**Migration Letters**

Volume: 20, No: S4(2023), pp. 88-97

ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)
www.migrationletters.com

# Conception of Science in Turkic-Muslim Discourse

Aslan Dybysbekovich Azerbayev[1], Gulzhikhan Zhumabaevna Nurysheva[2], Nurfer Tercan[3], Gaukhar Ginayadovna Barlybayeva[4]

**Abstract**

*There is attempt to identify the Turkic-Muslim specifics of knowledge in this article. The genetic method allows us to distinguish unified continuous discourse of science. Abu Nasr al-Farabi was a Turkic thinker, the founder of Arabic-speaking peripatetism. Al-Farabi was born in South Kazakhstan. He lived in the 9th and 10th centuries. There are scientific works in which ideas of al-Farabi were compared with views of Kazakh thinker, enlightener Abai Kunanbaev (1845-1904).*

*Ismail Gasprinsky (1851-1914) was a Crimean Tatar educator, the founder of Jadidism. He mentioned al-Farabi in his writings. Comparative analysis of spiritual heritage of three Turkic thinkers was conducted. Intercultural dialogue was revealed in Al-Farabi's legacy. The intercultural dialogue between East and West, Turkic spirituality, Islam and the ancient heritage of Greek philosophers (Plato, Aristotle and etc.) contributed to the formation of Turkic-Muslim model of scientific knowledge, containing a complete, comprehensive understanding of the universe, society and man. Abai Kunanbaev and Ismail Gasprinsky represented a man and the universe in an inseparable unity. Both of them saw a way to improve society through intercultural dialogue and interaction between East and West.*

*Modern global ecological, socio-cultural and political problems cause new cognitive approaches. One of the new cognitive approaches can be the scientific discourse presented in this article. The presented discourse declares an inextricable connection, a priori fusion of theory and practice, science and education.*

***Keywords:*** *science, faith, cognition, rationality, morality, education.*

## INTRODUCTION

Like any phenomenon in our world, development of science and technology has a dual meaning. Undoubtedly, there is an increase in life expectancy, in a number of countries the population enjoys the comfort that characterizes a high standard of living. On the other hand, environmental problems, wars with the use of high-tech weapons, cultural confrontation between traditionalism and globalism, sometimes resulting in conflict situations, are constantly on the agenda.

[1] Toraighyrov University, Department of History of Kazakhstan, Lomov St., 64, Pavlodar 140008 Kazakhstan, Email: Azerbayev_ad1986@mail.ru
[2] Department of Philosophy and Political Science, Al-Farabi Kazakh National University, Al-Farabi Ave., 71 Almaty 050040 Kazakhstan, Email: Gulzhyxan.Nurysheva@kaznu.edu.kz
[3] Department of Sociology, L.N.Gumilyof Eurasian National University, Adolf Yanushkevich St 6, Astana 020000 Kazakhstan, Email: nurfer@nursoultan.com
[4] Institute for Philosophy, Political Science and Religious Studies of the RK MHES CS, Chief Researcher of the Philosophy Center, Doctor of Philosophical Sciences 29 Kurmangazy St, Almaty, 050010, Kazakhstan, Email: gbarlybaeva@mail.ru

And it is quite possible to assume about some new approach within the framework of post-non-classical science. The synergistic consideration of modern reality is aimed at finding stability, which is due to difficult to understand and vaguely explainable phenomena and processes. For instance, the recent pandemic. The concept of sustainability as the main imperative of the humanities and interdisciplinary disciplines can be justified by the a priori unitarity of the material and ideal, natural and ethical.

Consequently, the concept of knowledge in Islamic interpretation can be considered. Muslim concept of ‘ilm as a divine comprehensive knowledge that has both religious and rational, scientific, encyclopedic content. The synthesis of faith and reason, transcendental and cognizable, irrational and rational is explained by the unity of knowledge as revelation, and observation, comprehension and proof.

The period of Muslim Renaissance is also characterized as the “golden age” of Islam. Muslim Renaissance began from the 8th century and touched the 13th century. Religion and science were united in this historical period. Muslim scholars actively studied the heritage of ancient philosophers. Discoveries were made in astronomy, medicine, physics, mathematics, geography. Muslim Renaissance was a matter of pride and exemplification, the primacy of Islamic civilization among the Islamic reformers of the 19th century.

Crimean Tatar intellectual, educator Ismail Gasprinsky (1851-1914) created new approaches and methods in education. He mentioned former primacy and progressiveness of Muslims in his writings. In this way, he attempted to awaken a sense of common Turkic national dignity.

The expressions “Islamic culture”, “Islamic civilization” or “Arab-Muslim” are firmly established in the literature. Accordingly, Arabic language held the unity of Muslims together. Arabic was also the language of science.

However, it should be clarified that Islamic civilization was not only Arabic. The Islamic civilization was Turkic too.

As Ismail Gasprinsky wrote, “... Europeans speak incorrectly, calling the Muslim civilization “Arab” (Gasprinsky 2017: 224). And the educator rightly cites as an example Ibn-Sina, whose origin was either Turkic or Iranian. Al-Farabi was a Turk and a native of Kazakhstan. The Muslim commander Salah ad-Din was a Kurd.

Thus, consideration of Turkic thought within the framework of Islamic spiritual culture deserves attention as a separate object of study.

The Muslim concept of ‘ilm means knowledge, which includes both divine revelation through the sacred scripture, and Sufi “insight”, as well as science with a rational method of cognition. It can also be considered in Turkic moral and intellectual discourse, originating from scientific views of al-Farabi.

In this regard, the purpose of this article is to identify and characterize Turkic-Muslim understanding of science as a component of spiritual culture and a method of social metamorphosis in views of al-Farabi, Abai and in educational activities of Ismail Gasprinsky.

## METHODOLOGY

Science as part of spiritual culture and social institution is a significant sign of a high level of civilization. Accordingly, the conceptual basis of the study was the approach of orientalism by Edward Said. It is necessary to consider some bias of Europeans in the New Age regarding Muslim civilization as a whole, including the type of rationality, and, consequently, scientific knowledge.

Ismail Gasprinsky wrote in 1883 that one part of Europeans “thinks that Islam and civilization are incompatible and predict imminent death for Muslims. Others prove otherwise” (Gasprinsky 2017: 171).

In this direction, the structuralism of Michel Foucault makes it possible to reach the very essence of the concept of science in al-Farabi’s treatises, Abai's views and the writings of Gasprinsky.

The genetic method makes it possible to define the origins of moral and intellectual discourse in al-Farabi’s views, their explication in the ethical heritage of Abai and manifestation in the writings and activities of Ismail Gasprinsky.

## UNITY OF FAITH AND REASON

The substantiation of faith by rational arguments was tested in the history of Christianity and Islam. And the Eastern, Arabic-speaking peripatetism, represented by al-Farabi, applied the rationalism of Aristotle to prove the essence of God as the First Cause of the world and life.

Al-Farabi characterized the deity as “the knower and knowledge”, “the single essence and substance”, “the Wise”, “the truth” (Al-Farabi 1972: 213, 215). And Al-Farabi wrote that the First Cause was Alive and Life (Al-Farabi 1972: 216). The concepts of “alive” and “life” are reduced by the thinker to one essence.

“Life” as the being of everything is the First Existing, the First Cause, the First Mind. Existence of the First Cause can be no doubt. Let us cite the concept of Rene Descartes. Man thinks. Accordingly, how can a person doubt his own existence, life? The very life of mankind, as well as the existence of each person individually, is conditioned by the First Existing.

In the treatise “Civil Policy”, the thinker wrote, “Regarding the First [Existing] one should have the conviction that it is the Almighty Allah. He is the proximate cause of the existence of the Second [causes] and active mind” (Al-Farabi 1973: 48). The active mind is like sunlight to eye. The potential mind is related to ability to see. Can a person with normal eye see in the dark? Similarly, in categories of reason. The potential mind is the ability to think. The active mind accumulates the potential mind. It's like a man in the sunlight clearly reproduces in his mind the reality surrounding him. The active mind, directing and transforming the potential mind, creates the actual mind, in which categories and concepts, things and phenomena appear in real form. In general, as al-Farabi summarized, “the action of the active mind lies in caring for a rational animal [man] and in striving to give him the opportunity to achieve the highest level of perfection available to him, namely the highest happiness” (Al-Farabi 1973: 48). Consequently, the First Cause sends down to man reason (mind) for the correct distinguishing of reality and the attainment of happiness. In this way, al-Farabi connects human faith and reason. There is human faith in the highest (divine) mind, through the mind given by it on man.

The First Cause is the highest virtue and the highest intellect. The model of human community is the “virtuous city”. The “city” is created by people who know deity and its manifestations. God is the universe. And knowledge of the universe, nature, its regularities means knowledge of a particle of God and approaching him.

The belief that the First Cause of everything is the main truth, the highest virtue, and rational understanding of the universe constitutes a virtuous consciousness and mentality, and their owners are able to achieve true happiness.

Happiness can only be achieved in community. People together can establish harmony. Thus, al-Farabi conveys the idea that a person is able to build the “city” by realizing of

divine commandments. And a person does not need to prepare for afterworld to see the world of bliss.

Al-Farabi reveals the problem of origin of sciences and offers their own classification. Studying sciences, a person comprehends his being, destiny and becomes convinced of virtuous principle of the world.

Abai Kunanbaev was a Turkic and a Muslim. He got acquainted with the heritage of ancient Greeks and European thought of his contemporaneity. Approximately a thousand years after al-Farabi, Kazakh thinker Abai Kunanbaev argued that human existence is contained in the universe, which is in Allah. Thus, the concept of deity is characterized by an all-encompassing universe.

According to ethical views of Abai, man was created by the love of a deity. The category of divine love includes truth, mercy, justice. From birth, a person is a bearer of virtue, laid down by the very nature of the universe.

The following structure is built in the ratio of faith and reason.

The path of Allah is the path of truth. Science is one of manifestations of Allah, and the human mind is the main component of science as a property of a deity. Only reason makes it possible to create. And the creation is also one of manifestations of the deity. Thus, the deity prescribes to study the science with the aim of creation and development.

According to the 38th Word of Abai, the Almighty is boundless, omniscient and omnipotent. The human mind is finite, and a person cognizes only what is available to his mind. But as the thinker assures, this does not mean that a person does not need to try to know God. On the contrary, the divine way is the way of truth. God grants man all the blessings of the universe. In this regard, in order to preserve truly human properties and qualities, such as justice, mercy, nobility, the desire to know the truth given by God, a person must know the logic of the universe.

Life, science, power, vigilance, sensitivity, will, words, creation are eight manifestations of the deity. The universe gave a person a part of each of them. Abai wrote, “life is an axiom” (Abai 2006: 85). A person, showing the will, learns science, which gives him more strength and opportunities. “Science comes to people through the word, the word becomes understandable through sounds and signs. The following three properties of Allah are based on this: Words, Vigilance and Sensibility” (Abai 2006: 87). Thus, the Almighty gave his own properties to man for knowledge and creation. The deity created the universe according to ordered regularities with cause-and-effect relationships and interdependence with the sole purpose of providing a person with the opportunity for self-development.

A person is able to know the smallest particle in the ocean of divine wisdom. A man can bring his own small brick into the building of a just society.

Al-Farabi defined the “chosen ones” who possess true knowledge, and the “general public” following the virtuous precepts.

Abai singled out scientists and thinkers as an intellectual elite among people. A scientist develops a certain branch of knowledge, making discoveries. The thinker, in addition, correlates the acquired knowledge and discoveries with the righteous, fair, honest essences of human destiny. Intelligence and innovation should have a good direction. In this regard, a thinker, unlike a scientist, can become wise.

Was Abai acquainted with the treatises of al-Farabi? Did the Kazakh thinker hear about the Aristotle of the East? There are only guesses. But morality and intellect, upbringing and science, both thinkers correlated with the heart and mind.

The heart is presented as a source of faith, convincing a person of his just and compassionate nature. And the mind is correlated with the concept of rational thinking,

logic. Leaving out of consideration the formal logic of Aristotle, logic can be built by subjective principles, and rationality is a relative concept.

Al-Farabi correlates heart and brain. Heart is a source of innate warmth, emotions. Therefore, heart is a symbol of kindness and compassion. But brain gives a framework to emotions, sets the form for manifestation of human kindness. Brain serves heart.

Abai compared the significance of human strength, mind and heart in the 17th Word. Strength is efficiency, power for accomplishments. However, it is also possible to use force for inequitable purposes. The mind is seen as logical thinking. As already mentioned, logic is a set of principles. And not always principles can meet moral standards. And only the heart as true faith expresses human conscience.

Safvet Halilović, characterizing the Islamic civilization in Spain, noted it as a civilization of "balance and the middle way". In Muslim spiritual culture, life and afterlife, science and faith, spirit and matter were connected, a balance was established between mind and heart. And moral education is equated with material progress (2017: 66).

The period of Islamic civilization in Spain begins in the 8th century. In the 15th century, the Muslim states were finally defeated by Europeans, and Muslims were forced to leave the Iberian Peninsula or to become Catholic. And in the Islamic world as a whole, tradition began to prevail over science and innovation, leading to European leadership in science and technology.

In this regard, later Islamic thinking circles were divided into modernists, who regretted the loss of the trends of scientific research by the Muslim world, and traditionalists, who did not regret it at all and wanted to distance themselves from science (Hoodbhoy, 1991:1).

Already in the 17th century, the Turkish scholar Katip Chelebi (1609-1657) thought deeply about the relationship between mind and heart, mind and traditions. 'Ilm contains two components. Chelebi thought about which of the components to give preference. This historically significant question was a dilemma among various intellectual circles of Ottoman society. Chelebi tried to expand the concept of 'ilm in order to consider the manifestations of modern science in the 17th century (Morkoç 2019: 114).

The Reformation in Europe, the discovery of the new world, the heliocentric system of Nicolaus Copernicus, and then the Age of Enlightenment caused controversy among Muslim intellectuals about how to combine European scientific discoveries with Islamic traditions.

Samer Akkach considered the polarization in the concept of 'ilm between modern "science" and din, i.e. "religion". The conflict began in the first decades of the 19th century, and later it intensified more (2019).

Al-Farabi and Abai opposed to religious fanaticism and scholasticism a specific type of rationality. But they did not go deep into the "polarization" between science and religion. They proposed a variant of "single knowledge".

Al-Farabi interpreted, "virtuous religion is like philosophy" (1987: 324). According to al-Farabi's views, philosophy was understood as the rational component, the ancient Greeks were meant as the philosophers (Plato, Aristotle). Practical philosophy was understood as known, realized, which could constitute the practical part of religion. Theoretical philosophy only assumes. And religion accepts these assumptions without evidence. Therefore, religion consists of philosophy and absorbs two of its parts. Probably, al-Farabi assumed periodic scientific discoveries and proofs. And what is hypothesis today may become proven conventional wisdom tomorrow. Thus, religion cannot deny new knowledge and close itself off from innovations.

Abai developed al-Farabi's reasoning. Abai insisted, “religion arose where the mind once stopped” (2006: 62).

The regulatory function of religion in traditional society is indisputable. Religion is a historically formed social institution. Abai allows changes in religion as sciences and technologies develop and, consequently, changes in everyday life.

The deity prescribes honesty and justice. Abai wrote, “the essence of a man is love, justice and sincerity” (2006: 129). This is the main postulate of faith, and religion canonizes the foundations of faith and affirms ritualism. But society can develop in accordance with the level of scientific development of the time and preserve the human essence.

Ismail Gasprinsky, who mentioned Ibn-Sina and al-Farabi in his writings, in 1881 described the image of a progressive Muslim, “A solidly educated Muslim adds broader, more humane views of things to the good qualities of an ordinary one; science and knowledge, without shaking the Muslim foundations and sympathy in him, illuminate, humanize his views, destroying, of course, prejudices and superstitions” (2017: 107).

The Turkic discourse correlates faith and reason, religion and science, traditions and modernism. A constructive, objective approach to consideration of science is revealed. This approach considers two fundamental components of the Turkic-Muslim population’s life in order to establish a morally healthy and progressive society.

Science as an integral part and guiding link of Islamic civilization at the turn of the 19th-20th centuries receives a social significance in the Turkic-Muslim discourse.

## CLASSIFICATION OF SCIENCES, THEIR SYNTHESIS AS METASCIENCE

Modern humanitarian, natural, and technical sciences constitute branched structures with narrow specializations. IT-technologies are a separate area. Knowledge and discoveries increase, consequently, the structures will become even more branched. It is regularity. This process can be characterized as civilizational growth. Civilization changes according to the permanent development. Human history has a traditional society, industrial, post-industrial (information). There is a well-known gradation into traditionalism, modernity and postmodernity.

Technology and artificial intelligence are developing at an accelerated pace. A relevant civilization is being formed. It is necessary to remember about the significance of a man in forming civilization.

Morality and artificial intelligence are a separate topic for research. But it is significant to foresee the consequences for humanity. Let's remember L.N. Tolstoy. He said, “the mission of science is to serve people”.

The interdisciplinary approach will only expand. Initially, philosophy absorbed the entire field of scientific knowledge in ancient Greece. Consideration of the problem of man and technology can contribute to a greater integration of sciences, evolving into a metascience.

“One might say that the aim of all the Islamic sciences; all the medieval and ancient cosmological sciences, is to show the unity and interrelatedness of all that exists. Thus, in planning the unity of the cosmos, human being may be led to the unity of the Divine Principle, of which the unity of Nature is the image” (Muhammad 2013: 47).

The concept of Muslim knowledge ‘ilm can be correlated with metascience.

The concept of Tawhid (the Oneness of God) determined in Islam the meaning of science as something sacred. Sabina Shamim wrote, “In Islam, nature is not seen as a separate

entity, but rather as an integral part of Islam's holistic outlook on God, humanity and the world", "… nature itself is viewed in the Qur'an as a compilation of signs pointing to the Divine" (Shamim 2015: 23). In this regard, the development of science was encouraged in Islamic civilization.

John William Draper emphasized the rationalism, scientific, progressive and scientific achievements of Islam. His scientific views aroused approval and admiration among Muslim intellectual circles (Akkach 2019).

In 1881, Ernest Renan delivered a public lecture on "Islam and Science" at the Sorbonne. In 1883 the lecture was published. This lecture caused indignation and reciprocal publications of Muslim intellectuals. "In his lecture, Renan forcefully repeated the claim (already in the air at that time) that early Islam and the Arabs who professed it were hostile to the scientific and philosophic spirit, and that science and philosophy had entered the Islamic world only from non-Arab sources" (Iqbal 2009: 82).

Al-Farabi characterized the deity as the First Cause, the First Beginning.

Abai wrote about eight faces (properties) of the deity and their manifestation in a man. Thus, he proved the main postulate of Islam "Allah is the only one, and He is in everything" (2006: 87).

The Deity is the source of all knowledge. And a deep study of nature and man is the comprehension of divine providence. Consequently, all sciences as a form of knowledge have one source.

The past progress of Islamic civilization is connected with progress in all sciences. The exchange of knowledge between various Muslim scholars creates disharmony between different areas of Islamic science. In order to overcome this disharmony, Muslim thinkers and scholars developed a classification of sciences with their hierarchies (Nasution, Siregar, Saputra, 2022: 54).

Al-Farabi highlights the following sciences: science of language, logic, mathematics (arithmetic, geometry, optics, the science of stars, the science of music, the science of gravity, the science of skillful approaches), physics, metaphysics, a separate block is civil science, jurisprudence and dogmatic theology. Metaphysics has the greatest significance. It is the hierarchy of science.

According to the treatise of al-Farabi, metaphysics includes three sections, covering all knowledge. The first section studies existing objects and things. The second section studies the proofs of theoretical particular sciences (logic, geometry, arithmetic, etc.). The third section studies intangible objects that are not bodies and do not have bodies in their ranking from imperfect to perfect. The First Existing, Allah is at the very pinnacle of perfection (Аль-Фараби 1972: 172-173). The study of sciences is supposed only in a complex for the formation of a worthy worldview and socialization.

Ismail Gasprinsky's writings contain his views on the essence of scientific knowledge. In the novel "French Letters", the educator singled out the "Book of Revelations", i.e., the holy scripture of Muslims, and the "Book of Divine Acts". Gasprinsky wrote about the "Book of Divine Acts", "This book is open everywhere, you just need to be able and willing to read it. Its pages are endless. The slightest dots and lines of its letters are whole mountains and seas… This book is the totality of Nature created by the Divine" (Gasprinsky 2016: 102). Natural science and technical discoveries are contained in the "Book of Divine Acts", which a Muslim need to study for correct adaptation in the industrial world.

The educator was indignant at European egocentrism, greedy individualism of modern times. In this regard, he considered that there was significant to preserve the moral foundations of Islam.

Gasprinsky wrote, “The study of nature, its forces and regularities give a person the knowledge necessary for life, just as the Book of Revelation shows us the foundations of morality and the path to salvation in the future life. How and when to pray, what is good and not good, we learn from Revelation, but how and when to work, how to grow trees and animals, what is harmful and what is beneficial for a person, we draw from the indications of Nature, which is the Cause of Allah, how The Quran is His Word. Later you will understand all this better” (2016: 102).

Gasprinsky published the newspaper “Translator-Terdzhiman”. In 1885, in this newspaper, he published a note “Muslim sciences”, in which, in fact, he revealed the concept of ‘ilm. The publication says that Muslim science consists of two parts: the science of revelation and the science of speculation and experience (Gasprinsky 2017: 284). Accordingly, Gasprinsky developed a “new method” (usul al-jadid) in education. According to “new method” religious disciplines and secular disciplines (history, arithmetic, natural sciences) were studied in Muslim school.

This reform in education was the beginning of Jadidism’s movement.

Jadidism formed the worldview of Muslims in Russian Empire

According to Jadidism Muslims in Russian Empire needed to form the worldview in new conditions of industrial society and preserve such spiritual and moral foundations of Islam as mercy, justice, compassion, honesty, responsibility and nobility.

The solidity of building with floors of various sciences with foundation and roof of the universal conscience is metascience. ‘Ilm as a concept of Muslim knowledge structured scientific knowledge in views of Turkic thinkers. They insisted that there was necessary to correlate scientific discoveries with human conscience.

Al-Farabi and Abay did not limit their philosophical and ethical horizons to the Islamic world. According to the ethics of al-Farabi, virtue is characteristic of all people, regardless of religion.

And Abay thought in terms of all mankind. His concept “tolyk adam” depicts a holistic, harmonious, perfect and universal person.

The basic principle of logic, rationality is the universal belief in conscience, love and justice. It is an axiomatic, predetermined human essence.

Kazakh intellectuals of the early twentieth century were the ideological followers of Abai and admirers of “new method” of Ismail Gasprinsky. In their political, journalistic, and educational activities, they did not use Islamic concepts, categories, and terminology. Moreover, they defended and affirmed the secularity of morality and education. They resisted the influence of “old method” clergy, who opposed European enlightenment.

Conscience as a constant and an axiom is established by the universe. And this “establishment” was explained by Kazakh intellectuals with a secular approach and sciences.

Leader of Kazakh national party Alash and head of the Kazakh government of Alash-Orda Alikhan Bukeikhanov wrote, “The most difficult thing that cannot be achieved either with the mind or with wealth is peace of mind, accessible only to the highest morality inherent only in a comprehensive education, we feel [this] only when you do no harm to anyone either in soul or body” (2009: 283).

Poet, writer, educator, member of Kazakh national party Alash Zhusupbek Aimauytov wondered, “A man has achieved perfection in everything: he flies like a bird, swims like a fish, brings distant distances closer and clears up the foggy mysteries of nature. And at the same time, he did not part with bestial malice, he kills each other. Why?” (2002: 377). The thousand-year formation of the scientific potential for harsh and cynical destruction of each other is reminiscent of absurdity. Therefore, the Kazakh poet asked objectively.

And Aimauytov saw the reason in insufficient emphasis on the science of moral education.

In the culture of peoples, Kazakh poet and publicist Sultanmakhmut Toraighyrov singles out the “physical factor” and the “factor of conscience”. The first includes the entire material side of development, the second includes moral and spiritual. Toraigyrov concludes that only the “factor of conscience” leads a person to happiness (1993: 162).

The discourse of science in Turkic ethics is represented by metascience. Consideration of scientific problems in two factors (moral and intellectual, technical, technological) constitutes metascience. Turkic, Kazakh version of scientific consideration correlates with Muslim concept of ‘ilm, but goes into universal categories.

## CONCLUSION

A course “Intellectual and moral discourse in history of Kazakhstan” for students was developed during the study. This course was delivered in the first semester of the 2022-2023 academic year at Toraighyrov University.

The course defines the main stages of the intellectual and moral discourse, characterizes conceptual apparatus of the study of spiritual and moral continuum at each stage of Kazakh history, reveals the features and uniqueness of intellectual formation, socio-ethical model of development in Kazakhstan.

The basis of problem-chronological structure of the course is the dialectical unity and delimitation of faith and reason, heart and intellect, traditions and technologies.

Nowadays, the discourse of science takes sharp forms, and a number of questions arise. How will technology change public morality? And what about traditional societies in this situation? Can technological projects be combined with moral standards?

Accordingly, it is planned to continue the study and develop the course with a wider geographical scope. It will be named “Intellectual and moral discourse in Turkic ethical thought”.

## References

Abai. (2006) Slova nazidaniya, Almaty: Oner.

Aymauytuly Zh. (2002) Vospitaniye (otryvki), Antologiya sotsial'no-politicheskoy mysli Kazakhstana s drevneyshikh vremen do nashikh dney (v dvukh tomakh), Almaty: Institut razvitiya Kazakhstana, S. 377-381.

Akkach, S. (2019) Polarising ‘ilm: Science and religion in early modern Islam, ‘Ilm: Science, Religion and Art in Islam. Edited by Samer Akkach, The University of Adelaide Press, pp. 3-18.

Al'-Farabi, Abu Nasr Mukhammad. (1972) Filosofskiye traktaty / per. s arabskogo, Alma-Ata: «Nauka» Kazakhskoy SSR.

Al'-Farabi, Abu Nasr Mukhammad. (1987) Yestestvenno-nauchnyye traktaty / per. s arabskogo, Alma-Ata: Nauka.

Al'-Farabi, Abu Nasr Mukhammad. (1973) Sotsial'no-eticheskiye traktaty / per. s arabskogo, Alma-Ata: «Nauka».

Bukeykhanov, A. (2009) Polnoye sobraniye sochineniy v 7 tomakh. T. 1., Astana: «Saryarka» BU.

Gasprinskiy, I. (2016) Polnoye sobraniye sochineniy Ismaila Gasprinskogo. T. 1, Simferopol': OOO FORMA, 2016.

Gasprinskiy, I. (2017) Polnoye sobraniye sochineniy. T. 2. Rannyaya publitsistika: 1879-1886 gg., Gl. red. R. S. Khakimov; sost. S. A. Seitmemetova, Kazan'. Simferopol': Institut istorii im. SH. Mardzhani AN RT.

Halilović, S. (2017) Islamic Civilization in Spain – A Magnificient Example of Interaction and Unity of Religion and Science, Psychiatria Danubina, Vol. 29, Suppl. 1, pp. 64-72.

Hoodbhoy, P. (1991) Islam and science: religious orthodoxy and the battle for rationality, London and New Jersey, 1991.

Iqbal, M. (2009) The Making of Islamic Science, Kuala Lumpur: Islamic Book Trust.

Morkoç, S. (2019) In between the mind and the heart: Çelebi's concept of 'ilm, 'Ilm: Science, Religion and Art in Islam. Edited by Samer Akkach. The University of Adelaide Press, pp. 113-124.

Afridi, M.A. (2013) Contribution of Muslim Scientists to the World: An Overview of Some Selected Fields, Revelation and Science, Vol. 03, No. 01, pp. 47-56.

Nasution, H.B., Siregar, M.F.S., Saputra, I.B. (2022) The distribution of science according to Muslim philosophers, Ta'dib: Jurnal Pendidikan Islam, Volume 11, Issue 1, pp. 53-64.

Shamim, S. (2015) Islam and Science: A Preliminary Exploration, International Journal of Humanities and Social Science Invention, Volume 4, Issue 1, pp. 19-26.

Torayğırov S. (1993) Eki tomdıq şığarmalar jïnağı., T. 2., Almatı: «Ğılım», 200 b.