

**PALEOANTHROPOLOGY IN ARMENIA:
(a Historical Background)**

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The process of gathering anthropological collections in our country has been rather irregular. That is why paleoanthropological materials of different chronological periods and from different Armenian provinces are represented very irregularly, and if some materials at our disposal are documented quite solidly and reliably as to their dating and location, the majority of the territorial and epochal groups still represent white spots hampering the integrated analysis of anthropological signs as well as the reconstruction of the human adaptation processes under specific conditions. However, taking into account the large scale archeological excavations conducted lately within the territory of Armenia we hope that the number of white spots on the anthropological map of Armenia will gradually go down. As of now the problem is to possibly research the available paleoanthropological materials of Armenian provenance and by means of geographical and chronological extrapolation to reconstruct the anthropological events and some tendencies in the distribution of various deviations from the antiquity to the present day.

The Armenian Highlands are one of the main centers of tentative emergence and distribution of the earliest people in Eurasia. In 1973 B.G. Yeritsyan found the remains of an 8–12 year-old child (a fragment of the parietal bone, the second top, right lactic molar tooth) in cave Yerevan I. The crown's sizes were too large for this type of teeth of ($VL_{COR} - 11, 3$; $MD_{COR} - 9, 6$ mm). Notably, the extraordinarily lengthy (12.1–12.3 mm) and dispersing pointed roots, the low location of the roots,

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divergence point and the excessive height of unbranched department of the root system testified to tavorodontism¹. In 1970 H. Azizyan unclosed a cave station Hamo I, in the loamy deposits of which, at the depth of 150–177 metres he found two partially fossilized hominid skeletons covered by manganese dendrites. Their teeth were of average size similar to those of the modern man. Fragments of the skull of a fossil man, without cultural context were found by A.T. Aslanyan and Yu.V. Sayadyan in the Hrazdan River gorge in 1975². In 1977 B.G. Yeritsyan found a fragment of the mandible of an adult individual in the Middle Stone Age cave Lusakert I (layer B)³. Later fossilized bones of *Homo sapiens-á* were found in Zovuni cave. All listed finds unearthed in Armenia are characteristic to a man of the modern physical type with some archaic traits⁴.

The immediate foundation of the paleoanthropological research in our country was laid by the works of V. Bunak (Sevan), H. Azizyan (Tsamakaberd, Lchashen, Garni), V. Ter-Martirosyan (Dzharat, Tsamakaberd), R. Bubushyan (Lchashen, Artik, Akunk, Tsamakaberd, Garni) and V. Alekseev (Noraduz, Garni). The fundamental researches of V.P. Alekseev⁵ and M.G. Abdushelishvili⁶ on the paleoanthropology of the Caucasus were dedicated to the analysis of the above-mentioned craniological series from the Armenian sites.

Publication in 1927 of V.V. Bunak's book "Crania Armenica"⁷ was a special event in the history of the Armenians craniology. As we know, while being in the province of Van – the eastern outskirts of the Armenian Highland after the

¹ **Ериця́н Б.Г., Худавердя́н А.Ю.** Среднепалеолитические пещерные стоянки Ереван I и Лусакерт I (Армения) (Научные ведомости Белгородского государственного университета, Белгород, вып. 7 (204), 2015, с. 6–7).

² **Асланян А.Т., Саядян Ю.В., Харитонов В.М., Якимов В.П.** Открытие черепа древнего человека в Ереване («Вопросы антропологии», М., вып. 60, 1979, с. 46–48).

³ **Ериця́н Б.Г., Худавердя́н А.Ю.**, указ. соч., с. 7–9.

⁴ **Ериця́н Б.Г., Худавердя́н А.Ю.** Палеолит Армении: ретроспектива антропологических находок («Պատմամշակութային ժառանգություն և արդիականություն», միջազգային գիտաժողով, զեկուցումների դրույթներ, Գյումրի, 2013, էջ 19–20):

⁵ **Алексеев В.П.** *Итоги изучения палеоантропологии Кавказа* (Պատմա-բանասիրական հանդես, թիվ 2, Ե., 1963, pp. 139–149); Происхождение народов Кавказа, М., 1974, с. 83–87, 88–90, 96–99, 101–103.

⁶ **Абдушелишвили М.Г.** К краниологии древнего и современного населения Кавказа. Тбилиси, 1966, pp. 60–87; Антропология населения Кавказа в бронзовом периоде, Тбилиси, 1982, с. 118–121, 128–130.

⁷ **Бунак В.В.** *Crania Armenica*. Исследование по антропологии Передней Азии («Труды Антропологического НИИ при МГУ», М., 1927, с. 30–41).

Armenian Genocide, in August, 1917 V.V. Bunak collected the skulls (26 infant and 152 adult) of Armenians for his studies. These materials constituted the basis of the said monograph and facilitated the study of the origin of the Armenoid type. It is difficult to overestimate the value of this work since it is still urgent and demanded by modern anthropologists. Two other anthropological expeditions of V. Bunak (1934–1935) to Armenia are also worth mentioning. The first expedition investigated the population of the Lori province, the second one – collected materials from the provinces of Gegharkunik, Tavush and Aragatsotn⁸. Unfortunately, the material collected has not been published. In 1960 another anthropological expedition headed by G.F. Debets continued the researches of the basic ethnic groups of Armenians. The Armenian expedition included: H. Azizyan, M. Abdushelishvili, V. Alekseev, G. Dzhanberidze, T. Alekseeva, A. Hajiyeu. In 1963 M. Abdushelishvili generalized the results received in the work “On the Anthropological Structure of Modern Population of Armenia”⁹. The researcher noted that the Armenians deviated from the typical Minor Asian complex of signs and represented a regional variety of the main anthropological substratum of the native population of Armenia. And R. Kherumyan¹⁰ enriched the literature on the Armenians by researches of groups that had migrated from Armenia at different periods.

A laboratory of physical anthropology was established at the Institute of Archaeology and Ethnography of the National Academy of Sciences of the Republic of Armenia on the initiative of prof. A.D. Tzhagharyan MD in the mid 70s of the last century. During his lifetime A.D. Tzhagharyan created an entire gallery of sculptural reconstructions of the ancient people. The number of his reconstructions counts by dozens. This tradition was adequately continued by his student – the anthropologist, anatomist and radiologist M.G. Altunyan¹¹ who restored the outlook of an individual living in VII–VI centuries BC with a

⁸ **Варданян Л.М.** К 150-летию С.Д. Лисициана: из истории антропологической науки в Армении («Вестник антропологии», ном. 1 (29), 2015, с. 104–105).

⁹ **Абдушелишвили М.Г.** Об антропологическом составе современного населения Армении («Труды Института этнологии АН СССР», М., ном. 8, 1963, с. 3–29).

¹⁰ **Kerumyan R.** *Introduction à l'anthropologie du Caucase. Les Arméniens.* Paris, 1943, p. 26–45, 121, 178, 220.

¹¹ **Алтунян М.Г.** Графическая реконструкция лица согласно антропологическим исследованиям («Հայաստանի կենսաբանական հանդես», թիվ 4, 1990, էջ 319).

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penetrating skull injury unearthed during the excavations at the village of Gusanaghyugh.

It should be noted that before the beginning of the 80s of the past century paleoanthropological research was focused on craniometrical studies of the bone material and recovery of the individual skulls. This direction changed with the arrival of A.K. Metsoyan (Palikyan) and N.H. Kochar both being the graduates of the Faculty of Biology of MSU who were involved in other fields of anthropological studies (discretely varying, cranial non-metrical traits, dental non-metrical and dermatoglifical traits). The main subject of N.H. Kochar's works was the dermatoglifical research of the basic Armenian ethnic groups. In 1981 she sustained her candidate thesis on the subject "Application of Dermatoglifical Traits in Studying the Genetic Processes in the Populace (on the example of the Armenian population)"¹². She showed the uniformity in the distribution of signs in all populaces within Armenia indicating a slight differentiation of separate sign frequencies, which is possible only under conditions of small genetic dissociation and is indicative of the significant role of the gene migrations hindering the differentiation¹³. In 1992 N.H. Kochar headed the laboratory of physical anthropology, which expanded its collection by new craniological samples from archaeological excavations. These materials were first introduced to the scientific community by A.K. Palikyan (craniology) and A.A. Movsesyan (cranioscopy) in their publications based on the materials of the Late Bronze, Early Iron and Antique periods from the Gegharkunik and Shirak provinces (Nerkin Getashen, Sarukhan, Artsvakar, Karchakhpyur, Shirakavan) in 1989–1990. According to A.K. Palikyan¹⁴ these craniological data enabled to trace the continuing process of autochthonic development of the anthropological type in the territory of Armenia since the end of the Late Bronze to the Classical period.

¹² **Кочар Н.Р.** Применение дерматоглифических признаков для изучения генетических процессов в народонаселении (на примере армянской популяции). Автореф. канд. дисс., М., 1981, с. 3–18.

¹³ **Кочар Н.Р.** Антропология армян. Дерматоглифика и популяционная структура, Е., 1989, с. 47–59.

¹⁴ **Паликян А.К.** Новые палеоантропологические материалы с территории Армении («Հայաստանի կենսաբանական հանդես», Ե., թիվ 4 (43), 1990, էջ 298).

The contribution of the Moscow-based anthropologist A. Movsesyan¹⁵ into the paleoanthropological studies leaning on the data of nonmetric traits in Armenia was really large. A detailed study of the cranioscopical markers allowed her to reveal the genetic continuity of the Central Armenia population throughout the Bronze Age. Genetic distances between separate populaces are in full accordance with the chronological sequence of the groups where “the distinctions between the Middle and Late Bronze Ages on the one hand and those between the Late Bronze and Early Iron Ages on the other are less than distinctions between the Middle Bronze and Early Iron periods”¹⁶.

Another representative of the Armenian anthropological school A.Y. Khudaverdyan was admitted to the Institute of Archaeology and Ethnography of the National Academy of Sciences of the Republic of Armenia after graduating from Yerevan State Pedagogical University, in 1989. Since 1990 A.Y. Khudaverdyan is a member of the Beniamin archaeological expedition. She defended her candidate thesis on “The Population of the Armenian Highlands During the Antiquity (according to anthropological data of the Beniamin necropolis)”¹⁷ under the supervision of Doctor of Biology, professor, research associate of the Institute and Museum of Anthropology of MSU V.E. Deryabin in 2001.

The 2000s were marked by publication of a number of such generalized works on paleoanthropology as the monograph by A.Y. Khudaverdyan “The Population of the Armenian Highlands in Antiquity (according to the anthropological data of the Beniamin necropolis)”. Detailed analysis including the craniometric, cranioscopic, osteometric, demographic and the paleopatologies indeces allowed not only to reveal the complex anthropological structure of the Beniamin population, but also to uncover the reasons of anthropological and ethnic inhomogeneity of the population living on the Shirak plateau. For the first time a

¹⁵ **Мовсесян А.А.** К палеоантропологии бронзового века Армении («Հայաստանի կենսաբանական հանդես», Ե., թիվ 4 (43), 1990, էջ 277–282); **Мовсесян А.А., Кочар Н.Р.** Древнее население Армении и его участие в формировании армянского этноса (по данным о неметрических признаках на черепе) («Вестник антропологии», М., вып. 7, 2001, с. 95–113); **Кочар Н.Р., Мовсесян А.А., Паликян А.К.** Географическая локализация и межпопуляционные связи древнего населения Армении («Հայաստանի կենսաբանական հանդես», Ե., թիվ 5 (42), 1989, էջ 445–450).

¹⁶ **Мовсесян А.А.**, op. cit., с. 280.

¹⁷ **Худавердян А.Ю.** Население Армянского нагорья в античную эпоху (по антропологическим данным Бениаминского могильника). Автореф. канд. дисс., Е., 2001, с. 3–23.

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multy-dimensional analysis provided a chance to allocate two groups of the population and to establish the resemblance of the Armenian antique groups to the Scythians of Moldova, coastal steppes of the Black Sea and Ukraine, the Sarmatians of the Volga-Ural region and Central Asian Saqs¹⁸. A detailed study of discretely varying (fenetic) signs of the individuals from antique populaces of Shirakavan and Karchakhpyur was carried out by A.A. Movsesyan who concluded that “along with preseving a genetic link with the population of the previous eras the population of Karchakhpyur and Shirakavan had undergone certain influence of the alien groups”¹⁹. Antique groups from the burial grounds of Chornaya Krepost I and Vardbakh are also non-uniform²⁰. It should be noted that the problem of the populace formation in Shirak plain during the Late Antiquity was also reflected in A. Palikyan’s research though she came to the conclusion that “the population living in the region during the antique era was genetically homogeneous”²¹.

A specific place in the monograph²² is allocated to such phenomenon as artificial deformation of the skull and teeth of the buried. Circular fronto-occipital deformation of the deceased was revealed in Antique Beniamin, Karmrakar, Vardbakh, Shirakavan I and Medieval (Byurakn, Hovhannavank) groups²³. Motives

¹⁸ **Худавердян А.Ю.** Население Армянского нагорья в античную эпоху (по антропологическим данным Бениаминского могильника), Е., 2000а, с. 72–101; **Khudaverdyan A.Yu.** Armenia in the Eurasian Ethnic Context of late Classical Antiquity: Craniometric Evidence, «Archaeology, Ethnography & Anthropology of Eurasia», Novosibirsk, no 3 (51), 2012, pp. 138–148.

¹⁹ **Мовсесян А.А., Кочар Н.Р.**, op. cit., с. 122.

²⁰ **Худавердян А.Ю., Енгисбарян А.А.** Палеоантропологические данные раскопок античных поселений Ширакской равнины («Բժշկություն, գիտություն և կրթություն», Ե., թիվ 20, 2016, էջ 110–120).

²¹ **Паликян А.** Новый краниологический материал античной эпохи с территории Ширакской равнины (Հանրապետական գիտական նստաշրջան՝ «Հին Հայաստանի մշակույթը», զեկուցումների դրույթներ, Ե., 2008, էջ 345).

²² **Худавердян А.Ю.**, указ. соч., 2000а, с. 28–34.

²³ **Խուդավերդյան Ա.,** Գանգատուփի արհեստական դեֆորմացիայի ազդեցությունը ուղեղի գանգատուփի և դեմքի չափսերի և հարաբերակցության վրա (Հանրապետական գիտական նստաշրջան՝ «Շիրակի պատմամշակութային ժառանգությունը», զեկուցումների թեզիսները, Գյումրի, 1994, էջ 39–40): **Худавердян А.Ю.** Искусственно-деформированные черепа и зубы из погребений античного могильника Бениамин (ՀՀ ԳԱԱ «Լրաբեր հասարակական գիտությունների», Ե., թիվ 2 (595), 1997ա, էջ 138–140); Искусственная деформация черепов из античных погребений Ширакской равнины (Հանրապետական գիտական նստաշրջան՝ «Հայ ժողովրդական մշակույթ», զեկուցումների դրույթներ, Ե., 2004, էջ 65–71). **Khudaverdyan A.Yu.** Artificial modification of skulls and teeth from ancient burials in Armenia, «Anthropos», Germany, v. 106 (2), 2011a, pp. 602–605, Trepanation and Artificial

for deliberate deformation of the head might include the traditions or medical manipulations: 1) unintended influence of a household item (special type of a cradle leading to flattening of the occipital bone); 2) emphasising of the social status and difference from foreign groups; 3) correction of the “improper” shape of the skull and shaping of a “beautiful” head to match particular aesthetic norms; 4) an opportunity to change the psychotype of the person; 5) need to suspend the rapid growth of the brain substance; 6) the aspiration to accelerate the fontanel overgrowing process; 7) the result of massage (for healing headaches); 8) desire to protect the newborn's head from natural factors (cold, wind, heat)²⁴. The foreteeth of three individuals from the burial ground of Beniamin were sawed²⁵. Perhaps, carriers of the idea of deliberate deformation of the head and modification of teeth of the Armenian population were the migrants. The skeletons from the burial ground of Beniamin revealed injuries, malformations, inflammatory and endocrine diseases, dystrophic and atrophic changes in the deceased²⁶.

Cranial Deformations in Ancient Armenia, «Anthropological Review», Poland, v. 74 (1), 2011b, pp. 44–48; Cranial Deformation and Torticollis of Early Feudal Burial of Byurakn from Armenia, «Acta Biologica Szegediensis», Hungary, no 56 (2), 2012, pp. 133–135; **Khudaverdyan A.Yu., Akopyan N.G., Zhamkochian A.C.** Anthropology of Human Remains from Hovhannavank (Armenia) («Journal of Anthropologija», Serbian, v. 16 (1), 2016, pp. 75–76).

²⁴ **Попов А.Н., Чикашева Т.А., Шпакова Е.Г.** Бойсманская археологическая культура Южного Приморья (по материалам многослойного памятника Бойсмана-2), Новосибирск, 1997, с. 58–66; **Худавердян А.Ю.** Атлас палеопатологических находок на территории Армении. Е., 2005, с. 90–91.

²⁵ **Խուդավերդյան Ա.Յ.,** Ատամների արհեստական ձևախախտումներ Բենիամինի հիմնավոր դամբարանադաշտում («*Բանբեր* Երևանի Համալսարանի», Ե., թիվ 2 (89), 1996, էջ 215–217); **Худавердян А.Ю.,** указ. соч., 1997ш, с. 140–143; **Khudaverdyan A.Yu.** op. cit., 2011a, pp. 605–608.

²⁶ **Сарафян А., Худавердян А., Алтунян М.** Рентгенопатологические наблюдения над костными материалами из античного некрополя Бениамин (Հանրապետական գիտական նստաշրջան՝ «Հայ ժողովրդական մշակույթ», զեկուցումների դրույթներ, Ե., 1997, էջ 72–73); **Сарафян А., Худавердян А.** Болезни и костные заболевания на скелетах (по материалам археологических раскопок) (Հանրապետական գիտական նստաշրջան՝ «Հայ ժողովրդական մշակույթ» զեկուցումների դրույթներ, Ե., 1999, էջ 68–70); **Худавердян А.Ю.** Некоторые аномалии, зафиксированные на черепках из Бениаминского могильника («*Մշակութային հուշարձանի պահպանումը*», գիտական զեկուցումների դրույթներ և հաղորդումներ, Ե., 1999, էջ 62–63); Антропологические и медицинские аспекты проблемы адаптации и стресс в свете данных палеоантропологии. Новые методы – новые подходы в антропологии («Вестник Международной академии наук экологии и безопасности жизнедеятельности», Ереван (СПб.), ном. 7 (31), 2000б, с. 96–100); Антропологические и медицинские проблемы адаптации и стресс в свете данных палеоантропологии (Сборник статей

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The following representative of the Armenian anthropological school is R.A. Mkrtchyan whose candidate thesis on the subject “Paleoanthropology of the Neolithic and Eneolithic Population on the South of the Euroasian part of the USSR (on the data of the “Hospital Hill” and Hvalynsky burial grounds)”²⁷ was defended in 1988 under the supervision of Doctor of History V.P. Alekseev. Her monograph published in 2001 was based on paleoanthropologic materials of the Horom burial ground and was provided by a table containing the descriptive and comparative characteristics of the population of Shirak in Early Iron Age. The geography of the comparative background chosen for statistical analysis embraces the Middle Eastern and North Caucasian regions²⁸. Another book also published in 2001 by A.S. Piliposyan and R.A. Mkrtchyan – “Van-Tospian (Uartian) Cave-Tomb of Geghovit” contained the paleoanthropological material of 9 individuals (3 ♂, ♀ 2, 4 children), and measurements conducted on three skulls (2 ♂, 1♀)²⁹. The researchers found a statistical proximity and morphological similarity between the Van-Tospian (Uartian), Scythian and Etruscan craniological collections.

Another monograph published by A.Y. Khudaverdyan in 2009 – “The Bronze Age Population of Armenian Highlands. Ethnogenesis and Ethnic History” – presented both craniometrical, cranioscopic and dental materials studied earlier, and the results of the newest researches based on modern methods of multivariate statistics³⁰. Much attention was paid to paleoanthropological finds of the Kura-Araxes culture because the genetic origins of the population of the basic autochthonous archaeological cultures in the region source from the Early Bronze Age. Their comparative analysis led to the extremely important conclusion that the morphological complexes of the South Caucasian race (linked with the Armenian Highlands and the Near East) were fixed within the anthropological composition of Eurasia in the Bronze Age already. For the first time the anthropological materials

конференции «Теория антропологии и ее методы, истоки и развитие», V Бунаковские чтения, М., 2001, с. 84–86).

²⁷ **Мкртчян Р.А.** Палеоантропология неолитического и энеолитического населения юга Евразийской части СССР (по материалам могильников «Госпитальный холм» и Хвалынский). Автореф. канд. дисс., М., 1988, с. 3–21.

²⁸ **Мкртчян Р.А.** Палеоантропология Оромского могильника, Е., 2001, с. 30–45.

²⁹ **Փիլիպոսյան Ա.Ս., Մկրտչյան Ռ.Ա., Գեղիովտի Վանտոսպյան (Ուրարտական) քարայր-դամբարանը**, Ե., 2001, էջ 35:

³⁰ **Худавердян А.Ю.** Население Армянского нагорья в эпоху бронзы. Этногенез и этническая история, Е., 2009, с. 95–100.

provided a possibility to authentically connect the Catacomb culture tribes with the carriers of Kura-Araxes culture. The proximity of skulls from the necropolises of Cucuteni-Trypillian, Lolinski, Srubnaya (Timber-grave) cultures and those of Kura-Araxes had also been revealed. According to the author of the monograph the South Caucasian morphological component revealed in the structure of the population of certain East European Bronze Age archaeological cultures generates from one source, the initial (or an intermediary) area of which mostly fixed with the help of the paleoanthropological data is the Armenian Highland. Subsequently, developing this subject in 2011 A.Y. Khudaverdyan published a monograph “The Earliest Communities of the Caucasus – in the Dialogue of the Worlds (the Anthropological Etude)”³¹.

The monograph³² specifically focuses on the nature of epochal changes of the anthropological traits in the course of time and their influence on the physical features of the Armenian people. The juxtaposition of the comparative groups showed that although there is not much similarity between the early and late groups, the existence of succession is clearly indicated by the complex of craniometric, cranioscopic and the odontologic signs. The problem of epochal shifts of morphological features was also touched upon by A.K. Palikyan³³ who compared five series of different periods and found (based on the complex of cranioscopic signs) a genetic continuity between the groups. In her article devoted to epoch-making changes of tooth system, the researcher noted “the strengthening of the reduction of certain odontologic signs from the Bronze Age to the present”³⁴.

³¹ **Худавердян А.Ю.** Древнейшие общности Кавказа – в диалоге миров (антропологический этюд). Saarbrücken: LAP LAMBERT Academic Publishing GmbH & Co. KG Dudweiler Landstr, 2011, с. 3–299.

³² **Худавердян А.Ю.**, *op. cit.*, 2009, p. 365–399.

³³ **Паликян А.К.** Некоторые антропологические наблюдения к проблеме преемственности древнего и современного населения Армении («Պատմա-բանասիրական հանդես», Ե., թիվ 3 (173), 2006, էջ 227–248); **Паликян А.К., Налбандян К.Г.** О некоторых эпохальных изменениях зубной системы на территории Армении (Հանրապետական գիտական նստաշրջան՝ «Հայ ժողովրդական մշակույթ», գեկուցումների դրույթներ, Ե., 2006, էջ 270–271); **Паликян А.К.** Некоторые антропологические наблюдения к проблеме преемственности древнего и современного населения Армении («Պատմա-բանասիրական հանդես», Ե., թիվ 3 (173), 2006, էջ 227–248); **Паликян А.К., Налбандян К.Г.** О некоторых эпохальных изменениях зубной системы на территории Армении (Հանրապետական գիտական նստաշրջան՝ «Հայ ժողովրդական մշակույթ», գեկուցումների դրույթներ, Ե., 2006, էջ 270–271).

³⁴ **Паликян А.К., Налбандян К.Г.**, *op. cit.*, p. 272.

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The collection of odontologic data for scientific purposes is carried out in our country thanks to R. Kochiev, A. Palikyan, N. Kochar, V. Kashibadze and L. Sinamashvili. R. Kochiev³⁵ who collected materials from the Syunik and Lori provinces and Artsakh opined that the complex of the odontologic signs in the Armenians of Stepanakert manifested closer ties with the Black Sea groups, Azerbaijani, Lezgians, Kumyks and Adyghe. In 1986 the expedition of the Institute of Archaeology and Ethnography of NAS RA headed by N.H. Kochar explored the provinces of Armavir, Gegharkunik and Ararat. Odontological material was transferred to V. Kashibadze for research (Institute of History, Archaeology and Ethnography n.a. I. Dzhevakhishvili, Tbilisi). According to Kashibadze the Armenian variant of the tooth system represents an ancient and morphologically mature odontological layer within the circle of the Caucasian forms; Armenian groups show strong resemblance and are the morphological core of the western subtype of the southern gracile type and therefore “it is expedient to call the odontological variant, characteristic of this circle, Armenian”³⁶. Later upon investigating the materials from the Lchashen, Ketik, Shirakavan and Karchakhyur³⁷ necropolises Kashibadze wrote that “to avoid major errors connected with selection all these data have been unified into one group, representing the Bronze Age population of Armenia”³⁸. However the series of Shirakavan and Karchakhyur date from the Late Antiquity. New data obtained by A.K. Palikyan³⁹ on the modern population of Armenia confirm the unity of the genetic substratum of all Armenian groups. The researcher also collected and studied the morphological features of tooth system of the Assyrians compactly residing in the Ararat province (Verin Dvin)⁴⁰. According to Palikyan the genetic characteristics of Assyrians confirm their proximity to

³⁵ **Кочиев Р.С.** Закавказье и Северный Кавказ (Этническая одонтология СССР. М., 1979, с. 135).

³⁶ **Кашибадзе В.Ф.** Одонтология армян («Հայաստանի կենսաբանական հանդես», թիվ 4 (43), 1990, էջ 294).

³⁷ **Кашибадзе В.Ф.** Дифференциация населения Кавказа по одонтологическим данным («Вопросы антропологии», вып. 80, 1988, с. 75; Ibid, էջ 287).

³⁸ **Кашибадзе В.Ф.**, op. cit., 1990, с. 287.

³⁹ **Паликян А.К.**, op. cit., p. 247–248; **Паликян А.К., Налбандян К.Г.**, указ. соч., с. 269–271.

⁴⁰ **Паликян А.К.** Одонтология ассирийцев («Հայաստանի կենսաբանական հանդես», թիվ 1–2, 2007, էջ 156); **Кочар Н.Р., Паликян А.К., Налбандян К.Г.** Этногенетическое исследование проживающих в Армении ассирийцев (по антропологическим данным ассирийцев Верин Двин) («Պատմա-բանասիրական հանդես», թիվ 2 (193), 2007, էջ 265–270).

Armenian groups. Dermatoglifical data also confirm the fact of the Assyrians' proximity to the Armenian groups, revealing at the same time ties with the native Caucasian population⁴¹.

The 90s of the past century were marked by a number of paleopathologic researches from a perspective allowing to designate this phenomenon as the emergence of the Armenian school of paleopathology. Earlier anthropological researches focused on craniologic, dermatoglific and odontologic studies of the materials, which significantly narrowed the notions concerning the physical type, way of life and the extent of the population's adaptation to the environment. The first extensive paleopathological assemblage containing unique materials of the Late Bronze and Early Iron Ages was established in 1995 owing to kind assistance and generosity of professor A.A. Sarafyan (Chair of Anatomy of Yerevan State Medical University) who donated the paleopathological finds to the author of this article. Examination of the skulls of Bronze, Iron and Antiquity periods carried out jointly by A.A. Sarafyan, M.G. Altunyan and A.Y. Khudaverdyan revealed various tooth and bone diseases⁴².

In 2005 A.Y. Khudaverdyan published the illustrated "Atlas of the Paleopathological Finds in the Territory of Armenia"⁴³ which was the only monograph on paleopathology spreading some light on the variants of anomalies, the antiquity and nature of diseases, life expectancy of the ancient inhabitants of Armenia. It should be noted that the cases of pathology described therein are provided with photos and published in specialized reviewed journals (Journal of Paleopathology, Anthropologie, Dental Anthropology, Anthropological Review, European Journal of Anatomy, Anthropos, Archaeological Science Journal, etc.)⁴⁴.

⁴¹ **Налбандян К.Г.** Дерматоглифическая характеристика ассирийской популяции села Верин Двин («Հայաստանի կենսաբանական հանդես», թիվ 59 (1-2), 2007, էջ 45-47).

⁴² **Сарафян А., Худавердян А., Алтунян М.**, op. cit., 1997, с. 72-73; **Сарафян А., Худавердян А.**, op. cit., 1999, с. 68-70; **Худавердян А.Ю.** Рентгеноантропология и рентгеноостеология (Հանրապետական գիտական նստաշրջան, ՀՀ ԱՆ Առողջապահության ազգային ինստիտուտ, գիտական զեկուցումների դրույթներ և հաղորդումներ, Ե., 1997թ, էջ 49-51); **Худавердян А., Ерицян Н.** Анемия в детской популяции древних поселений Армении как один из индикаторов среды (Մանկաբույժների հանրապետական գիտական նստաշրջան, զեկուցումների դրույթներ (ԵՊԲՀ), Ե., 1999, էջ 204).

⁴³ **Худавердян А.Ю.**, op. cit., 2005, p. 1-286

⁴⁴ **Khudaverdyan A.** Pattern of Disease in Three 1st Century BC – 3rd Century AD Burials from Beniamin, Vardbakh and the Black Fortress I, Shiraksky Plateau (Armenia), «Journal of Paleopathology», Italy, v. 22, 2010a, pp. 15-41; Palaeopathology of Human Remains from

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Skulls with traces of trepanations are recorded in Armenia since the Late Bronze Age⁴⁵. Traces of trepanations were found on 10 skulls of the Late Bronze and the Early Iron Ages (Lchashen: bur. 71, bur. 83, bur. 193/6; Artsvakar: bur. 5; Tekhut: bur. 1; Karmir: bur. 1; Bakheri chala: bur. 18, fig. 2, bur. 22; Barcaryl: bur. 9, fig. 3; Karashamb: bur. 9), with the adhesion signs on six of them (Lchashen: bur. 71, bur. 83, bur. 193/6; Artsvakar: bur. 5; Tekhut: bur. 1; Barcaryl: bur. 9). Only one skull from the Iron Age burial in Shirakavan I (bur. 9)⁴⁶ showed the trepanation traces. One of the photos with the trepanned skull of the Late Bronze Age from Lchashen series (bur. 71, ♀ 30–39 years, fig. 1)⁴⁷ was erroneously attributed to Akunk group (11–7 BC)⁴⁸. The two other trepanned skulls

Vardbakh and the Black Fortress I, Armenia, «Bioarchaeology of the Near East», Poland, no. 4, 2010b, pp. 1–23; Pattern of disease in II millennium BC – I millennium BC burial from Lchashen, Armenia, «Anthropologie», Brno, v. XLVIII (3), 2010c, pp. 239–254, Idid, 2011a, pp. 602–609, Idid, 2011b, pp. 39–55, Unusual Occipital Condyles and Craniovertebral anomalies of the skulls burials Late Antiquity period (1st century BC – 3rd century AD) from Armenia. «European Journal of Anatomy», Spanish, no. 15 (3), 2011c, pp. 162–175, Paleopathological Supervision over bone Materials of an Epoch of Antiquity from Necropolises of Armenia. 38th Annual Meeting of the Paleopathology Association. Abstract. Minneapolis, Minnesota, 2011d, pp. 42–43, The anthropology of infectious diseases of Bronze Age and Early Iron Age from Armenia, «Dental Anthropology», USA, no 2 (2), 2011e, pp. 42–54, Osteological analysis of human skeletal remains in Bronze Age from Armenian Highland, «Journal of archaeological science», Canada, v. 1(3), 2012c, pp. 21–36; Les inhumations de la cimetières de la plaine Chirak (Arménie), approche biologique et sociale, «Etnoantropološki problem», Serbian, no 9 (1), 2014a, pp. 219–242, Bioarchaeological Analysis of Skeletal Remains from the Black Fortress, Armenia: a Preliminary Overview, «Journal of Paleopathology», Italy, v. 24 (1–3), 2014b, pp. 9–16, Palaeopathology of Human Remains of the 1st Century BC–3rd Century AD from Armenia (Beniamin, Shirakavan I), «Anthropological Review», Poland, v. 78 (2), 2015, pp. 213–228, Idid, 2016, pp. 447–461.

⁴⁵ Худавердян А.Ю., указ. соч., 1997р, с. 50; Idid, 2005, с. 261–266; Khudaverdyan A., op. cit., 2010c, pp. 244–245; Trepanation in the Late Bronze Age and Early Iron Age in Armenia, «Homo», Australia, v. 67, 2016, pp. 447–461.

⁴⁶ Худавердян А.Ю., Деведжян С.Г., Еганян Л.Г. Способы обращения с телами умерших в памятниках Ширикаван и Лори Берд (Армения): по данным палеоантропологии («Вестник археологии, антропологии и этнографии», Тюмень, ном. 4 (23), 2013, с. 88).

⁴⁷ Худавердян А.Ю., указ. соч., 1997р, с. 50; Idid, 2005, с. 261–266; Khudaverdyan A., op. cit., 2010c, pp. 244–245.

⁴⁸ Миракян М.Е., Исаакян Е.Я., Мкртчян Р.А., Пилипосян А.С. Палеопатология кра-ниологической коллекции из погребений эпохи железа («Вопросы теоретической и клини-ческой медицины», ном. 3 (10), 1999, с. 55); Миракян М.Е., Исаакян Е.Я., Мкртчян Р.А., Татинцян В.Г. Следы некоторых заболеваний по материалам раскопок из погребения эпо-хи железа («Вестник Международной академии наук экологии и безопасности жизнедея-тельности». Научно-практический журнал, Ереван (СПб), ном. 7 (19), 1999, с. 187).

(Shirakavan, Black Fortress I) fall into to the era of Late Antiquity⁴⁹. The above-mentioned trepanations were made during the individuals' lifetime but the latter did not survive the surgery.



Fig. 1. Intravital trepanation. Material from Lchashen (bur. 71, ♀ 30–39 years). An instance from paleopathological collections of prof. A.A. Sarafyan

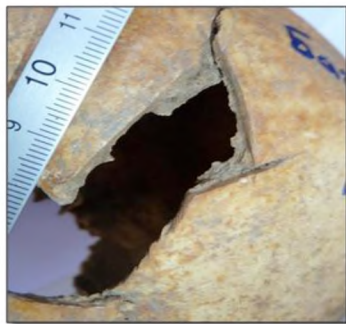


Fig. 2. Intravital trepanation. Material from Bagheri Chala burial ground (Lori Province) (bur. 18, male 30–39 years)

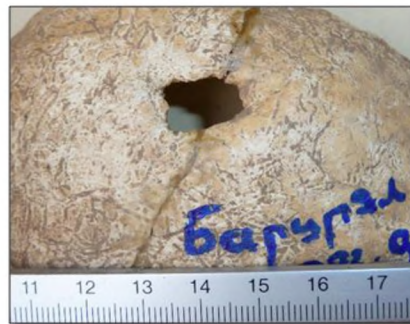


Fig. 3. Intravital trepanation. Material from Barcryal burial ground (Lori Province) (bur. 9, skull 20–29 years)

Supporters of paleopathology in medical circles devoted works to the history of specific diseases in the remote past. Meanwhile basing on the results of the analysis of craniological collection (of the 11–7th cent BC) from the tombs in the vicinity of Akunk M. Mirakyan⁵⁰ specified the cases of syphilitic manifestations on bone material. Thus, on the frontal and parietal bones of a 25–30 year–old man there were 3 plaques, in the form of spherical pimples. These spherical formations rose on the external switching plate of the bone, towering over it, leaving intact the

⁴⁹ Худавердян А.Ю., указ. соч., с. 261–266; Khudaverdyan A.Yu., op. cit., 2011b, pp. 43–44.

⁵⁰ Миракян М. К вопросу истории сифилиса. Новости дерматологии и венерологии Южного Кавказа («Научно-практический профессиональный журнал», Тбилиси, ном. 1 (4), 2007, с. 72–74).

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spongy tissue and the internal switching plate. According to the researcher, pineal or papulose plaques on the skulls were diagnosed as restricted non-gummatous osteoperiostites, typical of the secondary stage of syphilis.

Similar plaques of various sizes were found in the individuals of Early⁵¹, Late Bronze and Early Iron Ages⁵².



Fig. 4. Proportionate type dwarfism. Material from Beniamin burial ground (bur. 4, female 40–45 years)

The hypophysial nanism is a disorder of growth processes connected with the manifestation of abnormally low body height in people of both sexes. People affected by the disease are usually 100–140 cm height, but some may be not higher than 70 cm⁵³. The reasons of nanism include the anomalies in the hypophysis structure or other syndromes, which accompany this disease, as well as craniocerebral injuries, birth trauma, neuroinfections (bacteriemic meningitis, virus of encephalitis), etc. This extremely rare disease was recorded with two individuals from the Late Bronze/Early Iron Age (Artsvakar, bur. 4)⁵⁴ and Late Antiquity (Beniamin, bur. 221)⁵⁵ tombs.

⁵¹ Худавердян А.Ю., указ. соч., 2000а, с. 96–99, Idid, 2005, с. 141–142.

⁵² Худавердян А.Ю., указ. соч., 2005, с. 142.

⁵³ Васильев С.В., Бабаков О., Боруцкая С.Б. Типология ростовых нарушений в антропологических исследованиях («Вестник антропологии», ном. 7, 2001, с. 199–120).

⁵⁴ Khudaverdyan A.Yu. A Dwarfism skull: Excavated on the Site of the Late Bronze Age and Early Iron Age Cemetery at Artsvakar (Armenia), «Journal of Paleopathology», Italy, v. 26 (2–3), 2016, pp. 36–99.

⁵⁵ Khudaverdyan A.Yu., op. cit., 2015, pp. 220–223.

Summing up this historiographic review of the development of paleoanthropology in Armenia, it is necessary to specify that paleoanthropology is one of the most interesting fields of natural science having a huge scientific potential and value for a wide range of historical and medicobiological disciplines. The Current paleoanthropology is dealing with the problems of origin, change of racial types, their distribution across certain areas, physical development, influence of the environmental factors on the health of the ancient people. It is obvious that the future of the modern historical and medical studies depends on cross-disciplinary researches conducted on the junction of various applied, natural and humanitarian disciplines, which are presently enhanced by the application of generic methods of paleoanthropological and paleopathological research enabling to diagnose infectious diseases, determine the sex by the skeletal remains of children, etc.⁵⁶ Paleoanthropological researches are the best examples of such cross-disciplinary approach.

Paleoanthropology in Armenia is at a new stage of development. If the previous researches were carried out only by the representatives of the Soviet (Moscow) anthropological school, now the works are performed by Armenian anthropologists conducting comparative studies of the synchronous and diachronous populations, and paleopathological researches based on the comprehensive approach, which allows to precisely diagnose the disease on bone remains and to make a more convincing bioarchaeological reconstruction.

ՀԱՅԱՍՏԱՆԻ ՀՆԱՄԱՐԴԱԲԱՆՈՒԹՅՈՒՆԸ.

(պատմագիտական ակնարկ)

ԽՈՒԴԱՎԵՐԴՅԱՆ Ա.

Ամփոփում

Աշխատանքը պատմագիտական ակնարկ է Հայաստանում հնամարդաբանության զարգացման փուլերի մասին: Հայաստանի մարդաբանության պատմության մեջ նշանակալի երևույթ էր Ա.Դ. Ճաղարյանի և Մ.Գ. Ալթունյանի

⁵⁶ Худавердян А.Ю., Гаспарян Б.Г., Пинхаси Р., Канаян А.С., Ованесян Н.А. Антропология носителей энеолитической культуры из пещеры Арени I («Вестник археологии, антропологии и этнографии», Тюмень, ном. 2 (37), 2017, с. 72–93).

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պեղած գանգերի հիման վրա պատմական դեմքերի վերականգնման փորձը: Ա.Ա. Սարաֆյանը առաջինն էր, ով ռենտգեն ախտորոշումը կիրառել էր գանգոսկրների տարբեր ախտաբանական վիճակների ուսումնասիրության մեջ: Ն.Հ. Քոչարի հետազոտության արդյունքում պարզվել է Հայաստանի տարածքի բնակչության մաշկահետքաբանական հատկանիշների բաշխման միօրինակությունը և այդ հատկանիշներով հայերի բավականաչափ նմանությունը Կովկասի, Սիրիայի և Եմենի ժողովուրդների հետ: Հայկական հնամարդաբանական դպրոցի ձեռքբերումները վերաբերում են մարդաբանության ոչ միայն մասնավոր, այլև ընդհանուր հարցերին:

ПАЛЕОАНТРОПОЛОГИЯ АРМЕНИИ: (историографический очерк)

ХУДАВЕРДЯН А.

Резюме

Работа представляет собой историографический обзор этапов развития антропологии в Армении. Антропологи А.Д. Джагарян и М. Алтунян оставили значимый след в развитии армянской антропологии, создав целую галерею скульптурных реконструкций исторических лиц. А.А. Сарафьяном впервые были проведены опыты рентгенодиагностики различных патологических состояний на костях черепа. Н.Р. Кочар показала однотипность распределения признаков во всех популяциях на территории Армении и установила наибольшее сходство между армянами и народами Кавказа, Сирии и Йемена. Армянская палеоантропологическая школа добилась больших успехов как в изучении частных, так и общих вопросов антропологии.