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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

SOCIO-CULTURAL FEATURES OF THE FORMATION OF THE TURKISH INTELLIGENTSIA IN THE 19TH CENTURY OTTOMAN SOCIETY

Speciality: 5502.01- General History Field of science: History

Applicant: Natavan Qalib gizi Aghayeva

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The work was performed the Department of History and Economy of Turkiye at the Institute of Oriental Studies after acad. Z.M.Bunyadov of the Azerbaijan National Academy of Sciences.

Scientific supervisor:	Full Member of ANAS, Doctor of Historical Sciences, Professor Shahin Majid oglu Mustafayev
Official opponents:	Doctor of Historical Sciences, Professor Abdullah Gundoghdu
	Doctor of Philosophy in History Associate Professor Shirinbey Hajiali oglu Aliyev
	Doctor of Philosophy in History Associate Professor

Dissertation Council ED 1.30 of Supreme Attestation Commission under the President of the Republic of Azerbaijan operating at the Institute of History and Ethnology named after A.A.Bakikhanov of the Azerbaijan National Academy of Sciences.

Sevinc Farrukh gızı Ruintan

Chairman of the Dissertation Council: Doctor of Historical Sciences, Professor Karim Karam oglu Shukurov Scientific Secretary of the Dissertation Council: Doctor of Historical Sciences, Associate oglu Niftaliyev Chairman of th Corresponding Member of ANAS, Scientific Seminar: Doctor of Historical Sciences, Professor la Musa Jafar oglu Qasimli

I. GENERAL DESCRIPTION OF THE DISSERTATION

Relevance and study of the topic: Throughout the world history of the last three centuries, the intelligentsia, as the most advanced and thinking class of society, has been endowed with an important social and cultural role. Her civil and political position, competence and activity largely determined the vector of further development of historical events. For this reason, the study of the prerequisites, factors, social, political and cultural phenomena that affect the formation of the national intelligentsia in a particular country, as well as its value system, has a significant importance. This also applies to the process of formation of the Turkish intelligentsia in the depths of the Ottoman society in the 19th century. The emergence of this new, Western-educated category of people as an independent stratum in the social structure of Ottoman society had a significant impact on the entire further course of the historical life of both the empire itself and the Turkish people. It was the young Turkish intelligentsia that became the bearer of the ideas of modernization and the leader of the political and cultural reform movement. These ideas later had a certain influence on the policy of modernization in a number of countries neighboring the Ottoman Empire, such as, for example, Iran. All of the above determines the degree of scientific relevance of the problem of the formation of the Turkish intelligentsia in the Ottoman Empire of the XIX century and puts it in the same row with the topics for independent dissertation research.

The main chronological framework of this study covers the period from the beginning of the 19th century, from the time Sultan Mahmud II (1808-1839) carried out the first social, political and military reforms, until the very beginning of the 20th century, the reign of Sultan Abdul-Hamid II (1876-1909). However, it is worth noting that in order to clarify the causes, essence and consequences of a number of events that took place in the 19th century, the study provides a historical excursion into an earlier era, partially covering the 18th century, and also sometimes mentions the results of some social and cultural processes at the beginning of the 20th century.

A fairly wide range of different types and categories of sources was involved in the present study. A number of published archival primarily from the Ottoman Archives materials. (T.C. CumhurbaşkanlığıDevletArşivleri), such as, for example, a collection of decrees, charters and laws in the field of education adopted between 1798 and 1922¹ and a collection of documents related to the implementation of performing arts in the empire²(theatrical performances, concerts, circus arts, etc.), issued by the General Directorate of the Ottoman Archives (DevletArşivleri Genel Müdürlüğü), was used in the study to show theprocess of modernization in education and culture in the Ottoman Empire of that period. After all, as you know, by the end of the 18th century, the Ottoman Empire faced serious difficulties in the field of state administration, which weakened it before the face of external threats and constant wars with neighboring countries. For the upper strata and the political elite, the need to educate a new generation of young officials, educated in a modern way, capable of solving problems in accordance with the requirements of the time, became more and more obvious. To this end, numerous narrow-profile educational institutions, new-method schools gradually began to open, and elementary education was organized. It was the graduates of these educational institutions that later formed the basis of the young Turkish intelligentsia, which in the future took on the task of educating the masses and made the main contribution to the development in the Ottoman Empire of such new phenomena of cultural and intellectual life as the national theater, periodicals, new literature, etc. Later, theater stages, published newspapers and written works became the main platform for the dissemination of reform initiatives among the people.

¹Arşiv Belgelerine Göre Osmanlı Eğitiminde Modernleşme // T.C. Başbakanlık Devlet Arşivleri Genel Müdürlüğü, Osmanlı Arşivi Daire Başkanlığı. Yayın Nu: 134. – İstanbul, – 2014.

²Arşiv Belgelerine Göre Osmanlı'da Gösteri Sanatları / Proje yön. Uğur Ünal, TC Başbakanlık Devlet Arşivleri Genel Müdürlüğü Osmanlı Arşivi Daire Başkanlığı. Yayın nu: 138. – İstanbul: Bion Matbaacılık, – 2015.

Along with archival materials, the study also engages memoirs works of epistolary literature, such as biographies, and autobiographies, letters, travel notes, etc. This category of sources made it possible to trace the process of the formation of the personality of a Turkish intellectual from various perspectives. Memoirs of representatives of the Turkish intelligentsia, such as, for example, the work by the owner of an advanced for its timemagazine the Serveti-Funun (Servet-iFünunMecmuası) Ahmed Ihsan Tokgöz "My Publicist Memoirs", or by the Turkish prose writer and playwright Khalid ZiyaUshaklygil "Forty Years"⁴, letters by a prominent representative of the newTanzimat literatureNamyk Kemal⁵, a biography of one of the significant figures of the reforms of the Tanzimat era AhmetJevdet Pasha, written by his daughter, a bright representative of the young Turkish intelligentsia, Fatma Aliya Topuz⁶ and others, made it possible to look at the process of forming the personality of a Turkish intellectual from so called the inside and identify events and phenomena that had a special impact on the formation of the personality of a representative of the emerging intelligentsia. Memoirs and travel notes by representatives of other nationalities, such as, for example, the English writer and traveler Julia Pardoe⁷, the English journalist Grace Ellison⁸, the French

³Tokgöz, A.İ. Metbuat Hatıralarım (1888-1914) / haz. Necati Tonga. – Ankara: Çolpan Kitap. – 2020.

⁴Uşaklıgil, Z.H. Kırk yıl / Z.H.Uşaklıgil. – İstanbul: İnkilap Kitabevi. –1987.

⁵Namik Kemal'in Hususi Mektuplari: [4 cilt] / haz. F.A. Tansel. – Ankara: Türk Tarih Kurumu, – c. I: İstanbul, Avrupa ve Magosa mektupları, 2. bsk. – 2013; Namik Kemal'in Hususi Mektuplari: [4 cilt] / haz. F.A. Tansel. – Ankara: Türk Tarih Kurumu, – c. III: Midilli mektupları, 2. bsk.– 2013; Namik Kemal'in Hususi Mektupları: [4 cilt] / haz. Fevziye Abdullah Tansel. – Ankara: Türk Tarih Kurumu, – c. IV: Rodos ve Sakız mektupları, 2. bsk.– 2013.

⁶Topuz, F.A. Ahmet Cevdet Paşa ve Zamanı / F.A.Topuz. – İstanbul: Pınar Yayınları, – 1994.

⁷Pardoe, J. Beauties of the Bosphorus. Views of Constantinople / J.Pardoe. – London: byGeorgeVirtue, – 1838; Pardoe, J. The City of the Sultan; and domestic manners of the Turks, in 1836: [in 3 volumes] / J.Pardoe. – London: Henry Colburn pub., – Vol. I. –1837.

aristocrat Baron de Tott⁹, one of the greatest poets of French romantism and a member of the French Academy Alphonse de Lamartine¹⁰, Russian orientalist and traveler Constantine Bazili¹¹, the American scientist James DeKay¹² and others who traveled to the Ottoman Empire and had direct contacts with representatives of the Turkish intelligentsia made it possible to see the process from the outside, through the eyes of representatives of Western cultures, which in turn made it possible to recreate a more objective picture of the subject of research.

A special place among the sources used in the dissertation is occupied by treatises on the political, economic, cultural and social state of the Ottoman Empire, written by contemporaries of those events. The work by the French historian Jean Henri Ubichini "The current state of the Ottoman Empire"¹³, published in 1877, military officer and orientalist Mikhail Ladyzhensky "A look at European Turkey and the environs of Constantinople in topographical and military terms, with the addition of a description of the main decisions of the Ottoman Empire" (1828)¹⁴,Russian Orientalist-TurkologistVasily Smirnov "Turkish civilization, its schools, softas,

¹⁰Lamartine, A. Voyage en Orient 1832-1833 / A.Lamartine. – Paris: C.Gosselin, – 1843.

¹¹ Базили, К. Очерки Константинополя / К.Базили. – СПб.: тип. Н. Греча, – 1835.Часть первая; Базили, К. Очерки Константинополя / К.Базили. – СПб.: тип. Н. Греча, –1835. Частьвторая.

¹²De Kay, J.E. Sketches of Turkey in 1831-1832 by an American / J.E.De Kay. – New-York: J.&J. Harper, – 1833.

¹³Убичини, А. Современное состояние Отоманской империи / А.Убичини. – СПб.: тип. О.И.Бакста. – 1877.

⁸Zeyneb Hanoum. A Turkish Woman's European Impressions, edited & with an introduction by Grace Ellison / Zeyneb h. – London: J. B. Lippincott Company, – 1913.

⁹Tott, F. Memoirs of Baron de Tott containing the state of the Turkish Empire and the Crimea, During the late war with Russia. The Second Edition: [In two Volumes] / F.Tott. – London: printed for G.G.J. and J.Robinson, Pater-Noster-Row, –Vol. I. – 1786.

¹⁴Ладыженский, М. Взгляд на Европейскую Турцию и окрестности Константинополя в топографическом и военном отношении, с присовокуплением описания главнейших постановлений Оттоманской империи / М.Ладыженский. – СПб.: тип. Карла Крайя, – 1828.

libraries, printing" (1876)¹⁵,English economist Thomas Thornton "The Present state of Turkey or a description of the political, civil, and religious constitution, government and laws of the Ottoman Empire" (1807)¹⁶, British Ambassador James Porter "Turkey; its history and progress: from the journals and correspondence of Sir James Porter, fifteen years ambassador at Constantinople" (1854)¹⁷,Hungarian orientalist Herman Vambery "Essays on the life and customs of the East" (1876)¹⁸, French diplomat Edward F. Engelhardt "Tanzimat and Turkey"¹⁹ and others, provide us with valuable information for understanding the socio-political conditions in which the Turkish intelligentsia was formed.

The work on the topic of the dissertation also engaged a rather extensive scientific literature in Azerbaijani, Turkish, English, French and Russian. So, in some studies of Turkish scientists, such as, for example, the fundamental works by NiyaziBerkes "The Development of Secularism in Turkey"²⁰, Khalil Inalcik and Mehmed Seitdanlyoglu "Tanzimat"²¹, ReshatKainar "Mustafa Reshid Pasha and Tanzimat"²², Osman Ergin "History of Education

¹⁵Смирнов, В. Турецкая цивилизация, ея школы, софта, библиотеки, книжное дело. Из поездки в Константинополь летом 1875 г. // – Спб.: Вестник Европы. Журнал истории, политики, литературы, – 1876. Том 6, Книга 9.

 $^{^{16}}$ Thornton, Th. The Present state of Turkey or a Description of the political, civil, and religious constitution, government, and laws of the Ottoman Empire / Th.Thornton. – London: J.Mawman, – 1807.

¹⁷Porter, J. Turkey; its history and progress: from the journals and correspondence of Sir James Porter, fifteen years ambassdor at Constantinople / J.Porter. – London: Hurst and Blackett, – 1854.

¹⁸Вамбери, Г. Очерки жизни и нравов Востока / Г.Вамбери. – Спб.: изд. В.Ковалевскаго, – 1876.

¹⁹Engelhardt. Tanzimat ve Türkiye / Engelhardt. – İstanbul: Kaknüs yayınları, – 2017.

 $^{^{20}\}mbox{Berkes},$ N. The Development of Secularism in Turkey / N.Berkes. – London: C.Hurst& Co. Publishers, – 1998.

²¹İnalcık, H. Tanzimat. Değişim sürecinde Osmanlı imparatorluğu / H.İnalcık, M.Seyitdanlıoğlu – İstanbul: Türkiye İş Bankası Kültür Yayınları, – 2008.

²²Kaynar, R. Mustafa Reşit Paşa ve Tanzimat / R.Kaynar. – Ankara: Türk Tarih Kurumu Basımevi. – 2010.

in Turkey"23, Mehmed Kaplan "Mustafa Reshid Pasha and a new type of an intellectual"²⁴, presents a generalized picture of the process of formation of the Turkish intelligentsia as a part of a grandiose process of modernization of the empire, inextricably linked with the Tanzimat reforms and on the example of the life of individual representatives of this social group. For a complete understanding of this process, it became necessary to refer to additional literature. The study of a number of aspects of this research made it necessary to turn to more specialized scientific literature on the history of certain types of art, culture, literature, and architecture in Turkey in the 19th century. In instance, the works on the study of the history of Turkish theater, the origin and development of acting in Turkey, help to research such sociocultural habits of representatives of the young Turkish intelligentsia as visiting the theater, its theatrical preferences and tastes. In particular, many fundamental works on the history of Turkish theater are written by the famous Turkish theater and culture researcher Metin And²⁵. The life and work of individual representatives of the Turkish intelligentsia are studied in the frame of scientific works on the history of Turkish literature of the Tanzimat era²⁶. From this point of view, the works by the famous Turkish literary critic Mehmet Kaplan²⁷are of special significance. The question of the mutual impact between Turkish and Western fine arts, the impact of educational reform on the emergence of a new generation of Turkish artists among the young Turkish intelligentsia of the 19th century are work by the Azerbaijani researcher reflected in the

²³Ergin, O. Türkiye Maarif Tarihi: [Cilt 1-2] / O.Ergin. – İstanbul: Eser Neşriyat, – 1977.

 $^{^{24}}$ Kaplan, M. Mustafa Reşid Paşa ve yeni aydın tipi $\prime\prime$ – Ankara: Mustafa Reşid Paşa ve Dönemi Semineri Bildirileri, – 1985.

²⁵And, M. Başlangıcından 1983'e Türk Tiyatro Tarihi / M.And. – İstanbul: İletişim Yayınları, – 2019; And, M. Tanzimat ve Istibdat Döneminde Türk Tiyatrosu / M.And. – Ankara: Türkiye İş Bankası Kültür Yayınları, – 1972.

²⁶Tanziman Edebiyatı / haz. Z.Önder [ve b.]. – Ankara: Hayat Sağlık ve Sosyal Hizmetler Vakfi, Ankara Şübesi, Edebiyat Araştırmaları Koordinatörlüğü, – 2017.

²⁷Kerman, Z. Kaplan, Mehmet // – İstanbul:TDV İslâm Ansiklopedisi, – 2001. Cilt 24,

EhtibarMammadov "Turkish Caricature"²⁸. The formation of a new Turkish intelligentsia not only from the bureaucratic, but also from the military environment can be traced in the fundamental work on the history of military schools in Turkey by Doctor of Historical Sciences Tahsin Unal "History of the Military Academy"²⁹. At the same time, separate events that influenced the formation of the Turkish intelligentsia in the 19th century were studied within the framework of the political history of the Ottoman Empire. For example, in the book "The Longest Century of the Empire" by IlberOrtaily³⁰, Stanford Shaw "History of the Ottoman Empire and Modern Turkey"³¹, Donald Quataert "Ottoman Empire 1700-1922"³², Gabon Agoston "Encyclopedia of the Ottoman Empire"³³, Azerbaijani historianFarukhShabanov "State system and the legal system of Turkey during the Tanzimat period"³⁴. Aron Novichev"History of Turkey. In 4 Volumes"³⁵ and other authors, one can find a description of the main political and social events that played a significant role in the process of modernization of the state.

Data on the relations between the Turkish and Azerbaijani intelligentsia at the beginning of the 19th century can be gleaned from the letters of the great Azerbaijani writer-playwright Mirza

²⁸ Мамедов, Э.Г. Турецкая карикатура / Э.Г.Мамедов. – Баку: Элм, – 1992.

²⁹Ünal, T. Harp Okulu Tarihi / T. Ünal. – Ankara: Berikan Yayınevi. – 2001.
³⁰Ortaylı, I. İmparatorluğun En Uzun Yüzyılı / I.Ortaylı. – İstanbul: Timaş Yayınları. – 2014.

³¹Shaw, S. History of the Ottoman Empire and Modern Turkey: Volume 2, Reform, Revolution, and Republic: The Rise of Modern Turkey 1808-1975 / S.Shaw, E.K.Shaw. – Cambridge: Cambridge University Press, – 1977.

³²Quataert, D. The Ottoman Empire 1700-1922 / D.Quataert. – Cambridge: Cambridge University Press, – 2005.

³³Ágoston, G. Encyclopedia of The Ottoman Empire / G.Agoston, B.Masters. – New York: Facts On File, Inc. – 2009.

³⁴Шабанов, Ф.Ш. Государственный строй и правовая система Турции в период Танзимата / Ф.Ш.Шабанов. – Баку: Наука, – 1967.

³⁵Новичев, А.Д. История Турции II. Новое время. Часть первая (1792-1839) / А.Д.Новичев. – Ленинград: Издательство Ленинградского университета, – 1968.

Fatali Akhundov³⁶, where in correspondence with the leading personalities of the era, he shares his impressions of his trip to the Ottoman Empire and meeting with representatives of the Ottoman Scientific Society(Cemiyyet-i İlmiyye-i Osmaniyye). The memoirs by the first woman lawyer in Turkey, the daughter of the famous Azerbaijani and Turkish public figure Ahmed bey Agaoglu, SureyyaAgaoglu³⁷, allow us to trace the process of interaction the later generation of Azerbaijani between and Turkish intelligentsia. Moreover, such important research works as "Fraternal Assistance and the Baku Muslim Charitable Society" by Betul Aslan³⁸, "Ahmed Agaoglu in Turkish Public Thought and Political Life" by GulserenAkalyn³⁹, "Ali-bekHuseynzade" by Ali Turan⁴⁰ and others, make it possible to trace the process the formation of the Turkish intelligentsia of a later generation, mutual influence and the role of the Azerbaijani and Turkish intelligentsia in the process of forming the national intelligentsia of both countries.

Object and subject of the research: The object of this research is the stratum of the Turkish intelligentsia in the Ottoman society of the 19th century.

The subject of this study is the processes of a social and cultural nature that took place in the Ottoman Empire in the 19th century and served as prerequisites for the formation of the Turkish intelligentsia as an independent social stratum.

Objectives of the study: The purpose of this work is to study the prerequisites for the formation of the Turkish intelligentsia of the XIX century. For this, the following objectives were set:

- identification of the concept of "intelligentsia" in the context of the historical realities of the Ottoman society of the 19th century;

³⁶Ахундов, М.Ф. Избранные философские произведения / М.Ф.Ахундов, ред. Ш.Ф. Мамедова. – Баку:Азернешр, – 1982.

³⁷Ağaoğlu, S. Bir ömür böyle geçti / S.Ağaoğlu. – İstanbul: İshak Basımevi, – 1975.

³⁸Aslan, B. Kardaş kömeği (yardımı) ve Bakü Müslüman Cemiyet-i Hayriyesi / – Ankara: Atatürk Kültür Merkezi Başkanlığı Yayınları, – 2000.

³⁹Akalın, G. Türk düşüncə və siyasi həyatında Əhməd Ağaoğlu / G.Akalın. – Bakı: AzAtaM, – 2004.

⁴⁰Turan, A. Əli bey Hüseynzade / A.Turan. – Moskva: «Salam press», – 2008.

- analysis of the processes of modernization and socio-cultural transformation of the Ottoman society in the 18th and especially the 19th centuries;

- identifying, on the basis of a socio-historical analysis, the main stages in the formation and development of the Turkish intelligentsia in the 19th century;

- the establishment of characteristic features that make it possible to single out the Turkish intelligentsia as a special social stratum in the Ottoman society of the 19th century;

- revealing the results of the formation of the Turkish intelligentsia of the 19th century.

Research methods: Since the subject of this study is the sociocultural prerequisites for the formation of the Turkish intelligentsia of the 19th century, the main focus was turned to the historical, social, cultural processes that contributed to its emergence and development throughout the 19th century. The main theoretical methods of scientific research applied in this work are: the principle of historicism to determine the cause-and-effect relationships between changes in the public life of the empire and reform activities: structural-diachronic method for determining the stages of the formation of the Turkish intelligentsia; a comparative method for determining similarities in the formation of the national intelligentsia of various countries; analysis applied in the selection and study of individual parts of the phenomenon; synthesis, which allowed to combine the results of all previous methods. Moreover, a comparative historical analysis made it possible to identify causal relationships between individual events and phenomena. All of the above methods in the work are interconnected, organically complement each other and meet the objectives.

The main provisions:

1. The Turkish intelligentsia, as a social stratum, arose and evolved as a result of the objective conditions of the historical development of the Ottoman society;

2. The Turkish intelligentsia was largely a product of internal transformations and reforms in the Ottoman Empire, caused by the

need to adapt the Ottoman Empire to the new historical conditions and challenges that emerged in the 19th century;

3. At the same time, the emerging Turkish intelligentsia itself was the bearer and distributor of a new worldview, ideas and knowledge that spread in Ottoman society under the influence of Europe and differed from the traditional system of values inherited from the Middle Ages;

4. New knowledge was acquired by representatives of the future intelligentsia, mainly as a result of contacts with European civilization and borrowing its achievements, and later through education in new-method schools and educational institutions;

5. Along with the acquisition of new standards and norms of social and cultural life, which externally and internally distinguished the intelligentsia as a special stratum from other, more traditional strata of society, it also became the bearer of the mission of modernizing the whole society;

6. Along with internal factors to impact the process of formation of the Turkish intelligentsia in the XIX century, the external factors related to the growth of the political, economic and cultural dominance of Western countries and, conversely, the transformation of the Ottoman Empire to a large extent into the periphery of the world capitalist system, also had on it a serious influence;

7. There are three main stages of formation and development of the Turkish intelligentsia in the XIX century, each of which corresponds to a certain degree of evolution of a given social stratum and is represented by three main generations - of the beginning, middle and end of XIX century.

Scientific novelty of the study: The scientific novelty of this study is expressed in a comprehensive study of the prerequisites and the process of formation of the Turkish intelligentsia in the 19th century, which was born in Ottoman society under the influence of various internal and external factors, and the identification of patterns in the development of this process. Many works have been written in Turkish and world historiography on various aspects of the formation of the Turkish intelligentsia. However, in general, the Turkish intelligentsia of the 19th century in the works of researchers acts as one of the additional objects of research in the framework of studying the Tanzimat reforms and the process of state modernization. In this dissertation, for the first time, an attempt was made to summarize these data and more comprehensively highlight the prerequisites for the emergence and development of the Turkish intelligentsia in the context of social and cultural reforms in the Ottoman Empire in the 19th century. Raising the question of studying, as an independent object of research, the prerequisites for the formation of this social strata, the process of its origin and development, is new in research literature, and not only in Azerbaijani oriental historiography.

Approbation and application: The main provisions of the dissertation were reflected in the author's speeches and reports at republican scientific and practical conferences and interuniversity symposia, in publications on the pages of scientific journals included in the register of the Higher Attestation Commission of Azerbaijan, as well as in articles published in scientific collections published abroad.

Place of submission of the dissertation: The dissertation was submitted to the Department of History and Economics of Turkey of the Institute of Oriental Studies after Academician Z.M. Bunyatov ANAS.

Dissertation structure: The dissertation consists of an introduction, three chapters, a conclusion and bibliography. The general number of characters without spaces equals to 214 539 symbols (title page and bibliography not included). Content -1825 symbols, Introduction -15463 symbols, Chapter I -68619 symbols, Chapter II -71331 symbol, Chapter III -53215 symbols, Conclusion -4086 symbols.

II. MAIN CONTENT OF THE DISSERTATION

The structure of the dissertation is determined by the purpose and objectives of the dissertation and consists of an Introduction, three chapters in which the objectives were met, a Conclusion and the bibliography. The **Introduction** of the dissertation reflects the substantiation of the relevance of the topic and the degree of its research; presents a generalized review and characterization of the studied sources and literature; the definition of the object and subject, goals and objectives, as well as research methods is presented; the main provisions of the defense are formulated in 7 statements; the substantiation of scientific novelty, theoretical and practical significance of the study is given; approbation and application of the work are indicated, as well as the organization where the dissertation is submitted for defense; in the end, information is given on the volume of structural units and the total amount of work in signs.

Chapter I of the presented dissertation work is entitled **"Reform Movements in the Ottoman Empire**" and consists of three paragraphs. It deals with the analysis of the features of the socio-economic, political and cultural conditions that prevailed in the Ottoman Empire by the beginning of the 19th century, the first reform initiatives and their consequences for the empire and society.

As known, by the early 19th century, the Ottoman Empire began to clearly realize its lagging behind other world powers. For a number of previous centuries, confidence in their own military superiority and relative economic self-sufficiency did not cause the Ottoman rule to feel the need for active cooperation with other powers, which led the empire to a certain degree of isolation. However, subsequently the rapid growth of the military and economic power of the leading Western powers, the expansion of their colonial policy, the gradual lag of the Ottoman Empire in the economic and military spheres and, accordingly, its inevitable subsequent military defeats, forced the Empire to pay closer attention to the change in the international situation and start searching for reasons for their own failures. Thus, the country was laying the intellectual foundation for the future process of fundamental reforms, the essence of which was the so-called "modernization" of society.

The first paragraph of **Chapter I** "Early Reform Movements in the Ottoman Empire in the 18th-19th Centuries" deals with the beginning of awareness by part of the Ottoman elite on the need for military and partly socio-political transformations in the country in the Western manner and the first attempts in this direction. These processes were reflected in a number of "*risala*" - scientific treatises on the reasons for the country's backwardness, where the main one, among others, was indicated as "ignorance" in the affairs of other countries and the weak organization of the army, which did not meet the standards of that time. To "correct this shortcoming" in the second half of the 18th century, embassies were sent to all the major capitals of the world powers and an attempt was made to carry out some reforms. These steps were the prerequisites for the emergence of a new view on the system of international relations and the place of the Ottoman Empire in it, which led to the transformation of society's views on the traditional way of life and gave rise to a tendency to the so-called "Europeanization".

In the second paragraph of Chapter I called "Examples of the "Europeanization" of Turkish society before the Tanzimat reforms" examples are given that indicate that the "modernization" and "Europeanization" of the Ottoman society did not occur in an instant, but occurred gradually, as needed, with the development of society and the country's relations with the outside world. It is known that from early times, trade relations attracted representatives of various European peoples to the Ottoman Empire, who brought with them new customs, objects and cultural phenomena, which contributed to active cultural mutual influence.Many specialists in various fields, officers, gunsmiths, engineers (the example is widely known when, from the time of the conquest of Constantinople by Sultan Mehmed II the Conqueror (1432-1481), the Hungarian weapon engineer Urban was invited by him to service and designed for sultan the famous cannon Basilica), or simple artisans and merchants, arrived in the Ottoman Empire, settling in various regions of the country, where they continued to live and spread their knowledge and customs among the local population. However, the early changes in Ottoman society, which took place very slowly, and the desire to preserve their traditional way of life until the end of the 18th century, made the modernization that took place "on the ground" hardly noticeable on a state scale. And only at the end of the 18th century, when, along with new technical inventions in Europe,

when the first trains, steam-powered ships and factory machines, which produced relatively moreand much faster industrial products,began to appear, when the world itself began to change at a greater speed, the same the speed of change was also expected from the Ottoman Empire. Although the first attempt to radically change society was made by Sultan Selim III at the end of the 18th century, society became ready to respond to external incentives only during the reign of Mahmud II by the beginning of the 19th century.

The third paragraph of Chapter I"The Impact of Education on the Formation of the Early Turkish Intelligentsia" deals with the study of the one of the first reforms in the modernization process in the Ottoman Empire in the early 19th century - the reform of education, and as its result - the beginning of the formation of the first generation of the Turkish intelligentsia.

In the Ottoman Empire, from the end of the 18th century, when new socio-political conditions gave rise to the needs of the Ottoman society for "new knowledge", these needs prompted the country's administration to revise the existing traditional education system. The empire, "which had a militaristic character"⁴¹ and saw the cause of all its territorial, economic and social upheavals, as well as military defeats, in the weakening of the army, was the first to reform the military sphere.New educational institutions began to open, where practical knowledge was taught in the field of secular sciences, in particular geometry, trigonometry, ballistics and mechanical drawing. For example, in 1775, the Mathematical School at the Admiralty (Hendesehane) appeared, where student were taught various technologies of the military industry. Later, it became known as the Admiralty Engineering School (TersaneMühendishanesi). In 1806 it was renamed the Imperial Naval Engineering School (Mühendishane-iBahri-iHümayun). Moreover, the first engineering school opened by the decree of Sultan Selim III in 1790 -"Mühendishane-iSultani'ye", which in 1793 was renamed to the Imperial School of Military Engineering (Mühendishane-i BerriiHümayun). Moreover, in 1793 another engineering school appeared

⁴¹Ünal, Т. Harp Okulu Tarihi / Т. Ünal. – Ankara: Berikan Yayınevi. – 2001., стр. 1.

- the New School of Engineering (*Mühendishane-iCedid*). Thus, the aforementioned schools produced specialists whose knowledge was subsequently applied not only in military, but also in civilian life. Many graduates of these schools in the second half of the 19th century participated in the construction of industrial enterprises, the installation of a telegraph network, and the construction of railways. Based on their experience, the Telegraph School (*TelegrafMektebi*) and the Industrial School (*Sanayi Mektebi*) were opened. In 1874-75, the first School of Civil Engineering (*MülkiyeMühendisMektebi*) was founded as a branch of the Imperial University (*Darülfünun-i Sultani*). In 1839, the Imperial School of Medicine (*Mekteb-iTibbiye-iAdliye-iŞahane*) was opened.

Although in the first half of the 19th century, during the years of the Tanzimat reforms, the results of the first transformations in the field of military education were tried to leveled out by the tireless efforts of conservatives, it was these military educational institutions that would later form a solid foundation for the further development of civil education in the empire: graduates of military educational institutions were recruited as teachers for future secular schools. In the memoirs of their school years, a number of representatives of the Turkish intelligentsia, for example, such as the publicist IhsanTokgoz or the writer HalitZiyaUshaklygil and others, you can find lines where they write about their teachers of mathematics, physics or natural sciences, as about military people who worked at school along with military service.

Later, the next task set before the state was educating a newly formed bureaucracy in a modern way, capable of solving the problems of the time. Along with new educational institutions and state structures, from the first quarter of the 19th century, on the initiative of Sultan Mahmud II, young Ottomans began to be sent abroad to study at the expense of the state, and since 1830 this process has already acquired the status of state policy. On his own initiative, the Bureau of Translators - "Tercümeodası",was soon founded and headed by the former teacher of the engineering school Yahya Effendi. His duties included not only the translation of official documents, but also the training of new translators from Turkish youth. So, gradually, the study of foreign, especially European languages became widespread in the empire, which subsequently brought with it the habit of reading foreign literature, along with which new ideas and views on the traditional way of life in the empire began to enter the country.

In addition to the social sphere, the fruits of the educational reform became also noticeable in culture, in particular in the visual arts. Thus, it is known that most of the Ottoman avant-garde artists of the 19th century came from among the military. This was affected by the fact that these artists, while in military service or preparing for it, studied geometry, cartography, and drawing by the nature of their activity, thereby laying the foundations for such a drawing technique that broke the traditional models of miniature art. Some of the officers sent to France for training in the profession returned home with ideas about the technique of working with oily paints. So, in the empire an interest in painting arose. And by the second half of the 19th century, Sultan Abdul-Aziz sent two artists - former military men - Suleiman Seyid Bey and Ahmed Pashato France for study. Osman Hamdi Bey (1842-1910), who at the age of 18 went to Paris to receive a law degree, also played a special role in the dissemination of fine arts in the Ottoman Empire. Along with law he actively studied the basics of fine arts. Upon returning home, it was he who initiated the creation in 1882 of the school of fine arts. Subsequently, this school became the Academy of Arts, and in 1983 became the Mimar Sinan University. Now this educational institution is called the Mimar Sinan University of Fine Arts (Mimar Sinan Güzel Sanatlar Üniversitesi).

Thus, the reform of education, the emergence of new schools, the acquisition of knowledge in the field of secular sciences, communication with foreign teachers, moreover, the regular trips of young Ottomans abroad ensured the influx of a large amount of "new knowledge" into the country. With the growing number of modern educated people, increasing contacts with foreigners in various fields of activity, the return of the first graduates from abroad with new everyday habits and views to their homeland, the face of Ottoman society will gradually change. These changes are the main focus of **Chapter II**, which is entitled as **"The Social and Cultural Transformation of the Ottoman Society"** and consists of three paragraphs.

The first paragraph of Chapter II"The Emergence of the Categories "Alafranga" and "Alaturka"" deals with the process of formation in the traditional Ottoman society of such social groups as "Alafranga" and "Alaturka". The word "alafranga" is the Turkic "a la franque" - "frankish". The "Frankish" society of Istanbul, which consisted of employees of embassies, consulates, families of dragomans and merchants from various European nations, led a different from the traditional Ottomansway of life. Therefore, everything that personified their manners, entertainment, appearance, etc., was called by locals "a la Frank" - "Frankish". Later, when their manners began to be adopted by the local population, those who imitated them began to be rewarded with the same epithet. This means that the possession of certain "attributes" of the life of the "Franks" turned the traditional Ottoman into an "alafranga". Accordingly, those who, in contrast to the latter, still adhered to the traditional lifestyle, were called "alaturka".

The transformation that took place by the second half of the 19th century also brought with it new rules of behavior in a gradually transforming society. The transition to the "alafranga" way of life posed a previously unknown task for the Turkish intelligentsia familiarization with European etiquette. The second paragraph of Chapter II "New Etiquette" deals with the question of adaptation of Western habits by traditional Ottoman society, which entailed the need to revise traditional norms of behavior. And, since the main social life of the Ottoman until the middle of the 19th century took place mainly within the confines of his own home, changes were primarily made in everyday life, domestic manners and traditional Ottoman housekeeping. Thus, the entry of European forms into the hidden world of the Ottoman home began with the use of European furniture, a new organization of rooms and a change in interior decoration. The brightest example of such transformations can be considered the alteration of thetraditional for the Ottoman house "selamlyk" room into a "salon" of the Western type. From now on,

guests began to gather not only for light entertainment, but also to discuss current news and events. Thus, the culture of salons came to the Ottoman Empire, which, as an integral part of the "Alafrang" lifestyle, began to actively develop in the Ottoman Empire by the middle of the 19th century.

The third paragraph of Chapter II,"New Socio-Cultural Norms of Behavior in Ottoman Society" deals with the new sociocultural habits emerging in the young Ottoman society. Along with the above-mentioned changes, such traditional Western social habits as visiting the theater, reading novels, issuing newspapers and magazines, etc., also came to the empire.

With the study of foreign languages at the beginning of the 19th century, interest in foreign literature also increased. The new ideas read in these books, numerous conversations and discussions in the fashionable those days intellectual salons of the country in some cases had a great influence on the young Turkish intelligentsia, giving rise in them to a desire to act. As her main "tool" to act with the young Turkish intelligentsia chose education. Its representatives organized intellectual salons and "scientific societies", evenings and meetings at which discussions were held on various modern social and philosophical topics. As time passed, the problem of general education began to be discussed more and more often in these salons. The first small step for mass education was the translation of works by Western authors and the publication of articles in newspapers. Thus, young intellectuals tried to pass their knowledge to a bigger audience. At the same time this was the way new genres entered Turkish literature. Genres such as the novel, story, play, critical article, memoirs and letters, previously unknown to the traditional Ottoman literature of the divan, were subsequently the driving causes of changes in the socio-cultural habits of society. For example, the desire to bring contemporary issues to a wider audience prompted Agyah-efendi, a student of the Bureau of Translators, to open the first private newspaper in Turkish in the Ottoman Empire, Tercümân-1 Ahvâl (Event Interpreter). After him, many young representatives of the intelligentsia began to publish their own press.

From now on, the press has become one of those platforms from which enlightening and innovative ideas were sounded.

Anotherplatform to serve the same purpose was theater. Theater as a "form of social consciousness" and "a way of artistic reflection of reality"42 at the initial stage of its development in the Ottoman Empire became another tool for disseminating new knowledge and views among the people. Reading newspapers and books required tools and skills that, despite the reforms and efforts of individuals to instill them in the population, until the beginning of the 20th century were not possessed by everyone. However the "demonstrative" arts had deep-rooted traditions in the country. For example, the shadow theater Karagyoz and "ortaoyunu" - folk performances existed in the empire long before the 19th century and for many centuries served as a "mouthpiece" of people's opinion. Soon, thanks to the leading public figures of that time, such as, for example, Ibrahim Shinasi, Namyk Kemal, Ahmed Vefik Pasha, SamipashazadeSubkhi and others, plays in Turkish began to appear, and this case increased interest in this formof art. The appearance of a sufficient number of works for the stage subsequently raised the question of creating Western-style theater. With the construction of new theater buildings, the Western tradition of going to theaters began to develop in the Ottoman Empire as well. From now on, in the big cities of the country, in particular in Istanbul, Bursa and Izmir, regular performances were staged, troupes were created, and works were Thus, the new socio-cultural habits of the Turkish written. intelligentsia opened a new stage in the transformation of Turkish society, and served as prerequisites for the formation of a special type of personality - the Turkish intelligentsia.

ChapterIII of the presentdissertationwas namedas"**The personality of the representative of the Turkish intelligentsia**" and consists of three paragraphs. Itdealswithprerequisites, stagesandmainfeaturesofformation of the personality of the representative of the Turkish intelligentsia.

⁴²Театральная энциклопедия: [в 6 томах] / под ред. А. П. Маркова. – Москва: Советская энциклопедия, – т. 5. –1967., стр. 89

The first paragraph of Chapter III "The process of establishing of personality of the representative of the Turkish intelligentsia in the reflection of memoirs" allows us to follow the stages of formation of personality of the Turkish intellectual from the first person. Asisknown, the reforms of the early XIX century in the Ottoman Empire with its new socio-political programs, appearance of new socio-cultural concepts, development of new literature and the ideological-political movements, as well as with derived from all abovementioned a special type of behavior, including altered daily, domestic life styles, gave a rise to a specific direction of formation to the personality of the young Ottoman. The formation of the personality is a process of development and establishing of the personality of a man under the influence of external factors of social environment; it is "a purposeful development of the personality or its certain sides and qualities under the influence of education and upbringing, the process of establishing of the person as an subject and object of social relations"43.

Tofollowthisprocessbytheeasiestwayispossiblemainlyviamemoi rs.Indairies, autobiographies, biographies, memoirs, etc., authors often share with readers the hidden motives of their actions; tell about events, that left deep and special traces on author's inner world; describe processes or people, who they met on their way, and who defined or changed their choice of a life path.All these inner feelings and motivations allow us to look at well-known events from a new perspective, and it is this piece of information that will allow us to see the big picture that is very often not reflected in official documents. In Ottoman literature, such genre as memoirs appears only from the second half of the 19th century. Initially, the early Turkish intelligentsia published works describing contemporary historical events, supplying these works with their own comments and views. In such works, events played a major role, and their personalities act only as a prism through which it is proposed to look at these events. With time and the development of the genre in

⁴³Ермолаев, Ю.В. Формирование личности в контексте педагогической антропологии // – Москва: Фундаментальные исследования, – 2006. № 2, стр. 45

Ottoman literature, the nature of the narrative in memoirs changes, and now historical events begin to appear as factors accompanying the formation of their personality. It is the works of memoir literature of the second type that are indispensable sources for studying the stages and prerequisites for the formation of the personality of representatives of the Turkish intelligentsia at different stages of the development of Ottoman society in the 19th century.

The second paragraph of Chapter III. entitled "Prerequisites for the formation of the personality of different generations of the Turkish intelligentsia from the Tanzimat period to the end of the 19th century" deals with the three main generations of the Turkish intelligentsia of the 19th century. Thus, Mustafa Reshid Pasha, the initiator of the Tanzimat reforms and the author of the GulhaneHatt-i Sheriff, is presented in literature as the first representative of the emerging Turkish intelligentsia. He gathered around him the most talented representatives of the Turkish youth and in conversations explained the need for some changes in social traditions, which would later form the basis of the reform project. These young people would later become an active supporter and disseminator of these ideas of the Tanzimat reforms and make up the first generation of the emerging Turkish intelligentsia.

To pass the baton to the next generation, new method schools will be opened, where a new generation of intellectuals will be raised, with their own views on the needs of the country. After all, it is known that the middle of the 19th century will bring a new turn in the political life of the empire with its demands for a constitutional monarchy, which will require corresponding carriers and disseminators of new ideas that could meet needed modern requirements.

Further, under the influence of the political ideas of the middle of the 19th century, a new generation of Turkish intelligentsia of the late 19th century will grow up, which will go even further in its demands, and already at the beginning of the 20th century, the Republic of Turkey will be created by its efforts. Representatives of the Azerbaijani intelligentsia will also play a significant role in the development of the socio-political thought of the Ottoman Empire at the end of the 19th century.

The third paragraph of Chapter III deals with the relations of the Azerbaijani and Turkish intelligentsia of the 19th century and was titled respectively - "The relations of the Turkish and Azerbaijani intelligentsia in the 19th century". This paragraph reflects the facts of contact between representatives of the two cultures throughout the 19th century, starting with Mirza Fatali Akhundov's visit to Istanbul in 1863 with the aim of presenting the project of a new alphabet to the Ottoman Scientific Society (Cemiyyet-illmiyye-iOsmaniyye), to vigorous activity in the sociopolitical life of the Ottoman Empire of Ahmed-bekAgaoglu and AlibekHuseynzade in the last decade of the 19th century.

In the Conclusion of the present dissertation, the main results of the research are given and the conclusions are systematized. As a result of the study, it was found out that understanding of the problem of the formation of the intelligentsia, as an independent social stratum in the social structure of the 19th century Ottoman Empire, has an important historical, sociological and cultural significance. Throughoutthe 19th century, the intelligentsia was considered the main progressive and thinking stratum of society, capable of influencing the course of the historical development of its people and country. The study of this problem brings with it the inevitability of studying a number of other related questions. Knowledge in the cultural, social, and political environment in which the personality of the Turkish intellectual was formed, the specifics of the political situation in the country in a particular historical period, as well as national and educational traditions, makes it possible to identify the characteristic features of the intellectual and moral character of a representative of the Turkish intelligentsia, which in turn, gives the opportunity to formulate the essential features of the intelligentsia of the any studied society. An analysis of the negative and positive features of the process of formation of the studied stratum makes it possible to apply the acquired knowledge in a practical plane, namely in educational and training

programs designed with the aim of educating new generations of the national intelligentsia.

There are numerous approaches to the definition of the concept of "intelligentsia" - sociological, philosophical, literary, socioeconomic (in this case, such definitions as "thinking proletarian", "bourgeois intelligentsia", etc. are used); definitions tied by researchers to certain eras and the social development of society, to the class division of society, etc. The analysis of the concept of "intelligentsia" revealed, that the meaning of this word has been greatly rethought over time. In the context of the realities of the Ottoman society in the 19th century, the most appropriate definition for the Turkish intelligentsia of that era is the definition derived in the researched period, in the 19th century. Traditionally, the intelligentsia included representatives of society for whom universal human values prevailed over class ones, and such categories as freedom, honor, respect, and justice were at the heart of their activities.

The first representatives of the Turkish intelligentsia were people who came from completely different social background, from representatives of the spiritual environment, such as Ahmed Cevdet Pasha, KekhudazadeArif Efendi, Ataullah Mehmed Shanizade, the military environment, such as Osman Hamdi Bey, to representatives of the palace bureaucracy, such as the ambassador of the Ottoman Empire in London, Ismail Farukh-efendi, one of the main initiators of the Tanzimat reforms Mustafa Reshid Pasha, and others. They considered their main task to be the enlightenment of the people and the dissemination of "new knowledge" acquired by them, whether in new method schools or abroad, where they ended up on duty or for study. Due to their direct efforts the modernization process in the Ottoman Empirewas launched, although it systematically encountered various obstacles on its way.

The research on the stages of formation and development of various generations of the Turkish intelligentsia of the 19th centuaryshows that the latter went through the stages characteristic for this process, which are found in the development of the intelligentsia in various other societies. For example, as well as the Tanzimat reforms (1839-1876) in the Ottoman Empire, in Egypt - the reforms of Muhammad Ali (20s of the XIX century), in Iran - the reforms of Tagi Khan (1848-1851), in Japan - the Meiji Restoration (1868-1889), etc., starting as military-economic reforms after the palace administration realized the country's weakness in the face of the threat of the military-technical development of the West, they soon spread to the social sphere and led to the emergence of a new stratum - the intelligentsia. Moreover, it is also worth noting that the efforts of the Turkish intelligentsia in the XIX century to some extent will be a role model in some neighboring countries. The first eastern country that took the Tanzimat reforms as an example for the modernization of its own socio-political structure was Iran under the rule of the Qajar dynasty. Having been educated in the Ottoman Empire, some of the progressive people of Iranian society after returning to their homeland made attempts to apply this knowledge in practice. Thus, it is generally accepted that the reforms of Tagi Khan were inspired by the example of the Tanzimat reforms.

Thus, the Turkish intelligentsia in the 19th entuary overcame a long and difficult path of development. It was the main generator of advanced reformist ideas that provided the country with modern development and laid the foundation for the path it has followed and is following up to the present.

The content of the dissertation is reflected in the following publications:

- Aghayeva, N. The Ottoman Empire in the second half of the 19th century // -Romania: Universitatea Babeş-Bolyai, İnstitutul de Turcologieşi Studii Central-Asiatice Cluj-Napoca, «Studia et Documenta Turcologica», «Presa Universitară Clujeană», -2016. № 3-4, -s. 43-53.
- 2. Агаева, Н. Османская империя второй половины XIX века глазами турецкой эмигрантки (из писем Зейнеб-ханум) // -Вакı: AMEA Xəbələr (İctimai elmlər seriyası), -2016. № 2, -s. 125-133.
- Aghayeva, N. İmpact of Ottoman civilization to the world // -Gəncə: "2016-ci il Avropa gənclər paytaxtı", Avropa Gənclər Forumu, -2016, -s. 283-284.

- Агаева, Н. История Османской империи XIX века в западных мемуарах // -Baki: "Türkoloji elmi-mədəni hərəkatda ortaq dəyərlər və yeni çağırışlar", I Türkoloji Qurultayın 90 illiyinə həsr olunmuş beynəlxalq konfrans materialları, -2016. – s. 467-468.
- Агаева, Н. Об общественной мысли в Османской империи в XIX
 в. // -Bakı: "Müasir şərqşünaslığın actual problemləri ("Ziya Bünyadov qiraətləri" beynəlxalq elmi konfrans), -2017. –s. 168-169.
- 6. Агаева, Н. Значение мемуаров в изучении истории Османской империи XIX в. // Bakı: Azərbaycanda türk xalqları tarixinin tədqiqi və tədrisi məsələləri, Respublika elmi-praktik konfrans, BDU, -2017. –s. 123-126.
- 7. Агаева, Н. Предпосылки формирования новых взглядов на внешнюю политику в Османской империи в XVIII- начале XIX века // -Bak1: «Tarix və onun problemləri» jurnalı, -2019, № 4. –s. 77-80.
- 8. Агаева, Н. Трансформация Османского общества в первой половине XIX века. Появление категорий «алафранга» и «алатурка» // -Bakı: AMEA «Sosial Elmlər» jurnalı, -2021, № 1. –s. 66-74.
- 9. Агаева, Н. Влияние образования на формирование турецкой интеллигенции в первой половине XIX века // Bakı: Azərbaycan Dövlət Pedaqoji Universiteti «Tarix, İnsan və Cəmiyyət (elmi-nəzəri və elmi-metodik jurnal)», -2021, № 2 (32). –s. 3-10.
- 10. Агаева, Н. Появление новых социально-культурных привычек в османском обществе XIX века // -Bak1: Bak1 Avrasiya Universiteti «Sivilizasiya» jurnalı, -2021 № 4 (cild 10), -s. 96-102.
- Aghayeva, N. Z.M.Bunyadov and his role in the world Orientalism //

 Stockholm: International Scientific Symposium "The triumphant leader of the victorious people: Ilham Aliyev", -2023. –s. 327-331.

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Address: AZ1143, Baku, H.Javid Ave., 115.

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