SCIENCE AND THE BAHÁ'Í FAITH

by William S. Hatcher

Part of the difficulty involved in attempts to understand and clarify the relationship between religion and science is that the nature of religion seems much less clearly defined than that of science. Is religion primarily a cognitive activity like science, or is it more akin to an aesthetic or emotional experience? If religion is seen as primarily cognitive, then the main problem seems to be that of reconciling the application of scientific method to religion. In particular it is often felt that this is difficult to do without falsifying either the nature of scientific method or else the global, subjective, mystic character of religion. On the other hand, viewing religion as primarily noncognitive appears ultimately to relegate religion to an unacceptably secondary and inferior status in the range of human activities. It becomes very difficult to attribute any objective content to religious belief and to religious moral imperatives. These latter are seen at best to be expressions of various subjective, emotional, essentially irrational (and perhaps illegitimate and illusory) yearnings and desires on the part of a more or less general segment of mankind.

The Bahá'í Faith, founded in 1844 in Persia under extraordinary circumstances, is significant among the religions of the contemporary world in its clear statement both of the nature of religion itself and of the applicability of scientific method to religion. In a summary description of basic Bahá'í beliefs Shoghi Effendi (1897-1957) affirms:

> The Revelation proclaimed by Bahá'ulláh, His followers believe, is divine in origin, all-embracing in scope, broad in its outlook, *scientific in its method*, humanitarian in its principles and dynamic in the influence it exerts on the hearts and minds of men. The mission of the Founder of their Faith, they conceive it to be to proclaim that religious truth is not absolute but relative, that Divine Revelation is continuous and progressive, that the Founders of all past religions, though different in the non-essential aspects of their teachings "abide in the same Tabernacle, soar in the same heaven, are seated upon the same throne, utter the same speech and proclaim the same Faith." His Cause,

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they have already demonstrated, stands identified with and revolves around, the principle of the organic unity of mankind as representing the consummation of the whole process of human evolution. This final stage in this stupendous evolution, they assert, is not only necessary but inevitable, that it is gradually approaching, and that nothing short of the celestial potency with which a divinely ordained Message can claim to be endowed can succeed in establishing it.

The Bahá'í Faith recognizes the unity of God and of His Prophets, upholds the principle of an unfettered search after truth, condemns all forms of superstition and prejudice, teaches that the fundamental purpose of religion is to promote concord and harmony, *that it must go hand-in-hand with science*, that it constitutes the sole and ultimate basis of a peaceful, an ordered and progressive society.[1]

Further, the essentially cognitive nature of religion is affirmed by the founder, Bahá'u'lláh (1817-1892), in language such as:

First and foremost among these favors, which the Almighty hath conferred upon man, is the gift of understanding. His purpose in conferring such a gift is none other except to enable His creature to know and recognize the one true God—exalted be His glory. This gift giveth man the power to discern the truth in all things, leadeth him to that which is right, and helpeth him to discover the secrets of creation. Next in rank, is the power of vision, the chief instrument whereby his understanding can function. The senses of hearing, of the heart, and the like, are similarly to be reckoned among the gifts with which the human body is endowed. . . . These gifts are inherent in man himself. That which is preeminent above all other gifts, is incorruptible in nature and pertaineth to God Himself, is the gift of Divine Revelation. Every bounty conferred by the Creator upon man, be it material or spiritual, is subservient unto this.[2]

In other words from the Bahá'í viewpoint religion is basically a form of knowing, the object of knowledge (or basic datum) of which is the phenomenon of revelation. The other mystic and emotional aspects of religion also are affirmed in the Bahá'í Faith, but still the Faith is proclaimed to be "scientific in its method." Another essential aspect of religion is that of action or "good works." Still 'Abdu'l-Bahá (1844-1921), son of Bahá'u'lláh and designated interpreter of his father's revelation, affirms the primacy of knowledge with respect to action: "Although a person of good deeds is acceptable at the Threshold of the Almighty, yet it is first 'to know,' and then 'to do.' Although a blind man produceth a most wonderful and exquisite art, yet he is deprived of seeing it. . . . By faith is meant, first, conscious knowledge, and second, the practice of good deeds."[3] He defines religion as "the essential connection which proceeds from the realities of things" or "the necessary connection which emanates from the reality of things," again ascribing objective, cognitive content to it.[4]

The problem with all of this is that to affirm something as true does not necessarily give us an understanding of how or why it is true. My purpose in this paper then is to discuss the religion-science conflict from a Bahá'í viewpoint with the specific goal of explicating the above affirmations. It is my hope that such an effort may prove of interest and profit to those of any religious background or viewpoint.

The Nature of the Religion-Science Conflict

At the heart of the conflict between science and religion is that two essentially different views of man are associated respectively with each, at least in the popular view. In the one instance man is seen as a superevolved animal, a chance product of a material thermodynamic system. In the other he is seen as a spiritual being, created by God with a spiritual purpose given by God. Of course conflicting views of the nature of man are as old as thought itself and certainly predate the period of modern science. However, it is only in the modern period that the materialistic view has become linked to a prestigious and highly efficient natural science. The prestige of science forces people to take seriously any pronouncement that is put forth in its name.

All of this contrasts sharply with the premodern period in which the materialistic view was just one among many competing views and had no particular natural or obvious superiority over others. People simply could discredit or disregard the materialistic viewpoint without feeling any pangs of conscience or without feeling threatened.

In sum then I am suggesting that the conflict between religion and science is due essentially to the two qualitatively different views of man which are associated respectively with them, that the force of the materialistic view associated with modern science is due not to any inherent philosophical superiority of that view but rather to the immense prestige of the science in the name of which the materialistic view is put forth and that this prestige of science is due essentially to its evident technological productivity and efficiency.

One may ask in turn to what the efficiency and productiveness of modern science is due, and I believe that here there is one basic answer: scientific method. It is the method of science which has led to such remarkable results and thus to the present situation. Although some thinkers have tried to attribute the success of scientific method to one aspect or another of Western culture or religion, it is now abundantly clear that modern scientific method can be practiced with success independently of any particular religious or cultural orientation.

Indeed we can say that science as an activity is characterized by its method, for the immense diversity of domains which are now the object of scientific study defies any intrinsic characterization in terms of unity of content. The unity of science is its method.

The importance of religion on the other hand derives precisely from its goal and its contents rather than its method. Religion treats of questions which are so fundamental for us that every human being is obliged to realize the importance of answering them. Some of these questions concern the purpose of man's existence, the possibility of life after death, the possibility of self-transcendence, the possibility of contacting and living in harmony with a higher spiritual consciousness, the meaning of suffering, and the existence of good and evil.

Once we realize that the basis of science is its method and that the basis of religion is its object of study, the essential move toward resolving the religion-science controversy seems obvious and logical: Apply scientific method within religion. But, as I already have noted, there is widespread feeling that this is not truly possible. Thus each side remains with its view of the nature of man and with a feeling that a reconciliation is not possible.

It seems to me, however, that the conviction of the impossibility of applying scientific method to religion rests on several misconceptions both of the nature of scientific method and of the nature of religion.

The ensuing discussion, though clearly incomplete, attempts to identify the sorts of misunderstanding involved.

The Nature of Scientific Method

Science is, first of all, knowledge. Moreover, it is human knowledge because it is humans who do the knowing, and the nature of human knowledge will be determined by the nature of human mental faculties. Of course every human being on earth knows things and uses his mental faculties in order to attain this knowledge. What distinguishes the scientific method of knowing, it seems to me, is the systematic, organized, directed, and conscious nature of the process. However much we may refine and elaborate our description of the application of scientific method in some particular domain such as mathematics, logic, or physics, this description remains essentially an attempt on our part to bring to ourselves a fuller consciousness of exactly how we apply our mental faculties in the course of the epistemological act within the given domain. I offer therefore this heuristic definition of scientific method: Scientific method is the systematic, organized, directed, and conscious use of our various mental faculties in an effort

to arrive at a coherent model of whatever phenomenon is being investigated.

In a word, science is self-conscious common sense.[5] Instead of relying on chance happenings or occasional experiences, one systematically invokes certain types of experiences. This is experimentation (the conscious use of experience). Instead of relying on naïve reasoning, one formalizes hypotheses explicitly and formalizes the reasoning leading from hypothesis to conclusion. This is mathematics and logic (the conscious use of reason). Instead of relying on occasional flashes of insight, one systematically meditates on problems. This is reflection (the conscious use of intuition).[6]

The practice of this method is not linked to the study of any particular phenomenon. It can be applied to the study of unseen forces and mysterious phenomena as well as to everyday occurrences. Failure to appreciate the universality of scientific method has led some to feel that science is really only the study of material phenomena. This narrow philosophical outlook, plus the historical fact that physics was the first science to develop a high degree of mathematical objectivity, has led to a common misconception that scientific knowledge is inherently limited only to physical reality.

It should be stressed also that the scientific study even of material and concretely accessible phenomena involves a heavily theoretical and subjective component. Far from just "reading the facts from the book of nature," the scientist must bring an essential aspect of creative hypothesis and imagination to his work. Science as a whole is underdetermined by experience, and there are often many different possible models to explain a given phenomenon. The scientist therefore not only must find out how things are but also must imagine how things might be. Developments in all branches of science during this century have led to an increasing awareness among scientists and philosophers of the vastness of this subjective input into science.

Another feature of scientific knowledge is its relativity. Because science is the self-conscious use of our faculties we become aware that man has no absolute measure of the truth. The conclusions of scientific investigations are always more or less probable. They are never absolute proofs.[7] Of course if a conclusion is highly probable and its negation highly improbable we may feel very confident in the results, especially if we have been very thorough in our investigation. But realization and acceptance of this essential uncertainty and relativity of our knowledge are important, for the exigencies of the human situation are often such that we are forced to act in some instances before we have had time to make such a thorough investigation. It therefore

behooves us to remain constantly alert to the possibility that in fact we may be wrong.[8]

Let us note in passing that a similar view of scientific method is expressed in several places in Bahá'í writings. In a talk delivered at the Green Acre Institute in Eliot, Maine, in 1912 'Abdu'l-Bahá discusses the methods of knowledge or criteria of judgment available to man: "Proofs are of four kinds; first, through sense-perception; second, through the reasoning faculty; third, from traditional or scriptural authority; fourth, through the medium of inspiration. That is to say, there are four criteria or standards of judgment by which the human mind reaches its conclusions."[9] 'Abdu'l-Bahá then discusses each of these criteria and shows why it is fallible and relative.[10] He then continues:

> Consequently it has become evident that the four criteria or standards of judgment by which the human mind reaches its conclusions are faulty and inaccurate. All of them are liable to mistake and error in conclusions. But a statement presented to the mind accompanied by proofs which the senses can perceive to be correct, which the faculty of reason can accept, which is in accord with traditional authority and sanctioned by the promptings of the heart, can be adjudged and relied upon as perfectly correct, for it has been proved and tested by all the standards of judgment and found to be complete. When we apply but one test there are possibilities of mistake.[11]

In still another passage 'Abdu'l-Bahá explains the relativity of man's knowledge:

> Knowledge is of two kinds: one is subjective, and the other objective knowledge; that is to say, an intuitive knowledge and a knowledge derived from perception.
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> The knowledge of things which men universally have, is gained by reflection or by evidence: that is to say, either by the power of the mind the conception of an object is formed, or from beholding an object the form is produced in the mirror of the heart. The circle of this knowledge is very limited, because it depends upon effort and attainment.
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> But the second sort of knowledge, which is the knowledge of being, is intuitive, it is like the cognisance and consciousness that man has of himself.
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> For example, the mind and the spirit of man are cognisant of the conditions and states of the members and component parts of the body, and are aware of all the physical sensations.... This is the knowledge of being which man realises and perceives; for the spirit surrounds the body, and is aware of its sensations and powers. This knowledge is not the outcome of effort and study; it is an existing thing, it is an absolute gift.[12]

'Abdu'l-Bahá then explains that the Manifestations, or revelators, are distinguished from ordinary men in that they have the subjective (intuitive) knowledge of all things: "Since the Sanctified Realities, the universal Manifestations of God, surround the essence and qualities

of the creatures, transcend and contain existing realities and understand all things, therefore their knowledge is divine knowledge, and not acquired: that is to say, it is a holy bounty, it is a divine revelation."[13] It is this unique consciousness of the Manifestations which according to him enables them to be the focal point of man's knowledge of God.

In yet another passage 'Abdu'l-Bahá puts the matter thus: "Know that there are two kinds of knowledge: the knowledge of the essence of a thing, and the knowledge of its qualities. The essence of a thing is known through its qualities, otherwise it is unknown and hidden. As our knowledge of things, even of created and limited things, is knowledge of their qualities and not of their essence, how is it possible to comprehend in its essence the Divine Reality, which is unlimited? . . . Knowing God, therefore, means the comprehension and the knowledge of His attributes, and not of His Reality. This knowledge of the attributes is also proportioned to the capacity and power of man; it is not absolute."[14]

I will try to sum up, however inadequately, the epistemological implications of these passages in this way: Human knowledge is the truth which is accessible to man, and this truth is relative because man the knower is relative, finite, and limited. There is an absolute reality underlying the multifaceted qualities and experiences accessible to man, but direct access to this reality or direct perception of it is forever beyond man's capabilities. His knowledge is therefore relative and limited only to the knowledge of the various effects produced by this absolute reality (the Manifestations being one of the most important of these effects). However, if man uses systematically all of the various modes of knowledge available to him, he is assured that his knowledge and understanding, such as they are on their level, will increase.[15]

Positivism and Existentialism

The main purpose of this brief discussion of scientific method is to suggest that a misconception of the nature of scientific method—namely, that it is applicable only to more or less concretely accessible material phenomena and only in a relatively narrow way—has led to the general conclusion on the part of many religionists and scientists that scientific method is not applicable to religion.[16] Depending on what further assumptions are made, one is led to two basic positions which I have labeled positivism and existentialism. There are many variants to each position, and so these labels must be understood in a very general, heuristic way.

On the one hand we may add to the narrow view of scientific method the assumption that scientific method (so construed) is the only valid method of knowledge. One then concludes that religion is not a form of knowledge at all but rather an institutionalized form of superstition, emotionalism, fanaticism, togetherness, or what have you. On the other hand we may conclude that there are methods of knowledge other than the scientific one which are appropriate to religion. Religion in this view is so deeply private, mystical, and subjective as to be "beyond" scientific method. It is of course the first of these views that I have labeled "positivism" and the second "existentialism." I would like now to discuss briefly each of these positions in an attempt to show exactly why I hold them to be mistaken.

Basically the postivistic position regards religion as too hopelessly lacking in objectivity to be accessible to scientific treatment. It is true of course that the subject matter of religion is more complex than that of, say, physics because it includes more parameters. In the same way biology is more complex than physics, psychology more complex than either, and religion the most complex of all. In this sense religion is indeed more "subjective," for the presence of many more parameters makes objectivity harder to obtain since the effort to make all parameters explicit is correspondingly much greater. Indeed this is quite clearly reflected in the historical development of science in which first physics was developed to a fairly high level of objectivity, followed by chemistry, then biology, and now increasingly psychology and sociology.

But it is important to realize, as I mentioned in the foregoing, that there is an essential part of subjectivity involved in the application of scientific method in any context. Suppose, for example, that we try to eliminate the subjective element of the notion "red" by agreeing that the term shall be applied only to those objects which give a reading of thus and so on a spectroscope. Once this agreement is made we may still argue sometimes about whether or not the needle really is quite on thus and so, and the unbeliever will go away saying that the definition was all wrong in the first place.

Thus subjectivity is involved in science even on the most basic, observational level. It is obviously involved even more on the theoretical level where the entities discussed are not directly observable and where many of the statements are not directly testable empirically. Though parts of the total context of science may involve highly articulated objectifications, the ultimate roots of understanding lie always in collective human subjectivity, and so there is always "room for argument."

Besides appealing to explicit conventions, formal logic, and the like, positivists have tried to discredit the application of scientific method in religion by insisting on public verifiability as an essential aspect of scientific method. However, a little reflection will show easily that this restriction is arbitrary and in no wise a criterion of scientific method. I offer the following paradigm as an illustration of this point.

A biologist looks through a microscope in his laboratory, sees a certain configuration, and exclaims: "Aha, at last I have the evidence that my theory is correct!" Question: How many people in the world are capable of looking at the configuration and verifying the findings of the biologist? Answer: Very few, almost none, probably only a few specialists in his field. The fact is that the biologist will publish his findings, and a few other qualified individuals will test his results, and if they seem confirmed the scientific world at large will accept the theory as verified. Although the positivist might concede this, he would say: "But if an individual did go through the years of training necessary to understand everything the biologist knows, then the individual could verify the statement. Thus, I admit the statement is not practically verifiable by the public, but it is theoretically verifiable." But even this is not enough. The fact is that the postivist will be constrained to admit that a great many people may be unable, through lack of intelligence or mental proclivity, ever in theory to validate the result. The fact is that the findings are not verifiable by the public at all. The findings can be verified only by individuals capable of assuming and willing to assume the point of view of the researcher. In most instances this group is a very select one indeed, drawn from those who are members of a community of understanding and who participate in a certain framework of interpretation applied to all those subjective experiences which fall within a certain category. More will be said of this later.

At bottom the criterion for truth in science is pragmatic. "Does it work the way it says it will?" is the question to be answered. If the theory says that such and such a thing must happen, then does it happen? It is by repeated application of this pragmatic criterion, interlaced with intervening theory, that we gradually build up a model of reality, a collection of true statements. We may formulate a general criterion of scientific truth as follows: We have a right to accept a statement as true when we have rendered it considerably more acceptable than its negation. Proof in scientific terms means nothing more than the total process by which we render a statement acceptable by this criterion. Such a proof remains always relative, for it depends on the total context of the statements involved, the implicit

and explicit conventions concerning the meaning and operational use of symbols, the experiential component of these statements, and so on. All of these things have their ultimate roots in human subjectivity and are therefore liable to possible revision in the future.

In practice of course it often happens that revision comes either from strikingly new and different experiences which demand that we revise our conceptual framework in order to account for them or from some unexpected conclusions which are deduced within the framework itself and which contradict known experiences (the most radical case being that of logical contradictions). But nothing excludes the possibility that revision may come from some subtle interaction of all of these factors in a way which is totally inconceivable to us at present.

In short, I maintain that any sort of formulaic, pseudoobjective characterization of scientific method such as that attempted by various positivistic-minded philosophers cannot truly capture scientific method.[17] Our description of scientific method must remain scientific, that is, pragmatic, relative, open, etc.

Without any such closed, exclusive formula characterization of scientific method there is no basis on which to exclude the application of scientific method to religion. Of course this does not mean that everything that passes for religion is scientific; nor does it allow us to say what we will find if we do apply scientific method to religion. My essential contention is simply that no known positivistic formulations of or restrictions on the nature of scientific method which exclude a priori the applicability of scientific method to religion seem to be justified by the nature of scientific method itself. Furthermore, the nature of scientific method does not appear to lend itself to such formulations or restrictions.

The existentialist position derives its character more from its view of religion than from its view of scientific method. The existentialist might well accept, even readily, that scientific method cannot be applied to religion. But such a contention would not bother him (as it does me) because it only serves to heighten the difference and cleavage between science and religion. For him the very importance of religion derives from its being unsystematic, even chaotic, subjective, private, uncommunicable, emotional, etc. For him the knowledge that religion brings is a mystic or occult knowledge, communicable only to a limited extent and primarily through myth, symbol, art, and other forms of nonverbal activity.

One extreme form of this position would be to accept completely the positivistic contention that religion is not a form of knowledge and

to view religion primarily as an aesthetic experience of some sort. Otherwise if religion is viewed as a form of knowledge it is a form totally different from science, with its own methodology (or lack of methodology), symbols, and experiences.

Perhaps in the last analysis the difference between the existentialist and the positivist lies not so much in their respective views on the nature of religion and of science as in their difference in attitude toward these perceptions. The positivist values science above religion and sees his narrow interpretation of scientific method, with the consequent exclusion of religion, as purifying science from the unwanted trash of emotionalism and irrationality. The existentialist values religion above science and is just as glad to see religion separated from what he feels to be the soul-stultifying dryness, uniformity, formalism, and mechanization of science. While the positivist is impressed primarily by the efficiency and achievements of science, the existentialist is impressed by the potential richness of subjective experience. This richness he sees as constituting that which is most truly human and which deserves to be most thoroughly and strenuously developed in man. Since, as he supposes, scientific methods cannot be used to develop this richness, religion must develop methods of its own different from those of science. It is to the development of such methods that the existentialist bends his efforts, and it would never occur to him to try to reconcile religion and science, something which he would regard as impossible.

My sketch here of what I have labeled the existentialist position is consciously exaggerated at some points, but the logical thrust is clear: The existentialist grants that science cannot be applied to religion, that religion is peculiarly subjective and mystical in a way that makes it necessarily unsystematic and thus inaccessible to science, and he values this subjective aspect of religion above science and its method. He is therefore not upset by the cleavage between religion and science (except that he may have existential difficulties living in a world which is currently dominated by science and its fruits!).

Now I am as impressed as anyone by the richness of subjective experience, and I certainly feel that if the practice of science, or anything else, is going to lead ultimately to a progressive impoverishment of it, then such practice is dehumanizing and should be abandoned. But I feel that the existentialist position and its variants fall into their particular view of internal experience only by neglecting seriously the collective and social dimension of religion, in short, by considering religion as something which is purely internal to the individual. It is only within such a framework that the subjective aspect

can be isolated from the rest of religion and made to seem inherently separate from other types of subjective experience, in particular from that involved in the practice of science itself.

We already have had occasion, in the foregoing, to appreciate the fact that subjective experience is involved intimately and irrevocably in the practice of science at all levels. Clearly it is more reasonable then to view subjective experiences as being ranged on some sort of continuum from less intense to more intense, or from less profound to more profound, or yet some other characterization. As different as may be the experience of seeing a red object on the one hand and that of mystical ecstasy on the other, they are generically instances of subjective experience before they are specifically anything else. Moreover, the practicing scientist and the mystic, when confronted with the problem of building and communicating conceptual models of their experience, face essentially the same logical difficulty on their level of experience. For everyone, including the scientist, knows that no amount of explication, verbal or otherwise, can ever exhaust all of the subjective richness of the experience of "red." Our previous example of the spectroscope shows the nature of the problem involved, and we must further remember that during the long years of science's evolution such sophisticated conventional devices were not at hand.

Science has overcome this barrier by creating a community of understanding. Each individual scientist must undergo training of a sort which enables him to participate in the validation of the subjective experience of other members of the scientific community when this experience falls within a certain range determined by the nature of the particular scientific discipline in question. As we have seen in the example of the biologist and his microscope, subjective experience is never publicly verifiable. It is verifiable only by those capable of assuming and willing to assume the point of view of the one who has the experience. By maintaining a growing discipline of education and training in science a community of qualified individuals capable of assuming and willing to assume a certain point of view is evolved. This community generates a framework of interpretation for the individual practicing scientist, and it is the framework of interpretation which alone enables his own work, however brilliant or insightful, to become truly illuminating. No matter how far above the common lot of scientists an Einstein or a Newton may be, he can function significantly only in the context of such a community of understanding. If these same individuals had been born in a desert or in a tropical rain forest, their subjective experience would have fallen within another framework of interpretation and would certainly not have had the

same result (though it may have been just as illuminating in its own context).

This model of the objectification of internal experience through creating a community of understanding and a consequent framework of interpretation is borne out by observation and experience not only of the history and development of science but also of individuals. For example, case histories of individuals blind from birth who were given sight after reaching maturity indicate, as one would expect, that perception is not immediate but has to be painfully and slowly learned. Their first experience is a chaos of sensations with no discernible objects, forms, etc. Gradually, through participation in the framework of interpretation given by the community, perception is born, and order is brought out of chaos.[18]

The neglect of the social dimension of religion is only one aspect of the weakness of the existentialist position. Another aspect comes into focus when we further examine the comparison between the scientific view of subjective experience and the existentialist view. While our discussion of scientific method has led us to acknowledge a certain irreducibility of the subjective input into the epistemological act, it is nevertheless equally clear that our experience, however subjective, of anything, say a red object, is still an experience of something. Even the chaos of sensation that the previously sightless person experiences is a reaction of his subjectivity to something "out there." It is not simply the mind's experience of itself (which might be likened to the sensations of images one has during sleep or when one's eyes are closed). But the existentialist glorification of the subjective amounts to treating the internal experience of the individual as the datum of religion. Religious experience is thus not viewed as an experience of anything, at least not anything other than the internal self of the individual. Insofar as religion is scientific it thus would be indistinguishable from psychology, and this again explains the tendency to emphasize the unsystematic, unpredictable, irrational, mythic, and aesthetic aspects of religious experience, for these are the only aspects which from such a standpoint can be viewed as properly and specifically religious.

If such a view of religion and religious experience is to be refuted one must face and answer the basic question, "Of what is religious experience an experience?" What is religion about? If scientific method can be applied to religion, then what is the datum of religion? How can we ascribe objective content to religion?

The Bahá'í Faith

The answer which the Bahá'í Faith offers to this central question is, or so it seems to me, particularly cogent, clear, and direct. For Bahá'ís

the datum of religion is the phenomenon of revelation. Religion is that branch of knowledge which takes this phenomenon as its special object of study. The objective content of religion derives from this external, phenomenal datum. Religious experience in this view is a response to the spirit and teachings of the revelator or Manifestation.

The Bahá'í Faith offers the scientific hypothesis that revelation is a periodic phenomenon for which the period (i.e., the average time interval between two successive occurrences of the phenomenon) is fairly long.[19] The large number of generations intervening between two occurrences of revelation poses obvious problems for the study of this phenomenon. However, we cannot refuse to study something simply because the study is hard or because the data associated with it are in some instances accessible only with difficulty. Other natural sciences, such as astrophysics, also study periodic phenomena whose periods are much greater than a thousand years and for which the accessibility of data is likewise a problem. Simply, allowances have to be made for the fact that, because of the periods involved, careful records must be kept since the observations which a given individual scientist can make in his lifetime are too limited to form in themselves a basis for the furtherance of the science.

Let us take a brief look at the phenomenon of revelation as it presents itself to us in history, which is man's collective experience.

If we consider the great religious systems of which there still exists some contemporary expression or some historical record, we will see that virtually all of them have been founded by a historical figure, a unique personage. Islám was founded by Muḥammad, Buddhism by Buddha, Christianity by Jesus, Judaism (in its definitive form) by Moses, Zoroastrianism by Zoroaster, and so on. These religious systems have all followed quite similar patterns of development. There is a nucleus of followers gathered around the founder during his lifetime. The founder lays down certain teachings which constitute the principles of his religion. Moreover, each of these founders has made the same claim, namely, that the inspiration for his teachings and his influence was due to God and not to human learning or human devices. Each of these founders claimed to be the exponent on earth of an invisible, superhuman reality of unlimited power, the creative force (creator) of the universe. After the death of the founder, an early community is formed, and the teachings of the founder are incorporated into a book (if no book was written by the founder). And finally a great civilization based on the religious system grows up, a civilization which lasts for many centuries.

All of the statements in the preceding paragraph have high empirical content and low theoretical content. These are a few facts of reli-

gious history. Of course they are based on records and observations of past generations. We can try to dispute these records if we choose, but we must be scientific in any approach we make. In particular the records of the older religions are of validity equal to any other record of comparable date. If, for example, we refuse to believe that Jesus lived, we must also deny that Socrates lived, for we have evidence of precisely the same validity for the existence of both men. The records of Muḥammad's life are much more valid historically than these and are probably beyond serious dispute. Moreover, if we choose to posit the unreality of the figures whose names are recorded and to whom various teachings and influence are attributed, we must give at the same time an alternative explanation for the tremendous influence which these religious systems, elaborated in the name of these founders, have had. This is more difficult than we may be inclined at first to believe.

The major civilizations of history have been associated with the major prophetic religious systems. Zoroastrianism was the religion of the "glory of ancient Persia," the Persia that conquered Babylon, Palestine, Egypt, and the Greek city-states. Judaism was the basis of Hebrew culture, which some philosophers such as Karl Jaspers regard as the greatest in history. Moreover, Jewish law has formed the basis of common law and jurisprudence in countries all over the world. Western culture, until the rise of modern science, was dominated by Christianity. The great Muslim culture invented algebra and preserved and developed the Hellenistic heritage. It was probably the greatest civilization the world had seen until the rise of the industrial revolution began to transform Western culture.

We are, however, very much in the same position with respect to past revelations as we are with regard to any phenomenon of long period. We are not there to observe Jesus or Muḥammad in action. The contemporaries of these people were certainly impressed by them, but these observations were made years ago and are liable, we feel, to embellishments. Even though it may be unscientific to try to explain away the influence of these religious figures, there is still a certain desire to do so. We are put off by some obvious interpolations, and we are not sure just what to accept and what to reject.

Bahá'ís believe that man's social evolution is due to the periodic intervention into human affairs of the creative force of the universe by means of the religious founders or Manifestations. What is most significant is that the Bahá'í Faith offers fresh empirical evidence, in the person of its own founder, that such a phenomenon has occurred. Bahá'u'lláh claimed to be one of these Manifestations, and he reaffirmed the validity of the past revelations (though not necessarily the

accuracy of all the details recorded in the ancient books). Here is a figure who walked the earth in recent times and whose history is documented by thousands of records and witnesses. Moreover, the teachings of Bahá'u'lláh are preserved in his manuscripts, and so we are faced with a record of recent date and one about which there can be no serious doubt.

The only way we can judge Bahá'u'lláh's fascinating hypothesis that social evolution is due to the influence of the Manifestations is the way we judge any proposition: scientific method. This is the only way we can judge Bahá'u'lláh's claim to be one of these Manifestations. We must see if these assumptions are consistent with our knowledge of life as a whole. We must see if we can render these assertions considerably more acceptable than their negations. In the case of Bahá'u'lláh we have many things which we can test empirically. Bahá'u'lláh made predictions. Did they come true? Bahá'u'lláh claimed divine inspiration. Did he receive formal schooling, and did he exhibit power and knowledge not easily attributable to human sources? He insisted on moral purity. Did he lead a life of moral purity? In his teaching are found statements concerning the nature of the physical world. Has science validated these? He engaged in extensive analysis of the nature of man's organized social life. Does his analysis accord with our own scientific observations of the same phenomena? He also makes assertions concerning human psychology and subjectivity and invites individuals to test these. Do they work? The possibilities are unlimited.

Of course the same criteria can be applied to other Manifestations, but the known facts are so much less authenticated and so restricted in number that much direct testing is not possible. This does not disturb Bahá'ís because they believe that essentially there is only one religion and that each of the successive revelations is a stage in the development of this one religion. The Bahá'í Faith is thus the contemporary form of religion, and we should not be surprised that it is so accessible to the method of contemporary science. Christianity and Islám were probably just as accessible to the scientific methods of their day as is the Bahá'í Faith to modern scientific method.

This relative inaccessibility of data concerning the older religions should not be taken as in any way lessening their importance or value relative to the Bahá'í Faith. The Bahá'í view is that of the absolute unity of religion, not the superiority of one religion over another for whatever reason.[20] Nevertheless, if one is talking about applying scientific method to religion, problems such as that of the authenticity of ancient records must be faced frankly and seen in their true light. They must be neither exaggerated nor swept under the rug as if they

did not matter. Indeed the best of modern biblical scholarship, both Christian and Jewish, has been undertaken in this scientific spirit. If it has resulted in some instances in the undermining of certain traditional beliefs, it has more fundamentally served to clarify and enlighten the faith of truly informed students of religion. If the doubtfulness of a few passages of the Bible has been exposed, the validity of the basic text has been vindicated (e.g., the corroborative version of Isaiah in the Dead Sea manuscripts).

Each religious system has been founded on the faith in the reality of the phenomenon of revelation, and those people associated with the phenomenon felt fully justified in their faith. But as the influence of religion declined and the facts of revelation receded into history the sense of conviction of the reality of the phenomenon subsided, and this was only natural as we have seen. It is therefore important to realize that the Bahá'í Faith offers much more than new arguments about the old evidence for the phenomenon of revelation. It offers empirical evidence for the phenomenon, and it is frank to base itself on this evidence and to apply the scientific method in understanding the evidence. So much is this so that I would unhesitatingly say that the residue of subjectivity in the faith of a Bahá'í is no greater than the residue of subjectivity in the faith one has in any well-validated scientific theory. As in the example of the biologist and the microscope, the findings of a Bahá'í can be verified by anyone willing to assume and capable of assuming the point of view of a Bahá'í.[21]

According to Bahá'u'lláh the social purpose of religion is to create an adequate spiritual basis for the progressive unfolding of an ordered social life for mankind. Indeed, as one examines the history of mankind, one can perceive the gradual ordering and reordering of man's collective life on ever higher levels of unity, each new level maintaining the integrity of the previous ones and at the same time calling forth from the individual a correspondingly greater degree of altruism and other-centeredness. The family, the tribe, the city-state, and the nation can be seen as significant steps in this social evolution. The first two of these successive stages can be identified in large measure with the respective revelations of Abraham and Moses, while the latter is due essentially to Muḥammad, the founder of the nation of Islám.[22] Bahá'u'lláh explains that besides the general mission of renewing the spiritual life of men and society each religion has a specific mission which accomplishes a definite step forward in the total evolution of mankind. He views his own revelation as being the most recent in this succession and as having the unification of mankind as a whole for its specific mission.[23]

As one thinks about this progressive unfoldment of human society one comes to see certain aspects of its mechanism. It is clear that unity on one level can eventually become disunity on another; the unity of the family can coexist with disunity between families, for example. When the new level of unity is first attained it represents a positive step, but the very accretion of power and the increased mastery resulting from the reorganization of society on this higher level ultimately can lead to tensions among these higher-order units themselves. This may happen years or centuries or millennia later, but when it does happen the suffering caused by these tensions becomes increasingly unbearable and serves as one of the factors generating the motivation to accomplish the next stage of unity. That is, the individuals participating in the social system in question develop a strong sense of and a need for the higher unity.[24]

This higher unity is effected not by the suppression of the existing units but by their being harmoniously organized into a still higher unit—the unity of the tribe is the unity of families, the unity of a race that of tribes, the unity of a nation that of races. Indeed the attainment of unity on the lower level has been a necessary prerequisite in its establishment on the higher one. In the same way Bahá'u'lláh envisages world unity as being a unity among nations, with a world government, a world tribunal, a single auxiliary universal language, and a world economic system.

Just as a tree must push its roots deeper as it grows higher, so must each external step forward have an internal concomitant. The individual at each stage must become less self-centered. He must give his loyalty to and identify with an ever-widening circle of his fellow humans. Whereas "brother" first meant physical brother, it gradually came to mean fellow Jew, fellow brother in Christ, fellow countryman, and ultimately must mean fellow world citizen. There is, in short, a gradual increase in the consciousness of the individual, and it is this new consciousness which alone allows the new unity, the new external step forward, to take place on a spiritual basis. This new depth of individual spiritual awareness also serves to increase the quality of unity at all levels. In this way the creation of the new unity is not a superficial juxtaposition of parts or a purely formal restructuring but a renewal of the whole of the society, indeed the only way the society can be so renewed at that given stage in its development. Thus Bahá'u'lláh teaches that the establishment of world unity will lead to the perfecting and deepening of the quality of life at all levels of society.

This model also explains why we cannot wait for the lower levels of society to become perfect before working on the establishment of

world unity (such an objection to the Bahá'í goal of establishing world unity is frequently heard). The interdependence of the part and the whole is too great for such a piecemeal approach to succeed. Bahá'u'lláh explains that mankind is like a body whose cells and organs are the individual human beings and the smaller social units. If the whole body is ill every single cell will be affected in some way. At the same time the whole body suffers to some extent from even a few unhealthy cells.

Thus in the teachings of Bahá'u'lláh there are provisions for the organization and restructuring of society on a world level, and there are provisions for the perfecting of social organization on the local and intermediate levels as well as manifold spiritual aids for the individual in his own effort to spiritualize his life and attain to a new, more universal consciousness.

Indeed the individual aspect of religion is just as essential as the global, social aspect. This individual component was the point of departure for my whole discussion, and so I would like to return to it in closing this essay.

In the Bahá'í world view the essential purpose of religion for the individual is to provide him with the tools necessary to acquire a true and adequate understanding of his own nature.[25] For Bahá'ís the individual, internal aspect of religion is a direct response to the datum of the Manifestation, his spirit and teachings. It is not simply the mind's experience of itself or some form of autosuggestion. This is why scientific method can be applied even in this aspect of religion. In the Bahá'í Faith the individual component of religion takes the form of daily prayer, communion with God, meditation on the words of Bahá'u'lláh, and a constant effort to express one's developing spirituality through service to mankind. Among the many individual attributes which Bahá'u'lláh mentions as characteristic of the spiritually minded individual are humility, obedience to the will of God, justice, love, abstention from backbiting and criticism of others, regarding others with a sin-covering eye, and preferring others to oneself in all things.

Bahá'u'lláh stresses that personal spiritual development, the experience of self-transcendence, and the mystic sense of union with God—all of which have been described and discussed in the world's mystic literature—are the fruits only of conscious and deliberate search and struggle. They are not haphazard experiences which we can casually cajole from the universe. They must be sought consciously and practiced as diligently as any scientific or academic discipline. Scientific method—the conscious, systematic, organized, and di-

rect use of our mental faculties—must be employed if we are to be successful in developing spirituality.

Of course to say that spirituality must be sought consciously and systematically does not imply that it can be reduced to a formula any more than science itself can be so reduced. 'Abdu'l-Bahá has expressed it simply: "Everything of importance in this world demands the close attention of its seeker. The one in pursuit of anything must undergo difficulties and hardships until the object in view is attained and the great success is obtained. This is the case of things pertaining to the world. How much higher is that which concerns the Supreme Concourse!"[26]

In contemplating the application of scientific method to individual spiritual practice let us again recall that science never leads to total or absolute objectification of internal experience, for such a thing is simply unobtainable. Moreover, the quality of internal experience involved in the pursuit of spirituality clearly will be infinitely richer than that connected with most other types of activity. In this perspective, emphasis on the aesthetic and the mythic is legitimate, important, and useful, for the gap between any descriptive models of such experience and the experience itself will be correspondingly greater than in other areas, though the basic method remains unchanged.[27]

Religion is primarily a form of knowing but the relativity and limitations of our knowledge will be felt even more keenly here than elsewhere. Indeed it is this self-knowledge, the acute consciousness of these very limitations, which constitutes an important part of our knowledge of God. One of the profoundest truths that the mystic discovers is that the ultimate goal is not to comprehend but to be comprehended. The deepest knowledge is attained by the profoundest awareness of our own relative ignorance. Bahá'u'lláh expresses this important truth:

> Consider the rational faculty with which God hath endowed the essence of man. Examine thine own self, and behold how thy motion and stillness, thy sight and hearing, thy sense of smell and power of speech, and whatever else is related to, or transcendeth, thy physical senses or spiritual perceptions, all proceed from, and owe their existence to, this same faculty. . . . Wert thou to ponder in thine heart, from now until the end that hath no end, and with all the concentrated intelligence and understanding which the greatest minds have attained in the past or will attain in the future, this divinely ordained and subtle Reality, this sign of the revelation of the All-Abiding, All-Glorious God, thou wilt fail to comprehend its mystery or to appraise its virtue. Having recognized thy powerlessness to attain to an adequate understanding of that Reality which abideth within thee, thou wilt readily admit the futility of such efforts as may be attempted by thee, or by any of the created things, to fathom the mystery of the Living God, the Day Star of unfading glory, the Ancient of

everlasting days. This confession of helplessness which mature contemplation must eventually impel every mind to make is in itself the acme of human understanding, and marketh the culmination of man's development.[28]

Since in the Bahá'í view internal religious experience is not simply the self's experience of itself but is a direct response to the datum of the Manifestation, there is consequently a need for a constantly accessible focal point toward which the individual can turn in his pursuit of these individual spiritual goals. This indeed is one of the reasons for the periodic nature of the phenomenon of revelation. Although something of God's nature can be said to be revealed in every aspect of creation, clearly the force and importance of such a revelation are conditioned by two things, namely, the inherent limitations of the instrument used as a vehicle of revelation and the accessibility to us of the occurrence of revelation.

Man himself is the most highly ordered and subtle phenomenon in all the universe known to man. It thus seems logical that man would be the most nearly perfect (i.e., least limited) instrument available as a vehicle for God's self-revelation, hence the person of the Manifestation.[29] The necessity for the repetition of revelation derives from the condition of accessibility. The length of the period between occurrences, on the other hand, derives from the social nature of religion as described in the foregoing. Simply it takes a certain time for a Manifestation to become known, his system to become established, and for the specific purpose of his revelation to be accomplished.[30]

Conclusions

I feel that the Bahá'í view of religion is exciting in its fundamental assertion of the objectivity, universality, and accessibility of religion and religious experience to the inquiring mind. The existentialist view of religion, as well as other subjective views, sees religious experience rather as something which cannot (and perhaps should not) be cultivated, practiced, and sought systematically. It must strike like lightning for reasons which are never wholly clear or else as the result of some magical or occult practice. Clearly no experience of such an erratic and unstable nature can ever serve as the basis for a progressive society

Positivism and its variants limit unduly the application of scientific method and fail to see that the essence of the method can be applied to all phenomena and to all aspects of life, including the spiritual.

The ultimate resolution of the religion-science opposition is based thus on a balance and complementarity between the two, involving a better understanding of the nature and universality of scientific

method on the one hand and of the nature and content of that datum which is the phenomenon of revelation on the other. 'Abdu'l-Bahá has expressed admirably the nature of this balance:

Religion and science are the two wings upon which man's intelligence can soar into the heights, with which the human soul can progress. It is not possible to fly with one wing alone! Should a man try to fly with the wing of religion alone he would quickly fall into the quagmire of superstition, whilst on the other hand, with the wing of science alone he would also make no progress, but fall into the despairing slough of materialism. . . . When religion, shorn of its superstitions, traditions, and unintelligent dogmas, shows its conformity with science, then will there be a great unifying, cleansing force in the world which will sweep before it all wars, disagreements, discords and struggles—and then will mankind be united in the power of the Love of God.[31]

NOTES

1. Shoghi Effendi, *World Order of Bahá'u'lláh* (Wilmette,Ill.: Bahá'í Publishing Trust, 1955), p. xi; italics added.

2. Bahá'u'lláh, *Gleanings from the Writings of Bahá'u'lláh* (Wilmette, Ill.: Bahá'í Publishing Trust, 1971), pp. 194-95.

3. Bahá'u'lláh and 'Abdu'l-Bahá, *Bahá'í World Faith*, 2d ed. (Wilmette, Ill.: Bahá'í Publishing Trust, 1956), pp. 382-83.

4. 'Abdu'l-Bahá, *Some Answered Questions* (Wilmette, Ill.: Bahá'í Publishing Trust, 1930), pp. 181-82.

5. This is a conscious paraphrase of a description due to W. V. Quine, *Word and Object* (Cambridge, Mass.: M.I.T. Press, 1960), p. 3.

6. For a much more detailed and exhaustive analysis of this conception of scientific method see my "Science and Religion," *World Order* 3 (Spring 1969): 7-19 (reprinted in *The Science of Religion: Bahá'í Studies* 2 [September 1977]: 1-13).

7. Some might feel that deductive logical proofs are absolute, but such proofs proceed from premises which are based ultimately on empirical and thus inductive or probable inference. See ibid. for a more detailed analysis and discussion of these points.

8. The appeal to probable inference here is in the sense of "approximate" and not in the technical sense of the strict construction of a probabilistic model for the phenomenon being investigated. Probability in our sense is thus a measure of the relative ignorance of the knowing subject rather than the hypothesis that the phenomenon under investigation is indeterminate in some way. This leaves unanswered the question of whether every use of probability can be so regarded. However, if one espouses an essentially pragmatic epistemology, as I do, it may not even be necessary to determine, in any given instance, which part of our world view comes from the viewer and which part derives from the thing viewed. We have only to evaluate the explanatory and predictive value of our model according to pragmatic criteria. (See my "Foundations as a Branch of Mathematics," *Journal of Philosophical Logic* 1 [1972]: 349-58, for a further discussion of these points. Cf. also the discussion in my "Platonism and Pragmatism" to appear in the proceedings of the seventh annual meeting of the Society for Exact Philosophy, 1979, ed. Mario Bunge.)

9. This and the following passages are quoted in H. Balyuzi, *'Abdu'l-Bahá* (London: George Ronald, 1971), p. 242.

10. It is interesting to note the discussion given of the use of scriptural authority. In *Some Answered Questions* (n. 4 above), pp. 342-43, 'Abdu'l-Bahá points out that man's understanding of scripture is limited by his own powers of reasoning and interpretation. Since these powers are relative, so is his understanding of scripture. Thus, regard-

less of the authority one attributes to the text itself, arguments based on such authority are in reality based on man's understanding of the text and hence are not absolute.

11. See n. 9 above.

12. 'Abdu'l-Bahá, *Some Answered Questions*, pp. 180-81.

13. Ibid., p. 181.

14 Ibid., pp. 255-56.

15. We have in effect a Platonic metaphysics combined with a pragmatic epistemology, the essential connection between the two being the Manifestation. See also n. 30 below.

16. Of course it is clear that such things as remote stars and subatomic particles are not immediately accessible, but the refined techniques used to study them are often appealed to as concrete extensions of the immediately accessible, even to the extent of identifying the object of study as being the techniques themselves (operationalism). On the other hand such examples (and especially the subatomic case) can be seen already as a partial refutation of the narrow view of scientific method. Witness the difficulty encountered by positivistic philosophers of science in assimilating the study of these phenomena to the narrow view.

17. The most well-known attempts are those of the Vienna-Oxford school typified in Alfred J. Ayer's *Language, Truth, and Logic* (New York: Dover Publications, 1952).

18. Comparison may well be made here between such an experience and that of mystics. Perhaps the mystic is initially overwhelmed by the newness and intensity of his first experience and thus is led to feel that it is essentially and irredeemably chaotic and unsystematic. This would naturally lead to the glorification of the subjective which is characteristic of the existentialist view as well as to the conviction that mystic experience is essentially nonobjectifiable. But it is precisely my suggestion that the building of a religious community of understanding in a scientific way can lead to a relative objectification of mystic experience similar to that effected by the application of scientific method to other levels of experience. The resulting framework of interpretation would allow the individual to proceed from the initial mystic experience to a new stage of spiritual perception or knowledge, again bringing order out of chaos. This model also serves to illumine the relationship between the individual practicant and the community. The individual's mystic experience is his own and no one else's, but he has to relate properly to the community if his internal experience is to be of genuine profit to him. At the same time there is the further benefit to the community itself, which profits from harnessing the individual's spirituality in the form of service.

19. One thousand years is mentioned in the Bahá'í writings as representing an approximate length of time between two successive occurrences of revelation within a given collective or social gestalt. However, it is stated clearly that this is an approximate or average time span which can vary and which in fact has varied in history. Also, as the collective awareness of human society has increased through progressively more sophisticated means of transportation and communication, traditional gestalts widen, overlap, and fuse, lessening thereby the necessity for parallel or complementary occurrences of revelation.

20. In this regard Bahá'u'lláh has given the following clear statement: "Beware, O believers in the Unity of God, lest ye be tempted to make any distinction between any of the Manifestations of His Cause, or to discriminate against the signs that have accompanied and proclaimed their Revelation. This indeed is the true meaning of Divine Unity, if ye be of them that apprehend and believe this truth. Be ye assured, moreover, that the works and acts of each and every one of these Manifestations of God, nay whatever pertaineth unto them, and whatsoever they may manifest in the future, are all ordained by God, and are a reflection of His Will and Purpose. Whoso maketh the slightest possible difference between their persons, their words, their messages, their acts and manners, hath indeed disbelieved in God, hath repudiated His signs, and betrayed the Cause of His Messengers" (Bahá'u'lláh and 'Abdu'l-Bahá, [n. 3 above], pp. 27-28).

21. My brief discussion of the Bahá'í concept of progressive revelation does not address itself directly to a number of questions which a thoughtful reader may be

naturally led to pose. To treat these questions within the confines of a short paper like this would be impossible, and such excursions also would blur the sharp focus that is the proper goal of any essay. One important question, which is only partially treated in the foregoing, is that of establishing criteria for recognizing valid occurrences of the phenomenon of revelation. It is interesting to note that this and other related questions are treated in considerable detail in the writings of the Báb, Bahá'u'lláh, and 'Abdu'l-Bahá to which the reader is referred. Although these writers make some references to the internal states of the Manifestations, the criteria they give for assessing any claim to revelation mostly involve observable events. Besides the person of the Manifestation, his life, his teachings, his influence, and the social organization and civilization based upon them, one of the most important characteristics which these writers associate with authentic revelation is the Manifestation's capacity for "revealed writing." This latter refers to the manner of writing (spontaneous and uninterrupted), the quantity and volume of writing, the capacity to reveal writing under all conditions of human life and without the benefit of formal schooling, and, most important, the spiritual and literary quality, the depth, the cogency, and the rationality of the content of the writing. Thus, e.g., Bahá'u'lláh left well over one hundred major works of writings, some of them written while in prison, in chains, or under other extreme conditions. Moreover, he had no formal schooling whatever beyond learning to read and write his native language of Persian. One of his major works, the *Book of Certitude*, whose English translation runs to over two hundred pages, was written in the space of two days and two nights. Since these writings are published in many languages and widely disseminated, there is a maximum opportunity for objective verification of their quality and depth. The original manuscripts are all preserved, and there is consequently no question of interpolation or of other modifications done before publication. For an excellent discussion of these and other related points, together with eyewitness accounts and photocopies of many archival materials, see A. Taherzadeh, *The Revelation of Baha'u'llah*, 2 vols. (Oxford: George Ronald, 1974-77). Another important point stressed by Bahá'u'lláh and 'Abdu'l-Bahá is that a Manifestation is the first to practice his own teachings. He is the first example who lives his teachings into reality, whereas many philosophers, scientists, thinkers, and creative artists produce their works while living lives widely at variance with the precepts or ideals these works seek to express. In particular the Bahá'í concept of revelation must not be confused with a host of other phenomena which are sometimes popularly called "revelation." I am thinking of such things as trances, occultism, hypnotism, various psychopathological states, etc. As I have tried to make clear in my discussion, "revelation" in the Bahá'í concept refers to a naturally occurring periodic phenomenon (of rather long period) and not to abnormal or occult events. Of course the laws governing occurrences of revelation are viewed by Bahá'ís as depending on the will of God, but this is no less the case for all natural laws, and so revelation would have no special status in this regard. I feel that these supplementary comments are made necessary primarily because of the current resurgence of occultism, witchcraft, satanism, and other such activities which are specifically condemned by Bahá'u'lláh and 'Abdu'l-Bahá as superstitious and based on false imagination. Such popular fascination with the "supernormal" tends to create an ethos in which objective discussion of questions relating to religious experience becomes difficult and the otherwise clear lines between authentic spirituality and superstitious exoticism obscured.

22. The revelation of Jesus was focused primarily on the individual and can be viewed at least in part as a counterbalance to the overemphasis on the totalitarian state and to the miserable social conditions and status to which the majority of the recipients of his message were subject.

23. Bahá'u'lláh does not claim to be the last of these messengers, for according to his teachings the succession will never stop; nor will human and social evolution ever come to a dead end (though the ultimate physical death of the solar system itself seems inevitable according to the best current scientific knowledge). However, he does state clearly that the next Manifestation will not come before the lapse of a thousand years' time.

24. This reflects a fundamental principle of evolutionary phenomena: That which is functional and productive at one stage of the process can become dysfunctional and unproductive at another stage. The same principle can be applied in attempting to understand the various changes in religious practice wrought by each successive revelation.

25. With regard to the individual purpose of religion Bahá'u'lláh has said: "Through the Teachings of this Day Star of Truth [the Manifestation] every man will advance and develop until he attaineth the station at which he can manifest all the potential forces with which his inmost true self hath been endowed. It is for this very purpose that in every age and dispensation the Prophets of God and His chosen Ones have appeared amongst men. . . ." (Bahá'u'lláh, *Gleanings* [n. 2 above], p. 68).

26. Bahá'u'lláh and 'Abdu'l-Bahá, *Divine Art of Living*, rev. ed. (Wilmette, Ill.: Bahá'í Publishing Trust, 1970), p. 92.

27. Nothing that I have said in the foregoing should be taken as implying that the aesthetic and emotional aspects of religion should in any way be deemphasized, neglected, or excised from religion. My contention rather has been that when religion is excluded from the application of scientific method the aesthetic and emotional tend to become drastically overemphsized as they are then seen as constituting the only datum of religion. But it is my feeling that when a more balanced picture of religion is attained and its basically cognitive nature is recognized then these other aspects naturally fall into place in a healthy way, neither being indulged or sought for their own sake on the one hand nor rejected on the other. I think it is fair to say that many of the excesses witnessed throughout religious history, such as fanaticism, acesticism, mystic thrill seeking, and withdrawal from society, can be attributed largely to the lack of the sort of balanced viewpoint I am seeking to describe. It is interesting to note that Bahá'u'lláh pointedly condemns these specific excesses as well as others.

28. Bahá'u'lláh, *Gleanings* (n. 2 above), pp. 164-66.

29. In this connection Bahá'u'lláh has said: ". . . all things, in their inmost reality, testify to the revelation of the names and attributes of God within them. . . . Man, the noblest and most perfect of all created things, excelleth them all in the intensity of this revelation, and is a fuller expression of its glory. And of all men, the most accomplished, the most distinguished, and the most excellent are the Manifestations of the Sun of Truth. Nay, all else besides these Manifestations, live by the operation of their Will, and move and have their being through the outpourings of their grace" (ibid., pp. 178-79).

30. The crucial role of the Manifestation as the link between the transcendent absolute reality and the world of man is expressed by 'Abdu'l-Bahá: "The knowledge of the Reality of the Divinity is impossible and unattainable, but the knowledge of the Manifestations of God is the knowledge of God, for the bounties, splendours, and divine attributes are apparent in them. Therefore, if man attains to the knowledge of the Manifestations of God, he will attain to the knowledge of God; and if he be neglectful of the knowledge of the Holy Manifestation, he will be bereft of the knowledge of God" ('Abdu'l-Bahá, *Some Answered Questions* [n. 4 above], pp. 257-58).

31. 'Abdu'l-Bahá, *Paris Talks: Addresses Given by 'Abdu'l-Bahá in Paris in 1911-1912*, 11th ed. (London: Bahá'í Publishing Trust, 1969), pp. 143-46.