

Anthropological and Genetic Characteristics of Atropatene population

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Abstract

Iran is of great interest to a wide range of scientific disciplines because of the rich ethnic and cultural diversity of population living there, and the extreme complexity of the historical and genetic issues in the region. However, studies related to the ethnogenesis of indigenous peoples and their ancient genetic contacts are not conclusive. Iranian Azaris – the largest ethno-linguistic minority in Iran – are one of such peoples. The origin of the Turkic-speaking population of the north-western provinces of Iran, the so-called Azaris, is the subject of long-year debate. In this paper the anthropological data obtained by the author and the genetic results of modern scientific literature, concerning the ethnogenesis of Iranian Azaris, which is essential addition to their historical, archaeological and ethnographic. The main conclusion of the work, which is based on the analysis of anthropometric and genetic material, is as follows: the ethnic group under consideration - Iranian Azaris, undoubtedly is the indigenous population in the region of the Middle East.

Key words : Iranian Azersi . Persians. Atropatgan . Genetic Origin. Multivariate analysis

Introduction

Due to its geo-strategic location in the Middle East, the Iranian plateau has served as a key crossroad for human disseminations and played a critical role in the migratory waves between the populations of the Middle East and beyond. The most important long-term factor in this process was human adaptation to the Iranian plateau and its geographical, topographical, and climatic conditions with the subsequent development of agriculture, pastoralism, and pastoral nomadism. The spread of these technological innovations, along with a series of major demographic and historical events, has resulted in a large diversity and dispersal of ethnic groups and languages. Between the third and second millennia BC, the Iranian plateau became exposed to incursions of pastoral nomads from the Central Asian steppes, which were a difficult environment for agriculture but ideally suited to animal husbandry and pastoral nomadism. Presumably, via an elite-dominance process, existing Dravidian language across the region was substituted by Indo-Iranian language, which is a branch of Indo-European language [1]. Also their genetic impacts were as significant as the imposition of their language, which is clearly observed in Iran, Pakistan and northern India.

In the period of the eleventh to thirteenth centuries AD the Arab-Muslim, Seljuk and subsequent Turkic-Mongol invasions signaled the arrival of a new people with flocks and culture. Specifically, in a series of rapid Arab-Muslim conquests in the seventh century, the Arab armies swept through most of the Middle East, completely engulfing the Persian lands.

The dominance of the Arabs came to a sudden end in the mid-eleventh century with the arrival of Seljuk Turks, a clan of the Oguz Turks. The expanding waves of these Altaic-speaking nomads from Central Asia involved regions farther to the west, such as Iran, Iraq, Anatolia, and the Caucasus, where they imposed Altaic (Turkish) languages. In these western regions, however, the genetic contribution is low or undetectable, even though the power of these invaders was sometimes strong enough to impose a language replacement, as in Turkey and Azerbaijan [2]. Later, the Mongol armies also moved westward and, by the early thirteenth century, established their rule over a vast region, including Iran and advancing as far west as the Caucasus and Turkey. These waves of various invasions and subsequent migrations resulted in major demographic expansions in the region, which added new languages and culture to the mix of peoples that had pre-existed in Iran [3].

In general, a considerable genetic diversity is observed in Iranian populations, which resembles to that of Middle East patterns as a whole and strengthens the idea of Persia, being the main crossroad for human dissemination.

This area is remarkable for its high level of ethnic and linguistic diversity, comprising the major language families (Indo-European, Altaic, and Afro-Asiatic) currently spoken by more than seventy ethnically different populations [4]. This demonstrates the role of Iran, which played in population dispersal across the latitudinal belt spanning from western Anatolia to the Indus Valley. However, there have been gaps in high-resolution genetic analyses for this region to uncover population history at a fine scale, for example, for particular ethnic and linguistic groups. The principal aim of this paper is to test the existing principal hypotheses on the Azaris' origin through identification of their place on the genetic landscape of the Middle East.

The race of people settled in the Iranian plateau

The primitive anthropologists tried to determine the multi types of mankind's nature by classification under the title of race based on geographical areas and physical apparent characteristics like color and others. Race is applied to a group of people who have kept the common physical or biological characteristics in successive generations [5]. Or a group of natural people inherited a common physical feature; they have the same race even with different languages and customs. According to this definition what makes difference between two races is physical inherent characteristics and nothing else. It means that some of them know this difference resulted from heredity and others believe in environmental effects [6].

The people of different places in the world are so mixed and it seems unlikely to determine the exact racial location. But it is not out of ambiguity, because the most anthropologists and scientists believe that human has always exposed to immigration and racial integration. Racial integration is, not only a historical reality, but also it is more intensive than the past in this active world. The relations between nations and repetitive marriages of different races during centuries and their continuous changes have caused not to remain a fixed race. It means that we can not point to one factor only like color of skin to determine the race of a group. Other factors are considerable such as height, the form of skull, head, hair, face, forehead, eyebrows, eyes, nose, and size of cheek, jaw, and also scattering of people on the base of blood group (genetics). Asia continent as the largest and the most populous continent and the cradle of a developed civilization has different peoples with various races and with their special physical characteristics. On the other hand, it is the origin of different races, including yellow (Mogul), Siberia, northern and Mogul, central Mogul, Indonesia, Mediterranean, Transoxania (Kyrgyz, Turkman, Tatar, Anatolian Turk).

Although there have been intercourse among these ethnical groups, but all of them have their own special characteristics on the view of color, the form of skull and face. The world is a place containing various racial and lingual groups. So that as far as this issue is concerned there is no difference between developed and developing countries. As if, among all existing countries and islands in the world, about 160 countries have an increasing situation regarding race and culture. Iran is not an exception, because it can be called a multi-national or multi-racial community. The Iranian Plateau as a special geographical place in Asia continent has had different nations with various races. The Iranian plateau has 2/600/000km² area (about 55/000 Parasangs). It is a special geographical unit of Asia continent and Iran with 1/648/195km² area, located in the south west of Asia and the Middle East. In fact, Iran covers %63 or two third of this place and the rest is for other countries. Natural, climatic and geographical conditions of Iran have caused that this country will be accounted among the primitive living places and social centers of ancient human being.

Archeological and anthropological studies have approved this matter too. Although, the existing appearance of early human groups in the Iranian plateau is not clear and nobody knows that from where and which direction, primitive human have immigrated to western Asia and Iran, but it very probably seems that human collections have gradually immigrated from Africa to European areas and western Asia and then to Mesopotamia and Iran in Piston era, about one million years ago. It is a little difficult for present anthropologists and craniologists to determine the race of Iranian plateau inhabitants, because this plateau is as a bridge between the Far East, the Middle East and Mesopotamia. Therefore, many nations with different races have entered this area and placed under a unit ceiling of language. Anthropologists who study physical features are sure that some individuals with extended heads have settled in Iran before Nordic. But the main factors related to Iran population are generally Mediterranean. [7] Given to the researches, the most important factors related to Iranian plateau inhabitants are round heads and ellipsoid faces. Now, among the present group who live in this plateau, especially in the east part, there are many people with round heads and extended faces.

They are in heights and mountains more than valleys and plains. Some of them can be related to Indian Dravidians, because there are some ones with round heads and ellipsoid faces. High stature and light skin are their most important characteristics. It seems that the present residents of this plateau are more related to people in the west and northwestern of Iran. As a result of anthropological studies and measurements in Iran, a basic branch called white race has been determined as a race of Iranian plateau inhabitants. Iranians are among the oriental race called Indus European who have immigrated to this plateau from oxus and Caucasian mountains in the late of second thousand B.C.

Iranian Ethnic Groups

At the present time, a nation can settle in a country with clear borders or can be separated for historical events. Their races can be divided among some countries or can be scattered in different areas for immigrations. In Iran, with these geographical borders, there are several nations in which their characteristics are presented in their race and language. The official language of Iran is Persian (Farsi). Persian is a West Iranian language of the Indo-European family of languages and is spoken in those parts of Iran where the Fars people, Persians, dwell, as well as in the Republic of Tajikistan. Tehran, Isfahan, Fars, Khorasan, Kerman and Yazd are some of the provinces inhabited by the Persians [8].

There are a number of other national and ethnic groups living in various parts of Iran. The historical background and anthropological origin of these groups have been subject of numerous research works, but researchers are not unanimous concerning many of the questions posed. The most important of these groups with specific history, culture, customs, and language are the Azeri's, the Kurds, the Mazandaran and Guilan, the Baluchis, the Arabs, the Turkmans and the Lurs. There are also a number of ethnic minorities, but they have not been given much anthropological attention for a number of reasons, their small population and their extensive mixing with other Iranians being only two. The following is a general outline of the most populous ethnic and national groups mentioned.

- **Azeri** people who form all population of the northwestern and west of Iran are settled in a place called Azerbaijan (Atropatgan). Although there are some people with Persian language among them, but most of them are Turkish. It is worth mentioning that there are many differences between Iranian Turks and other Turkish nations. The Iranian Azeri people are not Turkish unlike common beliefs, but they are original Iranians with Aryan race [9].
- **Kurds** The exact origin of the Kurds has not been yet been researched, even though they have an ancient history. The Kurds reside mainly in Kurdistan. It is a large territory extending to a major part of the mountainous region of southeast Turkey, northeast Iraq, northwest Iran and parts of Russia, as well as Syria. There are three theories about their origin: The first theory: They are among Indians and European races immigrated in the 7th century B.C. The second theory: It emphasizes on their native and lingual nature as if they know Kurds as the relatives of other Asian nations like Khaleds, Georgian and Armenians. The third theory: Kurd race is the diagram of Zagros, Gouti, Lolubi, Kasi, Orartouie and other tribes who settled in Zagros or Kordestan in the past. They joined Indo-European nations and have the same race [10].
- **Lurs** is the title of a group of Iranians living in the mountainous areas of the south-west, mainly in Lurestan province. On the basis of historical evidence, the Lur appear to be of the same ethnic origin as the Kurds. There are four main Lur groups: the Bala Garideh, Delfan, Selseleh and Tarhan. The Bala Garideh are the genuine Lur who are divided into important tribes such as Dirakvand, Janaki, Amaleh, Sagvand, etc. The Lurs live in the west parts of Iran and have thick hairs and lighter skin physically. Most of them are tall. Their skulls are pressed and round. They have an extended and a thin face. Their foreheads are a little big, have thick and semicircular eyebrows. Also the big, wide, lowly noses inclined to the ground. Their chins are inclined down and seem a little big. They have small cheeks with more distance between them. The hair color is as same as chestnut and have thick beard, unmixed race on the view of quality and they are accounted among the Aryan race.
- **Baluchis** The Baluchis reside mainly in Baluchestan, which is a dry region in the south-eastern part of the Iranian plateau. It extends from the Kerman desert to the rest of Bam and Beshagard mountains, and to the western borderline of the Sind and Punjab provinces of Pakistan. Baluchestan is divided between Iran and Pakistan. Iran and Pakistan had a dispute concerning the border dividing the two parts of Baluchestan, which was resolved by an agreement in 1959. The Iranian Baluchestan is a part of the Sistan and Baluchestan province.

- **Mazandaran and Guilan** People of Mazandaran and Guilan who are settled in the Caspian seaside villages separated from the Persians in Alborz valleys by the northern climate condition of Alborz. They are original Iranians. Their difference with Persians is resulted from the separation on the side of Alborz and geographical climate condition and not for race. They have medium stature with dark and pale appearance, black eyes, black and thick hair and beard.
- **Arabs** Some historians maintain that the first Arabian tribes migrated to Khuzistan, a section in south-west of Iran where they now live, in the early centuries AD, probably moving in from the Arabian peninsula. Arabian tribes are scattered in an areas between the Arvandroud(Shatt al-Arab) and the Persian Gulf in the south and Shush in the north. The most important of the Arabian tribes in Iran is the Bani-Kaab, which is also the largest.
- **Turkmans** The Turkmans are an ethnic minority who speak the Turkish language with the Eastern Oghoz accent. The same dialect is spoken in the Republic of Turkmenistan. They live in the Turkoman Sahra and in the Gorgan plains. The area is a fertile plain near the Iranian border with the Republic of Turkmenistan. It extends from the Atrak river in the north, to the Caspian Sea in the west, Quchan mountains to the east and the Gorgan river to the south. Iranian Turkmans have been living in Iran since 550 AD, but they first began forming tribes from 750 AD onwards. They are the descendants of Central Asian Turks, who retained their ethnic identity during the Mongol invasion. Not all the nine Turkoman tribes live in Iran. The most important Iranian Turkoman tribes are Kuklans and Yamotes. The Kuklans have six branches, and live in the central and eastern Turkoman Sahra. The Yamotes have two large clans, the Atabai and Jaafarbai, and live to the west of Turkoman Sahra. There are also smaller tribes to the east of the region in a few villages.

The race of Atropatgan people

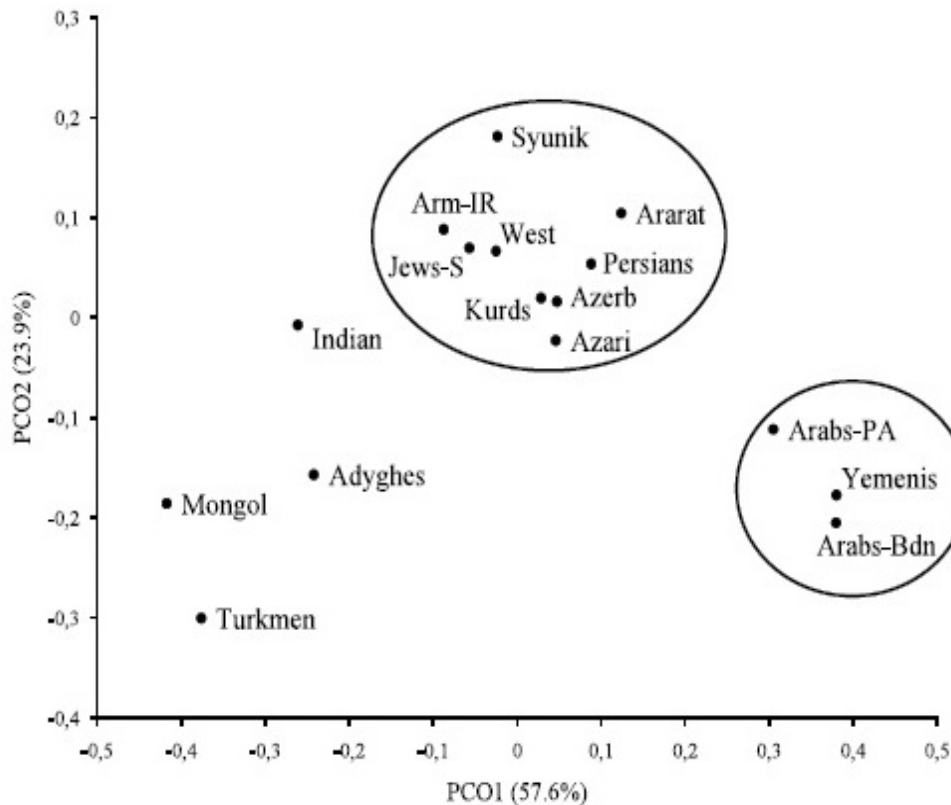
They were called Aryan in the history. The great part of Iranian plateau located among the Oxus and Indus valley, Zagros and Caucasian mountains, makes Azerbaijan plateau (Atropatgan) in the north. Azerbaijan was covered by the Big Sea in the early of third era and called Titus. Consequently, great changes in earth's crust, mountain-making movements and volcanic actions have made the final geographical form of Azerbaijan plateau (Atropatgan). There is not any information about this matter that when human beings have steeled here and stepped on it for the first time. But archeological investigations indicate that it refers to Paleolithic era [11].

The Iranians display considerable genetic diversity consistent with patterns observed in populations of the Middle East overall, reinforcing the notion of Persia as a vital crossroad for human disseminations. The geographic area is remarkable for its high level of ethnic and linguistic diversity, comprising the major language families (Indo-European, Altaic, and Afro-Asiatic) currently spoken by more than seventy ethnically different populations. This demonstrates the role Iran played in population dispersal across the latitudinal belt spanning from Western Anatolia to the Indus Valley. However, there have been gaps in high-resolution genetic analyses for this region to uncover population history at a fine scale, for example, for particular ethnic and linguistic groups. Among them, the Turkic-speaking Iranian Azari population constitutes the largest ethno-linguistic group after Persian-speakers, accounting for 24 percent of Iran's population (CIA 2010). The historical background and anthropological origin of the Turkic-speaking Iranian Azeri population has been a subject of numerous research works, but so far the opinions of scholars are not unanimous concerning many of the questions posed.

Some sources tend to designate them as the descendants of the Turkic people, most likely due to their Turkic language. The majority of sources view the ethnic Azeris as having mixed ethnic origin tracing back to indigenous Caucasian populations and Iranians, who were influenced by Turkic languages throughout centuries of occupation under several Turkish dynasties [12]. The Iranian roots of Azaris, according to protagonists of this view, can likely be traced back to ancient Iranian tribes, such as the Medes, who lived on the territory of Azerbaijan (ancient Āturpatakān, roughly covering the modern Iranian provinces of Eastern Azerbaijan, Western Azerbaijan, and Ardabil), and Scythian invaders, who arrived during the 8th century B.C. This population was Persianized during the period of the Sasanian dynasty of Iran (3rd-7th century AD), but, after the region's conquest by the Seljuk Turks in the 11th century, the inhabitants were Turkicized, and further Turkicization of the population occurred in the ensuing centuries. Some information is also available about the Caucasian Albanians as the main ethnic constituent of the inhabitants of the modern-day Republic of Azerbaijan in the South Caucasus, called Azerbaijanis by the name of the state. The Caucasian origin mostly applies to the Azeris of the Caucasus, most of whom are now inhabitants of the Republic of Azerbaijan. Azerbaijan is the most populous country in the Caucasus.

Although it contains people of many different nationalities, the republic has become more ethnically homogeneous in recent years. The proportion of Azeris, who have traditionally comprised about four-fifths of the population, has increased since the start of the conflict with Armenia over Nagorno-Karabakh in 1988. Average population density of Azerbaijan is 86 pers/km². However, whether originally Caucasian or Iranian, it is fairly definite and largely supported by historical accounts that Azeris are not descendants of Turkic tribes, although they have certainly been affected by them. We intended to get relatively comprehensive information about the Y chromosome diversity in Azeris living in Iran. All donors were selected only if their paternal grandfathers were from the same region and they were unrelated to other donors at the grandfather level.

As comparative datasets we used several ethnically distinct groups currently living in the Middle East, the Caucasus, Central Asia, and the Indian subcontinent. They consist of 16 populations representing Indo-European, Afro-Asiatic, North Caucasian, and Altaic language families (the list of ethnic groups is presented in the legends of the Figure below). The Turkmens (representing a Turkic-speaking group from Central Asia) and Adyghes (being Caucasians by origin) are considered here as possible source populations for Azaris genetic origin. DNA samples were collected in 99 male Azaris living in Tabriz (north-west Iran) with strong local identity, whose paternal grandfathers lived in the same region at least three generations. All samples were screened for 18 molecular genetic markers broadly used in population genetics studies. On the plot of genetic distances (see the Figure below) we can clearly identify several distinct clusters of the populations, which are in good agreement with geographical and, in some cases, linguistic classification of the groups. Armenians, Turks, Kurds, Jews, and Persians and form a distinct sub-cluster of the Middle East, while Arabs (Palestinian Arabs, Yemenis, and Bedouin Arabs) shape another separate entity. Other ethnic datasets, including hypothesised source populations of Turkmens and Adyghes, are located far beyond the limits of the two sub-clusters of the Middle Eastern origin.



SPATIAL RELATIONSHIPS BETWEEN THE GROUPS BASED ON GENETIC DISTANCES

Abbreviations used: *Arabs-Bdn*: Bedouin Arabs; *Arabs-PA*: Palestinian Arabs; *Ararat*: Armenians living in Ararat Valley; *Arm-IR*: Iranian Armenians; *Azerb*: inhabitants of the Republic of Azerbaijan; *Azari*: population of north-west Iran; *Jews-S*: Sephardic Jews; *West*: Western Armenians; *Persians*: Persian-speakers of Iran.

According to other scholars, the Iranian roots of Azeris likely trace back to ancient Persian tribes, such as the Medes, who lived on the territory of modern Iranian Azerbaijan, and Scythian invaders, who arrived during the 8th century BC. To further test to check one of the existing, the 'Iranian', hypotheses of the Azeris' origin. We compared the Turkic-speaking Azeris (n=400) and the Iranian-speaking Persians (n=115) living in Iran using eight cephalometric traits. The data were collected in different, predominantly rural, populations in the province of Iranian Azerbaijan. Two multivariate statistical approaches, the principal component analysis and the discriminant analysis, were applied using SPSS software package. On the basis of the first method the integrated features, principal components (PC1 and PC2), accounting together for 73.6% of total diversity of the initial cephalometric traits were separated. The mean values of these features did not significantly differ between the Azeris and Persians ($p > 0.05$). The spatial relationship between the populations considered is presented on two-dimensional plot of principal component variables (Fig.2).

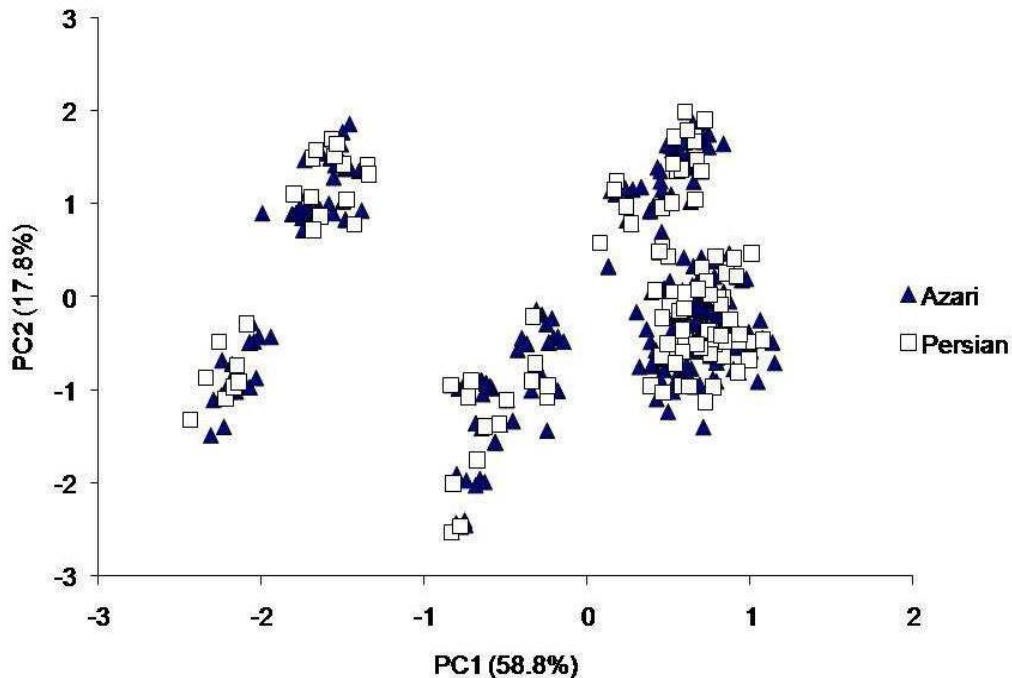


Figure2. Spatial distribution of the objects in 2D-principal components plot (numbers in brackets represent percentage of total variation explained by each axis).

The next statistical approach, the discriminant analysis, allowed checking the rate of multivariate analytical recognition of the objects, i.e. the probability of their belonging to the corresponding sample. It was revealed that the average level of correct reclassification for the pooled sample is about 52%, which means that the likelihood of the attribution of the objects to any of the groups is almost equal. In whole, the results show that Iranian Azeris and Persians do not differ significantly from each other according to multivariate morphological characteristics thus witnessing to the same generalized pattern of cephalometric peculiarities in the ethnic groups considered. These results are in good agreement with recently published data on close genetic affinity between Iranian Azeris and Persians established on the basis of Y-chromosomal markers. Moreover, using multivariate genetic classification methods, it was shown that Iranian Azeris and their close neighbors (Persians, Kurds and Armenians) form a rather distinct cluster of the Middle East origin [13]. Relying on cephalometric and genetic data we can suggest that Iranian Azeris might be considered as an indigenous population of the Middle East. The recognition of racial characteristics is a little difficult, because there is no information related to craniology of early inhabitants in Atropatgan, unless there are some ancient documents.

Here, as a statement, the following observation by Igor M. Diakonoff (based on the studies of L.V. Oshanin on the stability of certain genes in the different Turkic-speaking populations) is worth quoting. "What actually happens in history,—the author says,—can be illustrated by a linguistic 'migration', which occurred in historical times, namely, the spread of the Turkic languages... It is well known that in a biologically stable population the recessive and the dominant genes will be maintained in the same proportion [14].

The first historically attested Turkic tribes were anthropologically Mongoloid and hence had the typical Mongoloid feature of the epicanthic fold of the eyelid, depending upon a dominant gene. If the movement of the Turkic languages from the borders of modern China to those of modern Turkey were actually a mass population movement, then the percentage of the epicanthus in the speakers of Turkish, Azerbaijani, Turkmen, Uzbek, Kazakh and Qyrghyz would be approximately identical. The actual measurements, however, show the retention percentage of epicanthic fold to be, in males, 51% for the Qyrghyz, 22% for the Kazakhs, 11% for the Uzbeks, 6% for the Turkmens, and below 2% for the Azerbaijanis; and in females, 83% for the Qyrghyz, 53% for the Kazakhs, 18% for the Uzbeks, and 10% for the Turkmens. For Turks, the retention percentage for both sexes tends toward zero.

Given the explorations and discoveries of bones from early people in Atropatgan, we can discuss about individuals' skulls in this area. These bones belong to native inhabitants. As a result of studies and measuring these skulls and also based on anthropological studies, it is obtained that people in this area have a rather round heads. It means that the upper part of skull called tinsel in medical is round and has no special projection. Thus, frontal bone is begun from its attachment place to forehead bone and then inclined as semicircle with 100° or 105° downward and to the back of skull and attaches to the forehead bone. The state of semicircle in obtained bones in mentioned area has proved that this matter that inhabitants' skulls are round and it is one of the main characteristics of Aryans. The state of being round affects on the form of face bones particularly on the cheek, eye, socket, and nose. It has caused that face bone becomes big, extended and ellipsoid. Forehead bone is a little big, protuberant, extended and smooth. Eye socket is big, square, semicircle or round. Of course in some skulls, eye sockets are different on the view of smallness and bigness. The nostrils are wide and big. The width between the arches of molar bones is one of the main characteristics; especially that much width may show intermingling with the Moguls and Turks. Therefore, cheek can be one of the other differences between Turks and resident people in Atropatgan (Azerbaijan of Iran) namely Aryans. Molar bone (OZ ZYGOMATICUM) is placed on the sides to make protuberant. After studying the cheek of inhabitant people in Atropatgan, it was determined that they have delicate and narrow cheeks.

But the Moguls and Turks have wide and big cheeks. This difference is clearer in Aryans and Turks by the color of skin. Chin bone is lowly and extended and face is ellipsoid. Thus, it has a great effect on the chins and cheeks. It means that superior maxilla bone is big and lowly because of cheek smallness. This bigness is completely observable in the inferior maxilla bone. Now we proceed to apparent characteristics of inhabitant people in this area.

As a result of field studies in Atropatgan, the following outcomes have been obtained. People in this area have white or wheaten or to some extent brown and a little dark skin. According to this research, %95 of residents in mountainous areas, specially in Shand Heights have a white or light color as if we can point to Kandovan village in south of Azerbaijan (Atropatgan). In the northwest of this area, white or even dark and wheaten people are observed. In Ahar Township in the west of Azerbaijan, the white and yellow races are observed among men and women. They are often mongrel. Certainly there are individuals who are dark black and green, but most of them are immigrant and have come here from other areas. However, generally, Atropatgan inhabitants are white. In the north of Azerbaijan, people have brownish black hair. Gray hair can be observed rarely before 40 years old. The color of hair in %60 of Azeris' (Atropatgan) is between black and brown. 90% of those people have thick hair and generally it is straight. Given to hair tissue, %40 has soft and others, medium and minority bristles.

There are a few bald ones, resulted from old age or illness. Most of people have full-beard faces. Their beard is black or dark brown. In the east of Azerbaijan, people have generally black or dark brown hair. Concerning color and given to the type, there is any kind of hair from soft to bristles, but most have soft. People have high, wide, big, smooth and extended foreheads. The length of forehead is to some extend more and its width is not completely extended. Most of the time, it is wrinkled and have grown well. People in these areas have mostly thick eyebrows, and even sometimes it has covered top of the nose. But there are separate eyebrows, too. They have had semicircular, extended and a little curved form. %95 have curved, %80 thick, %15 ordinary and %5 have separate eyebrows. But these features (curved and round) are seen among people. Eyes are to some extent round and generally brown. A few of them have brown-green and most of them have brown-blue eyes, too. Only a few ones have had reddish brown eyes. The light colors indicate the factor of blond among them. Totally, it can be said that %84 have dark brown, %15 conical and some have lighter eyes. White part of the eyes is clear in most and a few have albugo.

The distance between eyes vertically and also the distance of eyebrows with eye horizontally is small. During the researches, some individuals who have had extended and long eyes were observed. They are a few but are not accounted among Aryans ethnically and perhaps have Mogul or Turk race affected by ethnical intercourse during the time. One of the most important physical features to determine a race is the length, width and a profile of nose. With regard to the size, nose is big and a little smooth. It means that %80 of people have big and extended noses. Tip of nose is wide and lowly inclined to ground and others have medium and a few have small and delicate noses observed in women more. However the nose size makes unusual appearance especially when it is seen sideways. People settled in the south of Azerbaijan (Atropatgan) have medium noses and about half of them have curved and more than one third have erect noses. In the west, the profile of nose has a considerable variety. But most of them are curved and big and a few are erect. In the studies, some people with erect and small noses are seen, too. They are short and have more extended head, round face, narrower forehead, wider maxilla and smaller nose. People with extended heads, on the contrary with round head ones have small, narrow and delicate noses. On the opposite, round head ones have big, extended, lowly and broken noses that are a feature of Aryans.

Let it not remain unsaid that there are Arab Iranian race among Azeri, too. In the year 21 A.H., when Arabs came into Iran, the first ethnical amalgamation was happened. Azerbaijan (Atropatgan) and original Aryan Iranians in this area were not deprived from this ethnical amalgamation. As if %25 has this race, but %5 has unmixed Arab race and %15 mongrel (Arab Iranian). They have special genealogies for themselves. They have the same typology with people settled in this area. Although this amalgamation took place, but Aryan race has been superior because of being a dominant race. Moreover, they may have insignificant differences with Aryans. Their most important features are: white color, blue and bluish green eyes, bond hair, black eyes with high forehead, curved eyebrows, extended and lowly nose and black hair.

Conclusion

It is worth noting that because of the history of the region, political changes in different parts of Iran, invasion of Turk, Mogul and Arab Atropatgan inhabitants are homogeneous as race is concerned. The invasion of nomads into Iran and Mogul penetration, hostility and long fighting with Ottoman and their penetration to Atropatgan have caused changes in the nature of this country concerning its history and its identity. Therefore, the manifestation of the change appeared in the language of people in this area and not in their race. Considering the studies about unique features of people in Atropatgan, we came to this conclusion that Atropatgan inhabitants have Aryan race like other Iranians. As a result, if they were from other race like Turks, so they would be yellow as same as Turkish people. In fact, the investigation clarifies that they are not yellow.

The reason is that among people settled in Atropatgan, none of the features related to yellow race in north is observed such as yellow skin, thin and extended eyebrows, oval eyes, and big protuberant cheeks. They are the most obvious characteristics of Turkish people. All of the characteristics are observed in all groups of Turks and yellow race in the north as Kyrgyzstani, Cossak, Uzbek, and mostly in Turkmen. But on the opposite, not only the features of white race are observed in Atropatgan like big eyes, white skin, and non-protuberant cheeks, but most of them still have special characteristics of Aryan, such as light eyes and hair even after many years of Arab and Turk invasions. Genetic studies suggest that recent erosion of human population structure might not be as important as previously thought, and overall genetic structure of human populations may not change with the immigration events but in the Azerbaijani case; some Azeris of Azerbaijan republic genetically resemble other Caucasian people like Kurds and Armenians and people in the Azerbaijan region of Iran to other Iranians.

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