Paper Title: Nursi's and Gulen's Method of Reflection Towards a God Conscious Science Education Author: Dr. Muzaffer M. Tabanli Institutional Affiliation: Southeastern Illinois College

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Abstract:

Developing a course that engages Science, Philosophy and Religion (SPR) constructively is a challenge. There are several problems waiting to be overcome in order to make this course consistent, comprehensive, progressive and agreed upon. Some of the problems are essential such as the choice of a context. Until the SPR community is mature enough, we need to take either science, or philosophy, or religion as the starting point and extend to the other two within the context of the former. This is an essential problem since there are different scientific views, many philosophical school of thought and countless religions. Essential problems cause irremovable differences that categorize SPR works and they will lead to different courses eventually. Second type of problems are contingent such as developing terminology, forming a language, constructing paradigms, compatibility to the educational standards, and openness to scientific progress. Since it is possible to overcome contingent problems through dialogue, we will present relevant works of Nursi and Gulen. Said Nursi, a Muslim scholar of early-mid 20th century, dedicated his life to support faith in everyway possible. With the rise of communism and materialistic, positivist and naturalist philosophy, belief in God and necessity of religion was questioned constantly. Nursi developed a method to teach about God within the context of modern science education for the first time in Islamic community. He stated that all the sciences continuously speak of God and make known the Creator, each with its own tongue. Through reflection we can reach to the meaning of science behind the veil of formulas. It is possible to achieve a state where every piece of the Cosmos will be a window showing God's attributes, and a channel that connects us to the Creator. In his book "Fruits of Belief" he applied this method to chemistry, engineering, commerce, and literature. Later, Fethullah Gulen adopted this method and gave a series of talks sermons and conferences. In his book "Essentials of Islamic Faith" he used universal truths such as cooperation, conservation, cleanness, order, providence and similarities as mirrors reflecting Divine attributes and as signs pointing to the necessary existence of God.

Biography:

Muzaffer Mustafa Tabanli is a full-time faculty at Southeastern Illinois College, in Harrisburg, Illinois. He completed Ph.D. in Physics at University of Missouri-Rolla under the supervision of D. H. Madison. His research interest is in theoretical and computational Atomic Molecular and Optical Physics. He is a member of American Physical Society (APS) and American Association of Physics Teachers (AAPT). He is currently working with the Fountain Magazine and the Niagara Educational Services in the area of Interfaith, Intercultural and Interdisciplinary dialogue. He is married with no children.

Paper:

INTRODUCTION

After the enlightenment, science is used for spreading materialism and disbelief. The religious community faced these attacks for centuries. Very few scientists had courage and background advocated the importance of religion and even fewer scholars had satisfactory knowledge in both science and religion. As a result, we came to a point where nothing in science education points to God and religion. We inherited this lack of spirituality in science for so long, therefore, we may not even feel the need today. For this reason there is a huge need for a course that integrates science and religion in a consistent, comprehensive and progressive way.

The immediate goal of this paper is to provide a structure for a science course that incorporates existence of God and emphasizes values of religions. We believe that the more we connect science with the spiritual realities, the more it will be appealing to the society. Furthermore scientific knowledge will be firmer and hopefully new doors will be open to humanity. Although the initial text originates from Islamic sources, the lectures are made as religion-independent as possible. Since it is almost impossible to achieve this goal, people of different faiths should later improve formation of this course. This will enable us to develop terminology, forming a common language and constructing paradigms.

Following the book "Supreme Sign" and "Fruits of Belief" by Said Nursi, Fethullah Gulen gave a series of talks (sermons) on the signs of existence of God. He gave wonderful examples from science and shows a healthy and practical way to relate the facts of science to our understanding of God and nature. Unfortunately these talks, which are originally more than 20 hours long, have not been fully translated to English yet. Some extractions from these talks can be found in his book "Fundamentals of Islam." Our lectures are based on the works of Nursi and Gulen.

We will present a structure for a course that incorporates facts of science with spiritual realities in the next section "Curriculum for the Science Religion 101-102." The course is presented with the pedagogy, assessment, desired multimedia applications and syllabus. This section is followed by the "Atmospheric Science Lecture". This sample lecture is a preliminary work. A rigorous analysis is intended for the future work.

CURRICULUM FOR THE SCIENCE RELIGION 101-102

This course is intended for either one or two semester. It incorporates scientific facts, basic philosophy and religion. Inquiry based pedagogy is the main method of teaching. The goals of this course will be assessed through pre-test and post-test. Students` knowledge and skills will be tested before the class and will be compared to their final scores. Since current encyclopedias gave knowledge without spiritual meaning, a new type of encyclopedia must be written in order to use for references. Also different events

that point to the same reality will be collected in a multimedia application in order to achieve the desired effect. For example: suitability of external organs to internal organs for different animals; truth of cleanness in galaxies, in atmosphere, on earth, on living bodies and on cellular level etc.

COURSE OUTLINE

1. CATALOG DESCRIPTION: Topics include: basic deductive methods; choice between nature, causes, chance or God; meaning of objects and phenomena in cosmology atmospheric science, earth sciences, life sciences, birds, marine life, land animals, plants trees and flowers, human body, molecular, atomic and subatomic scale.

2. **PRE-REQUISITE:** Basic physics and biology.

3. STUDENTS THE COURSE IS EXPECTED TO SERVE: This course is intended for students seeking a degree in science, religion or philosophy. The primary purpose is to present to the students some of the fundamental facts of science and give them ability to relate them to spiritual realities.

4. SPECIFIC OBJECTIVES:

A. Use basic deductive and inductive reasoning

B. Analyze the meaning of nature, causes, effects, natural laws, chance, and randomness.

C. Apply God and religion related concepts to the scientific facts. Specifically: Apply the realities of subjugation, administration, regulation, order, cleansing, employment, disposition, nurturing, providence, opening, protection, preservation, storing, distinction, compassion, mercy, bounty, generosity, adornment, and decoration to appropriate sciences.

5. MAJOR COURSE TOPICS:

- A. Historical review
- B. Basic logical process.

C. Definition of natural laws, causes, effects and their relation to God and religions.

D. Specific content analysis in cosmology, atmospheric science, earth sciences, life sciences, birds, marine life, land animals, plants trees and flowers, human body, molecular, atomic and subatomic scale.

E. Content independent analysis of change-conservation, order-disorder, subjugation-employment etc.

ATMOSPHERIC SCIENCE LECTURE

We came to this world as a traveler seeking the meaning of our existence and we want to know who send us here and with what mission. We start our inquiries in the atmosphere. We look at it in order to discover and find the object of our search, the one who sent us here! We look at the atmosphere and perceive the following.

The clouds, suspended between the sky and the earth, gave water to the garden of the world in the most wise and merciful fashion. They furnish the inhabitants of the earth with the water of life, modify the natural heat of life, and hasten to bestow aid wherever it is needed. In addition to fulfilling these and other duties, the vast clouds, capable of filling the heavens sometimes hide themselves, with their parts retiring to rest so that not

a trace can be seen, just like a well-disciplined army showing and hiding itself in accordance with sudden orders. Then, the very instant the command is given to pour down rain, the clouds gather in one hour, or rather in a few minutes; they fill the sky and await further orders from their commander.

The wind in the atmosphere and the air is employed wisely and generously in such numerous tasks that it is as if each of the inanimate atoms of that unconscious air were hearing and noting the orders coming from that monarch of the universe; without neglecting a single one of them, it performs them in ordered fashion and through the power of the monarch. Thereby it gives breath to all beings and conveys to all living things the heat, light, and electricity they need, and transmits sound, as well as aiding in the pollination of plants.

The rain as if it is sent from a hidden treasury of mercy, have so many compassionate gifts and functions. The lightning is also employed in wondrous tasks.

Through deduction we figure out the following.

"The inanimate, lifeless cloud that resembles carded cotton has of course no knowledge of us; when it comes to our aid, it is not because it takes pity on us. It cannot appear and disappear without receiving orders. Rather it acts in accordance with the orders of a most powerful and compassionate commander. First it disappears without leaving a trace, then suddenly reappears in order to begin its work. By the command and power of a most active and exalted, a most magnificent and splendid, monarch, it fills and then empties the atmosphere. Inscribing the sky with wisdom and erasing the pattern, it makes of the sky a tablet of effacement and affirmation, a depiction of the gathering and the resurrection. By the contriving of a most generous and bountiful, a most munificent and solicitous sustainer, a ruler who regulates and disposes, it mounts the wind and taking with it treasuries of rain each as heavy as a mountain, hastens to the aid of the needy. It is as if it were weeping over them in pity, with its tears causing the flowers to smile, tempering the heat of the sun, spraying gardens with water, and washing and cleansing the face of the earth. These hundreds of thousands of wise, merciful and ingenious tasks and acts of generosity and mercy that arise from the veil and outer form of this inanimate, lifeless, unconscious, volatile, unstable, stormy, unsettled, and inconstant air, clearly establish that this diligent wind, this tireless servant, never acts of itself, but rather in accordance with the orders of a most powerful and knowing, a most wise and generous commander. It is as if each particle were aware of every single task, like a soldier understanding and hearkening to every order of its commander, for it hears and obeys every dominical command that courses through the air. It aids all animals to breathe and to live, all plants to pollinate and grow, and cultivates all the matter necessary for their survival. It directs and administers the clouds, makes possible the voyaging of sailing ships, and enables sounds to be conveyed, particularly by means of wireless, telephone, telegraph and radio, as well as numerous other universal functions.

"Now these atoms, each composed of two such simple materials as hydrogen and oxygen and each resembling the other, exist in hundreds of thousands of different fashions all over the globe; I conclude therefore that they are being employed and set to work in the utmost orderliness by a hand of wisdom.

The one who through the disposition of the winds employs them in countless dominical functions, who through the ordering of the clouds uses them in infinite tasks of mercy, and who creates the air in this fashion — such a one can only be the Possessor of Necessary Existence, the One Empowered over All Things and Knowledgeable of All Things, the Sustainer endowed with Glory and Generosity." This is our conclusion

Then he looks at the rain and sees that within it are contained benefits as numerous as the raindrops, and dominical manifestations as multiple as the particles of rain, and instances of wisdom as plentiful as its atoms. Those sweet, delicate and blessed drops are moreover created in so beautiful and ordered a fashion, that particularly the rain sent in the summertime, is dispatched and caused to fall with such balance and regularity that not even stormy winds that cause large objects to collide can destroy its equilibrium and order; the drops do not collide with each other or merge in such fashion as to become harmful masses of water. Water, composed of two simple elements like hydrogen and oxygen, is employed in hundreds of thousands of other wise, purposeful tasks and arts, particularly in animate beings; although it is itself inanimate and unconscious. Rain, which is then the very embodiment of Divine Mercy, can only be manufactured in the unseen treasury of mercy of One Most Compassionate and Merciful, and on its descent expounds in physical form the verse:

Through the testimony of the atmosphere to the truth that is composed of the disposition of the winds, the descent of the rains and the administration of the events of the atmosphere, we say: "I believe in God." There is no god but God, the Necessary Being, to Whose Necessary Existence the atmosphere and all its contains testifies, through the testimony of the sublimity of the comprehensiveness of the truth of subjugation, disposal, causing to descend, and regulation, a truth vast and perfect, and to be observed.

CONCLUSION

Formation of this course and the textbook should be enforced by an encyclopedia and multimedia applications that tells about the meaning and purpose of life and universe within the contexts of scientific facts. In this encyclopedia and multimedia resources cosmology, atmospheric science, geology, biology, zoology, chemistry, biochemistry, atomic subatomic physics etc. will be reinterpreted and the emphasis should be given to spiritual realities that can be associated to God and religion and we hope new paradigms will be formed. Behind the veil of formulas a new understanding will emerge.