PART 2

Critique of Marxist Philosophy

XKP

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Chapter 1

Preface

Ever since man has attempted to determine his relation to the external world, the formulation of world view has been a central problem of philosophic thought. The author's aim is to present the world view of Islamic philosophy against the backdrop of other views presented by modern Western philosophy, especially Marxism.

Two issues are involved in the difference between world views:

The first one relates to realistic and idealistic conceptions of the world. Realism believes in the existence of an objective reality independent of mind, while for idealism reality can be only mental. The second issue involves two separate outlooks within realism: materialism and theological realism. Materialism regards sensible matter as the common ground of all existence including mind and consciousness. Theological realism (hitherto referred to as 'realism')goes beyond matter and asserts the existence of an eternal and infinite cause as the primary cause of all phenomena, including the mental and the material realms.

Correction of Some Errors: Here, it is necessary to correct the misconceptions n of some modern writers. The first of these errors is to consider the conflict between theology and materialism as the one between idealism and realism, as if theological thought advocated idealism and materialism was the only representative of realism.

The second is the accusation that the theistic world view attributes every phenomenon to a supernatural cause and thus

makes science impossible by completely eliminating causality and law from the realm of nature. This accusation is false, because theology considers God as a cause transcending nature, as a power above nature and matter. This error involves a misunderstanding of the place of the transcendent cause in the causal chain.

The third error is that of identifying spirituality with idealism, whereas spirituality can be considered as an attribute of idealism as well realism; it has a different meaning in each of these outlooks.

Thus there are three kinds of world views: idealism, materialism and theological realism. Idealism was studied in Part 1, while discussing the theory of knowledge. Materialism and theological realism will be studied in this part.

A Clarification: At the outset a number of points have to be clarified. Firstly, what is the basic feature that distinguishes all the various versions of materialism from theological realism, making them two conflicting schools? The answer is that the basic distinguishing feature of materialism is its denial that there is anything beyond the scope and realm of experimental science. Both the theologian and the materialist accept the findings and formulations of science, but they differ over the issue that there is an immaterial realm of existence beyond the realm of experiment and sensible phenomena. The materialist considers natural causation revealed by experiments as the sole ground of all existence, including mind and consciousness. The theological realist, on the contrary, regards the knowing subject and its knowledge as being of an immaterial nature. Further, theological realism asserts that the developments and movements studied by science are, in the ultimate analysis, attributable to a cause transcending nature and the material world. The materialist denies this and claims that no immaterial or transcendent causes are revealed in the field of experiment; nature is dynamic, autonomous, self-sufficient and self-contained.

It is clear that there is no dispute between theology and

materialism with regard to scientific truths. The theologian admits all scientific truths; he just admits other truths and asserts the existence of a primary, non-sensible and immaterial cause of nature's movements and phenomena.

Secondly, if the conflict between theology and materialism is that of affirmation and negation, which of the two schools is responsible for giving evidence in favour of its position? The theologian must offer reasons for his affirmation and the materialist for his negation, for absolute denial like absolute affirmation requires proof. The materialist, by his absolute denial, in fact asserts that he has examined the entire realm of being and not found any immaterial cause in it.

Now a second question arises : What kind of evidence that can be?

The answer is that the evidence for the affirmation or for the denial must be based on reason, not on sense experience. This is contrary to the materialist view, which considers sense experience as its evidence and claims that the propositions of metaphysics and theology cannot in general be verified by sense experience and that an analysis of experience and nature does not reveal the existence of immaterial things. Now if materialism is correct in its claim that sense experience and science do not constitute a proof for the propositions of theology, then neither can they be proof for its absolute negation. Moreover, the truths of science are not the subject of disputation between theology and materialism. For the disputation relates rather to the philosophical interpretation of these truths which asserts the existence of a cause transcending the limits of sense experience. It is clear that sense experience cannot be considered as a proof for the negation of a truth outside its own limits.

Science does not affirm the materialist view of the world. All the truths uncovered by science leave room for the assumption of a cause above matter. Scientific experimentation cannot prove that matter is not created by an immaterial cause. Therefore, the proof in support of materialism cannot be based on

scientific truths or sense experience. Rather, materialism is a philosophic interpretation of experience and scientific truths, in the same way as theological realism is; both of them give different interpretations to the findings of science. The soundness of these interpretations cannot be established on the basis of sense experience.

This leads us to a third question: If scientific experimentation is not sufficient by itself for deciding the issue, is there any other means available to the human mind? Al-Sadr's answer is that human reason is sufficient for studying this issue, in the same way as it studies all scientific issues in the light of primary rational knowledge, which is independent of experience. Thus the method adopted by theological realism in demonstrating its propositions is ultimately the same method by which we prove all scientific truths and laws.

Chapter 2

Dialectics

In classical Greek philosophy 'dialectics' meant a specific method of discussion in which the debate between the representatives of opposite points of view begins from preliminaries admitted by both the sides and proceeds until one of the points of view is affirmed or a new conclusion is reached by the way of synthesis of formerly opposite viewpoints.

Dialectic in modem Western philosophy is not a method of discussion but a method of explaining reality and a general law of the universe according to which movement is a continuous development of oppositions and contradictions, their merging and reconciliation. The idea is an old one, foreshadowed by Empedocles (who explained change as a conflict between the world forces of Love and Strife) and Zoroaster, and embodied in the 'golden mean' of Aristotle, who held that "the knowledge of opposites is one." Hegel was the first to establish a complete logic (and metaphysics, which in Hegel is same as logic) on the basis of the notion of dialectic.

In this logic, which is claimed to govern thought and existence, the fundamental principle is one of thesis, antithesis, and synthesis, which involves a constant 'taking up' and reconciliation of pairs of contradictories in higher, more comprehensive and penetrating ideas, until finally all oppositions are overcome in the all-inclusive, all-reconciling and all-explaining Absolute Idea.

Hegel views conception as a hierarchy of syntheses whose skeleton is constructed of ascending triads in which seemingly antagonistic concepts are reconciled by dialectic in higher

logical concepts. The most basic triad involving the concepts of being and non-being as thesis and antithesis yields the synthetic concept of becoming. The ideas of becoming and change involve the concepts of identity and difference which are reconciled in the concept of essence. The concepts of essence and existence, whole and part, appearance and reality are resolved in the concepts of ground and force. The concept of force suggests those of actuality and potentiality, whose dichotomy is reconciled in the concept of fact. Also the notion of fact suggests those of necessity and freedom, which are resolved in the concept of 'nature of things'

. Now we are confronted with the thesis and antithesis of substance and its attributes or accidents. This contradiction is overcome by regarding the substance as the cause of its attributes. Here cause contains the effect and so cause and effect become one. Similarly final and efficient causation are synthesized in the identity of means and end, which are neither external to nor distinct from each other, by the concept of process. The world-process and the Absolute are one; it is its own cause and its own goal. Hence the actual is the ideal; on the moral plane, value and fact are identical.

Hegel's stand on the law of contradiction is dubious. As can be seen, the driving motive behind every Hegelian synthesis is avoidance of contradiction; i.e. it is inspired by belief in the impossibility of contradiction. Moreover, he holds that the nature of Reality can be deduced from the sole consideration that it must not be self-contradictory.

On the contrary, according to Hegel, truth and falsehood are not sharply defined opposites, as is commonly supposed; nothing is wholly false and nothing that we can know is wholly true. The truth is the 'whole', and nothing partial is quite true. Whatever the value of his arbitrary analysis of concepts, it does not seem correct, on the whole, to hold that Hegel rejects the principle of contradiction.

Hegel is one of the most confused of philosophers. His philosophy is difficult because it is difficult to understand confusion.

The Marxist interpretations, or misinterpretations, of Hegelian dialectics have added to this difficulty. Therefore, when al-Sadr criticizes Hegel, he has the Marxist interpretation of Hegel before him.

Thus when we see al-Sadr charging Hegel with the complete rejection of the principle of contradiction and with holding that contradiction is not only the primary principle of all knowledge but the general law of the universe, we should understand him as criticizing the Marxist interpretation of dialectics rather than Hegel. With these remarks now we turn to al-Sadr's criticism of Marxist dialectics.

According to the Marxists, the dialectical method is characterized by four main points: (1) The movement of development, (2) the contradiction of development, (3) the leaps of development, and (4) the general linkage. These are supposed to replace the four laws of thought recognized by formal logic: the law of identity, the law of contradiction, the law of conversion, and the law of demonstration. Al-Sadr then goes by one on to deal with the four points of the dialectical logic one.

Chapter 3

The Movement of Development

The dialecticians reproach metaphysics and traditional logic for considering nature in a static state of unchanging frozenness and stagnant stability and for failing to reflect nature in its moving and progressive reality. According to this claim, the poor metaphysician is an unperceptive being devoid of consciousness and awareness who tails to notice change, transformation and movement in the realm of nature.

Al-Sadr briefly recapitulates the standpoints of Greek philosophers regarding motion. He refers to the paradoxes of Zeno (d.c. 430 B.C.) which were arguments put forward to demonstrate the inconceiv ability of motion and to the acceptance of motion by the Aristotelian school. The problem is related to the manner in which motion was conceived: either as a succession of pauses in instants of time or as a gradual advance in which there is no pause or rest.

Islamic philosophy pictures motion as the gradual actualization of the potentiality of a thing. Development always consists of something actual and something potential. Thus motion continues as long as a thing combines both actuality and potentiality, existence and possibility. It possibility is exhausted and no capacity for a new stage remains, motion ceases. Mulla Sadra (1572-1641) demonstrated that motion does not pertain to the accidental surface of things but goes on inside their very substances. Not only that, he also showed clearly that motion and change is one of the necessary principles of metaphysics.

The accusation of the dialecticians that metaphysics views nature as static and frozen is due to their failure to understand

motion in its proper philosophical sense. The difference between the ways metaphysics and dialectical materialism view motion consists of these two points:

Firstly, dialectical materialism views motion as being based on contradiction and strife among contradictories. According to the metaphysics of Muslim philosophers motion is a progression from one stage to an opposite stage without involving the union of these opposites in any one of its stages.

Secondly, motion according to Marxism is not confined to external nature but is also common to intellectual truths and ideas. On the basis of this, there can be no absolute truths. According to Muslim philosophers, motion and development do not intrude into the realm of knowledge and thought.

In regard to the first point, al-Sadr quotes a passage of Engels wherein motion is conceived as continuous succession of contradiction and the temporary reconciliation of this contradiction. "The simplest mechanical change in place," says Engels, "cannot, in the last analysis, occur except by means of the presence of a certain body in a certain place at a certain moment and in another place at the same moment.

In other words its being and non-being are simultaneously in one place."

This shows that the Marxists have not made much progress since Zeno in conceiving motion. Fakhr al-Din al-Razi also raised similar objections against the gradual emergence of a thing. The Marxists however differ from the ancient Greek philosophers in that while the latter negated motion because it involves contradiction, the former use this conception of motion to justify contradiction.

The alleged contradiction in motion is only due to the confusion between potentiality and actuality. At no stage does motion involve a specific rank in actuality and another rank in potentiality. In other words, motion is a gradual actualization of potentiality. The confusion in the Marxist conception of motion

arises due to its considering the entanglement of actuality and potentiality, or their union in all the stages of motion as a union of actual opposites, a continuous contradiction and a strife among the contradictories.

Now that motion is not the result of an inner cause in the form of conflicting contradictories, it is also impossible for motion to be self-sufficient or to be without an external cause that takes a thing continuously from potentiality to actuality. Applying this idea to material nature as a whole, al-Sadr derives a theological conclusion. The very existence of nature is a gradual progression and continuous departure from potentiality to actuality. Since there can be no self-sufficiency in the form of internal contradiction, the law of causality forces us to recognize a cause transcending the limits of nature.

Al-Sadr then takes up the second thesis of dialectical materialism, that dialectical change and development also occur in the realm of thought and truth, which could not portray nature if thought did not grow and develop dialectically like nature. "Reality grows", states a Marxist citation, "and the knowledge that results from this reality reflects it, grows as it grows, and becomes an effective element of its growth." Al-Sadr rejects this dialectical picture of the movement of thought for the two following reasons:

1. The realm of nature involves fixed laws that reflect fixed truths in the realms of thought and knowledge. Scientific knowledge reflects the permanent underlying the transient in nature.

2. Firstly, concepts and ideas, no matter how accurate, do not possess the actual properties of the things to which they pertain (e.g. the idea of radium does not emit relation). Motion is one of those properties. A true idea, although it reflects objective reality, need not possess the actual properties of the reality it represents. Hence the concepts of changing things do not change in order to reflect the objective reality of those things.

Al-Sadr then takes up the second Marxist argument intended

to demonstrate the dialectic development of thought, that knowledge is a natural phenomenon and therefore governed by the same laws that rule nature. It changes and grows dialectically as do all the phenomena of nature. The laws of the dialectic apply to both matter and knowledge.

This argument rests on a pure materialistic explanation of knowledge. Al-Sadr postpones the analysis of this view to an independent chapter, "knowledge", at the end of the book. Here it suffices to put a question to the Dialecticians : Is this materialistic explanation of knowledge reserved for the thought of the dialecticians or does it extend also to the thought of others who reject the dialectic? It becomes contradictory for Marxists to accuse other's thought of being frozen and static; for if the dialectic is a natural law common to both thought and nature, then it must apply to all human thought alike.

Thirdly, al-Sadr examines the Marxist effort to produce the history of science as an empirical evidence for the dialectical movement of thought. Although progress and development in human knowledge is an undeniable fact of history, this development is not a kind of motion in the philosophic sense intended by Marxism. It is no more than an increase in the quantity of truth and a decrease in . the quantity of errors. When a theory moves from the level of hypothesis to that of law, it does not mean that scientific truth has grown and altered. Al-Sadr gives a few instances from the history of science to prove his point, He goes on to remark that Marxism seeks to achieve two ends by applying the dialectic to truth. First, it seeks to destroy metaphysics on which theology rests, by holding that since truth moves and grows there can be no fixed and absolute truth. Second, by denying absolute falsity it seeks to make all truth relative.

Chapter 4

The Contradictions of Development

Here al-Sadr takes up the Marxist rejection of the law of contradiction and the claim of dialectical materialism that all change, becoming and development involve contradiction. He explains the meaning of the law of contradiction and points out that no logical person can deny the absolute validity of this law. He points out that the Marxist denial is based on a misunderstanding of what is meant by contradiction. He examines one by one seven instances of contradiction cited by the Marxists, and argues that none of them involves a union of actual contradictories. The first example is that of motion, which according to Engels is in itself contradictory, As explained previously, there is no contradiction in motion. The second example is that of the growth of the living body, which, according to Engels, is at every moment itself and something other than itself. Other examples include the contradiction: of the positive and the negative charges, of action and reaction in mechanics, attack and defeat, advance and retreat, victory and defeat in war, etc. Al-Sadr disposes of all these examples by pointing out that actual opposites are not logical contradictories and that no logical contradiction is involved in any of these cases.

Al-Sadr points out that this compulsive urge to see contradictions in everything has political motives. In its effort to give a reassuring analysis of the conflict between the capitalist and the working classes, Marx builds up a whole social philosophy on the dialectic of contradictories that promises the ultimate collapse of capitalism and the victory of communism.

However, the social and political application of the dialectic would lead to its self-refutation. In the communist utopia

envisioned by Marxism, in which classes and class-conflict are abolished, social development would also come to a halt due to the abolishment of contradiction.

Al-Sadr sarcastically remarks that such a static and stagnant fate has indeed overtaken the communist states, wherein the subjugation of all thought to the official doctrine has led to intellectual repression, stagnation, and backwardness.

Chapter 5

The Leaps of Development

This is another idea in the Marxist ideological arsenal. According to the dialecticians, gradual quantitative changes reach a point when the accumulated change produces a sudden qualitative change. Hence development is not a circular movement but a linear progression from one qualitative stage to a new one. Moreover, they assert that this is a general law of nature. One of the examples offered is that of some substances, like water, which pass from solid to liquid state and from liquid to gaseous state at specific temperatures.

Al-Sadr points out that although instantaneous leaps do occur in a number of natural phenomena, they are by no means general and do not hold true in the case of all phenomena (e.g. biological organisms, language, etc.). In the example of water, experimentation does not demonstrate that heating is a result of contradiction, nor there is any dialectical development involved. Secondly, neither the heating up of water nor its passage from one state to another is a linear, irreversible progression.

Thirdly, the leap from solid to liquid state or from liquid to vapour state does not take place suddenly for the complete mass of water heated. Why should, then, the leap in the social sphere be imposed on society as a whole? Finally, al-Sadr points out, the change of state of water is as much a matter of quantitative change from the viewpoint of science as the change in temperature. Here al-Sadr seems to refer vaguely to the kinetic theory of heat, according to which the changes of state are quantitatively related to the speed of molecular movement and the force of molecular cohesion.

Al-Sadr goes on to criticize Marx's view of transformation of Surplus value into capital as an instance of accumulated quantitative change passing into qualitative change. Although he is right in pointing out that money does not undergo any qualitative change by passing into capital, his insistence that the change involved is merely verbal amounts to ignoring a significant economic fact pointed out by Marx.

Chapter 6

The General Linkage

Marxism, following Hegel, insists on considering nature as a whole in which things and events are linked together organically and are dependent on one another. No thing or event makes sense if isolated, as allegedly done by metaphysics, from other things and events that surround it. Martyr al-Sadr denies this allegation. Metaphysics considers the world as completely interlinked in accordance with the law of causality. The novelty introduced by the Marxist dialectic lies not in the general linkage itself but in its application to political aims.

However, two points are noteworthy in regard to the view of the theory of general linkage held by metaphysics. First, the linkage of every part of the universe to the causes, conditions and circumstances relevant to it does not mean that one cannot notice or define it in an independent manner. Second, the causal linkage among the parts of nature cannot be circular.

Here, at the close of al-Sadr's refutation of the dialectics, which was an attempt, albeit an unsuccessful one, to understand and interpret historical change and indeed to bring it about it is essential to point out that traditional Islamic philosophy as well historiography have not paid adequate attention to historical change, which is a kind of 'macro-change' that reveals itself over extended ages and eras of time. Western philosophy and science, at least since Hegel and Darwin, have been keenly cognizant of historical change and development and have tried to see beyond the immediate panorama of micro-changes of all sorts: physical, chemical, biological, social, economic, political and cultural.

Although al-Sadr insists that traditional metaphysics has not been blind to change, he himself gives no clear indication of the recognition which is due to macro-changes. One of the most significant characteristics of modem science is its attention to change that lies behind the veils of permanence in the universe. This historical awareness is now common to all the disciplines which have to deal with the past from astronomy, geology and biology to sociology, history, anthropology, and the historical study of art, technology, religion, politics, language and ideas.

Chapter 7

The Principle of Causality

The law of causality, al-Sadr states, is a necessary rational principle present in the core of man's nature as a rational being. It is on the basis of this principle that (1) the objective reality of sense perception, (2) the validity of scientific theories and laws based on experimentation and (3) the validity of all philosophical and scientific inference, are based.

Al-Sadr explains that although the objective existence of the world is a necessary primary judgement that requires no evidence, the objective reality of every particular sense perception is not known in a necessary manner. It is on the basis of the principle of causality that a specific perception, under specific circumstances and conditions, reveals the existence of its cause as an external object.

Experimental theories do not acquire a scientific character unless they are generalized beyond the limits of particular experiments. And this is not possible without reliance on general causal laws which are: (1) the principle that every event has a cause, (2) the principle that every cause necessarily produces its effect, and (3) the principle of harmony between causes and effects.

Without the laws of causality, there would not be any link between evidence and conclusions and no evidence would lead to any result.

Even those who attempt to deny this principle by resorting to a certain evidence would not make this attempt had they not believed that the evidence on which they rely is a sufficient cause

of the knowledge of the falsity of this principle. But this is in itself an application of this principle.

It is wrong to regard the principle of causality as an inductive law based on experimentation, because such a view reopens the fundamental question about the validity of perception and experimentation, to which no answer can be found. It is a principle which is accepted independently of the senses and is above experimentation. From the viewpoint of Islamic philosophers, (1) causality is not limited to the natural phenomena which figure in experimentation, but is a general law of existence, applicable to the material and the immaterial; (2) the cause whose existence is confirmed by this principle need not be subject to experimentation, nor it need be of a material nature; (3) the fact that experimentation does not disclose a specific cause of a certain phenomenon does not imply a failure on the part of this principle, for it does not rest on experimentation. These salient points differentiate the mechanistic, materialistic interpretation of the law of causality from its theological interpretation. Causality and Microphysics:

Inevitable uncertainty entered the realm of modern physics as a result of experimentation with subatomic particles. If the position of an electron were to be accurately measured, radiations of very small wavelength would have to be used for the determination. But such radiations possess quanta of high energy, and would alter the momentum and energy of the electron by impact. Similarly, to measure the momentum of an electron, quanta of low energy would have to be used.

The wavelengths of such quanta being large, the position of the electron would be correspondingly indeterminate. Heisenberg's Principle of Uncertainty followed from the wave-particle duality of matter and radiation, and from the fact that the characteristics of objects were usually unavoidably altered during the course of experimentation.

The indeterminacy at the subatomic level meant that there could be only probabilistic knowledge of subatomic events. This fact made the physicists and erroneously according to al-

Sadr abandon belief in the universality of the principle of causality. Not only that, they came to interpret the causal fixity and regularity of macroscopic events as a statistical phenomenon, analogous to the stability of, say, suicide rates.

Al-Sadr points out that the doubts raised by scientists in microphysics are based on a specific notion of the principle of causality different from the notion of it held by Muslim philosophers. According to the latter notion, the principle is not based on experimental evidence and stands above experimentation. Moreover, the limits of experiment prove only our inability to apply it in some fields, not the invalidity of this principle in those fields. In addition, microphysical experiments do not offer any scientific evidence proving the falsity of the principle of causality in the field of subatomic physics. The introduction of indeterminacy is a problem of the observing subject, something which does not warrant the elimination of causal laws from the universe.

Chapter 8

The Meaning of Causality

Al-Sadr states that there are four theories which resulted from attempts to answer the question: Why do things require causes? (1) The first theory, adopted by some Marxist theoreticians, states that an existent requires a cause for its existence. According to it, causality is a general law of existence as confirmed by scientific experiments. To regard the law of causality as an inductive principle, al-Sadr points out again, is an error. It is not within the scientific possibilities of experiment to indicate that the secret of the requirement for a cause lies at the heart of existence in general. The principle of causality is a purely philosophical principle and so also are the issues concerning it and the theories that treat its limits.

(2) The second theory, which al-Sadr calls "the theory of creation", asserts that things need causes for coming into existence. Thus if a thing exists continuously and always and has not come into being after not having existed, there will be no need in it for a cause, nor will it enter the realm of causality. While the first theory goes too far in generalizing causality, the second theory goes too far in restricting it.

(3) & (4) The other two are the theories of "essential possibility" and "existential possibility". These two theories assert that what makes things need their causes is possibility. They differ from each other due to their different notions of possibility, which relate to a difference regarding quiddity and existence. Since a discussion of this difference lies outside the scope of the book, al-Sadr limits himself to the discussion of the theory of existential possibility, advanced by Mulla Sadra, which asserts the fundamentality of existence.

According to this theory, causality is a relation between two existences: the cause and the effect. If, for example, B is an effect of A, does B have an existence independent of A? The answer is in the negative. Causality requires that the effect does not have a reality prior to its link with its cause; otherwise, it will not be an effect. Moreover, B is not something that has a link or relation to the cause; rather it is the very linkage, in the sense that its being and existence become a conjunctive being and relational existence. The discontinuity of its linkage to its cause means destruction of it and an end of its being, for its being is represented in that linkage. A relational entity cannot be detached from the thing to which it is essentially linked or related. Moreover, all being is not governed by the principle of causality. Rather, this principle governs the relational existents, whose reality embodies linkage and relation.

Here Martyr al-Sadr points out that the Marxists fluctuate between the dialectical model and causality while explaining phenomena. That is, while they regard internal contradiction as a sufficient explanation of every phenomenon in the universe, they also take recourse now and then to the cause-effect relation for explaining some phenomena by external causes. A relevant caw is the Marxist assertion that the means of production make up the social infrastructure, whereas all other aspects of society, including the intellectual and political conditions, the considered superstructural. This means that the relation between the superstructure and the means of production is a cause-effect relation. Here, there is no contradiction but causality.

Chapter 9

Contemporaneity Between Cause and Effect

Since the existence of the effect is essentially linked to the existence of the cause, the cause is necessary for the effect and the effect must be contemporaneous with the cause so that its being and existence the linked to that cause. This is the law of contemporaneity between the cause and the effect. Two arguments were forwarded to prove that it is possible for the effect to continue after its cause ceases to exist.

(1) The first argument, put forward by theologians, rests on two idea. The first is that things need causes in order to come into existence; after its coming into being, a thing has no need for a cause.

However, as pointed out earlier, a thing's need for a cause is not for its coming into existence, but because its existence is essentially linked to its specific cause.

The second notion is that the law of contemporaneity between the cause and the effect is not consistent with a certain group of phenomena in the universe. For example, a building erected by builders continues to exist even after all of them are gone and are no more alive. Al-Sadr states that in all such examples, the error lies in identifying the real causes.

(2) The other theory, suggested by the modem science of mechanics, assert that in the light of the laws of motion continuity of motion does not require a cause. According to the first law of motion, a body continues to move with a uniform velocity in a straight line, after an impulse is imparted to it, unless disturbed by an external force.

According to al-Sadr such an assertion leads to an immediate cancellation of the principle of causality. If it were possible for motion to continue without a cause, then it would also be possible for it to occur without a cause and for things to begin existing without a cause.

The reason is that continuity of motion always involves a new coming into existence.

According to al-Sadr, the experiments which suggest the first law of motion do not actually show that the external force is cause of motion. It is possible, he says, that the real cause of ethereal is something that had existed all along; external causes act the force within the body and prepare it as cause (Muslim have believed that all accidental motion, including the mechanical motion of bodies, is produced by a force within bodies). As a result, al-Sadr finds the law of inertia to be incompatible with the law of causality.

It is amazing that the author should consider the first law of motion as incompatible with the principle of causality. But that is because he, in the tradition of Mulla Sadra, considers motion as a continual renewal of existence, a continual recreation. Mechanics, on the other hand, considers rest as well as uniform motion in a straight line as unchanged states. Only acceleration is considered a change of state that requires an external cause or force. Also, Mulla Sadra considers circular motion as the most perfect kind of motion (and, it may be remarked, such a conception of motion can have unfortunate consequences for any civilization that adopts it). There is no reason why simple mechanical motion should necessarily be considered a continual renewal of existence and no reason why the first law of motion should be logically incompatible with the principle of causality.

One wishes that al-Sadr had treated some concepts of traditional Muslim philosophy with the same critical scrutiny with which he treats the dialectics. It is the view of some historians of science that certain misconceptions about motion inherited

by Muslim philosophy and science from Aristotle were responsible for the failure of Muslim scientists to develop the science of mechanics, which was developed by the West only after it discarded the misconceptions of Greek philosophy regarding motion.

On the whole, it may bestated that the arguments advanced by the author in favour of contemporaneity of cause and effect are not very convincing. At the end of the chapter he draws a theological conclusion from the above discussion. The causal chain which relates relational entities cannot be infinite or circular; for in that case all the parts of the chain will be effects. Hence the world proceeds from a being necessary in essence, self-sufficient and not requiring a cause. Every cause except the first cause is a cause-effect, and hence needs a cause.

The first cause, being a pure cause, does not require a cause prior to it, for a thing does not require a cause qua cause but as an effect qua effect.

Chapter 10

Matter or God?

The question dealt with in this chapter is whether the first cause of existence is matter or something transcending it. This is the ultimate issue in the conflict between theological philosophy and materialism.

The dialectic is but an unsuccessful attempt of materialism to unite the efficient cause and the material cause of the world, in accordance with the laws of dialectical contradiction.

Al-Sadr briefly recapitulates the development of the scientific study of matter from Greek thought to the twentieth-century atomic physics.

Modern physics discovered that energy is the substratum of the world and matter is a state of energy. In the light of these discoveries the quality of materiality itself becomes an accidental quality.

The philosophical conclusion that follows from this is that it is not possible to regard matter as the first cause of the world. Moreover, science has established that there is one kind of matter that underlies all the various elements, compounds, substances and things. But how can a single reality be the cause of different and contradictory manifestations? According to al-Sadr such a thing is not possible. Hence matter cannot be the efficient cause of the world, as the world is full of different and multifarious phenomena.

Furthermore, the properties or qualities that matter manifests in the various spheres of its existence are accidental to the

primary reality of matter. Further, the property of materiality itself is also accidental. Hence, raw matter, which all things share, cannot be an essential cause of those properties or qualities.

Al-Sadr points out that the method followed by theology for demonstrating the necessity of an efficient cause of the world is the same as that followed by experimental science for explaining empirical phenomena. He does not fail to point out here that the dialectic with its theory of contradictions is able to account neither for the progression of the elements in the atomic table nor for the formation of chemical compounds.

Chapter 11

Matter and Philosophy

The above discussion related to the necessity of the efficient cause of the world in relation to matter as conceived by science. Thereafter, al-Sadr proposes to examine the question in the light of the philosophical conception of matter. By 'philosophical matter' he means the most primary matter of the world, whether or not experimental science is able to posit it. Philosophical matter is matter simpler than scientific matter and has a form. Its existence can be demonstrated philosophically.

Atomic physics posited Democritean atomism, the theory that bodies are not continuous and are composed of minute atoms. But there is a philosophical side to the Democritean theory which is rejected by philosophy. Philosophically, according to al-Sadr, the unit of matter posited by science must be continuous, for it cannot be a real unit without internal continuity.

At the same time, on account of its continuity, it should be capable of division and separation. That is, the unit must have a simple matter which is receptive to division and separation. Matter, therefore, is that which is receptive to division and separation, which are destructive of unity. Philosophically, it is not possible to conceive a unit without the receptivity to division, regardless of the ability of scientific tools and methods to affect such a division. The discovery of the so-called fundamental particles as the primary units of matter does not settle the question as to whether or not they are receptive to division.

When the philosophical conception of matter, as something composed of matter and form is understood, we know,

according to al-Sadr, that philosophical matter cannot be the first cause of the world.

Chapter 12

Matter and Motion

Matter is in continuous motion and constant development. Can the same thing be simultaneously a subject of motion and a cause of it?

Metaphysics insists on the multiplicity of the mover and the moved, because motion (i.e. growth) is a gradual development and completion of a deficient thing. A deficient thing cannot be the cause of its own completion. In the light of this, the cause of developmental motion is not matter itself, but a cause transcending matter that imparts to matter linear motion and gradual development. Here it should be noted that al-Sadr does not attempt to distinguish between different kinds of motion, such as simple mechanical motion and organic growth.

Dialectical materialism, on the contrary, does not recognize this duality between the mover and the moved, and considers matter itself as the cause of its motion and development. From the viewpoint of theology, there are no actual contradictions contained in matter. The internal content of matter is empty of everything except receptivity and capacity. Motion is a gradual departure from potentiality to actuality. Matter is not the cause of motion, for it is devoid of the levels of completion attained in the various stages of development. It is, therefore, necessary to search for the cause of the substantial motion of matter outside its limits.

It is also necessary that this cause be God, the Exalted, Who encompasses essentially all the ranks of completion and perfection.

Al-Sadr then calls our attention to the digestive and circulatory systems which provide proper nutrients to every one of the billions of cells in the body. In the same way, he calls attention to the eye and the apparatus of vision as a proof of the design of a supreme intelligence.

He points out that experimental biology has failed to explain the origin of life upon the earth. He asks whether the astonishing work of the genes, which control the character of every cell and bestow particular traits to an organism, could be products of haphazard chance. He discusses various theories of animal instinct and finds all of them in- adequate in explaining the wonderful behaviour of the bee, the shark, the ant, the hen and the eel. The only adequate explanation is that instinctive behaviour is the result of a mysterious, divine, supernatural inspiration. The marvellous order underlying nature bears testimony to the presence of an omniscient, omnipotent and omnipresent intelligence.

Chapter 13

The Nature of Knowledge

The most important issue of epistemology, according to al-Sadr, is the one concerning the reality of knowledge: Is knowledge a material or an immaterial phenomenon? Marxism asserts that knowledge and thought are material, organic processes of the brain.

Scientific exploration of the processes of sensation and consciousness has revealed beyond doubt that there are physical, chemical and physiological events involved in the functioning of the sense organs and the nervous system. However, these findings do not prove that perception, knowledge, thought and consciousness are material processes and that mind is grounded in matter. Such an assertion about the reality of the mind lies outside the scope of experimental science. Similarly, psychology, either through introspection or objective observation, studies psychological phenomena; but the nature of knowledge and the reality of the mind are questions that have to be dealt by the philosophy of mind.

Al-Sadr takes up the nature of the perceived image in visual perception as an example to argue in favour of the immateriality of the mind.

When we enter a vast garden extending for thousands of meters, at a glance we perceive its extent together with most of the trees and objects that are in it. Is the image of the garden that we grasp a material? It is, according to materialism. It image existing in a part of our brain is not, according to the metaphysical view; it is a metaphysical entity outside the realm of the material world. It is true that the light rays form

an image on the retina, and this image is transferred in some form to the brain. Nevertheless, the image transferred to the brain is other than the mental image. Al-Sadr offers two reasons for believing so.

Firstly, he states, the mental image does not have the same "geometrical properties" as those of the material image transferred to the brain, because the former resembles the garden in extent, form and geometric properties, whereas the brain and its image are small and the imprinting of a large thing on a small thing is impossible. Therefore, it must be an immaterial image.

Secondly, the mental image is inclined to stability and does not change in accordance with the changes of the image reflected in the nervous system. What al-Sadr means by the 'stability' of the mental image is this: If, for example, 1 place a pencil at a distance of one meter from me it will form an image of a specific size on the retina. If this distance is doubled, the retinal image would be reduced in size accordingly. However, al-Sadr claims, in spite of this reduction in the size of the retinal image, the mental image we have of the pencil remains stable in size. This also proves, according to him, that the mental image is immaterial.

Both of the above arguments offered by al-Sadr appear to be invalid. In the first argument, the actual size of the mental image is assumed to be the same as that of the viewed object (garden, in the example). However, when one is inside a room, the visual field presents a part of the room; when viewing a landscape, it covers a much wider space consisting of near and distant objects. When viewing the sky at night, the same visual field presents stars located at astronomical distances. It is not logical to claim that the mental image assumes the extent of the room in the first case, the extent of the landscape in the second, and the extent of the Milky Way in the third. That the second argument is invalid will be revealed by a simple visual experiment. Every student of drawing familiar with the laws of perspective knows that objects of similar size should be drawn on a scale proportional to their distance of location. The

'stability' of size, referred to by al-Sadr, is simply an illusion.

However, the failure of these arguments does not mean that the philosophical position asserting the immateriality of the mind is indefensible. An argument that may be offered in favour of this position is the following. If we assume the contents of the mind to be material, then it can be said that the mind should be in direct contact with the fundamental reality of matter when perceiving the data of the senses, as well as while experiencing any of its phenomena, such as thoughts, dreams, feelings, emotions, and everything else that enters the consciousness. That is, the fundamental reality of matter must be the object of the mind's direct experience if its phenomena are of a material nature. However, we see that we do not come across any molecules, atoms or sub-atomic particles, which are what matter is composed of according to science, in any sphere of our consciousness.

Moreover, it is believed that the reality of matter is one, while the phenomena that manifest themselves in consciousness are fundamentally various. The data of the senses smells, tactual impressions, impressions of taste, sounds, colours are fundamentally of a different nature from one another. Further, perceived impressions of each class are different from imagined, dreamt, or recalled impressions of that class. Again, all the impressions of the senses are fundamentally different from thoughts.

None of them can be imagined as being reducible into another, nor all of them can be reducible to any single substratum called matter.

Furthermore, each of the impressions of the senses, and so also thoughts, are fundamental realities experienced by the mind. They are signs and images in that they represent something other than themselves, but in themselves they are things in that they are what they are. Material objects are represented by them in that they are images; but nothing that we know about matter enters their actual constitution as things.

Now, going back to al-Sadr's discourse, if there are two sides to a human being, one spiritual or immaterial and the other material and physical, how do the two sides constantly affect each other? Plato was unable to bridge the gulf between the soul and the body. Descartes' theory of parallelism denied that there was any causal relation between physical and mental events, and hence admitted an unbridgeable gulf between the body and the mind. This failure leads to the crystallization of the inclination in European philosophy to explain man's being on the basis of one principle, matter or mind, leading to the opposite tendencies of materialism and idealism.

In the Islamic world, the explanation of human being on the basis of two principles, spiritual and material, found its most convincing formulation in the thought of Sadr al-Muta'allihin or Mulla Sadra.

According to Mulla Sadra, movement does not occur only in the accidents, but goes on in the substances and in the core of the being of things. He called it al-harakat al-jawhariyyah, substantial movement.

According to his theory, matter in its substantial movement pursues the completing of its existence until it assumes an immaterial being, becoming free from all materiality. Thus, there remains no dividing line between spirituality and materiality. Rather, they are two levels of existence. in spite of the fact that the soul is not material, yet it has material relations, because it is the highest stage of the completion of matter in its substantial movement. The difference between materiality and spirituality is just a matter of degree. However, it does not mean that the soul is a product of matter and one of its effects. Rather, it is a product of substantial movement, which does not proceed from matter itself. The reason is that every movement is a gradual emergence of a thing from potentiality to actuality. Potentiality cannot bring about actuality, and possibility cannot bring about existence. Therefore, substantial movement has its cause outside matter. The soul is a product of this movement, which itself is the bridge between materiality and spirituality. Concluded - wa al-hamdu lillah.

"Wisdom is the lost property of the Believer,

let him claim it wherever he finds it"

Imam Ali (as)