi'l-'aql, ed. Maurice Bouyges (Beirut).
- 4- (1959): "Kitab al-shi'r li-Abi Nasr al-Farabi", ed. Mushin Mahdi, Shi'r, 3:91-6.
- 5- (1960a): Sharh al-Farabi li-Kitab Aristutalis fi al-'ibarah, ed. W. Kutsch and S.Marrow (Beirut).
- 6- (1960b): Kitab al-jam' bayn ra'yay alhakimayn Aflatun al-ilahi wa-Aristutalis, ed. Albert Nader (Beirut).

Index of term

[English to Persian]

فناء مطلق (fana"a mutlaq) فناء مطلق

وجود مطلق Absolute Existence

علم محض (ilm-mahd) علم محض

عقل مطلق (aql-mutlaq) عقل مطلق

اعراض (Arad) اعراض

عوارض ذاتیه (awareed zatiya) عوارض ذاتیه

عوارض ماهیات (awaared maahiat) عوارض

عوارض (awaared) عوارض

عوارض مكتسبه (Acquired accidents (awaared muktaseba

العقل المستفاد(Acquired intellect (al-aql-al-mustafaad)

علم الحصولي (Acquired knowledge (ilm-al- husuli)

العقل الفعال (al-aql-al-faal) العقل

عقل فعال Active Intellect

العقل بالفعل (Actual intellect (al- aql -bil-fil)

فعلیت Actuality

عالم عين (alam ayn) عالم

فاعل Agent

عوامل نفسانی (Agents of the soul (awaamil nafsani)

Allegorical (tamsily -ramzi) تثيل - رمزى

قدرت مطلق (qudratu mutlaq) قدرت

عقل ملكة (aql-malaki) عقل ملكة

عالم حيواني (Animal world (alam haywaani)

فناء (fanna) فناء

فناء در توحید (fana"a dar tawhiid) فناء در توحید

ف فناء الله (fana"a fii lahh) فناء الله

Annihilation in the essence (fana"a dar zaat) در ذات فناء Aquired intellect (aqlmuktasib) مکتسب عقل Aquired intelligence (Aql-al- mustafad) المستفاد عقل Aquired knowledge (ilm-muktasib) علم مکتسب ملکوت -عقل(Archangelic intelligence (aql-malakuuti

رپاضیات Arithmetic

تصديق Assent

هیئت Astronomy

جوهر (jawhar) جوهر

وصف (wasf)

علم متعارف (Axiom (ilm-mutaaraf)

الوجود و العدم (Bieng ex nihilo (al-wujuud waladam)

معاد جسمانی Bodily resurrection (maad jismaani)

فروع الفقه (furu alfiqh) فروع الفقه

خلیفه (khalifeh) خلیفه

جزئی قیاسی (juzyi-kiyasi) جزئی

مقولات Categories

حسم فلکی Celestial body

نفس آسمانی، فلکی Celestial Soul

الدور (Circularity of augment (dawr)

علم مدن (ilm-mudun) علم

نظام کیهانی Comic system

شروح Commentaries

عقل متعارف (common in intellect (aql-mutaaraf)

حس مشترک Common sense

فناء کلی (fana"a kuli) فناء کلی

فناء تام (Complete xtinction (fana''a taam) فناء تام

عوارض مراكبه (composite affection (awareed murakabah)

مرکب Composite

مفاهیم Concepts

نتیجه استدلال Conclusion of Syllogism

نتائج Conclusions

تلازم (Concomitance (talazum)

عوارض لازمه (Concomitant accident (awaared lazemeh)

إجماع (consensus (ijma) إجماع

عقل مقوم (aql-muqawim) عقل مقوم

عوامل مقوم (constitutive factors (awaamil muqawim)

إتصال (contact -communion (itisal)

عالم نفس متصل (alam nafs mutasil) عالم نفس

عالم شهادت متصل (alam shahadat mutasil) عالم شهادت

ممكن الوجود (Contingency (mumkin al-wujuud)

فيض مدام (fayz mudam) فيض مدام

قدرت مدبره (qudratu mudabireh) قدرت مدبره

تقلبی ،نقلی Copy or clone

مادی Corporeal

حدوث (huduth) حدوث

عالم محدث (created world (alam -muhdes)

الباري (Creater (al-bari

الخلق (Creation (alkhalq)

إبداء (ibdaa) إبداء

فلسفه انتقادی Critic'sphilosophy

إنتقاد (intiqaad)

عقل منكوس (aql- mankoos) عقل منكوس

عالم فساد (Defective world (alam fasad)

مردم سالاری Democracy

مقدمات برهان (Demonstrative premises (muqademat burhaani)

عقل رُّهانی (aql-burhaani) عقل رُّهانی Demonstrative reason (burhaan) برهان کث ف عالم (Dense world (alam kasiif) کث ف عالم صحدل (Dialectic (jadal)

جدلی Dialectic

مقدمات جدل (muqademat jadali) مقدمات جدل

دوگانگی Dichotomy

ابعاد Dimension

عالم نفس منفصل (alam nafs munfasil) عالم نفس منفصل Discontinuous world of visibility (alam shahadat munfasil) عالم شهادت

منفصل

فتنه (fitneh) فتنه

عقل تفصيلي (aql-tafsiili) عقل تفصيلي Divine compassion (lutf ilahii)

حكمت العرشيه (hikma-al-arshiya) حكمت

فيض حق (fayz haqq)

فيض إلهي (fayz ilahii) فيض

جبروت عالم (alam jabaruut) جبروت عالم

لطف أزل إلهي (lutf azali ilahi) لطف

عنا تٌ حق (inayatu haqq) عنا تٌ

عقل ربانی (Divine intellect (aql- rabani)

بخليات الهي (tajaliyat-ilahi) العلى العلى Divine manifestation

قدرت كامله خداوند (qudratu kameleh hudawand) قدرت كامله خداوند

عنایت الهی (Divine providence (inayatu ilahi)

علت الهي Divine reason

عالم ربانی (Divine sage (alam rabaani)

علم لدنی (ilm-laduni) علم

حكمة الهي (Divine wisdom(hkmat ilahia

Divine world (alam -malakuut) ملكوت عالم عالم لاهوت (alam lahuut) عالم لاهوت Doctrinal difference (ikhtilaf) إختلاف Domain of the unseen (alam gayb) عالم غيب فيض وجودي (Effusion of being (fayz ujuudi) فيض وجودي

فيضان فضل الربان (fayzan fadl rabaani) فيضان فضل

عنصر Element

Emanation -effusion (fayd) فيض فيض Emanation

عقل فیاض (aql-fayaad) عقل فیاض

ف ضّان (fayzan) ف

فيضان نور (fayzan noor) فيضان نور

عالم حس (alam hi"isi) عالم

کارهای علمی Epistemological functions

شناخت شناسی Epistemology

المعاد (Eschatology-(al-maa''d)

عالم باطن (alambatin) عالم باطن

الذات (dhat) الذات

عين اليقين (ayn al-yaqin) عين اليقين

خصوصیات ذاتی Essential Properties

فلسفه اشراقي Estern Philosophy

حدث (hads-gaman) حدث

إبدا (Eternal existentiation(ibda)

قدرت أزلى (Eternal power (qudratu azali)

عناية ازلي (Eternal providence (inayatu azali

جاودانگی Eternity

اخلاق (ahlaq)

شر Evil

وجود (Existence (ujud)

وجود بما هو Existence as such

فيض ايجادي (Existentiational emanation (fayz ijaadi)

عقل عملي (Experimental intellect (aql-amali

عوارض خارجيه (awaared kharegiya) عوارض خارجيه

مقدمات خارجی (muqademat kharege) مقدمات

عالم خارج أز ذهن(Extra -mental world (alam kharegi-azzihn)عالم

قوة خيالي Faculty of imagination

إ مّان (Faith (iman)

بطور رمزی Figurative form

رمزی ، سمبولیک Figurative

عنصر أول (First element (unsure"e awal)

فيض أول (fayz awal) فيض

عوا لم خمسه (awaalim khamseh) عوا لم

أسفار اربعة (suurat) صورت Four journeys' (asfar -arba) أسفار

علل اربعه Four causes

عوالم أربعه (awaalim arbaa) عوالم

Free will and and destiny (jabr)

حادث Generated

هندسه Geometry

علم خدا به ذات خودش God`s self-knowledge

اوامر الاله (Gods command (awamir-ilahi)

عقل صریح (aql-sareeh) عقل صریح

حكمة اليونانيه (Greek wisdom (hikmat al-yunaniya)

العقل الملكة (Habitual intellect(al-aql-al-malakah

سلسله Hierarchy

فيض مقدس (fayz muqadas) فيض مقدس

عوا لم عرضية (awaalim aradiya) عوا لم

واحد، ک Identical

صورتما Images

عالم مثال (alam-misal) عالم

خ آل Imagination

عقل مجرد (aql al-mujarad) عقل مجرد

جاو ڈان Immortal

فيض أمري (fayz amree) فيض

نقص Imperfection

In wad (batin) باطن

عقل مجسم (aql-mujasam) عقل مجسم

غ رٌ مجرد مادي (Incoporeal (mujarad gair madi)

جوهر مادی Incorporeal Substance

عقل جزئی(aql-juzyi)عقل جزئی

ناقابل تقيسم و تجزئه Indivisible

معقولات Ineligibles

نا متناهى علل/تسلسل سلسه Infinite chain

عقل نامتناهی Infinite intellect (aql-naamutanahi)

بداء (badaa) بداء

إلهام (Inspiration (ilham)

عقل غریزی (aql-garezi) عقل غریزی

عقل کامل (Integral intelligence (aql-kamil)

العقل (Intellect (al -aql)

عقل Intellect

عوالم عقل ةٌ (awaalim aqliya)

عالم برزخ (alam barzakh) عالم

مثال برزخ عالم (alam mesal barzhkhi) مثال برزخ عالم

الهام Intuition

عقل مكاشفه (aql-mukashfeh) عقل مكاشفه

الذوق (dhawq) الذوق

عالم معاني (Invisible world (alam -maa''ni)

Isthmus (barzakh) برزخ

فقه (Jurisprudence (fiqh)

فقیه (faqiih)

علم حضوری (ilm-al-huduri) علم حضوری

علم اليقين (ilm- al-yaqeen) علم اليقين

منطق (mantiq) منطق

عشق (ishq) عشق

عالم نوراني (Luminous world of ideas (alam nooraani)

مفهوم الوجود (the concept of bein) مفهوم الوجود

ماه تٌ Mahiyyah (quiddity

قوه تعرف Manipulation

عقل مدبر (Master mind (aql-mudabir)

عقل هیولانی (aql-hayuulani) عقل هیولانی

عالم ملك (alam mulk shahadat) عالم ملك

عالم ماده (alam maadeh) عالم

مادی Materialism

ماده (mada) ماده

فقير Meagre

وجود ذهني Mental Existence

قوای ذهنی 'Mental faculties

الهيات بالمعنى الاخص Metaphysics

روش شناسی (rawish -shenasi) روش شناسی

معجزه (mujezeh) معجزه

Moral language (zaban -ahlaq) زبان أخلاق

فيض أقدس (fayd aqdas) فيض

فيض الله أقادس (fayz laahi aqdas) فيض الله أقادس

Mundus imaginal (al-alam-al-khayal) عالم الخيال متشابحات (Mutashabihat (of unclear outward meaning)

عرفان Mysticism

كفضت (rebirth-renaissance)

نقل (proof from tradition)

علم طبيعي يا طبيعيات Natural Science

نظر (reflection)

نو افلاطوني Neo-Platonist

عقلان (Noetic (aqlaani)

عرفا ن(nosis -speculative-mysticism (irfan)عرفا

عدم Nothingness

عالم خارج (Objective world (alam kharege)

بداهت Obviousness

غيبت (ghaibat) غيبت

حکومت یک نفر Oligarchy

قدرت المطلق (qudrat-al -mutlaq) قدرت

عالم غيب (alam be-gayb) عالم

وجودى Ontological

مناظره ومرايا Optics

خطیب Orator

الحكمة المشرقية (Oriental philosophy (al-hikma-almashriqiya)

عقل أول (Original intellect (aql-awali

جزئی Particular

فناء بشری (fana''a bashare) فناء بشری

العقل المنفعل (al-aql al-munfa -il) العقل المنفعل

قدرت إدراكي (Perceptive power (qudratu idrakii)

عقل تام (Perfect intellect (aql-taam

كمال Perfection

Perishable world (alam faani) عالم فانی Permenent arechetypes (ayan -sabita) اعیان ثابته این ثابته (fayz abadii) یین أبدي Perpetual blessing (fayz abadii) فیض أبدي الفناء Persistence in annihilation (albaqaa-filfanna) عالم مظاهر Phenomenon world (alam -mazaahir) عالم مظاهر Philology (zaban -shenasi) زبان شناس Philosophers (falasifah) فلاسفه Physical bodies (ajsam-madi) فلاسفه Physical bodies (ajsam-madi) أشكال Pleasure الذت

Poetry شعری، فن شاعری، شعری، فن اسعری، فن Politics سیاست
Possibility قوه امکان/ شی ممکن Possible

Posteriority تأخر

Potential intellect(al-aql-bil- quwwah) قدرت الهي Power of God (qudratu ilaahi) قدرت تصرف Power to dominate (qudratu tasaruf) قدرت تصرف

محمولات Predicates

اصل موضوعي Premise

Primacy of existence (asalat-al-wujud) أصالة الوجود (Primacy of existence (asalat-al-wujud) أصالة الوحى أصالة الوحى أصالة الوحى Primacy of revalation (asalat-alwahyi) أصالة العقل Primacy of the intellect(asalat al-aq) اصالة العقل Primal reason (aql-fitree) عقل فطري Primary premises (muqademat awal) مقدمات أول Prince of believers(amir-al-mu"minin) امير المؤمنين Prince of unbelievers (amir-al-alkafiriin) امير الكافرون الكافرون الكافرون المهردان المؤمنين الكافرون المهردان المه

Principiality of essence (asalat-al-mahyi) أصالة الماهيه

تقدم Priority

الدليل (Proof-(dhalil

قدس عقل (aql -qudsi) قدس عقل

عقل محض (Pure intellect (aql-mahd)

عقل محض (aql-mahd) عقل محض

عقلیات (aqliyaat) عقلیات

مبنى بر دلالت عقلى Rationalistic

عالم عقل (Realm of intelligence (alam aql

عالم كثرت (alam kasrat) عالم

عالم ناسوت (alam nasut) عالم

عالم وحدت (alam wahdat) عالم

العقل و النقل (Reason and tradition(al-aql-wal-naql)

علت Reason

مقدمات کلیه (muqademat klieh) مقدمات کلیه

تسلسل /دور Regress

ذكر Remembrance of God (dhikr)

جمهوری Republic

حافظه Retention

خطابه Rhetoric

فيض إلله مقدس (fayz laahi muqadas) فيض

فيض قدس(fayz quds)فيض قدس

Sane reason (aql-sahih) عقل صحيح

علم (ilm) Science -knowledge

فرقه ها (Sects (firqihaa)

Self- annihilation (fana"a dar hud) فناء دذر حد

فناء نفس (fana"a nafs) فناء

فناء در رسول هدی (fana"a dar rasool Huda) فناء در رسول

self-intelligent عاقل بالذات Self-intelligented معقول بالذات Semantics (ilm -al-maa"ni) علم المعانى Sense perception حس

عالم محسوس (Sensible world (alam -mahsuus)

عالم شهادت (alam shahadat) عالم

عنصر بسيط (unsure''e basiit) عنصر

عقل بسيط (Simple intellect (aql-basiit) عقل

أصول إجتماعي (social norms (usool-igtimayi)

جامعه Society

نفس Soul

عقل سليم (aql-saliim) عقل سليم

ies (nuuw) نوع

Speculative theology (kalam) کلام

روح Spirit

قدرت روحی (qutratu ruuhi) قدرت

عالم روحاني (Spiritual world (alam ruhani)

جهان ما دون Sublunary world

عقل جوهر (substantial mind (aql -jawhare)

عقول ما فوق انسانی Supra- human intelligence

فيض أعلى (fayz aalaa) فيض

عقل متعالى (aql- mutaa''li) عقل متعالى

قدرت متعالى (qudratu mutaa''li) قدرت متعالى

بقای نفس Survival of Soul

قياس Syllogism

قياسات Syllogisms

تشکیک Systematic Ambiguity

تفهيم (compression)

تفكير (Tafkiir (thought)

تفسير (Tafsir (explanation -exegesis)

تفويض (delegation of power and responsibility to a man) تفويض

تحقیق (verification)

تجرد (catharsis) تجرد

Taking -text -literally (ithbat) إثبات

تنزیه (Transcendence)

تقدير (Determining) تقدير

تقدیس (sanctification)

تصور (conceptualization) تصور

تصديق (Assent-jugement)

تشکیک الوجود (the gradation of being) تشکیک

توحید (oneness) توحید

توحيد الافعال (doctrine of the unity of action)

تأويل (spiritual hermeneutics -interpretation)

عالم ظلماني (alam zulmani) عالم ظلماني

عالم سفلي (alam suflaa) عالم

حقيقت الوجود (haqiqat al - wujuud) حقيقت

علم الكلام (ilm al kalam) علم الكلام

The science of proof (ilm -istidlal) علم الإستدلال

علم الكتاب (The science of Quran (ilm-al-kitab)

علم توحيد (ilmtawheed wasifat) علم توحيد

صفات

علم التوحيد (ilm -al-tawheed) علم التوحيد

عالم نفس (alam nafs) عالم

علم الألهي (ilm -al -ilahi) علم الأله

تجلیات (tajaliyaat) جلیات

علم نظری (ilm-nazari) علم

Theosopher (hakim mutaallih) حكيم المتأله Theosophy (hikmat) حكمت

حكمت الاشراقيه (hikmat al-ishraqya) حكمت

فوق جوهر بودن Tran substantiality

حكمت متعاليه (al-hikma-almuta"aliya) حكمت

إسناد (isnad) إسناد

فناء حقيقي(True effacement (fana''a haqiqi)

مقدمات حقیقی (muqademat haqiqi) مقدمات

حقیقت (haqiqat) حقیقت

حکومت استبدادی Tyranny

علم محتوم (ilm-mahtoom) علم محتوم

فناء در حق Union with reality (fana"a darhaqq

اتحاد (itihad) المحاد (Union with the devine

واجب الوجود (unity of being (wajib al-wujuud)

وحدة الشهود (wahdat alshuhud) وحدة

Unity with the active intellect (itihad baaql- fa"al) باعقل فعال إتحاد

عاقل ومعقول (itihad aaqil-wa-maquul) عاقل ومعقول

إتحاد

علم کلی (Universal science (ilm -kuli

کلی Universal

عالم مقال (Universe of discourse (alam -maqal

قدرت غیب (qudratu gaybi) قدرت

عالم طوليه (Vertical world (alam tuuliya)

مدينه فاضله، شهر بافضيلت Virtuous city

عالم ملأ (Visible world (alam -mala)

حکمت (Wisdom (hikmat)

عالم غيب مطلق (alam gayb mutlaq) عالم

عالم هاهوت (world of absolute silence (alam hahuut)

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سکوت محض عالم (World of absolute silence (alam skuut mahad) سکوت محض عالم
          عالم بحردات (alammujaradat) عالم بحردات
               عالم مثال (World of analogies (alam mesal
              عالم فنا ("World of annihilation (alam fanaa
                عالم وجود (World of being (alam wujuud)
     نفوس سماوي عالم (alam nufuus samawe) نفوس سماوي عالم
              عالم أيقان (alam-ayqaan) عالم
          عالم جمع (World of comprehensiveness (alam ja"am)
               عالم خلق (World of creation (alam khalkh)
              عالم تكوين (World of creation (alam taqwiin
             عالم ظلمت (World of darkness (alam zulumat)
              عالم عناصر (World of elements (alam anasir)
               فيض عا لم (alam fayz) فيض عا لم
          عالم صور (world of form-world of power (alam suar)
عالم كون وفساد (alam kawn wafasad) عالم كون وفساد
              عالم تقدس (world of holiness (alam taqadus)
                 عا لم مثل (World of ideas (alam mususl)
             عالم خيال (World of imagination (alam khayal)
            World of imagination (alam tahayul) عالم تخ لَّ \ddot{b}
            عا لم بحرد (World of immateriality (alam mujarad)
             عالم عصمت (World of infallibility (alam ismat)
               عالم عقول (World of intellects (alam uquul)
              عالم تعقل (World of intelligence (alam ta"kul)
          عالم معقولات (alam-maquulat) عالم
             عالم تسبيح (World of invocation (alam tasbiih)
                  عالم نور (World of light (alam nuur)
             عالم ظاهر (world of manifestation (alam zahir) عالم
                عالم راز (World of mysteries (alam raa''z)
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عالم صورت (World of natural forms (alam Surat)
           عالم طبیعیات (alam tabiya) عالم
   قرب به حق عالم (alam kurbi haqq) قرب به حق عالم
    عالم توحيد (alam tawhiid) عالم
          عالم بقاء (world of permanence (alam baqaah)
  عالم مثال أفلاطون (World of platonic ideas (alam mesal aflatooni)
            عالم قدرت ( World of power(alam kudrat
     صور محض عالم (World of pure forms (alam suar mahad)
     عالم صور طبیعیات (alam suar tabiyia) عالم صور طبیعیات
    عقل مجرد عالم (World of pure intelligence (alam aql mujarad)
           عالم حقايق (world of realities (alam haqayiq)
           عالم حقيقت (World of reality(alam haqiqat)
             عالم واقع (World of reality(alam waaqi
             عالم قدس (alam quds) عالم
         عالم تجلى (World of self -disclosure (alam-tajali)
            عالم حس (world of sensation (alam hii''s)
عالم حس و شهود (alam hii"s wa shuhuud) عالم حس
              ظل عالم (alam zili) ظل عالم
         عا لم نفس مجرد (World of souls (alam nafs mujarad)
             عالم نفوس (alam nufuus) عالم
عالم جان و روح (alam jaanalam ruuh) عالم جان و روح
           عا لم علوي (World of sublimity (alam alawii)
 عالم مثل معلقه (alammusul-mualaqeh) عالم مثل معلقه
         عالم ملائكه (world of the angels (alam -malaike)
       عالم ملك عرفاني (World of the kingdom (alam -mulk)
        عالم ملك فلسفى (World of the kingship (alam-mulk)
            عالم زمان (alam zamaa"n) عالم
         عالم وحدانيات (alam wahdaniat) عالم
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World of universal beings (alam kuliyaat) عالم کلیات عالم کل (alam kuli) عالم کل World pre-existence (alam zar) عالم ذر Yaqin (certain) یقین Zahir (outward -apparent -exoteric) ظاهر Zoology (ganwar-shenasi)