

Using Science to Explore the Spiritual Domain: New

Frontiers

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精神的領域の開発における科学の適用

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The harmony of science and religion, a fundamental tenet of the Baha'i teachings, is explored in this presentation in relation to the emerging studies of the "spiritual domain" in the fields of neuroscience and social science. Recent studies are showing with increasing clarity how the interaction between spiritual practice, faith and outreach to meaningful insights beyond the physical plane contributes to the higher development of the human mind and personality from earliest childhood throughout life. While acknowledging the imperfections and limitations of human understanding and science, the Baha'i approach to science and revealed religion as complementary paths to knowledge and human development encourages an open-minded, continued and enthusiastic search into and development of the powers of human reflection.

本稿では、脳科学と社会科学の分野で出現している「精神分野」の科学に、バハイの教えの原則である科学と宗教の調和を適用させる。最近の研究では、物理的な領域を超えて精神的な活動や信仰や意味の探索などを行うことと、幼少時から人生全般にわたっての知性や性格の発達との相互作用に関する考察が取り上げられている。宗教と科学は知識と発展のための補足的な手段であるとするバハイのアプローチは、人間的な理解力や科学的な手段は限界があると認めると同時に、人間の考察力をさらに開発するために積極的な探索を奨励するものである。

Key words: spiritual domain, science and religion

What gives us human beings our ability to reflect on our own being? How do we know what we know? The physical materials and even the cells that make up our brains and bodies are essentially the same as other animals and life forms. So what gives us the ability to know and to reflect and to sense our own being and the being-ness of others? This is a question that neither science nor philosophy is entirely able to answer. It is sometimes referred to as the “hard question of consciousness.”⁽¹⁾ These days, science can give us a great deal of knowledge about the brain mechanisms of how we learn, and even quite a bit about our motivations work. We can learn about the “how” from science. But the so-called “Big Question” – the “WHY and WHAT FOR” – is a question left for religion.

Recently a neuroscientist, Rebecca Saxe⁽¹⁾, after delivering a detailed speech on the brain mechanisms involved in our ability to understand the moral judgments of others, was asked if she thought we would ever be able to answer this question of WHY we are conscious of “being.” She said she hoped we might be able to answer it, but she didn’t think we ever would. The questioner asked her why she thought that. She responded, “They don’t call it the ‘hard-question of consciousness’ for nothing!”

However, science is not our only means of knowing. The foundations of our civilizations and the mortar which keeps us moving forward as human beings comes from the revealed, “metaphysical” knowledge of the great spiritual teachers in every age. The Manifestation of God for this Day, Baha’u’llah, revealed a fundamental answer in simple terms: God simply wanted to be known. He loved “our creation” and so He created us.

It is amazing to think that in the universal scheme of things we, tiny little forms that exist on a small, insignificant solar system in a minor galaxy in a vast field of 100 billion galaxies, can reflect on the macrocosm and microcosms in which we live. Abdu’l-Baha’ quotes the Imam Ali, *“Dost thou think thyself only a puny form, when the universe is folded up within thee?”*⁽²⁾ And literally, though we are nothing but bodies of dust, it is stardust, after all and something in the way we ARE made impels us to learn and to seek to know. As one group of scientists has observed, “We are hardwired to connect.”⁽³⁾

Abdu'l-Baha observed that there were essentially four ways that we come to know things. ⁽⁴⁾ We have our senses. But our senses are limited. We are also blessed with the power of reason, which allows us to look farther into reality, to extend in time and space the powers of our minds to discover reality. But our reason can take us only so far and sometimes our reasoning can be faulty. There is the way of tradition. We can follow well-worn paths of knowledge gained by relying on what others have known before. This can be useful to some extent. But as we are seeing – reality shifts, so we cannot always rely on what was learned in the past.

For example, an old rice farmer in our town was very disturbed when he learned that his adult sons were now planting rice early in May, instead of late May as has been the tradition since he was born. His sons explained that due to climate change, the weather is warming earlier, and the typhoon season also comes earlier. They learned from other farmers who had lost crops in typhoons that if they planted two weeks earlier and harvested before the typhoon season, the chances of bringing the crops in safely had increased. The lesson is that traditions must be re-examined and not followed blindly.

There is also the mysterious phenomenon of inspiration. Sometimes we are given knowledge based on direct spiritual insight. Baha'u'llah calls it “a light which God casteth into the heart of whomsoever He willeth.” ⁽²⁹⁾ It is amazing how many inventions and discoveries – from the sewing machine to the workings of DNA – have come about through dreams, visions and similar “inspirational” events. Baha'u'llah discusses this method in the *Tablet of Wisdom* ⁽²⁸⁾. This is the method of reflection, and discovery that we can seek to make use of, but the results are something not completely within our control.

Far from the notion that one way of learning is better than another, or that science and religion do not mix, the teachings of Baha'u'llah encourage us in the strongest terms to use all methods, and those of science and reason to learn, and to expand the horizons of knowledge in all spheres. According to Abdu'l-Baha,

There are certain pillars which have been established as the unshakeable supports of the Faith of God. The mightiest of these is learning and the use of the mind, the expansion of consciousness, and insight into the realities of the universe and the hidden mysteries of Almighty God. To promote knowledge is thus an inescapable duty imposed on every one of the friends of God.⁽⁵⁾

Furthermore, he says that,

“Religion and science are the two wings upon which a 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.”⁽⁶⁾

In this remarkable age, science has expanded its scope of observation through the advances of technology so that we are now able to explore the “heavens” of the physical universe, as well as the most microscopic, sub-atomic world, the molecular world, the cellular level, the bio-chemical level, the organic level as well as the social level that we live in. The social sciences have made advances in connecting both the physical and behavioral sciences in animals and humans, and even plants. Now we can enter through the powers of reason and direct observation into the here-to-fore unseen realms of emotion and motivation. It is very fitting that in this Day, the domain of spirit – traditionally thought to be the realm of religion – should become now a topic of scientific study. Abdu'l-Baha says, *“Happy are those who spend their days in gaining knowledge, in discovering the secrets of nature and in penetrating the subtleties of pure truth.”*⁽⁷⁾

Today, I would like to share a bit of an overview of some of the ways that the scientific method is being used to explore the “spiritual domain.” By “spiritual domain” is meant that aspect of ourselves that urges us to connect in non-physical ways (through thought and emotion) to that which we perceive to be outside of ourselves. As we consider the science of it, let us also reflect on related

quotations from the revealed scriptures of the Baha'i Writings.

To start with, a school-book definition notes that science is “a way to ask and answer scientific questions by making observations and doing experiments.” A website aimed at teaching science to students, called Science Buddies ⁽⁸⁾ explains the scientific method briefly as follows:

“The steps of the scientific method are to ask a question, do background research, construct a hypothesis, test your hypothesis by doing an experiment (or controlled observation), analyze your data, draw a conclusion and communicate your results.

Ask a Question - The scientific method starts when you ask a question about something that you observe: How, What, When, Who, Which, Why, or Where? And, in order for the scientific method to answer the question, it must be about something that you can measure, preferably with a number.

Do Background Research – What has been discovered by others in the past concerning this problem or issue or question. By building on the knowledge already discovered and proven by others, we can take our exploration even further into uncharted territories of knowledge

Construct a Hypothesis – What do you predict is true or not true about the variables you are studying?

Test Your Hypothesis by Doing an Experiment (or controlled observation).

It is important for the experiment to be a fair test. A “fair test” occurs when you change only one factor (variable) and keep all other conditions the same.

Analyze Your Data and Draw a Conclusion according to accepted methods of analysis and reason. Sometimes the conclusion is that more information is needed.

Communicate Your Results so that others can share in the knowledge you have found.”

Although it sounds simple and straightforward enough, before going further into the topic some of the ways that “human error” is prone to enter into our scientific approaches to knowledge should be mentioned. First, in some cases our questions are not in alignment with our methods for testing. One popular topic these days is how praying for others affects the health outcome of sick patients who may or may not know they are being prayed for. It is no surprise that the results are very mixed. In order to do a controlled test we would have a clear definition of prayer, we would have to be able to discern when a person is praying and how. We would have to control for other treatments going on at the same time, and the severity of illness. Most importantly, we would have to define the outcome we expect (is recovery and complete return health the desired outcome in every case?) It might be that our methods of testing and analysis are not yet adequate to answer our questions or hypotheses we have made.

Secondly, there are cases where the background research leads us astray or leads us to make assumptions that are not really true. Einstein, for example, had to let go of the long-held Newtonian assumptions about gravity in order to grasp more completely the theory of relativity, which opened the door to understanding many more things about the universe.

Third, the field of science is also prone to politics and popular priorities. Sometimes the most salient, important or useful questions are crowded into the background while more “popular” or “financially rewarding” questions occupy the work of researchers, who, after all, hope to make a living. Unfortunately, there are many examples of this in the health and medical field today.

Fourth, (and somewhat related to the above three points) there are cases when wrong conclusions are drawn from “confounding variables” — that is, so many things in the experimental mix that we cannot really tell what is causing what. There are cases where conclusions are drawn too quickly without enough replication or without adequate attention to other research. For example, character development research in the West was slowed down at least 50 years based on inappropriately drawn conclusions and inadequate methodologies of one highly-regarded study by Hartshorne and May in 1928 ⁽⁹⁾. Somehow, these two

respected researchers commented that in the large population of youth they surveyed in the US, religion seemed to have a negative impact on character development. For many years, even though many studies with better supporting data existed that pointed to the opposite conclusion, little mention of them was made and very little research was funded that studied this conclusion further. It became a politically “unpopular” topic; the variables were too confusing; the means of research not well enough developed and the possible conclusions too controversial one way or another.

So it is very important that people who are dedicated to searching for answers through the methods of science and reason, approach the process with great humility, patience, diligence, and integrity, along with a good deal of “common sense” reasoning.

Baha’u’llah also warns us to study sciences that are of benefit to mankind, and not “those that begin and end with mere words.” So the usefulness of scientific research is a fundamental “value” consideration when deciding what to study.

I am happy to report here, that there is a new and growing field of scientific research into what is being called “the spiritual domain.” As the social sciences developed, there have been many studies exploring the “behavioral domain” (about how we act in various circumstances), “the social domain” (how we interact with others), “the cognitive domain” (about how we think and learn), and “the emotional domain” (how our feelings are evoked and managed). When scientists began to want to explore the realm of “what is meaningful to us, and why,” the scholars who proposed to study this topic referred to it as “the spiritual domain” and they realized that they must come to some agreement on the definitions of their terms of study. Benson, and others ^(10, 11) discuss “spiritual development” as “the process of growing the intrinsic human capacity for self-transcendence.” The spiritual domain is described as the sense of “self embedded in something greater than self...(a high power, if you will) including the sacred.” Loosely speaking, the “spiritual self” can be defined as everything that is you that is not your body. A body is made up of matter: The body has organs, organs are made up of cells that are created by compounds, compounds are made up of molecules, molecules

are made up of atoms and atoms made of nucleons which are made up of energy – light waves and particles acting and interacting in these miniscule spaces... And this energy presumably takes on some sort of motivating force that leads to affect (feeling), creates images or sensations on the mind via the brain, creating thoughts, even thoughts that can be articulated as words, or behaviors – behaviors which can become habits, habits that manifest virtues such as love, righteousness, (or their opposites). The spiritual domain could be identified as that realm of energy, the energy that creates the sensation of connection to others and to our sense of higher meaning; that realm of understanding and motivation that brings about the feelings and behaviors and the connections within and beyond what we experience as the “self.”

The Baha’i Writings indicate that the soul, itself, is beyond the material realm. Yet Abdu’l-Baha has affirmed that there is a sympathetic nervous system that interfaces between the physical and spiritual world. ⁽¹²⁾ I could demonstrate this quite easily by singing a song or telling a joke. Nothing but sound vibrations would be exchanged between you and I in the physical world, and yet your feelings can be totally changed. The relationship between energy and matter has long been a field of scientific inquiry. And some aspects of the “big questions” of how these energies move and move us are now being studied at new levels.

At the Center for Spiritual Development, in the USA, researchers are trying to use demographics and other social science approaches to investigate what people around the world mean when they talk about the spiritual domain and spiritual development. They know that it is often related to religion, but they note that it includes non-religious spiritual activity as well. How does spiritual activity such as prayer, meditation, service, worship, reading of scripture and the like, affect positive human development beyond what is already understood through other domains, such as social, emotional, and moral development? How does the spiritual domain grow and change through the first two decades of life? What factors enhance or thwart spiritual development? The Center for Spiritual Development is developing and expanding a searchable data base on such questions and have so far identified that spirituality, religious or otherwise, seems to relate to at least three dimension: 1) **Connecting and belonging**: What gives us a sense of being

connected to or bonded to our own selves, to others, to nature and to that which transcends nature however it is experienced. 2) **Awareness and awakening:** What do we perceive as ultimately important, and how / when do we become aware of that? 3) **Concerning our way of living:** What determines our life-style choices, and our attitudes and actions in the face of challenges. Most of The Center for Spiritual Development research focuses on young people, and briefly, the preliminary work they report shows that youth who are regularly engaged in religious or spiritual activities make better connections with others, aim higher in their future outlooks and make better life-style choices that protect them from harm and prepare them for high endeavors. ⁽¹¹⁾

In another project, Dartmouth Medical School and the YMCA in the US teamed up with the Institute for American Values to fund a multi-field “Commission for Children at Risk” ⁽³⁾. This project involved bringing together research from neuroscientists, biologists, sociologists, psychologists and psychiatrists, educators, pediatricians, and others, to look into why, in the presence of the greatest period of material wealth, so many children and youth were psychologically and spiritually failing to thrive. In previous ABS meetings some of their work has been reported by this researcher, particularly about the need for “authoritative communities” which are basically spiritually-based social organizations such as the Baha’i Faith. Today I’d like to share with you some of the scientific underpinnings of their conclusions. (I’ll simplify the scientific terms associated with various neuro-chemical descriptions for the sake of brevity, but let me note that the more these mechanisms are understood, the more impressive they are.) There are ten scientific foundations that support their conclusions. I will share them a few at a time:

1. **There are biological mechanisms by which we become and stay attached to others.**
2. **Nurturing environments, or lack of them, affect gene transcription and development of brain circuitry.**
3. **The whole nature-vs-nurture debate about which was more important to people, heredity or environment, is no longer meaningful.**

I hope that is not too technical to grasp. To simplify, perhaps you are aware of

the social science research that indicates how important it is for babies to attach to mothers or a responsible care-giver in the first year of life. Originally, the hypothesis was developed by a British physician named Bowlby, who observed the extreme differences between the growth and development of infants who were raised by caring mothers, and orphans who got little or no hugging and nurturing ⁽¹⁴⁾. The idea that babies need a secure loving attachment in order to develop both physically and psychologically has been explored and proven in many studies. The way this happens is becoming even clearer from brain research. Brain researcher, Dr. Allen Schore of UCLA Medical Center, has found that at the cellular level “the self-organization of the developing brain occurs in the context of a relationship with another self, another brain.” The nature of the relationship “imprints into the developing right brain either a resilience against or a vulnerability to later forming psychiatric disorders.” In other words, if a baby bonds with a person with healthy brain function, the baby’s brain will organize in a healthy way. If it doesn’t, the brain can develop in a disorganized way that may lead to later psychiatric disorders. Other researchers examined parental care in animals and have found the chemical basis for this bonding process. This has also been confirmed in human research. It seems that the brains and bodies of mothers, fathers and children are all ready to produce certain chemicals that in the proper circumstances release to create strong attachments — even addictive in a sense — that create the ideal circumstances for the growth of the child and the family to the next level. All of the various chemicals involved can be named and measured. The results of their presence or absence under various circumstances can be measured. We ignore or attempt to override these mechanisms at our own peril.

Another neuroscientist, Larry Young, found that well-cared-for rats are healthier and more capable than rats whose mothers did not care for them well. They have altered levels of “stress hormone receptors... in the hippocampus – a brain region that plays a central role in regulation of stress responses.” Rat pups from an aggressive breed were taken and then raised by a nurturing mother rat from a less aggressive breed, and it was found that not only did they develop more stress-reducing hormones, they passed these more positive

stress-reducing mechanisms through the genes to the next generation.⁽¹⁵⁾ This discovery and others like it show that the way we are cared for actually changes the genes we pass on to the next generation. The need for proper parenting has never been more obvious: “All of the soft reasons with which we are familiar, such as a desire to be a ‘good influence on a child’...are supported by “the hardest facts now flowing from our microscopes and laboratories” showing us that our environments influence our children’s genetic expression.⁽¹⁶⁾ They have also found that genetic weaknesses can be turned into strengths through better nurturing.⁽¹⁷⁾ Even in human studies researchers are noting that social environments can “impact us at the cellular level to reduce genetically based risks and turn such risks into behavioral assets.”⁽¹⁸⁾ Early nurturing experiences also affect the way a person approaches spirituality and religion. So we can say that good enough doses of love in early life can effect the physical, social, emotional and spiritual development of our children and our children’s children. Is it any wonder that Abdu’l-Baha wrote, “Kiss the face and hair of thy dear children for me...”?⁽¹⁹⁾

How about older children and adolescents?

- 4. Studies on adolescents show that “risk-taking” and “novelty-seeking” are connected to changes in brain structure and function at this time.**
- 5. Social contexts affect biological systems. Even before puberty children seek to understand the meaning of their gender and sexual embodiment.**
- 6. Morality begins with morality of attachment.**
- 7. On-going development of morality in later childhood and adolescence involves the human capacity to idealize both individuals and ideas.**

It has been shown that the desire for teenagers to take risks, to look for adventure and bond with peers is at least partly biologically based. Wishing teenagers were different will not help, and leaving them to their own devices is worse.⁽²⁰⁾ The same goes with gender identity. The living environments of adolescents and the ways they are taught to view themselves affect their biological systems. For example, girls who are raised in the presence of males who are not their biological fathers

(step-fathers or mother's boyfriend, for example) actually enter puberty faster than girls who are raised in the presence of their biological fathers. Even before puberty children seek to understand the meaning of their gender and sexual embodiment. Exposure to sexual role models has an important impact on sexual identity and development. Neglecting, oversimplifying or exaggerating gender differences all can lead to various undesired consequences. Anthropological studies of cultures around the world show that "rites of passage" — events that focus young people on the emerging roles and qualities they will take on in society — have been shown to be important for physical, psychological, spiritual and social health and well-being. In so-called developed countries, these rites have all but disappeared leaving teenagers to develop or imagine their own lines of demarkation. Children are not sure about how and when they enter society.

The commission who brought out these findings suggests a wider-scale mobilization of the community to guide youth through this time with skills, positive peer groups and meaningful challenges that will lead to more authentic fulfillment and maturity. This is connected to the fact that morality begins with "morality of attachment." As mentioned, the first attachment of a child is to its mother or primary care-giver, then to other members of a family. What is good or bad to the child relates very much to what is seen as pleasing to the objects of attachment. As children grow, their sense of attachment moves from mother (or care-giver) to a toy or imaginary friend, a teacher, and widens out to peers, mentors, teammates or workmates, or popular idols and heroes... "Moral behavior – good actions – stem at least as much from (these) relationships as from rules."⁽²¹⁾ This point seems to indicate the importance of adults to be conscientious moral models, to take care in helping children choose friends, and the social images of attachment in the stories and media they encounter. On-going development of morality in later childhood... "involves the human capacity to idealize both individuals and ideas." There is a "human capacity for awe, worship and idealization." "Adolescents seek to find their ideal self outside of the self," according to anthropologist David Gutmann.⁽²²⁾ So the "attachment process" repeats itself at the social level and onward to the spiritual level as we will see.

Brain researchers, psychologists, and other social scientists may use differing

terms, but the main point is that the most important factor helping to move young people through adolescence to adulthood are people inside and more often outside of their immediate family with whom they can identify and have a strong ideal bond, who can mentor them and inspire them to make moral sense of the social confusion they may be experiencing. Once the young person can reflect those ideals, internalize them and transmute that idealism into service roles in the community, one can say adulthood is achieved. Animal research can actually track the brain biochemistry of such changes. These findings have implications for the junior youth and youth programs that Baha'is throughout the world are at work raising up at the grass roots level.

Now let me talk about the role of religion and spirituality:

- 8. Primary nurturing relationships... influence early spiritual development. Spiritual development influences us just the way primary nurturing does.**
- 9. Religiosity and spirituality significantly influence well-being. (It improves health and longevity, reduces stress and depression, lowers risks of suicide and criminal activity, correlates with higher personal happiness.)**
- 10. The human brain seems to be organized to ask ultimate questions and seek ultimate answers.**

The last three points have implications for the role of religious faith in our lives. The first point notes the interplay between our early nurturing experiences and our spiritual development, and notes that our spiritual development influences us biologically in the same way as early nurturing does. There is a tendency for children to attribute the qualities they see in their parents, to God. As a child grows, concepts of the nature of divinity can alter and become more complex. However, the happiness or disappointment with early parental attachment “can lay important foundations for beginning religious comprehension.”⁽²³⁾ People’s trust in God or lack of it, is affected by their early experiences. And that, in turn, can affect the “spiritual vitality” they develop later on. Research shows that stronger spiritual and religious attachment affects long-term survival rates for people who are ill, and

the resilience people experience in times of difficulty. In short, religious and spirituality significantly influence wellbeing. Study after study shows that religious activity and spiritual behavior improves health and long life, reduces stress and depression, lowers risk of suicide and criminal activity, and correlates with higher personal happiness.⁽²⁴⁾ As the reports point out, these outcomes result, not simply because of what is “constrained” or “discouraged” by religion, but perhaps more importantly by what it *encourages*. If your early nurturing experience was not particularly religious, or negative in that regard, do not despair. It is possible to turn doubt into faith through the powers of love and reason throughout life’s experiences. Abdu’l-Baha admonishes Baha’is:

“Therefore, order your lives in accordance with the first principle of the divine teachings, which is love. Service to humanity is service to God. Let the love and light of the kingdom radiate through you until all who look upon you shall be illumined by its reflection.”⁽²⁵⁾

Finally, the human brain seems to be organized to ask ultimate questions and seek ultimate answers. Those of you who have been involved in Ruhi study circles may recall the statement of Abdu’l-Baha quoted in Book One about prayer – that prayer “engenders susceptibilities of the higher intelligence.” Now brain research is in the process of explaining that in more detail: When neuroscientists use brain imaging to study individuals in spiritual practices such as contemplative prayer and meditation they have found an increase in activity in a number of frontal brain regions including the prefrontal cortex. These frontal regions of the brain are the newest ones (the oldest part is the limbic area deep in the center that controls the animal responses and raw emotions). The prefrontal area is the part that is stimulated by the search for connection and meaning. It is this part of the brain that is undergoing considerable change and development during adolescence. It is interesting to note that even children whose parents have little or no religious activity have quite similar religious and spiritual yearnings as children whose family is religiously active. Researchers are hypothesizing that at certain developmental windows of time, the stimulation of various areas of the brain becomes critical so that the maximum growth and functioning can be realized. (26) Saxe, the

neuroscientist mentioned at the beginning of this presentation, studies the part of the brain that relates to how people understand and judge the actions of others. Her research shows that the particular area of the brain that is responsible for that is only about 25% developed by the time a child is five, only 50%~60% developed by the age of eleven and only about 80~85% developed by time a person reaches adulthood. ⁽¹⁾ It seems the moral reasoning power of a person needs continual development well into adulthood. It also seems that new areas of the brain are coming “on-line” as developing functions as we develop as a human species.

There are so many directions to take the study of human beings and the spiritual domain. We may never solve the mysterious “hard question of consciousness” in scientific terms. But the search leads us to understand amazing mysteries of the universe that surrounds us and is reflected within us. It is exciting and comforting to know that we human beings are “a work in progress,” and the more we understand, the more we can aid our own development. To bring this brief overview to a close let me “dazzle your mind” in the light of the above scientific findings with another few quotes from Abdu’l-Baha:

“The powers of the sympathetic nerve are neither entirely physical nor spiritual, but are between the two (systems). The nerve is connected with both. Its phenomena shall be perfect when its spiritual and physical relations are normal. When the material world and the divine world are well co-related, when the hearts become heavenly and the aspirations grow pure and divine, perfect connection shall take place. Then shall this power produce a perfect manifestation. Physical and spiritual diseases will then receive absolute healing.”⁽¹²⁾

“The virtues of humanity are many but science is the most noble of them all. The distinction which man enjoys above and beyond the station of the animal is due to this paramount virtue. It is a bestowal of God; it is not material, it is divine. Science is an effulgence of the Sun of Reality, the power of investigating and discovering the verities of the universe, the means by which man finds a pathway to God. All the powers and attributes

of man are human and hereditary in origin, outcomes of nature's processes, except the intellect, which is supernatural. Through intellectual and intelligent inquiry science is the discoverer of all things.

“Put all your beliefs into harmony with science; there can be no opposition, for truth is one. 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.”⁽²⁷⁾

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