Science Technology and Spirituality: Discovery of Truth

Brig Tahir Ul-Mulk Kahlon
National Defence University
Islamabad, Pakistan

Aneel Salman
CIIT Islamabad, Pakistan

Nadia Asghar
National Defence University
Islamabad, Pakistan

Abstract
The purpose of this paper is the discovery of truth. It develops a relationship between technology and spirituality, which is a bold ambition and requires a lot of logical reasoning. Humans involved in technological explorations are in search of spiritual enlightenment or vice versa? This document is a stream of thoughts, and its goal is not to convince anyone rather in the words of Shakespeare "confound” and “confuse” and of course motivate us to seek the truth. Economists assume and try to analyse with logic. There are some assumptions on technology and spirituality that are widely held and accepted:

1. Spirituality and technology are as oil and water, and thus do not mix.
2. Spirituality is obviously superior to technology.
3. Technology has a value in monetary terms, but spirituality has no price.
4. The technology is cold, inhuman, heart of stone, but spirituality is deeply human and warm.

These assumptions revolve around the notion of God, because people think that spirituality is God / Nature and technology is not natural and is apart from God. Technology is an object used against God and we try to build on our own what God has planned for us or refused to us purposely. With technology, we are asserting our independence and God.

Introduction
Prophets’ teachings in their times were radical and outrageous. They could talk to God across heavens, travel through time and space, to and from earth and beyond, made dead people alive, gave sight to blinds, explained the science of birth and death and numerous other occurrences. Those could be/were miracles; but at the same time invite for human inquiry and rationality of sciences to discover the nature. Most prophets lived normal human life and earned their livelihoods as common people of society. However they were far contended and relaxed. Erich von Däniken questioned if God was an Astronaut. He said:

“The gods of the dim past have left countless traces which we can read and decipher today for the first time because the problem of space travel, as relevant today, was not a problem, but a reality for men of thousands of years ago. We received visits to the universe in the distant past, although I do not know who these extra-terrestrial intelligences were or what planet they came from” (Däniken 1969) (p.10)

“Old civilizations’ methods of engineering are equal, if not superior to ours and these technologies have been applied at the global level, as guided divinity” (Campbell, 1991). Finally we are spiritually indebted to old technologies given by Daedalus, Mercury, Minerva, Prometheus and Pandora.

The discussion here will give an outline of the spirituality and technology in order to stimulate the identification of the spirituality in technological studies. The basic premise is that technology represents and produces sets of values and its spiritual values are vital to diagnose natural, ethical, social, political and technical values. Phenomena need words for explanation. Words are symbols; so how and who should interpret these words? How do we understand periods of defying historical
Science Technology

Science is a conjecture of the measurable underlying order. A belief is a postulation that when an apple falls from a tree, there was a natural cause and effect. It does not fall because of thunderstorm causing a wind, making apple swing to and fro and fall from the tree. Actually it happens due to measurable rational reasons. God has made a world that works on its own constantly without fixing it from outside. Modern science prospered in the West because theology understood God to have created the universe functioning according to permanent laws. That provided people with a philosophical basis for a scientific method. If a scientist does not claim that there is a rational reason for what he is about to study, he will be unable to investigate at all. This faith in rationality comes from the belief in a rational God, a God that wants humans to discover the world and for whom this discovery is an act of worship.

Humans have been constantly busy with three types of control in this world. First, controlling the colossal forces of nature like heat, cold, wind and energy; secondly, the objects in their proximity like animals, plants and their health and disease; and finally their desires and fears, fantasies and nonsense. (Bernal 2009) Throughout history, technology has been the primary means by which human to human contact has been improved and it is only by the progress of civilization that we are able to develop and explore the spiritual dimension of human existence (Robertson 1998). Technology is a human discipline, created to meet human needs. The technology is part of what defines us as human.

Noble exclaims the theology of technology, and that it is still to be seen whether the new gospel restored technology or if it was direction for technology, or both. (Hopper 1991). We must discover how technology can facilitate our inquiry and spirituality. What is the best possible way to use the technology and how can it be found? How much should be depended on intuition and how much on information? Intuition is a skill to further expand the vision of our experiences. There should be balance in this skill to avoid over exposure, fatigue and to keep the ingenuity rolling and passion increase. Here spirituality becomes strength.

Spirituality

Spirituality is related to the Greco-Christian tradition derived from the Latin word interpreted as “the principle of conscious life, the vital principle in humans, animating the body or mediating between body and soul”. (Flexner and Hauck 1993) It is grounded in the revelation of God found in the religious books. Given what we believe about God, it is not surprising that some believe that for "God's sake" they should free religious institutions. Although it is true that religion builds on spiritual experience, the spiritual experience becomes religious very quickly.

Spirituality is also often contrasted to religion. Whereas religion is considered complicated and tied to morally ambiguous institutions, spirituality for many is simple way forward and connection with God. For seculars spirituality offers an alternative to conservative religion. It is linked with an experience of the transcendence that brings meaning to a life, while religion is seen as an institution that often supports patriarchy and oppression (Rebecca E. Grinter 2011). Increasingly one hears individuals describe themselves as "spiritual but not religious." For these individuals, the point is that God or the divine or the transcendent still matters; however, the institution of the church/mosque/temple or the official beliefs of a certain religion are deeply complicated.

Spirituality helps in search for meaning and value of life through self-transcendence. It is manifested in the views and activities that prompt a sense of relationship to a transcendent dimension, and may include formal religious participation (Reed 1991).

"The spiritual dimension is defined and is understood as the Need; meaning, purpose and fulfilment in life; Hope, will to live, belief and faith". (Ross 2011)
Why religions are ignorant about the popularity of spirituality? There are several reasons. First, it appeals to the secular part of America and Europe. For example some of them consider that many religious institutions were cruel to women and minorities while for some the set of beliefs is increasingly difficult in this scientific age. Yet these people enjoy a sense of transcendence. Second, there is a thought that spirituality without religion solves their problems. This argument means that religions cause problems which "spirituality" might be able to solve. Thirdly, much suspect spirituality predates the emergence of organized religion. Humans had a sense of the divine which was codified and used. In other words, religion is parasitic on the spiritual plane.

**Spirituality and Technology**

Spirituality (S) and technology (T) are two general terms that are stretched to cover a lot of linguistic territory. There are two kinds of things in this world; those that come directly from nature and those produced by humans. Technology applies primarily to the field of artificial thing. Heidegger defines technology as:

"to create is to do something to emerge as something that has been brought forth." (Heidegger 2008)

Technology has made the expansion or extension of the human potential for communication or unconcealing reality. It is the way of our creativity. The most mysterious and wonderful thing about technology is that reality being manipulated by one of its evolutes, humans. Spirituality is very much a part of human inner landscape, is very personal and individual. Technology is a deep expression of the human soul as art.

There is lots of contemporary discussion about humans being lost in search of something. Such thought is considered a consequence of secularism, alienation, disenchantment or due to restlessness and fears which are creating thirst in people for sense and purpose and hence for spirituality. People are not finding satisfaction from web surfing, shopping and communication on social media. Without spirituality, mater of this world is of course worthless. Technology might be result of our disenchantment of religion devoid of the Spirituality. When Marx called religion as opium of the people, he was concerned about religions depriving proletariats from their revolutionary mind. Max Weber went around this saying that instead of a force of oppression, religion turned to capitalism and technology to free our spirits from oppression (Susan P. Wyche 2008). The apex of technology goes along with the revival of Gospel (Kohlenbach 2005), (Mendieta 2004), (Siebert 1985), (Stahl 1999). Joseph Smith had said in 1926 that there would be no radio, no airplane, no medicine, no chemistry, no electricity, and many other discoveries. These discoveries were not buy chance, but due to superior intelligence by men today; and these continue coming, because the “Lord wanted, and because he hath poured out his Spirit upon all flesh”. (Erickson 2001)

Religion could be variable that affects the relationship between technology and spirituality. Its symbolic expressions and activities reflect an attempt by humans to find meaning of life, justify the conscious behaviour and way of life, the certainty of death and the pervasiveness of human suffering (Miller 1998). Human reality is the virtuality of God. Religion can never take us to spirituality, as it divides people. Each religion seeks to dominate the other by proving that its god and the prophets are the only reality and power in this world. In fact religion tends to make man, a slave. Luddite thinks we are becoming cyborgs as we give our agency to technology. But actually this is the religion that makes us a machine telling us the dos and don'ts of life. Spirituality is above all religions. It is like a tree (Spirituality), which has so many branches (religions).When the man questions about his existence, it leads to spirituality.

Spirituality is not a dogmatic but a dynamic action, adapting to varying circumstances and environment continuously. This adaptability is vital in a technological milieu to progress and modernize oneself. In the competition to acquire technology, what must be remembered is its creator which is human mind. Like charging telephones, cars and computers, human mind also needs to charge itself. To be more effective, it should be fed with diet of meditation. It must connect with the life around. Spirituality is significant for this connection. Humans are a source, always connected to the ultimate intelligence, moving forward with a sense of possession and obligation for the transformation.
by using technologies at their disposal. They can detonate a nuclear bomb and they can bring peace to world. It is the spirituality that can create balance with grace and inculcate such skills naturally. Values of caring and sharing, truth, joy of love and wisdom; is growth of humans through spirituality. Technology is used be used to get all this and make their life, a festivity.

According to Noble (Noble 1997), there was the religious inspiration and momentum behind the technology company from the West. In his interpretation, the blurred distinction between the Christian God and the man who was part of the Jewish tradition and identified as its main project, the resumption of the divinity of the lost man. As a first step, "practical arts" were despised by the Christian thinkers because they were not considered relevant for the purpose of overcoming the state of fallen man. However, the ninth century philosopher Erigena argued, with others, that these arts could be used in the service of the salvation of men and constituted the link between man and the divine (Paul 2005).

Adam had a hand in creating world, the designation of beasts, was a part of the divine knowledge, knowledge of nature, and moral knowledge. And also, and most importantly for our story, Adam was immortal (Berkhof 1996). But after eating the forbidden fruit, perfection and participation in the divinity of origin is lost, or at least reduced. And the Christian project is the recovery of the lost divinity. God inflamed with anger for the builders of Tower of Babel, did not destroy the tower, but just merely confused the Masons. Apparently he was not opposed to the technology, but only for the purposes for which technology was being used, God gave Noah the sketch and specifications of a boat, and later he gave three divine blueprints to the construction of the Arc of the Covenant, the Tabernacle and the First Temple. Favourite metaphor of Jesus for the Heaven was technological: a house with many rooms. We could conclude God was a technologist and admired technique. The prophets are smart technologists and may be day dreamers. They desired things to happen that seemed impossible at this time. Prophecy must be considered part of history, but until the history had found its laws, it must be used as a data for illustration, though one may say vaguely that everything happening has to be consistent with the spirit of the history. Physical sciences, insofar as we know, give us the material from which the future as well as past is constructed, and the manner of this construction. (J. D. Bernal 1952)

The global village is now a digital reality. Modern technology offers us enormous opportunities that are not only physical, but also spiritual. Already, we are seeing the technology not only expanding our knowledge, but also our minds, with clear implications for our spirituality. This may seem scary, but is an inevitable outgrowth of evolution leading closer to the day where we will see our body and mind highly cohesive with machines. There is another delusion on artificial intelligence (AI), the type of mimicry in which the machines are programmed to think like humans. This may not be an imitation model, but intrinsically new order of human consciousness where intelligent machines can play a role as sensing partners in human transformation. Such transformed machines may play a creative role to give life to other machines. The question then arises about the boundaries between the virtual and real, thought and matter, matter and light, space and time. Is God in the machine, or only in its makers? Or is He within or beyond both?

Machines run on electricity, as humans do. Humans are evolving from the matter into the spirit, while computers and machines doing the reverse, arising from consciousness and plans in human minds. To use the high technology is not enough: we need to know, feel and understand spiritually. The human union with the technology is a relay station integral and inevitable for their evolutionary path towards and with God. In a sense, the question of the effects of technology on spirituality is really a reflection of human impact on their spirituality. If they wand technology to improve their spirituality, the tools are there to support this goal. If they want to use technology to lead a life of hedonism / pleasure, the tools are there to support this goal as well. If an individual choose to use the technology for destruction, opportunities exist for that too. The technology is really a reflection of humans, and they are its reflection.

Religions have appeared on the web, beyond the normal brick institutional form in virtual environments. A few decades ago surfing and net games enticed the anger of the holy. They exclaimed that devil has found job for idle hands. But now the religions of the world have gone across the virtual
verge to adopt new technologies. Digital "save" is strangely close with the religious notion of "be saved". One of the first computer axioms, garbage in garbage out is relevant to spirituality that what is put into life determines what gets out. Virus corrupts computer like virus in religion can corrupt spirituality. Human can control this "download of virus into their sprits as they do it for computers. Contrary to this there are many web prayer circles especially of Christianity. People use emails and other social media for praying and seeking prayers to for family, colleagues and friends. Synchronicity is not a problem anymore. If one misses the church, mosque or temple today, there is option of postponing meeting with God to some other expedient time.

The end of the world is not going to be due to some computer error, but by the will of Allah, Buddha or God. The coming era will usher awakening where science and technology are creating new openings. Techno pagans are a "vital subculture of digital gurus who keep one foot in the emerging techno sphere and one foot in the wild and woolly world of Paganism," (Campbell 2005), (Davis 2004), (Herzfeld v), (Wertheim 1999). Paradoxically, Amish craft also shows connections to a higher spirit or God. Their chastening craft has always been tempting for the silversmith, weaver or woodworker. It is considered to have spiritual linking through meditation on their act of creation (and technology).

Luddite believes that nothing good can possibly come from technology. Ignacio Götz wrote in technology and the Spirit,

"It is not fair that the contemporary human situation can only be understood in relation to technology, but the human condition itself cannot be understood in this relationship "(Gotz 2001).

Muslims say return to the fundamental practices of the time of their Prophet while Christian fundamentalists have faith in a literal version of the Bible. Believers say that there will be reward of hell and heaven after death. Strangely both rely on technology to spread the message of spirituality and salvation. Bin Laden used modern technology of media, weapons, banking system to the best of his ability (Castells 2004). Christian fundamentalists use Internet, modern media to spread their antiquated theology and conservative version of the white supremacy of Jesus Christ. Fundamentalist groups around the world take technology as something of an obstacle on their path of spirituality, but they understand neither. Technological advancement is a natural evolutionary process of humanity, and even if it wished away, it will continue. Similar is the case with spiritual progress. Only companies that are technologically advanced will also be spiritually advanced. Therefore, a necessary requirement for large-scale spiritual progress is to have technological progress.

The world has produced spiritualists in different religions such as Buddhism, Christianity, Islam, Gnostic (modern), Jainism and Hinduism etc. Most renounced material comforts and immerse themselves in meditation for spiritual elevation. But thanks to technology and the Internet, it may be possible to produce thousands of spiritualists as you enter a new world away from what we call reality. Thus, as we move ahead in technology, we will discover the great laws of nature and ultimately God. If we look more closely, he would have realized that God is nothing other than this wonderful universe that follows its own scientific laws. Spirituality is, but understanding humans and the laws of the universe through the tools of science and technology. In Spirituality, they seek to achieve full knowledge of the truth, however as they seek and explore the totality, they can never grasp or reach unless they become whole. Thus, the process of evolution is always in flux and in the process to achieve the wholeness (thanks to technology) which can also be called perfection.

The longing to see scientific progresses as opportunities to rethink the quality of our spiritual life has been there since the mid-19th century. Filled with the spirit of scientific research, Mary Baker Eddy (Eddy n.d.) believed the Bible was like a medical textbook with sound principles of life sciences. Helena Blavatsky, founder of Theosophy in 1875, mentioned scientific discoveries and claimed religions were mired in superstition whereas spirituality was scientific. Charles Babbage (Babbage n.d.) credited spiritual significance to his adding machine (future computer), claiming it was a proof of the truth of miracles and life after death.

Going to church / mosque / temple will never ever make someone spiritual. Whenever one worships, there is a force within him, which is not anti-religion. But as one learns more about the world, less mysterious and magical the miracles appear. Actually even preachers have no
enlightenment of their faith, just the belief without any real explanation. Earlier there was lack of technology and information, but now it is supplanting superstitious based theology.

Conclusion

Here is an effort to make a mathematical relationship between T and S; the two are directly proportional to each other making technology as an independent variable and spirituality as the dependent variable.

\[ S = \alpha T \]

The equation reveals in fact the negation of our assumption. At this stage it is very difficult to prove, but is not impossible. The problem is how to quantify spirituality and what is the value of \( \alpha \). It can be positive, negative or zero depending on exogenous variables. If it is positive that we really want it to be (our bias that is not yet proven), so we name this equation as a “beautiful equation”.

If we are concerned about the technology and how it affects our spiritual life, we should be very selective about the technologies we use and how we use them. In terms of spirituality, the technology must be evaluated in terms of quality rather than quantity. To attain spirituality we need a technology that is simple, transparent, have community effect and gives the identity. It should give us freedom and we must ask the question: is this technology liberating or enslaving us?

Right now what is seen is that T and S are on a crash path. Will we be expended by the interface of technology with our backward spirituality? Or will we move toward spiritual mellowness? Thoughts are mechanisms. Can these thoughts potentially cause human extinction, i.e., connecting through the technology? Similarly, with bigoted spirituality, humans can turn good into a bad and a blessing into a profanity. Magic has been used in the garb of spirituality to spread misery in the name of God and technology used for neo-slavery.

Philosophically, the exploration of the relationship between S and T seems similar to the religion and science dialogue, but it is not the same, rather it is an application or integration of the latter. We would like the reader to ponder on these questions - What is the human relationship with S and T? How do they think about it? How do they feel about it? Why some people love it and some people hate it? Why at one time they get attracted to it and simultaneously seek escape from it? Why do they think it is an obstacle in their spiritual lives?

Reference