TRAVELLERS, NATURAL PHILOSOPHERS AND HISTORIANS VISITING ARMENIA IN THE V CENTURY BC - XVIII CENTURY

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Since late 1970s the author began to study the geotectonic ideas of antiquity and Middle ages. In the mid - 1980s I came to a conclusion that only a thorough review and analyses of studies not only on natural philosophy, but also geographers, poets and play writers could give a chance for the complete understanding of the initial stages of geotectonic ideas.¹

Recently I began to study the initial phases of the geological ideas in Armenia,² as well as the writings of Armenian historians, poets and novelists, foreign travellers who visited Armenia and studies of the historians of geography, devoted to the latters (J. Baker, I.Yu. Krachkovskij, I.P. Magidovich etc.). In 2013 appear the studies of D.Yu. Beknazaryan and R. Galichyan dealing with this problem. Strikingly, in any of these studies is mentioned Xanthus, the Lydian historian of the V century BC, the first researcher of Armenia, and some other authors. Due to the specialization of the present author (history of geology), we shall limit our survey with the description of travels which could be useful for the historians of geography for their studies in the future.

In the article we shall focus on 58 travellers, natural philosophers and historians who visited Armenia from the V century BC until the end of the XVIII century. The study reaches until early XIX century, since exactly beginning from this period (Caucasian expedition of A.A. Musin-Pushkin, studies by F. Dubois de Montpéreux and H. Abich) a thorough geographical and geological study of Armenia took place. In our study are emphasized those authors who wrote about the natural phenomena or to its natural resources. It should be mentioned that in most cases we do not possess with full texts of authors (a task that must be done in the future).

Xanthus (V c. BC). A Lydian historian who wrote «that in many places he had seen a long way from the sea fossil shells, some like cockles, others resembling scallop shells, also salt lakes, Armenia, Matiana, and Lower Phrygia, which induced him to believe that sea had formerly been where the land now was.³ Some 100 years before Xanthus only Xenophanes of Colophon had expressed an idea that the fossil animals and floral remains found on earth proves that those parts were flooded by the sea.⁴ It should be mentioned that Xanthus was the first scholar who had come to the idea of Xenophanes in regard to Armenia. This idea became fundamental for the development of geological and palaeontological thought.

¹ Khomizuri 2002.

² Khomizuri 2016; Jrbashyan, Khomizuri, Harutyunyan 2017.

³ Strabo 1964, I, III, 4.

⁴ Hippolytus 1868: I, 14.

In the «Anabasis of Cyrus» **Xenophon** narrates about the famous retreat of 14,000 Greek army in 401 BC from Asia Minor. In two chapters he tells how the Greek army had proceeded through the territory of Armenia.⁵

Strabo (64/63 BC-24 AD). In his «Geography» the author tells that «he personally travelled from the western part of Armenia to the regions of Tirrhenia». Armenia is mentioned over 100 times, and the Chapter XIV of Book XI is devoted exceptionally to the geography and brief history of Armenia. In this chapter he wrote that «There are gold mines in Syspiritis near Caballa, to which Menon was sent by Alexander with soldiers, and he was led up to them by the natives. There are also other mines, in particular those of sandyx, as it is called, which is also called 'Armenian' colour, like chalcê. Strabo was he first who had studied the waters of Lake Van: «There are also large lakes in Armenia; one the Mantianê, which being translated means 'Blue'; it is the largest salt-water lake after Lake Maeotis, as they say, extending as far as Atropatia; and it also has salt-works. Another is Arsenê, also called Thopitis. It contains soda, and it cleanses and restores clothes; but because of this ingredient the water is also unfit for drinking".

Ammianus Marcellinus (IV c. AD). A Roman historian who in the late IV c. had participated in the war against Persians, i.e. on the territory of Armenia. In this study Armenia is mentioned 46 times, in the context of military operations. Indeed the information contained in the study of Ammianus is trustful, since he wrote that "So far as I could investigate the truth, I have, after putting the various events in clear order, related what I myself was allowed to witness in the course of my life, or to learn by meticulous questioning of those directly concerned".

Sallam at-Tarjuman (IX c.). An Arab traveller whose account of the 845 journey in Armenia was used by Ibn Khordadbeh (of Iranian descent).¹⁰

Ahmad al-Ya'qubi (IX c.). Arab historiographer, geographer and traveller. Until 873 he lived in Armenia and Khorasan (Iran). His study Kitab al-Buldan («Book of the Countries», 891) contains the description of Armenia, unfortunately of which only very few was preserved.¹¹

Abu Ishaq al-Istahri (850-934). In 930-933 he had travelled through Arabia, Syria, Egypt, Persia and southern regions of Armenia. The account of his travels appeared in the study Suwar al-Aqaaleem ("Shapes of the Climates").12

Al-Mas'udi (896-956). Arab historiographer and geographer who visited Armenia («The Meadows of Gold»).¹³

⁵ Xenophon 1951: Book IV, ch. IV-V.

⁶ Strabo 1964: II, V, 11.

⁷ Strabo 1964: XI, XIV, 9.

⁸ Strabo 1964: XI, XIV, 8.

⁹ Ammianus Marcellinus 1906-1908: XV.1.1.

 $^{^{\}rm 10}$ Ibn Khordadbeh 1986: § 77.

¹¹ Hitti 1916: 305-332 (Russian edition Al-Ya'qubī 2011).

¹² Ebn Haukal 1880: 156-161; in this edition of the text the study erroneously was ascribed to Ibn Haukal.

Abu Dulaf al-Hazraji (X c.). Travelling through Armenia in 942-943 he observed that «there flows a river which disappears underground», and also several times mentions underground waters. He wrote also about natural resources of Armenia: «There exist salt mines where an excellent salt is extracted, also mines of the anderan salt¹⁴ magnesite and copper mines <...> in Armenia are springs from where a sour, acting as laxatice water comes; most of these is located around this mountain [Masis]. On its eastern part, in a single mine is an ample concentration of aurupigment. In Armenia the sulphate of copper and sulphur is not abundant, and there does not exist neither silver nor gold mines <...> there is a mine of yellow markazite». ¹⁵

Shamsuddin al-Mukaddasi (946-947-after 1000). An Arab traveller who visited North Africa, Arabia, Central Asia and Transcaucasia in 970-80s. In his study «The Best Divisions in the Knowledge of the Regions» al-Mukaddasi gives a brief account of travel through Armenia. Most of what he wrote concerns the trade, beliefs and customs of peoples (also in the case of Armenia). ¹⁶

Nasir Khusraw (1004-1088). A Persian poet and philosopher. In the course of his travels through the Near East he visited also Armenia in 1046.¹⁷

In 1160-1173 the Spanish **Rabbii Benjamin of Tudela** (בנימין מטודלה) visited Armenia during his journey from Zaragoza to Baghdad.¹⁸

In 1174-1185 on his durative trip along the Eastern Europe, Caucasus and Near East the Chech Rabbii **Petachiah of Regensburg** visited Armenia. 19

About 1240 the Syrian Christian monk **Simeon Rabban Ata** visited Armenia during his mission to the.²⁰

In 1255 r. the Flemmish monk **Guillaume de Rubrouck** on his way back from Mongolia proceeded through Armenia.²¹

The Arab historian and geographer **Ibn Saʿīd al-Maghribī** proceeded through Armenia in 1267.²²

Duting his famous travel in 1271 and return trip in 1295 Armenia was visited **Marco Polo**. Two chapters of his book (XX and XXII) are entitled as «Here is described Lesser Armenia» and «Here is described Greater Armenia». But it lacks any information regarding the nature and natural resources of Armenia, although in many chapters

¹³ Mas'udi 1989.

¹⁴ Crystalline rock salt.

¹⁵ Abu Dulaf 1960: 38-40.

¹⁶ Al-Muqaddasi 1994 ("The climate of ar-Rihab").

¹⁷ Khisrow 1933.

¹⁸ Veniamin 2004.

¹⁹ Petachiah 2004.

²⁰ Kirakos Gandzakeci 1976: Ch. 33.

²¹ Magidovich 1955: 167; Rubruck 1957.

²² Krachkovskij 1957: 354.

devoted to other regions (XXXV, XXXIX, XLVI, XLVII etc.) are described in detail natural resources and precious stones mined there.²³

A Nestorian monk **Rabban Bar Ṣawma** and his pupil **Marcos** (from 1280 - **Mar Yahballaha III**) began a durative pilgrimage to the Near East in 1278 and around 1286 they «reached the city of Ani».²⁴

In 1292 the Arab historian and geographer **Abu al-Fida** had participated in an expedition to Armenia Minor.²⁵

At the beginning of the XIV century Persian historian and geographer Ḥamdallāh Mustawfī Qazvīnī visited Armenia. He describes the water of the Lake Sevan as follows. «The waters of the Lake Gokca Tangiz are useful, and the population living in these places, drinks its water. It is not bitter taste and salty, as in most other lakes. Its circumference is equal to 20 parasangs». Hamdallāh Qazvīnī was interested also with Armenian lazurite. «Armenian stone is of the the color of lazurite and ruby. After washing they use it for colouring instead of natural lazurite».

About 1320 Armenia was visited by Italian traveller **Odoric of Pordenone** (Odorico da Pordenone).²⁸

In that same year his compatriot, **Jordan de Sévérac** (Jourdain de Severac) an Italian traveller-missionary, visited Armenia, who, as witnessed by him, "crossed the whole country".²⁹ In the chapter of his book entitled as "About Armenia" de Severac writes that "in Armenia there is a dead sea having the most bitter water in the world. He bears in mind the Lake Urmiya. As it was established by geologists, the Lakes Urmiya and Van, as well as Aral and Caspian seas were splinters of the prehistoric ocean of Thetis.

In 1377 the monk **Johannes de Galonifontibus** from Normandy was appointed as the bishop of Nachijevan and occupied that position until 1398. During this period he travelled many regions of Armenia and Persia. The account of his travels was published in 1404.³⁰

In 1404 **Ruy Gonzáles de Clavijo**, a Spanish diplomat and traveller, had passed through Armenia on his way from Cadiz to Samarkand.³¹

A German soldier **Johann Schiltberger** (Johannes Schiltberger), who was imprisoned by the Turks, crossed Armenia together with his masters during their military campaigns about 1405.³²

²³ Marco Polo 1955: 54-57, 66, 69, 74.

²⁴ Mar Yabalaha 2000: III, Ch. 3.

²⁵ Krachkovskij 1957: 388.

²⁶ Qazvīnī Ḥamdallāh 1963, Ch. XX, Part 5.

²⁷ Idem, Ch. XVII, Part 3.

²⁸ Odorico Pordenone 1968.

²⁹ Jourdain de Severac 1968.

³⁰ Galonifontibus 1979.

³¹ De Clavijo 1990.

³² Ivan Schiltberger 1866.

In 1466 a Russian tradesman **Vasili Mamirev** visited the region of Adana (Cilicia) during his journey to the Near East.³³

In 1466-1472 famous Russian tradesman **Afanasij Nikitin** had conducted a durative journey through the eastern countries and Armenia as well, but did not left any valuable information.³⁴

In 1474 **losafat Barbaro**, a diplomat from Venice had passed through Armenia on his way to Persia.³⁵

In 1476 an Italian diplomat and traveller **Ambrogio Contarini** was in Armenia during his diplomatic mission.³⁶

Some authors, beginning with J.P. Richter (1881) until D.Ju. Beknazaryan³⁷ think that Armenia was visited by **Leonardo da Vinci** in 1480's, referring to his text from the Atlantic code: «When I was in these parts of Armenia ...».³⁸ J.P. Richter refer to the fact that in the biography of Leonardo there are gaps for the years 1481-1486. During this period he probably could have travelled to the Cilician Armenia. But most scholars assume that Leonardo's words are no more than literary fantasy, based on the reports of other travellers.³⁹ We also share the position of sceptics, since the referred passage is a part of his alleged book: «About the Taurus mountain. Chapters of the book. Gospel and an appeal to the faith. Sudden flooding until the end. Collapse of the city. Death of inhabitants and despair <...> Description of the Taurus mountain and the Euphrates river. To Dioderius of Syria, viceroy of the holy sultan of Babylonia ...».⁴⁰

About 1517 the Arab geographer and traveller **Joannes Leo Africanus** (born **al-Hasan ibn Muhammad al-Wazzan al-Fasi**) visited Armenia during his durative journey to the eastern countries.⁴¹

In 1562 an English diplomat **Anthony Jenkinson** had passed through Armenia on his way to Persia.⁴²

In 1603 **John Cartwright**, another Englishman had been in Julfa during his trip to Persia.⁴³

In 1604 the German diplomat and traveller **Georg Tectander von der Jabel** had passed through Armenia during his dimplomatic mission from Prague to Persia.⁴⁴

³³ Vasilij 1884.

³⁴ Afanasij Nikitin 1960.

³⁵ Iosafat Barbaro 1970.

³⁶ Contarini 1971.

³⁷ Beknazaryan 2013: 55.

³⁸ Leonardo da Vinci 1955: 55.

³⁹ Zubov 1955: 978; Zubov 1962: 296-297.

⁴⁰ Leonardo da Vinci 1955: 470-471.

⁴¹ Krachkovskij 1957: 446.

⁴² Anton Jenkinson 1884.

⁴³ Cartwright 1611: 35 (apud Galichyan 2013).

⁴⁴ Tectander 1896.

In 1620 on his journey from Moscow to Persia the Russian merchant **Fedot** (**Feodor**) **Afanasefich Kotov** travelled through Armenia.⁴⁵

In 1630-1633 **Jean-Baptiste Tavernier**, the merchant from Prague conducted his first journey to the East, in the course of which he had resided for a long period in Armenia, including Yerevan and Echmiadzin. The first volume of his memoirs (693 pages) are devoted to Armenia - its attractive places, customs of Armenians, their religion.⁴⁶

In 1635 the German geographer and traveller **Adam Olearius**, the member of the Holstinian embassy sent to Russia and Persia, had visited Armenia. Only in one passage he touched upon the nature of the country: «That high mountain (Ararat – G.Kh.) - maybe due to an earthquake, has been fractured in different parts, so that due to wide and deep gorges it is impossible to reach to the place where rests the arch». ⁴⁷

In 1636 **Vassilij Yakovlevich Gagara**, the Russian merchant and traveller, had passed through Armenia on his way back from Egypt; he describes the beauty of the Mount Ararat.⁴⁸

In 1630s-1640s **Francesco Maria Maggio**, an Italian catholic missionary, had been in the East, including Armenia.⁴⁹

In 1646-1647 the Turkish traveller **Evliya Chelebi** had conducted a durative journey to the Transcaucasia and several times passed through Armenia. He describes the hot healing springs on the western part of the Erzurum vilayet and 7 hot springs in the region of Hasankale, and also springs of Sederge (in the region of Nakhijevan).⁵⁰ He writes also about the mineral resources he saw there: «In these mountains (Kagizman - G.Kh.) viretashi, a painkiller stone is extracted, from which surgeons make healing ointment in order to put on wounded or ailing parts of the body, drills for the goldsmiths, grindstone for the barbers; tiles for the roofs. In these places there are mines of gold and silver. But due to wasteful mining and exhaustion now they are deserted».⁵¹

In 1648 **Alexandre de Rhodes**, the French clergyman visited Nakhijevan, Erzurum, Yerevan and Echmiadzin during his journey to Persia.⁵²

In 1650 the Russian clergyman **Arsenij Sukhanov** had been sent to Greece and Armenia by the patriarch Yosif and the king Aleksej Mikhailovich in order to study and describe customs of church in these countries.⁵³

In 1654 the Turkish historiographer **Mustafa Abdullah** (he is known mostly as **Kyatib Chelebi**) several times had been in Armenia and was an eyewitness to the

⁴⁵ Kotov 1958.

⁴⁶ Tavernier 1676.

⁴⁷ Olearius 2003, Book IV, Ch. 14.

⁴⁸ Beknazaryan 2013: 77-78; Polievktov 1935: 35.

⁴⁹ Polievktov 1935: 146.

⁵⁰ Evliya Chelebi 1983: 83-84, 102-103, 105, 113.

⁵¹ Idem: 199.

⁵² Galichyan 2013: 97- 98.

⁵³ Beknazaryan 2013: 81-93.

conquest of Yerevan by the Sultan Murad IV in 1635. He concluded his historical-geographical study «Jihan Numa» which had been initiated in 1648. In the chapter 41 dedicated to Armenia, he had made use of his observations, and that of other authors as well. He reports that «in 644 [1246-1247] most of the houses (of Akhlat - G.Kh.) were collapsed due to terrible earthquake» and that in the town of Erzinjan «repeatedly occur earthquakes and most of the houses are destroyed». On several occasions he writes about cold and hot springs, also that through the town of Khnus «two rivers flow: from one white salt is extracted, and from the another - red one». He mentions also about minerals, mined in Armenia: «There is a mine of silver near the town Urma <...> From the ore silver, copper and gold is extracted». Near the town of Shebhane (the vilayet of Erzurum) «alum is extracted», and near the town of Tortum (in the same vilayet) «there are mines of nitrates». ⁵⁴

In 1664-1668 on his journey through the East the French traveller **Francois de la Boullaye le Gouz** visited Erzurum, Echmiadzin and Yerevan.⁵⁵

In 1665-1675 Armenia was visited by the French jeweller and writer **Jean Chardin** during his journey to the Near East. In the manuscript of A.I. Mesropyan, S.T. Tigranyan and A.P. Demekhin it is stated that J. Chardin (c. 15) «in his essay dedicated to Armenia among other things, touches upon its geological structure». The authors do not give any references. It is known that J. Chardin had spent two weeks in Armenia, of which one week in Yerevan. Any observation regarding the geology of Armenia is extant in his book.⁵⁶

In 1670 **Jan Jansen Struys**, a Dutch traveller was in Armenia, who had climbed the summit of Ararat during 6 days.⁵⁷

In 1685-1686 a French Jesuit **Philippe Avril** was ordered to scout out the overland (but not maritime) routes to China for the Jesuit missionaries to be sent there. Departing from Livorno, he proceeded by the route Erzurum - Kars - Echmiadzin - Yerevan - Astrakhan.⁵⁸

In 1688-1708 **Jacques Villot**, a Catholic missionary, visited Kars, Erzurum and Yerevan several times during his journeys in the East.⁵⁹

In 1693-1698 an Italian traveller **Giovanni Francesco Gemelli Careri** had proceeded through Armenia during his around-the-world journey.⁶⁰

In 1700-1702 the French botanist **Joseph Pitton de Tournefort** had conducted studies in the region of the Mount Ararat and had established the vertical zonal character of the climate here.⁶¹

⁵⁴ Kyatib Chelebi 1973, Chapter 41.

⁵⁵ Polievktov 1935: 120.

⁵⁶ Chardin 1686.

⁵⁷ Struys 1935.

⁵⁸ Polievktov 1935: 77.

⁵⁹ Polievktov 1935: 190.

⁶⁰ Polievktov 1935: 114.

⁶¹ Gehtmann 1962: 281.

In 1726 the German naturalist **Johann Christian Buxbaum** had passed through Armenia during his journey to Asia Minor.⁶²

In 1728 the German geographer and ethnographer **Johann Gustav Herber** had drawn up the map of the Caucasus and gave its detailed description.⁶³.

In 1734 the Russian statesman **Sergej Golitsin** who was appointed as the ambassador of Russia to Persia, on his way to Persia had passed through Armenia via the Caucasus. On his way to Persia he visited Yerevan and Echmiadsin.⁶⁴

In 1743-1745 the English buisinessman **Jonas Hanway** conducted a durative travel in Persia. The book 3 of his 4-volumed study describes Armenia. 65

In 1770-1773 **Johann Anton Güldenstädt**, a Baltic German on the Russian service, naturalist and traveller, had conducted an expedition to the Caucasus. The description of this expedition was published after his death by P.S. Pallas in Saint-Petersburg in 1787 and 1791. A. Güldenstädt mostly travelled through Georgia and only several pages of his study dealing with the geographical, geological and ethnographic description of Georgia were devoted to the foothills of the Mount Ararat.: «The mountains or their rock constituents, that is sandstone and limestone are often mixed, partly are embedded with other rock samples such as feldspar, quartz, Muscovy glass, schorl etc., of that they looks like different <...>. On the foothills of Ararat not only oilfileds, but also different ore veins and mines, iron ore are extant <...>. Copper green, copper blue, the mirror iron ore and rude bloodstone are mixed in the ore of one fathom (2,13 meters) in width near the monastery of Akhtala, on the mountain of about 60 fathoms high». 66

In 1781-1783 **Jacob Reineggs**, a German adventurer, physician and mineralogist had organized 5 expeditions to the Caucasus on behalf of the Russian government. He states that in January and February, 1783 occured an eruption of o Mount Ararat.⁶⁷ From the text it could not be deduced was he an eyewitness to this event. R. Porter, an English traveller and diplomat who in 1817 had checked this information and interviewed the clergymen of Echmiadzin, convincingly evidenced that nothing had happened neither in 1783, nor a thousand years before or 40 years after it.⁶⁸

In 1795, Armenia was visited by the Georgian diplomat and traveller **Raphail Danibegashvili** on his journey from Tbilisi to Madras.⁶⁹

In 1790s **Semen Bronevskij**, the Russian military leader and statesman was in the Caucasus and collected materials for the history of this region. In 1823 he had published a book with the title «Latest geographical and historical news about the

⁶² Polievktov 1935: 87.

⁶³ Gerber 1728.

⁶⁴ Polievktov 1935: 35.

⁶⁵ Hanway, 1753.

⁶⁶ Güldenstädt 2002: 210.

⁶⁷ Reineggs 1796: 30.

⁶⁸ Porter 1821: 185.

⁶⁹ Danibegashvili 1969.

Caucasus», where brief information about the rock samples and natural resources of the Ararat foothills are given. Below only two passages of this book from the total 4 pages devoted to Armenia are cited:

«The Northern Ararat foothills are like the southern Caucasian mountains, with their layers, clayish covering and rock-formation which everywhere consists of sandstone; on a medium heights it consists of limestone which in many places is absolutely exposed and contains plenty of sandstones <...>. In the Ararat foothills a mountainous oil and salt mines are found, also different ores, large shales of iron <...> bloodstone and granular copper green, and shale are obtained in great quantities».

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