# A short history of the Armenian Geography

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Armenian people as one of the oldest nations of the worls, has created huge cultural heritage in numerous fields and areas, one of these areas is Geography. These geographical works have been created both directly as geography and as part of classical historical literature, since both historical events and geographical information were closely associared to each other.

Valuable geographical information can be found in the works of Armenian classic historians and authors, and through old manuscripts.

Geographical knowledge in Armenia stands out against a background. Despite the devastation, which had suffered Armenia, being situated between Byzantium and Persia, Armenian feudal culture was rather high in V-VII centuries. Armenians knew several geographical works of Greeks including "Geography" of Ptolemy. So-called Armenian "Geography" (Ashkharhatsuyts<sup>1</sup>) was created on the basis of Ptolemy "Geography" in the beginning of VII c. and contained an extensive text, survived to the present day, and at least 15 maps, including a map of the world, unfortunately lost. Text part was similar to the work of Ptolemy, giving description of the Earth and its inhabitable part, but it contained original material about Armenia and the countries of Asia Minor. The author of the Armenian "geography" understood that it would be very useful to draw attention to Armenian provinces, although it will require studying maps and books. Thus, the geographical works and maps were not an isolated phenomenon in Armenia. The importance of «Armenian geography" can be gauged by the fact that Ptolemy work - scientific revelation for cartographers and geographers of medieval Western Europe, became known here only in XIV c.

One of the subject sof geography was the shape of the Earth. It was a matter of discussion among geographers and geometers since V c. BC. The ancient geographers represented different measuring systems for Earth and measuring unit used by them varied in the range of 148-186 meter. Armenian ancient resources have answered many of the questions regarding the measuring systems of the Earth. Some of these sources are:

- 1- Measuring table, in the short version of the "Armenian Geography" (Ashkharhatsuyts).
- 2- Measuring table in the long version of the "Armenian Geography" (Ashkharhatsuyts).
- 3- Measuring fragmet in "About the Sun and mesurment".
- 4- Measuring table by unknown author, in No 114 manuscrip, National library of Paris.
- 5- Measuring fragment of "Copy of calendar" by Shirakatsi.

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<sup>&</sup>lt;sup>1</sup> - Ashkharatsuyts (U2huuphuugnjg ; U2huuphuugnijg ), often translated as Geographyin English sources, is an early Medieval Armenian illustrated book by Anania Shirakatsi. It is about the geography of Armenia, Georgia, Iran, Iraq, etc. "Ashkharatsuyts" is the oldest book in Matenadaran on geography.

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- 6- Description of measurement from "Commentary of Calendar by Andreas".
- 7- "Mileage"

## Anania Shirakatsi, the Great Medieval Scientist<sup>2</sup>

Anania Shirakatsi is one of the greatest scientists, who made an important contribution to the field of exact sciences in Armenia, a brilliant scientist and philosopher of the 7th century; actually the founder of exact sciences in Armenian reality.

Unfortunately, out of Shirakatsi's rich heritage only some fragments of his works in the fields of Mathematics, Cosmography, Calendarology, Metrology, which are of great value for the history of exact sciences, got to us. There is a valuable source about Anania Shirakatsi's life and work; the author has left his autobiography.

From Shirakatsi's autobiography we learn that he was born in the village Aneank (Shirakavan) at the beginning of the 7th century. He got his elementary education in the local monastery school, later being eager to improve his knowledge, he went to Western Armenia. Shirakatsi dreamt about specializing especially in Mathematics, which he considered "mother of all sciences". "And love strongly the art of figures", he writes, "I thought that it's not possible to compose something without figures honoring them as the mother of all wisdom". He had to travel a lot about West Armenia seeking an advanced specialist in Mathematics. He was leaving for Constantinople but on his way to Signup he learns that in Trapeze a great Greek scientist, Tyukhik lives: "a wise man, popular with the kings, an expert on Armenian Language and Literature". Shirakatsi changed his way and went to Trapeze.

Tyukhik received the young Armenian with pleasure and began to teach him. Shirakatsi remembers his teacher with respect and warmth: "He loved me as his own son, he writes, and he passed all his knowledge with such eagerness that my class-mates were envy".

Shirakatsi had been at Tyukhik's school for 8 years; he became proficient in exact science and came back to his native land with rich knowledge base. Here he opened a school and devoted himself to teaching and research. He wrote research works in Astronomy, Mathematics, Geography and in other fields of science. Among medieval sources there is evidence that in 667 – 669 Shirakatsi first, on the instructions of Catholicos Anastas, formed a new Armenian Calendar with the aim to make a fixed one.

Unfortunately not all the works of Anania Shiraktsi have got to us. From the letter, which was written by Armenian scientist of the 11th century Grigor Magistros to Catholicos Petros it is obvious that there was absolutely unfriendly attitude towards Shirakatsi's scientific work, his works were included among the forbidden books, and Magistros requires from Catholicos to eliminate that injustice.

<sup>&</sup>lt;sup>2</sup> - Lilit Nazaryan, Lecturer, Department of Geology, Yerevan State University (YSU)

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One of his valuable works is "Ashkharhatsuyts" ("Geography"), which includes the description of all the countries in the world discovered at that time. That is a great work in the World Geographical and Cartographical literature of that time. "Ashkharhatsuyts" consists of Introduction and two parts. In the introduction Shirakatsi determines the zones and temperature of the Earth defining the points of view existing in the science. In the first part he gives a general description of the Earth and in the second part there is a description of different countries known at that time. In the main part of "Ashkharhatsuyts" is the description of all the countries in the three continents known then: they are Europe, Africa and Asia. Here the author defines the boundaries of each described country, distinguishes the rivers, mountains and towns, etc.

An important source on economic life of historical Armenia is Shirakatsi's "Mghonachap", where the ways of camel cades, which crossed Armenia in the 6-7th centuries are depicted.

Geography became an important subject in 17-18 centuries for Armenians sespecially the Armenian merchants, who had great commercial activities from far west Europe to far east Asia and Autralia. They were cometing with the trade giants of the time, England and Holand. So there was great need for geographical informations and maps. We will discuss about maps in the next section.

One of the sources which was translated into Armenian was called "A book which is called history of the world, which describes in detail, howabout of old and new worlds, the places, populations, traditions and business and other things, all those strange matters which we were not aware"<sup>3</sup>. It was an interesting tools for Armenian merchants.

In 18<sup>th</sup> century Some of the geographical books were translated from European languages. But beside these kind of books, the Armenian geographers created Armenian geographical literature about Armenia, Near East countries peoples, locations, and so on, by using old Armenian, Latin-Greek, Persian and Arabic resources.



<sup>&</sup>lt;sup>3</sup> - Armenian manuscripts library, Matenadaran, Yerevan, RA, manuscript No. 7789, 1725.

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## Sisvan, Armenian Cilicia, by Ghevond Alishan, Venice, St. Lazarus Island, 1885

In Ealy 18<sup>th</sup> century (1702), "Natural sciences" in two volumes authored by Matevos and Ghukas Vanandetsi were published. These books included natural elements of the world and their cycles.

Famous Armenian scholar Khachatur Erzrumetsi or Arzrumetsi or Karinetsi, (Arakelian, 1666-1740) has important role in the field of geology in 18<sup>th</sup> century. His work is titles "Contents of all sciences", published in Venice, 1711.



H.Palagashian, New Geography, Istanbulm, 1892

Hakop Nalian's book under the title of "Book named treasure of information" (1758) in four volumes was one of important resources of 18<sup>th</sup> century. The first and second volumes were dedicated to religious and moral subjests. The third volume had geographical content. The forth volumes was about history and geography of Armenia.



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Ashkharatsuyts, (World map), by Vardan Areveltsi (1200-1271), Paris 1960



Old history of Armenian Geography, Venice, 1822

Prominent Armenian personalities in the field of Geography in the late 18<sup>th</sup> and early 20<sup>th</sup> century, were Ghukas Inchichian (Ղուկաս Ինճիճյան) and Stepanos Agonts (Ստեպանոս Ազոնց), both of them were member of Mkhitarist congregation of Venice.



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Sisakan, Geography og Syunik, by Ghevond Alishan, Venice 1893

Gh. Inchichian was born in Istanbul (1768-1833) and his main focus was Geography of Armenia and Armenology. He has authored more than 20 books, about 10,000 pages. In 1791 his book under "Theory of new and ancient geography" was published in 1791. He has written one book each two years in the next 42 years. Beside it, he has coauthored with Stepanos Agonts in writing.



"Geography of the dry world"<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> - Geography of the dry world from Asia, Europe, Africa and America. ... Part Two. To Europe G (1802)

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#### Ayrarat, by Ghevond Alishan, Venice 1890

His other books are "Climate of Byzantium" or "The Byzantine Season Almanack", "Chronology of Byzantium", "Description of Ancient Armenia", where he presented 15 provinces of Armenian with geographical details, "Old history of Armenian Geography" in three volumes, "Byzantine summer resort" (1794).



#### Old geographic names of Armenia, in Armenian, by Hubschmann Vienna, 1907

- Geography of the dry world from Asia, Europe, Africa and America. ... Part Two. To Europe D (1802)
- Geography of the dry world from Asia, Europe, Africa and America. Part one. Asia, right D (1805)
- Geography (1791)
- Geography of the dry world from Asia, Europe, Africa and America. ... Part Two. To Europe A (1802)
- Geography of the dry world from Asia, Europe, Africa and America. Part one. Asia, right A (1806)
- History and geography
- Publicity on Geography:
- Geography of the dry world from Asia, Europe, Africa and America. ... Part three. Africa (1802)
- Geography of the dry world from Asia, Europe, Africa and America. ... Part Two. To Europe Z (1804)
- Geography of natural, educational and political, atlas of the Atlas of Geography:
- Geography (1728)
- Geography: Aghsuekirche (1668)
- Geography: Aghsuekirche: A Religious Novelty (1683)
- Geography of the dry world from Asia, Europe, Africa and America. ... Part Two. To Europe E (1804)
- Geography of the dry world from Asia, Europe, Africa and America. ... Part Four. United States (1802)
- Geography of the dry world from Asia, Europe, Africa and America. ... Part Two. To Europe B (1802)

Geospatial Armenia. Map

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Stepanos Agonts was born in 1740 in Elizabetopolis city in Transylvania. 11 of his works are about geography, such as "A brief review of geography" (1817).

"A booklet called basic natural sciences" by Stepanos Abgarian Ankuratsi (Rome, 1796) is an important resource about physical geography.

Political geography, although was discussed partially by mentioned geographers, but achieved separate attention in 1770 decade, especially by Armenian elite in India, like Movses Baghramian ("Nor tetrak vor kochi hordorak", New book of recommendation), Shahamir Shahamirian ("Vorogayt parats", Snare of Glory). Shahamiran published his "Geography of Armenia" in Venice, 1778, which included not only maps of Armenian, but also Georgia and lands in the north of caucasian mountains. Israel Ori Armenian activist for liberation of Armenia prepared a political map of Armenia and presented to tsar Peter I in 1701. We will discuss about maps and cartography in more details in the next section.

As we saw the scientific geography was created in the Armenian culture in 5-7 centuries and developed greatly in 17-18 centuries.



Old geographic names of Armenia, in German, by Hubschmann, Strassnurg, 1904

During 18-20 centuries at least 250 books about Armenian geography has been published only in French, German and English languages<sup>5</sup>.

<sup>&</sup>lt;sup>5</sup> -A. Salmaslian, Bibligraphie de L'Armenie, Erevan, 1969, pp. 17-31.



Description of Armenian regions, by Manuel Mirakhorian, Istanbul, 1885



Geoghrapghy of old and new Armenia text book For boys school, By Manuel Kajuni, Venice 1857

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Geography text book by Artashes Abeghian

The number of Armenian geographical books published from 1512 to 1930 are as follow: (historical resources including geographical information are excluded):

1512-1800: 33<sup>6</sup> 1801-1850: 33<sup>7</sup> 1851-1900: 211<sup>8</sup> 1901- 1920: 110<sup>9</sup> 1921- 1930: 53<sup>10</sup>

Armenian geography progressed tremendously in the modern times. Many armenologists and geographers created valuable works, such as scientist in Mkhitarist congregation (Ghevond Alishan, Gh. Inchician, St. Agonts, and others), in the Caucasus (A. Ghukasov, Y. Lalayants, Leo, H. Manandian, S. Yeremian, T. Hakopian, T. Jerbashian and others). School of Geography of the State University of Yerevan in Armenia has played important role (H. Hovhannisian,, B. Galstian, H. Karapetian, S. Lisitsian, and others).

<sup>&</sup>lt;sup>6</sup> - Bibliography of Armenian books: 1801-1850, Yerevan 1988.

<sup>&</sup>lt;sup>7</sup> Bibliography of Armenian books: 1801-1850, Yerevan 1967.

<sup>&</sup>lt;sup>8</sup> - Bibliography of Armenian books: 1801-1850, Yerevan 1967 Bibliography of Armenian books: 1801-1850, Yerevan 1999.

<sup>&</sup>lt;sup>9</sup> - Bibliography of Armenian books: 1801-1850, Yerevan 2007.

<sup>&</sup>lt;sup>10</sup> - Bibliography of Armenian books: 1801-1850, Yerevan 2012.

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"Iranshahr" According to Shirakatsi geography (mistakley assumed M. Khorenatsi)



After establishment of Soviet regime in Armenia, huge cultural revolution happened in all fields of sciences including geography. Before Soviet era (1920) there were no geographical institutions or research foundations in Armenia. Eastern Armenia (under Russian occupation) was studied and researched by relevant Russian institutions and Western Armenia (under Ottoman Turkish occupation) by Russians and Western Europeans. Although some Armenians of Diaspora had valuable works on this subject.

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Armenia according to Ashkharatsuyts, Yerevan, 1963

Researchers of Russian Academy of Science and Army studied the geography of Eastern Armenia and generated the first maps (F. Parrot, H. Abikh, I. Khodsko). Russian and European individual researchers studied Western Armenia. Henry Finnis Blosse Lynch published his "Armenia" book in 1901 (1-Armenia: Travels and Studies. Volume I: The Russian Provinces. London: Longmans, Green, and Co. 2-Lynch, H.F.B. (1901). Armenia: Travels and Studies. Volume II: The Turkish Provinces. London: Longmans, Green, and Co.). A. Ghukasov published "Armenian Highland..." in 1901.

The first institution in Soviet Armenia responsible for Geographical education and research was Department of Geography at the Yerevan State University in 1929 under direction of H. Hovhannisian. In 1933-34 Faculty of Geography and Geology of this university was founded then academic scientific geographical institutions were established.



Armenian population from Black sea to Karin, by Hakobos Tashian, Vienna 1921

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#### Peria (Faridan) canton of Isfahan, by Aram Yeremian, New Julfa, 1919

Armenian Geographical Association was founded in 1935. Geographic department of Armenian National Academy of Sciences is active since since 1958. Many books and mapas were published susch as: "Overview of the climate on Armenian SSR" by R. Kristosturian" in 1937, "Geography of Armenia" by H. Poghosian, Paris 1952, "History of Geography" by T. Hakopian, Yerevan 1955, "Overview of Historical geography of Armenia" by T. Hakopian, Yerevan 1960, "Atlas of Armenian SSR" by Academy of sciences, Yerevan 1961, "Armenia according to Ashkharhatsuyts" by Suren Yeremian, Yerevan 1963, the first book of multu-volume research of "Geology of Armenian Soviet Socialist Republic" with 1:500000 scale maps, Yerevan 1962, "Armenian climate" by A. Nersesian in 1964, "Armenian highland and neighboring countries..." in 1969,



Historical geography of Armenia, edition Yerevan 1968.

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"Physical geography of of Armenian SSR" by A. Aslanian, A. Baghdasarian, L. Zhohrabian in 1971, "Cities of Soviet Armenia", by T. Hakopian, Yerevan, 1977, "Anania Shirakatsi" including his geography in 1979, "Dictionary of geographical names", by H. Gergiarian and N. Harutyunian, Yerevan, Vol. 1 1987, vol.2 1989, "Dictionary of geographical names of Armenia and neighboring Countries, by T. Hakopian, Stepan M.Melik-Bakhshian, H. Barseghian, Yerevan, Vol.1, 1986. Vol 2. 1988, Vol. 3 1991, Vol. 4 1998, Vol. 5 2001, "The atlas of Armenia and the World" Yerevan, 2003,"Historical altas of Armenia", Yerevan, first volume 2005, second volume 2009, "Dictionary of geographical names of the Republic of Armenia", Yerevan, 2008, various researches by Leo, Babken Harutyunian, G. Alexandrian, A. Baghdasarian, G. Zubian, A. Mkhitarian, Kh. Poghosian, G. Avakian, A. Aslanian, H. Stepanian, etc.

There are unique historical maps in the National Library of Armenia.



Dictionary of geographical names", by H. Gergiarian and N. Harutyunian, Yerevan, Vol. 1 1987, vol.2 1989