

**Prof. Muhammad Abdus Salam<sup>1</sup>**

**Subject: Science and Philosophy**  
**Nationality: Pakistani/ Major: Physics**  
**Dialogue Date: 1988**

*Professor Abdus Salam visited Allameh Ja'fari on Monday, November 21, 1988 in his house in company with Professor Golshani [a distinguished and highly esteemed Iranian physicist who has the chair of philosophy of science at the Sharif University of Technology]. Both Ja'fari and Abdus Salam insisted on the necessity of industrialization and scientific development in Moslem communities.*

**Abdus Salam:** As you know, today Moslem societies are in urgent need of joining the global industrial and scientific movement. We should remember the glorious advent of Islam and renew ourselves. What is your view in this regard?

**Ja'fari:** That is absolutely right. Near the end of the second century after Hijra, Moslems began a glorious scientific movement that was alive for almost three centuries latter until the early years of the fifth century. According to the historians of science, Moslems created an intellectual movement that was not limited to Caspian shores; in fact, it spread into the Atlantic coasts as they travelled through various lands to widen their knowledge of other cultures and people. They laid the foundation of an original civilization, Whitehead says, the originality of which is praised by all historians of science and civilization. Whitehead opines that:

*The Byzantines and Mahometans were themselves the civilization.<sup>2</sup>*

Moslems, Whitehead continues:

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1- Prof. Muhammad Abdus Salam (29 Jan.1926 – 21 Nov. 1996) was a theoretical physicist who, sharing the 1979 Nobel Prize in physics for his contribution to electroweak unification, became the first and only Pakistani to receive a Nobel Prize and also the first Moslem to win a Nobel Prize in science. (Translator).

2- Whitehead, Alfred North, *Adventures of Ideas*.

*Flourished on their own, revolutionized mathematics, made genuine progresses in physics, commerce, chemistry and other branches of knowledge and created an original civilization.*<sup>1</sup>

In his voluminous *Science in History*, J. D. Bernal interestingly says:

*Since its advent, Islam was seen as the religion of knowledge and literacy... Furthermore, the cities of Islam were not isolated from the rest of the Eastern world as had been those of the Roman Empire. Islam became the focal point of Asian and European knowledge. As a result, there came into the common pool a new series of inventions quite unknown and inaccessible to Greek and Roman technology. These included such manufactures as steel, silk paper and porcelain. In turn, this formed the basis for further advances, which were able to stimulate the West to its great technical and scientific revolution of the seventeenth and eighteenth centuries.*<sup>2</sup>

It must be taken into serious account that Moslem progresses were not merely limited to abstract theoretical and philosophical sciences; as a matter of fact, as this book suggests, it was a matter of technology and inventions. In fact, one can say that Moslems were the forefathers of modern industry and science.

In her renowned "*Allahs Sonne über dem Abendland*" ("*Allah's Sun over the Occident*") (1960), Sigrid Hunke states:

*We are not only an heir to Greece and Roma, but we are indeed the inheritor of Islamic intellectual world which the Occident is undoubtedly indebted to.*

Moreover, Philipp Frank has openly written:

*In the middle ages no nation has as much contributed to the progress and advance of humanity as the Moslems did.*

John Bernal has also said:

*The Arabs were no stranger to civilization. They had their own cities and had fulfilled an essential function in organizing the Eastern trade of the Roman Empire. The ease of their conquest showed that all they did was to take over the urban civilization of the Mediterranean with the effective consent of the inhabitants.*<sup>3</sup>

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*In fact, if we were only to deal with the history of science, it would be more logical for us to have focused on the period which starts from the*

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1- Since Mr. Abdus Salam was aware of the history of science in Islam, Mr. Ja'fari merely focused on the points that were of interest for both of them.

2- Bernal, J. D. (1954): *Science in History: The Emergence of Science*, Vol. 1, (Penguin Books Ltd, Harmondsworth, Middlesex, England).

3- Ibid.

*seventh century, i.e. the first century of Islam, and ends in the fourteenth century.*<sup>1</sup>

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*It is interesting to note that the primary subject of Islamic culture was not only material and terrestrial but also objective.*<sup>2</sup>

There are countless examples of such intelligent remarks that have been made by impartial Western historians of science of the Moslems' contribution to the advance of science and industry.

**Abdus Salam:** I think philosophy is no longer working and we need to turn to science and industry.

**Ja'fari:** I don't exactly think so. To begin with, you must first define what you mean by the term philosophy. If you mean by it a number of hyper-universal and abstract notions that are totally detached from reality, I would also agree with you that not only could such a philosophy fail to have any practical avail for us, but we would not even be able to defend it as a genuine source of knowledge and insight, either.

I have frequently emphasized in my lectures, speeches and essays that we should approach the issue from a phenomenological standpoint regardless of what has been and is conceived of the notion in past and today. As a matter of fact, philosophy takes issue with the truths that belong to the third stage in the hierarchy of human knowledge. Thus, we need to begin with the other two early stages.

The first stage is the stage of science which relies on senses, alternative instruments, reasoning and ideas; it chiefly deals with concrete facts of the external world. We know, however, that our epistemic struggle is not confined to the branches of knowledge that cover limited subjects in a restricted fashion. We have also theoretical discourses of knowledge. These discourses form the second stage of human knowledge. Theoretical physics is an example of this modality of discourse, which is focused on theorems and hypotheses that have not yet been proven or disproven via experimental or discursive methods.

This modality of discourse is discernable almost in all branches of *geisteswissenschaften* as well as in natural sciences, say law, as a discipline versus theoretical law, physics as a discipline versus theoretical physics, anatomy as a discipline versus theoretical anatomy. To put it otherwise, it is not so that our knowledge of the anatomy of the human body is merely scientific. This is also the case with physics or law, for instance. These disciplines contain a set of theoretical issues concerning the premises of scientific problems or

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1- Ibid.

2- Ibid.

their respective axioms and postulates that may be proven or disproven by experience.

This is followed by the third stage, which is called the stage of *universal knowledge* and covers the totality of the human scientific episteme of reality. In this stage we revise the whole body of our theoretical notions of reality from a more universal point of view in order to reach higher cognitions. Man can by no means understand his existential quadruple relationships (i.e. the human relationship with man himself, with God, with the world and with his fellow human beings) only via experiential experiments, observation and external senses. This is truly impossible as scientific knowledge is limited in its nature, methods and consequences.

On the other hand, there is a genuine yearning in man to understand the world in its totality and in an integral fashion rather than by way of mental puppet shows.

As I mentioned earlier, if philosophy is merely supposed to be limited to mental phantoms and delusions which have nothing to do with realities, not only will you have no need for it at all, but you will even have to find a way to keep yourself away from it, as it may have dire epistemological consequences for you. But if it is concerned with universal issues of worldview, as I have just argued, it is as necessary and vital as theoretical hypotheses in sciences.

The modern hegemony of technology and industrialism that has caused many significant truths to be marginalized should not be the compass of intellectual activity. The men of ideas need to listen only to the call of realities. When a reality proves its necessity for recognition to us, we are obliged to devote ourselves to it, whether in the name of philosophy or in the name of theoretical, scientific, spiritual or cultural issues. We are not to bear anymore the damages and losses that man has suffered due to the denial of ideas and ideologies that interpret the existence for us. The past has been a big lesson for us.