

# **Philosophical Evaluation from Science and Technology in a Replacing Civilization with Emphasis on Critical Re-reading of Modern Science**

**Sayyed Bagher Sayyednejad\***

Assistant Professor, Department of History, Civilization and Islamic Revolution,  
University of Tehran, Tehran, IRAN.

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## **Abstract**

In the present study, the dignity of science and technology in modern civilizations is evaluated as the vital status of the ontological and of "Being" and "Not-Being" type, while emphasizing that the problem description in religious models of new civilization cannot be reduced to the acquisition of modern and strategic science and technologies; Accordingly, this article, while reviewing and critically interpreting Modern Science, in its philosophical and final evaluation of the perspective of science and technology in alternative civilization, emphasizes that the question is the question of "one distinctive awareness infrastructure for thinking," and "redefinition and quality of confrontation with science and technology." While has presented a different configuration of these relations and civilization-making structures that make a difference the way of facing the world and science. Regarding the experiments and the existing capacities after the Islamic Revolution, the transformation of a modern civilization formed how and around what very different and distinct theoretical organization or concept. As a conclusion, while trying to explain the religion of religious society, it emphasizes that science and technology are "Detrimental," "Direction-Finder," and "Renewable" phenomena. Therefore, the religion-based culture and order as the point of consensus and unity of all religions and spiritualists, start their identity limits vis-à-vis science and technology by distancing from the materialistic configurations and technical thought, without negating the science and technology.

**Keywords:** Science and Technology, Modern Civilization, Monotheistic Rationality, Islamic Revolution, Religion-Based Civilization

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\*. Corresponding author: sayyednejad@ut.ac.ir

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### Introduction

The civilization studies as a "holistic and interdisciplinary study unit" requires attention to the software of the order state, arranging ratios and civilization structures based on the spirit of civilization. Philosophically, each culture is the default product of these relations and the creation of new social arrangements and realized from these relations and civilization structures. Among these structures and concerns, the relationship between science and civilization is of existential importance; in this sense, cultures create in turn to science and orient it. Accordingly, and in terms of civilization study, the dignity of science and technology in the modern world civilizations is an essential dignity of the ontological type. As modern civilization and its quality depend on the quality of science and technology, this issue is of fundamental importance through the meaningful relations of contemporary science and technology. Hence, any attempt at civilization-making must recognize the fundamental importance of "Science and Technology" as the "Basic Concept" or the macro concept of "Civilization and New Civilization-Making" and clarify its position and relationship with it.

The present study, with the method of systemic ijtehad, examines and evaluates the philosophical and realistic modern civilization and its replacement civilization (spiritual civilization) to get the extent and proportions of actual and potential cultures with science and technology, also to discover the meaning and concept of the rupture or attachment of these relations or the emergence of new ties related to science and technology from the perspective of civilization.

The next question is about modern civilization and its status in terms of the possibility of continuing its current trends and practices on a global and long-term scale. In terms of software, what kind of change should the nature of science and technology possibly have in terms of changing it into a social reality to increase the possibility of an alternative civilization? In particular, being at the frontier of modern science and technology and presenting systematic paradigms related to the ever-increasing and leapfrogging creativity and innovation of civilization-building knowledge and technology is a necessary but insufficient condition for alternative civilization.

Existing challenges in replacing civilization should not be underestimated with extreme optimism, because the spiritual culture is not created with emerg or the quantitative and qualitative development of modern sciences and educational centers and first ranking in the world universities.

The following essential questions clarify the issue and challenging location, define the limits and scope of such studies: What impact will future technologies have on strategic areas and the world order and civilization approach? What are the conditions, definitions, and procedures of science and technology for the development of spiritual culture?

Amid these, attempt to "eternity of modern civilization with emphasis on its extension from the ancient West" on the one hand and "denial of any other possibility of civilization, especially spiritual and religious type," on the other hand, implies ignoring essential realities. The realities in which the intensity of the dominant paradigm and censorship prevents to have its real weight and significance, in particular the facilities related to the spiritual and religious civilization to be seen in today's world.

Today's world is indeed in lack of a civilizational form with "spiritual" or "religious" thoughts. Still, awareness of the existing possibilities, in particular the infrastructural implications and possibilities for the formation of the spiritual civilization, is of great significance. In particular, modern culture has largely lost its positive aspect. That is, today, the problem is the weaknesses and limitations of alternatives.

In this situation, religious civilization is a possible form to replace Modern society, but the main issue is not whether religion has become necessary in the world of politics;

Here, concerning divine revelation, "We have already sent Our messengers with clear pieces of evidence and sent down with them the Scripture and the balance that the people may maintain injustice" (Quran, 57:25), I strongly emphasize the justice-oriented narrative of Islam; because It is not the case that the alternative and irrational narratives of religion are ready to put aside various oppressive discriminations. Also, the new civilizations need software that makes its values compliant on a global scale; and these values, as activism, create civilized action and advance the work of refinement in different dimensions; I believe that The goals of religion and spiritual values cannot be realized within the framework of a Modern and Secular conceptual organization. More importantly, it is the positive aspect that Islam has today; Islam has a followable value model in the world; Islam creates change in the modern epistemological and value system; In other words, the human epistemological system is changing in the context of Islamic discourse; The Islamic Revolution of Iran has shown an intra-religious transformation in the world; Religion, instead of being a dead and non-constructive phenomenon or a compromise with oppression and the

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justification of domination, has found Its right path, and innovations that have become a religious tradition have been deeply challenged.

Building a progressive and efficient system such as "Religious Democracy" and attractive discourse such as "Political Spirituality" and justice-oriented Islam, are among the most basic infrastructures and possibilities for the spiritual and religious civilization, the options that in the modern world, are extremely valuable. It is for this reason that one of the most famous contemporary philosophers and sociologists, after his presence and close study of the "Islamic Revolution," has mentioned it as "the spirit of a world without spirit" (Foucault, 2013:211). In another independent writing, yearningly wrote addressed to the Europeans: the people [Iranian] is searching, even at the cost of their own lives, for this thing whose possibility we have forgotten since the Renaissance and the great crisis of Christianity, a political spirituality (Foucault,2010: 209). The issue of science and technology in this context and discourse is an important subject which is studied in this study deeply, in particular from this perspective that how the address of the Islamic Revolution configures the spiritual civilization from inside.

### 1. Science and Technology in the Perspective of Modern Civilization

From a typological point of view, modern science and technology, before being the evolutionary continuity of pre-modern science and technology, and or to be at the "top of the science" and "their noblest one," has an independent identity and distinctive nature. Francis Bacon, as the founder of modern science, though not a prominent thinker, but he made a proposition about our relation to science and philosophically formed the direction of Modern science. He is a symbol of the characters who changed the direction of science from "Truth" to "Material Ability and Power." In his most famous work, he emphasized that "Human knowledge and power come to the same thing" (Bacon, 2000, 33). Based on this, a discourse was produced in the world that science and knowledge should give human resources and domination. Hence, the nature of Modern science became a priori, and technology found a posterior spirit; for the simple reason that from the beginning, in the Modern era, science became essential to give man the ability and dominance over the world. Therefore, sciences that do not have such a power lose their importance compared to modern sciences. Therefore, Modern science has a distinct nature; not merely due to positivistic aspects or the contemporary prevailing interpretation of science and the scientific revolution, as "knowledge derived from the facts of

experience” (Chalmers,1999:1), and nor due to idealistic perception and views of great philosophers such as Kant who in criticizing the perception of experiment-centered scientists and philosophers such as Hume, emphasized Understanding as the ultimate and definitive reference for science, and showed that “Through understanding, objects are thought and from it arise Concepts” (Kant, 1999:25). On base this, Kant used to “insist that we can not prove that nature is purposively organized” (Losee, 2001:99).

The Modern Science and Technology, with the inclusion of all of these, have distinctive natures, even when it is said, “The natural sciences, for instance, physics, chemistry, and astronomy, presuppose as self-evident that it is worthwhile to know the ultimate laws of cosmic events as far as science can construe them” (Weber, 1991: 144).

What is remembered in this text as the "different" identity of science and technology in modern ages- without being considered as an innate issue - at the beginning of the matter is evaluated as something resulting from a paradigm rotation and an intellectual organization that in the subsequent evolutions is constitutive of a type of self-founded rationality.

It is such that in general estimation, in addition to the fact that it implies a feature of humanism and materialism ontology and also secular presumptions of the world proportions, it changes the method of facing the world and phenomena.

From this perspective and concerning the nature of modern science, it cannot be said easily that contemporary science and technology, is acquired through synergy and gradual increase of scientific facts. Still, it is similar to the thing which is called "revolutionary replacement" by Kuhn. According to this view, one scientific model or paradigm is replaced with another paradigm, and this makes our attention towards this issue that “why the choice between competing paradigms (like the situation of the modern civilization and spiritual civilization in this study) regularly raises questions that cannot be resolved by the criteria of normal science” (Kuhn,1970:109).

In the elaboration of this paradigmatic revolution and its main essence, in addition to the interference of "non-epistemological elements" in modern science- in particular the tendency of secularity and capture in the universe and its creatures- the existing philosophical presumptions beyond the contemporary science are also determining variables, the deductions whose prominent features have been outlined in the works of the classic philosophers of science and finally, are based on the contradictory or uncollectable relation between science and religion.

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On this issue, those familiar with the history of thinking and philosophy of science know well that the Middle Ages and modern age are amazingly full of reasoning that, with the institutionalization of such assumptions, have emphasized on the demarcation between science and religion and have converted the "modern ages" into "science ages" cut from the religious roots.

As a general conclusion, modern science germinated in a secular land, and in this context, "technological advances have searched experimental sciences replace the doctrine of prayer and gradually replace the age of religion." So, individual vision and scientific knowledge are replaced with faith as the basic standard of human awareness. (Kissinger, 2018) and in the process of growth and expansion of its relations with the "negation of divine feature from nature and universe," reached its increasing materialism and secularism.

It placed humans at the risk of losing an ability, which is the essence of human life. This, from the philosophical starting point, is evaluated because the mechanistic and removal of deity in nature which in principle was a part of the dualism and atheism attitude toward the reality in general, eventually led to the secularization of the whole world and through disenchantment (secularization), nature became void of all characteristics and qualities which human spirit was able to feel an affinity with them or from whatever it could infer norms.

At the same time, the limitlessness from nature basically (by Galileo, Descartes, Boyle, Newton, and his companions) had been presented within the framework of a two-dimension meta naturalism in which explanatory tasks and thus, a causative power had been determined for the "Spirit" and "Personal Deity."

However, from the signs of progress of the objective, mechanistic, and reductionist attitudes, this belief was concluded soon that this approach should be employed in the whole reality (entity). "God was at first stripped of all causal power beyond that of the original creation of the world; later thinkers turned this deism into complete atheism" (Griffin, 1988: 3).

The external and functional return of this approach was the change of form of the world, and this alteration became possible by giving originality and formality to the methodology by Descartes in the Modern World (Cf. Sayyed Nejad, 2013:38). The world, through the channel of modern science and knowledge, altered such that the contemporary science, before being evaluated as the reflector of the image of the same world, was defined as a modification in creatures and the world

Furthermore, this saying from Marx on the logic of modern science got so famous that "the philosophers have only interpreted the world; the point is to change it." In the transformation of the world, technology has become civilized, and today, a modern social organization can be evaluated based on it.

From a teleological point of view, after the initial optimism about the achievements of modern science, gradually, the critical discourses and studies based on the emphasis on the reductionist features of contemporary science took shape.

Rousseau, as one of the most famous political philosophers of the Enlightenment Age, was one of the first critics of modern science in the eighteenth century. In a convincing statement, he dealt with the decadences resulting from science and technology and used to emphasize that not only the modern science and education do not improve human's ethics, but also they impose damage on them; "We have seen virtue fly away to the extent that their lights have risen over our horizon" (Rousseau, 1992:7).

In general, the reaction of the west philosophy vis-à-vis the "radical attitude of modern science to the world" has found a clearer and more basic form in the works of the recent philosophers. The most important of these reactions from the perspective of intra-discourse is related to the reactions of figures like Husserl. In his last incomplete work entitled, "Crisis of the European Science" from the standpoint of modern rationality, while referring to the achievements of contemporary science, he deals with the analysis and finding roots for the causes of recent crises and considers the source of the modern science in the "abstract making of geometry" and with emphasis on the life-world as "the forgotten meaning-fundament of natural science," he adds something of the highest importance that occurred even as early as Galileo: the surreptitious substitution of the mathematically substructured world of idealities for the only real world, "the one that is given through perception, that is ever experienced and experienceable - our everyday life-world"( Husserl, 1970:48-49).

In a final concluding remark, this western philosopher reaches to the significance of "Life World," which is the social and real face of the European culture rather than the eastern one. It is this very life-world that, in the perspective of Husserl, is the sense-giving base of natural science but now, as a forgotten issue, explains the crisis of science. Due to his intense adherence to modern science and humanity culture, Husserl decided to configure the philosophy of phenomenology into a scientific

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one. He was profoundly expressing concern that the current configuration of science may annihilate the modern rationality. The modern and newer post-modern philosophers from this aspect stand in a counterpoint of figures like Husserl. The latter considers the base of modern science and modern and human rationality as the fundamental source of existing problems.

It is such that Nietzsche detects "cognitive nihilism" in it. Still, the later philosophers, in particular Heidegger, consider the issue much more dangerous and higher than cognitive nihilism and evaluate the technical thinking as a cause for "existential nihilism." In the author's view, the essence of these statements is in proximity to the fundamental question. For further explanation, it is possible to refer to the etymology of "Technique," which has been taken from the Greek world of *Techne* and in Latin; it has been applied to the "techniques" which entail art and spiritual value. In this sense, as the historical studies show about the technique and its position in previous civilizations, strategy and science have existed in pre-modern ages, with this difference that the conceptual evolution of science and practice in modern periods and the emergence of its spirituality-escaping concept of it, is a function of the technical calculative set and technologic thought.

Here, it is necessary to consider a difference between technical thought and "technology in the sense of engineering of science" in this sense that technical thinking in the interpretation of Heidegger is "*Gestell*" and more recent than science and technique. At the same time, due to its precedence from science, it has succeeded over science and possibly will impose its issues on science. Thus, in technical thought, thinking has an ontological aspect. This thinking casts such a dominancy and covers from spirituality-escaping over technique and technology - that like today's situation of the world - before having the spirituality and spiritual rationality giving sense to the technology, the technology determines the limit of spiritual values, without that, the technology could imply spirituality and spiritual direction, unless, we consider a technical spirituality; otherwise, spirituality in deterministic and technical thinking does not have an ontological being.

Consequently, the nihilism which comes from it is in nature different from the nihilisms that human has experienced in the course of history and the pre-modern ages and the words of Heidegger, this nihilism, is not even of the type which had been detected by previous philosophers such Nietzsche, but it refers to a more basic origin, i.e., the "existential nihilism" and "therefore, no scene of human" and "nature areas" is



immune of it. Amid these, some philosophers such as Jaspers believe that technique and technology have become independent forces in human life, which uproot everything and bring everything with it. "Human is in the captivity of design and is not informed about the secret of his confinement and through technique; it is not possible to be freed from captivity" (Cf. Davari, 2011:56).

According to the conceptual evolutions and following discourses, it is likely that the nature of scientific and technical human to be understood. This issue among the post-modernistic schools which believe human does not have a "Pre-determined" character, finds a more radical feature, as in the cyber tendency of the "*Cultural Studies*," the human is reduced to a "Computer," such that human can be applied to "a set of data and programs."

In such a condition, human nature and fate are defined not based on his relations with God but based on modern science and technology and human equal to contemporary and in agreement with, and ideal for the modern world is the technical and technological human. In addition to the fact that human's nature and his rationality take shape with technology, human's future will be evaluated as a function to the course and trend of such a meaning of technology.

It is for this very reason that modern civilization and its fluid relations in the secular world, more than feeling the need for rationality and religion, have become needful to more modern technology. If we want to elaborate on the ties between modern science and technology within the framework of the history of civilization, it is possible to refer to the methodic nature and secular confirmation of contemporary science and technology. In this sense, modern science and technology are never "Un-requirement," and the study of trends and achievements of human sciences and even existing technologies show that the nature and fate of modern sciences, in addition to having a connection with the cultural, historical, and social background of the western world, the origins of researchers and technologies also interfere in their shaping and they play a role there.

The civilizational feature of this science and technology opens a way into the modern civilization and genesis of capitalism in the west and expansion of its global dominancy, the same capitalism that based on three-volume studies of "*Material Civilizations, Economies, and Capitalism*" is considered "the origin or the signal for all major material progress and all the most oppressive exploitation of man by man" (Braudel, 1992: 563).

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Though in the interpretation of Max Weber, capitalism in the west has near a link with the organization of labor, it is not the same entirely. Its social and cultural face, more than economic shape, has been only in the west, and for a long time, the new forms of western capitalism, to a great extent, have found necessary due to the evolution of technological facilities. Thus, the rationality of capitalism is the product of science and technology directed at modern science; "science as a vocation" (Weber, 1991:143). This rationality also by nature depends on the possibility of calculation of detrimental technologic factors, i.e., on the precise and necessary accounting, and this means that "Its rationality is to-day essentially dependent on the calculability of the most important technical factors. But this means fundamentally that it is dependent on the peculiarities of modern science, especially the natural sciences based on mathematics and exact and rational experiment" (Weber, 1958: 24).

Hence, with a slight tolerance in interpretation, it can be said that today liberalism or its economic translation within the framework of "capitalism" represents only the social face and modern civilization and other current configurations - with those who are in the margin or those who have been produced in the critique of liberalism and capitalism-, definitely do not have an independent civilizational visage.

As about the external example and primary representative of modern civilization, many western and non-western thinkers believe "American conditions are the conditions of modern civilization, even if the drift has gone further on the other side of the Atlantic than on this" (Johnson, 1979:96).

As was discussed earlier, the rate of strength and weakness or durability of modern civilization depends on the quality of the durability of sense-giving relations of science and technology in the contemporary paradigm. Thus, any crisis and inefficiency in the contemporary and secular proportions of science and technology are immediately transferred to modern civilization and make this civilization critical and inefficient. Moreover, if as a result of secular presumptions and configuration of science and technology, the world has faced enormous spiritual and ethical challenges and crises, these crises have roots in the situation of modern science and technology and its rationality, a position which there was no necessity for its being and could not be now a part of the problems and crises of the world.

## 2. Recognition and Semantic Change in the Civilization-Building Knowledge and Technology

Science and technology are great blessings. Based on what was referred to earlier, it becomes clear that the Modern science and technology, at least, as the propellants of civilization, have become materialistic that today their natures, with all achievements, are in the core of critiques, concerns, and expanding challenges. These challenges and also opportunities of science and technology - more or less-are familiar for the theoreticians and advocates of the modern civilization. They are not only aware the ruling intellectual and political organization over the world "is now placed among the turbulence of the emergence of a modern technologic revolution" but also they notice in a futuristic attitude that "newer technologies give news of issues and affairs that like the project of artificial intelligence- only worsen this situation;" at the same time, that "this technology can solve the complex issues and abstract issue through processes which seems to be a duplicate of human's mind" (Kissinger, 2018). Out of all these opportunities and challenges, the uncertainty and ambiguity in the results, which might alter the method of thinking about science and technology, more than anything else, has worried the strategists of the status quo about the existentialism of the civilization based on a secular system.

The works such as "*How the Enlightenment Ends*" (ibid) with an emphasis on issues of science and technology in the future reflect such a pervasive concern. What justifies this issue intensively is the principle of the efficiency or inefficiency of the modern materialistic civilization about an experience upon which it is said that the contemporary society, even with its definition of salvation, has failed in bringing the contemporary human to fortune.

The newer technologies do not only solve the issues mentioned above, but always in the modern era, they have been influential in the daily weakening of human's spiritual abilities that today the rules of the heaven and earth, together, gives centrality to the "necessity of change" and risks resulting from the lack of "spirit of spirituality." Consequently, where the world is pulled towards the newer technologies and replacement of the frontiers of discovery in modern technologies, the prioritized issue in the third millennium is the issue of change. A change of the semantic and sense-giving and this pervasive demand requires "search of a guiding philosophy that could generate a potentially dominating technology" but not by "humanistic traditions" (Kissinger, 2018) or Spiritualism like William Denton (Cf. Denton, 1888) which are

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suggested by secular strategists and thinkers. Still, this change is fulfilled through the channel of connection and communication with the spirit of spirituality, especially justice-oriented and transformational Islam, not through the experienced traditions which, as much as they could, negated the spiritual ability of human and science and technology and by converting them into tyrannical gods, have brought the modern civilization to critical terminals and have created unfavorable history for modern science and technology and hard wares. By continuing or reconstructing before mistakes in the use of anti-spiritual sciences and technologies - like what happened in the world wars to now - in the third millennium, according to the scientific triple creator of the information age: perhaps with the power of new technologies, life on the planet destroy forever. (Castells, 2010:390).

Amid these efforts to correct and change in this route, with the emergence of the Islamic Revolution, have found a new and necessary conformation. It is such that as a beginning point for a paradigm change, it shows new horizons to save the science and technology and dominate over the technical nihilistic thinking and its dominant power.

In this horizon opening, the redefinition of the original relations of science and technology in connection with the religious spirit, was a starting point that shows the modern technologies- including internet and computer technologies- despite all increasing challenges and their unstoppable trend, are never beyond the God-granted intellect of Intelligence and science and technology can open an unprecedented vision before human's understanding and his human lifeworld, provided that in the representation of these relations, in addition to revision in humanistic traditions, those categories of religious and irreligious interpretations not to be the sense-giving base, because instead of being keys in science and technology, they are locks and make the spiritual and religious civilization impossible.

The significance of the Islamic Revolution about it is that based on a positive relation of the relationship between science and spirituality, it has designed an entirely different route as compared with the nihilist-founded science and technology. At the time, it entails an incomparable capacity of originality and introvert effort of science and technology. A revolution by which the people - in the interpretation of the famous sociologist and philosopher who has examined the Islamic Revolution closely- wanted to "other things on their minds than these formulas from everywhere and nowhere. This is one that would allow the introduction of a spiritual dimension into political life, so that it would not be, as

always, the obstacle to spirituality, but rather its receptacle, its opportunity, and its ferment” (Foucault, 2010: 207).

This revolution, which has been interpreted as the "spirit of the modern spiritless world," is considered itself the first stage of historical shaping and evolution of Islamic civilization. It is noticeable for this reason that it removed the most critical obstacles in the way of fulfillment of the Islamic Civilization. This very point is a starting point that, in addition to giving shape to the civil and political infrastructure, makes possible any change in science and technology.

It is from this very place that the sale of the arrival of the world religious people and spiritual advocators into the modern world changes significantly. They sincerely feel that they require relearning and change in the civilization-building knowledge and technology to help them in the way of fulfillment of the model at the level of Islamic and spiritual civilization because, in the view of many people, the modern science and technology are in lack of concerned human direction and ideality. This significance is not acquired through imitation and its continuity or passivity in facing with modern science and technology.

As for a feasibility study and civilization-building, the shaping of three primary and essential parts of "sense-giving discourse," "civil system arising from it," and "science and technology" in a significant, correlative, and overlapping tie, builds essential stages of the evolution of spiritual civilization.

The acquisition of these possibilities at the time of sovereignty of Modern science and technology and complexity resulting from the dominancy of the materialistic civilization demands a more excellent capability and what makes these inputs significant more than the past is the historical background of religious and spiritual seeking nations like Iran in civilization-building.

This background, with the set of referred facilities with an emphasis on the world capacities, has given a specific and unique position for the creation of Islamic and spiritual civilization. Contrary to Hegelian inductions, modernity is the flagship of all cultures of history, and Western culture is the inevitable destiny of world history. We believe that this destiny is not based on the historical status of religion, but mainly on an avoidable process (Cf. Sayyed Nejad, 2015: 7 and 44). As today, the "religion-based" civilization as an alternative civilization is the most pivot for consensus and unity and also the "Equal Word" between religions and spiritualists of the world in a manner which was explained earlier.

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That is to say, when we say that science and technology or civilization is seeking to make a change in world fate through the channel of Islam, this word with this explain finds its real and correct meaning. In other words, frequently, a belief-based approach has existed from the past and given identity to the society of religious people and ideologists. Still, in the religious culture in which the Islamic Revolution lives, there is something beyond the will for faithful obedience to the sacred law. That is a will arising from the temperament which seeks a necessary change in referring to the monotheistic rationality and spiritual experiences of the prophets and faithful saints, and this exists in the heart of Islam.

It is in such a horizon of a religious view that today even in the world secularism discourse and the clash of civilizations (Huntington, 2007), the issue of spiritual culture and particularly of the Islamic type is taken seriously. This very type of culture seeking that forms the alternative model of the world order and secular-based culture and that by giving shape to a pervasive awareness organization and different from the modern paradigm, alters the method of confrontation with science and technology from inside.

Expressing this issue does not constitute extreme optimism and easy access to religious civilization or ignoring other challenges and infrastructural deficiencies in the fields of science, research, technology, and knowledge-based economics. Just as the mere advancement of science and technology and its growing trend in religious parts of the world - such as Iran - without considering its civilizing nature, will not create any new idea except to keep alive and strengthen the same idea of modern science and civilization today.

Moreover, despite the potential and existing capabilities, the passive confrontation with science and technology will not lead to the religious and spiritual civilization.

### **3. The Progress of the Islamic Republic of Iran in the Domain of Science and Technology**

What is more important than the scientific and technological advancements in every country is the type of view or the attitude ruling over science and technology in a work in which the modern idea is ruling.

From this perspective, based on the study of the supreme council of the Cultural Revolution and from the viewpoint of stream studies, "the passive intellectual steam in the domain of production of science and technology at least after the Islamic Revolution in our country does not

enjoy noticeable advocators. Because the authorities of the country, researchers, and faculty members of universities and scientific and research centers with self-confidence, believe in the capabilities and potentials of the country for the multilateral growth and development and pursuing to fulfill the ideals of the Islamic Revolution. This belief forces them to avoid imitative adherence to the modernity trend and linear viewpoint in the issues of development” (Keynejad, Basirniya, 2000:24).

With such a view, the Islamic Republic of Iran in the first forty years has found a high position in the world scene from the viewpoint of scientific ranking and production of science. It seems, which are valuable, is the issue of the presence of the Islamic Republic of Iran in the frontier of knowledge and presentation of science and technology in some of the most emerging and promising domains of science of technology.

That Iran recently has found the most significant concentration along with three other developed countries on the most newly emerged and advanced domains of science and technology is substantial from different aspects and indicates the correct direction of the country in this domain. The results of international research - published in 2018 - shows that Iran, with the acquisition of the fifth rank, is among the most advanced countries in the area of nanotechnology, also emphasizes on the progressiveness of the Islamic Republic of Iran in the direction and quality of academic achievements. This research, by the researchers of the prestigious "Georgia Institute of Technology," commonly referred to as "Georgia Tech." A university in China compares the countries and world institutes for science and technology-based on a new indicator entitled, "concentration on emerging technologies" and shows that to what extent the governments and institutes and even experts of the countries have focused on the frontier of science and technology, i.e., the promising and emerging domains.

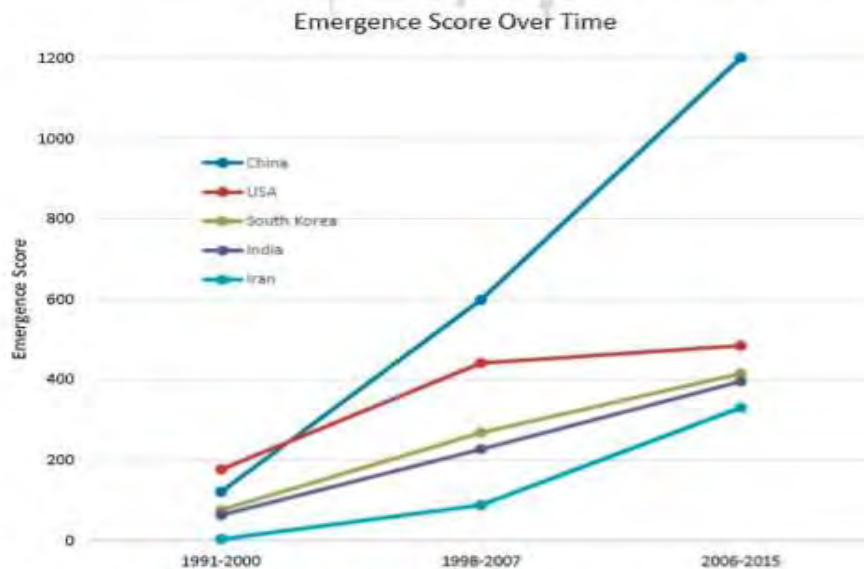


Figure 2. National nano emergence scores by time period

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Based on this standard, China, with a great distance, holds the first rank, and the four countries of America, South Korea, India, and Iran with less space to each other grade the second to fifth. In this ranking, Iran has stood higher than all European countries, and also Japan with an expenditure of millions of dollars in the area of Nano researches and the author of the article directly have expressed their exclamation by using the "surprisingly" adverb (Porter et al, 2019:25).

"Nuclear Technology" is one of the objective indicators and one of the most important today's technology of the world whose study has an elaborative significance from the perspective of religious importance and effect in science and technology. In particular [it is important] as in this detailed study, there will be a reference to the position of religious authority and Guardianship of Islamic Jurist in the Islamic Republic of Iran to explain the religious view on science and technology.

Firstly, nuclear technology shows the lofty and valuable position of this science and technology in the world. The Islamic Republic of Iran is one of the eight countries in the world with a complete nuclear fuel cycle in atomic technology. With this position, the type of arrival and view of the Islamic Republic of Iran to this technology explains the difference between science and technology in two modern and religious paradigms. "The implication of this meaning, emphasizing the difference between the perceptual organization, is that the manufacture, production, and maintenance and use of nuclear weapons are forbidden by Islam" (Khamenei, 2000: 312), but from the religious point of view, trying to save and protect human beings from this scientific calamity is a definite public duty. This approach does not hinder nuclear technology: "We have no right to lose nuclear technology at any cost based on Westerners and the centers of world power will the Islamic Republic of Iran never allowed to acquire such technology for another hundred years, but it has been done against their will and sanctions. Of course, we still have much distance from reaching to the front lines of technology and science. The reason is that we have started from the point below zero. They had imposed a situation in this country that it should not have scientific and technological achievements but even not to have hope for it too. Thus, we did not start from the point of "none," but we started from the point of "none plus disappointment." From here, the Islamic Revolution entered into the field, and thanks to God, it has significantly developed up to today" (Khomeini, 2000: 284-285).



#### 4. Science and Technology Vision in the Future

The Second Phase of the Revolution Statement<sup>1</sup>, which as a "charter," "action guide," and "strategic estimation," provides for stances, trends, and procedures of the past, present, and the future of the Islamic Republic of Iran, represents the civilization-building feature of Islamic Revolution, the civil structure and also science and technology are arising from it. In this statement, referring to the capabilities which have been acquired in the first forty years, taking the second step of the Islamic Revolution has been introduced as an action much more accessible. Because based on the statement, in the first step, essential and marvelous outcomes have been obtained, which was not predictable and imaginable at all.

It is such that what is predictable is likely more than what will be fulfilled. As many of the obtained indicators and developments of the country in different domains, including science and technology, before being predictable before, are mentioned in the global circle with astonishment.

On this subject, the Islamic-Iranian Model of Progress Document that represents the new Islamic-Iranian civilization in the next half-century, the vision which has been outlined the civilizational horizon of science and technology in Iran: "By 2065, Iran is going to be an international pioneer in producing Islamic-human sciences and the elevated culture; it is going to be among the top five countries of the world in producing ideas, science, and technology, and will enjoy a knowledge-based, self-sufficient economy, that relies on rationality and Islamic spirituality and among the top ten economies of the world" (Center for The Islamic-Iranian Model of Progress, 2018).

There are serious doubts about the scientific mechanism for achieving such complex estimates of future studies. Still, the subject of the discussion is important from a philosophical point of view and the nature of the issue.

#### 5. Re-deliberation Upon Challenges and Solutions

Despite the progress mentioned above and capacities, the reality is that scientific confrontation of the non-modern type, mostly religious, in its entirety is not in the level of conflict of civilization with modern civilization. It even is hardly evaluated on the eve of the confrontation of

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1. On the Occasion of the Fortieth Anniversary of the Victory of the Islamic Revolution. February 11, 2019.

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culture; Part of this reality can be explained as follows that today, the mainstream of science and scientific planning in the Muslim and Christian worlds, even among the claimants of spiritual civilization, takes place mainly under its Modern and Neo-Debates. It is a long way from reaching a cohesive and identifying macro-institution at the level of culture. What complicates this situation is the foundational approach of scientific and educational institutions to new sciences and technologies so that the output of the institutions and the mainstream of science is more like a common market and a fruitless formulation of self-founded science and technology.

In particular, that despite many debates, still no semantic change and correct and precise understanding of religious sciences have been created in the world. Amid these, the concerned thinkers who have indeed found out the "difficult situation and the unusual critical situation" of the modern world; but at the same time, they consider the situation such closed and the modern science as something inherent that as if no work can be done about it and that it is not possible to take science and technology, unless to take the Modern science with its crisis. It is with such a deep-rooted understanding of dominance of science and technology in the Modern world, as well as the uselessness of resistance, that Heidegger, in his critical analysis, concludes that it is "only a God that can save us" (Heidegger,1966:45).

The experiences arising from transformational Islam are not based on such a viewpoint, and it does not see any need for the destruction of the integrity of modern science and technology. In this sense, the issue is the issue of finding a direction and renovation based on an example of a member of the social body that when it is transplanted to a new body, either it should associate other members of the body with the new member and accept the new member. Otherwise, other members will cause the weakness of the performance of the new member (Cf. Keynejad and Basirniya, 2000:24).

In such a process, the awareness organization in the spiritual and religious civilization present different conformation of these civilizational relations and structures and distinguishes the method of facing with science and technology. Otherwise, it is not possible to reach from to the new civilization the critique of the Modern intellectual tradition and Modern. Otherwise, the analysis of the technology-oriented scientific practice and the resulting culture will not necessarily lead to the establishment of religious civilization and spiritual-centered sciences. These all represent a part of existing theoretical challenges.

Today's issue, in addition to orientation and innovation in science and technology, is the issue of the balance of soft power and hard power; in a way that brings science and technology to the level of civilization transformation. It is due to the capacity for adaptation and change that Islam has shown through the original discourse of the Islamic Revolution, civil society organization, and scientific progress in the Islamic Republic of Iran. From this perspective, alternative civilization represents the objective and realized form of the fundamental transformation of the actual relations between "Spirituality" and "Science and Technology." Otherwise, a science that is detached from religion and does not commit itself to belief, the result will be the same modern science and technology whose central direction is focused on power and domination. While in religious rationality, science is not a tool of authority, but within the modern system of meaning and will, science refers to any equation that helps to overcome and conquer. Hence, definitions and concepts of the famous hadith "science are kings" is used, as a result of which particular sciences that are preferred, and some sciences are taken out of priority, and knowledge leads to technology. These ideas and issues are not mere propositions that do not create a paradigm shift or importance. Instead, they become social structures and forms, and socially, when modern science and technology become the central discourse in the public sphere, they are weakened in proportion to morality and religion. Accepting the strengthening of religiosity and ethics by prioritizing modern science and technology is simplistic, unless we mean ethics and religion, ethics and spirituality focused on the same science and technology.

Finally, the issue of science and technology, is an issue more complicated and beyond the point of instrumentation of science and technology, which could be pulled to every direction and gave the desired shape to the world order. The author thinks that modern science and technology, before their inherent significance, or restriction in their instrumental and apparent functions, possess philosophical and founding value because of the creation of understanding and rationality.

### **Conclusion**

Modern science and technology, in a critical re-reading of contemporary science, has a philosophical, ontological aspect to the existing civilization, and its evolution reflects the technological element of modern culture rather than its inherent dignity. And today, modern science and technology are of philosophical importance due to the

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reliance of social organization on technology as well as the representation and creation of a kind of intellectual and perceptual organization.

From this perspective, Modern Science, in addition to having a civilization-building role and creation of dominant discourse in today's world, signifies a meaning and concept ontologically, which indicates the sovereignty of materialism and technical thought over science and technology of the world.

In such a life-world, the "direction" of technology and science, without being assumed non-requirement or innate, based on existing realities, directs at making a background for the materialistic or dominance seeking power. The more science and technology achieves its ultimate success, the more it will show its crisis and failure in its scientific explanation of the universe.

In this study, while trying to explain the religion of alternative civilization, its effect on science and technology has been considered, which can provide a better understanding and a different confrontation. The Islamic Revolution of Iran, as a ray of the all-encompassing transformation of Islam, contains other rationality and computational apparatus, as well as a different approach to science and technology.

The premise of the article in the discussion of religious civilization is that the purpose of religion is not to present the best life plan in this world. Still, the purpose of religion is for man to live according to the best possible strategy in this world to reach the perfection of the spirit and knowledge of God. For this reason, in this study, spiritual politics and building of a progressive and efficient system (religious democracy/Islamic Republic) in the contemporary period has been evaluated as a phenomenon that involves self-founded science and technology and has made spiritual civilization more achievable than ever before. At the same time, certain ranks of the monotheistic rationality have been evaluated as the absolute necessity for a rational balance of science and technology and spirituality. At the same time, citing the challenges posed by the repetition and imitation of modern science and technology in creating a kind of rationality and the social organization based on it, he argued that until a new understanding of science and technology is based on monotheistic rationality, the desire for spiritual civilization and religion will still be far-fetched.

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