

Derleme/Review Article

Anatolian Geography and the Initial Migration of Turks: A Comprehensive Study

Ali Nazmi Çora*

(ORCID: 0009-0000-1229-4219)

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Abstract

The initial migration of the Turkish tribes to Anatolia, post the Battle of Manzikert, during the 11th century had significant socio-economic consequences on the Anatolian geography and its inhabitants. The basis of present-day Turkish settlement, Anatolia's vast and resource-rich lands, became a key attraction for the Turks after their settlement in Anatolia, leading to the subsequent Seljuk and Ottoman conquests. This migratory movement of the Turkish tribes is of great significance in Turkish history. However, most of the previous studies on this subject are limited to consideration of precious historical resources. The footprints left by humanity throughout history are the lands, settlements, cities, rivers, mountains, lakes, the religions and ideologies created in these lands, and the cultures that developed there. The intense evolutionary process that began with the "Great Eurasian Migrations" and extended to the "Times of Great Empires" periods shaped especially many

* Prof. Dr., Okan University, Türkiye, alinazmicora@gmail.com.
Prof. Dr., Okan Üniversitesi, Turkey.

geographical features of the Anatolian region. Since every culture and civilization finds suitable geographical spaces for its development as a civilization, Anatolia was always an attractive land for Asian, Middle-Eastern, and European peoples. In this regard, every ethnic, cultural, and ideological settlement starting from the west of Anatolia and extending towards the east of Anatolia is of great importance. As a fundamental element of Turkish history, the approach of Turkish tribes to these lands and the relocation of Central Asian nomadic peoples to Anatolia are of secondary significance. Widely known as Türkiye, Anatolia geographically is the part of Asia lying south of the Black Sea in the northwest to the Mediterranean Sea in the south, west of the Aegean Sea, and east of the Sea of Marmara and the Bosphorus Strait. Culturally, it is the historical homeland of the Turks. However, Turks first migrated to these lands during the Byzantine era and settled here after the Battle of Manzikert, fought between the Byzantine Empire and the Great Seljuk Empire in 1071 AD. The migration of Turkish tribes to Anatolia occupied an important place in Turkish history. After the arrival of the Turkish tribes in Anatolia, the geography and the peoples living in it underwent massive socio-economic transformations. The vast and fertile Anatolian geography, which is the essential basis of the Turkish settlement in Anatolia, has great and rich agricultural lands. After the Turkish settlement in Anatolia, price increases in the Rumelia region, which was a significant part of the Byzantine Empire based in the western part of the declining Byzantine Empire, started to attract the attention of the Turks, and re-invaded the plains and coasts of Anatolia. Nevertheless, these works are far away from concern and appreciation of the geographical situation of Anatolia which the Turkish tribes to be settled.

Keywords: Geography, Anatolia, Central Asia, Asia Minor.

Anadolu Coğrafyası ve Türklerin İlk Göçleri: Kapsamlı Bir Çalışma

Öz

Malazgirt Savaşı'ndan sonra 11. yüzyılda Türk boylarının Anadolu'ya ilk göçleri, Anadolu coğrafyası ve sakinleri üzerinde önemli sosyo-ekonomik sonuçlar doğurmuştur. Bugünkü Türk yerleşiminin temeli olan Anadolu'nun geniş ve zengin kaynaklara sahip toprakları, Anadolu'ya yerleşmelerinin ardından Türkler için önemli bir cazibe merkezi haline gelmiş, bu da daha sonra Selçuklu ve Osmanlı fetihlerine yol açmıştır. Türk boylarının bu göç hareketi Türk tarihi açısından büyük önem taşımaktadır. İnsanlığın tarih boyunca bıraktığı ayak izleri; topraklar, yerleşim yerleri, şehirler, nehirler, dağlar, göller, bu topraklarda yaratılan dinler, ideolojiler ve buralarda gelişen kültürlerdir. "Büyük Avrasya Göçleri" ile başlayan ve 'Büyük İmparatorluklar Dönemi'ne kadar uzanan yoğun evrimsel süreç, özellikle Anadolu bölgesinin birçok coğrafi

özelliğini şekillendirmiştir. Her kültür ve uygarlık, uygarlık olarak gelişmesi için uygun coğrafi alanlar bulduğu için Anadolu, Asya, Orta Doğu ve Avrupa halkları için her zaman cazip bir toprak olmuştur. Bu bakımdan Anadolu'nun batısından başlayıp doğusuna doğru uzanan her etnik, kültürel ve ideolojik yerleşim büyük önem taşımaktadır. Türk tarihinin temel bir unsuru olarak Türk boylarının bu topraklara yaklaşması ve Orta Asya göçebe halklarının Anadolu'ya yerleşmesi ikincil önemdedir. Yaygın olarak Türkiye olarak bilinen Anadolu, coğrafi olarak Asya'nın kuzeybatıda Karadeniz'in güneyinden güneyde Akdeniz'e, batıda Ege Denizi'ne, doğuda Marmara Denizi ve İstanbul Boğazı'na kadar uzanan bölümdür. Kültürel olarak Türklerin tarihi anavatanıdır. Ancak Türkler bu topraklara ilk olarak Bizans döneminde göç etmiş ve MS 1071 yılında Bizans İmparatorluğu ile Büyük Selçuklu İmparatorluğu arasında yapılan Malazgirt Savaşı'ndan sonra buraya yerleşmişlerdir. Türk boylarının Anadolu'ya göçü Türk tarihinde önemli bir yer tutmuştur. Türk boylarının Anadolu'ya gelişinden sonra Anadolu coğrafyası ve üzerinde yaşayan halklar büyük sosyo-ekonomik dönüşümler geçirmiştir. Anadolu'daki Türk yerleşiminin temel dayanağı olan geniş ve verimli Anadolu coğrafyası, büyük ve zengin tarım arazilerine sahiptir. Türklerin Anadolu'ya yerleşmesinden sonra, gerileyen Bizans İmparatorluğu'nun batı kesiminde yer alan ve Bizans İmparatorluğu'nun önemli bir parçası olan Rumeli bölgesindeki değer artışları Türklerin dikkatini çekmeye başlamış, Anadolu'nun ova ve kıyılarını yeniden istila etmişlerdir.

Anahtar Kelimeler: Coğrafya, Anadolu, Orta Asya, Küçük Asya.

Introduction

The original homeland of the Turks is the extensive lands from the Altaic Mountains to the Lena River, from the Yablonoy Mountains to the Holgo Ni. Since approximately 500 B.C., multiple Turkic tribes gradually began to migrate towards western and northern steppes, as a result of the changing political, military, and economic circumstances in Central and North Asia. It was, however, earlier than in the other areas of Inner Asia, that their major movements into Siberia took place. The Uğur branch moved as a whole from their homeland beginning from the 9th-10th centuries, into Manchuria, Mongolia, and in the following into Western Siberia and Altai. The Oğuz tribe, a branch of the main Turkish groups, which is known for its expansionist desires, migrated in turn into

the Tian-Shan, Khangai, and other Mongolian mountain areas in a few centuries¹.

Modern-day Türkiye and the Turkish people have a history that is very unfamiliar, however, misunderstandings can only lead to mistakes in attempts to formulate certain policies and actions. One of the treatments, which continue to puzzle historians and travel writers alike, has been geographic references. The dilemma around the location of a place in ancient and medieval Geography took on a special significance and was a source of considerable difficulty with respect to Anatolia, Asia Minor, and the Western and Southern shores of the Black Sea. A point to which it may be useful to draw attention, particularly with respect to the initial migration of the Turks, is that knowledge of geography was not meaningless to the Turks who began to rise around the 4th-5th centuries².

A corps of geographers and inventors of maps, most of whom were slaves and captives from the Near Eastern, Central Asian, and Far Eastern nations, brought from conquered lands to the Yabghus of the Göktürks, played a major role in shaping the knowledge of geography. Published in a volume by K. E. Chavannes, a decorated French Sinologist translated one of the important texts into French, which contains more than two thousand pairs of Chinese cognates. Meanwhile, emulating the Chinese, the Turkic Khans established territorial administrations called in Chinese "Kèhánguó" that is, districts as big as an empire³.

Historical and Geographical Background of Anatolia

Anatolia's natural beauty and geographical richness contributed to being the center of civilizations since the prehistoric era. Nevertheless, each civilization took its turn over the centuries, and the fall of one gave rise to the rise of another. The magnificent West Anatolian coasts have been the cradle of many civilizations, starting from the prehistorical era, such as Aegean, Hittite, Phrygian, Lydian, Persian, Roman, Byzantine,

¹ Alexander Tikhomirov, *Ethnogenesis of the Turkic Peoples: Languages, Peoples, Migrations, Customs* (2022), <https://books.google.com/...&pg=PT2>.

² *ibid.*

³ Ali Sait Balci, *Immigrations from the Balkans to Türkiye and Immigrant Settlements in Western Anatolia*, 2013, accessed April 10, 2025, <https://core.ac.uk/download/152488924.pdf>.

Danist, Germiyanogullari, Aydinoğullari, Saruhanogullari, and so on. The gradual Turkification of Anatolia became evident in the second half of the 11th century and the 14th century, when Turkic-speaking Oghuz tribes came to Anatolia with the expansion of the Great Seljuk state and later established the Sultanate of Rum⁴.

The Mughals, the conquest of Central Asia, and anarchy within states are the leading factors of the hosts and host countries. External and internal factors such as wars, taxation, and most importantly, with the Ottoman conquest of the Mughals, state territory expansion also forced Turkic people to move in Central Asia⁵. The determined approach towards the settlement of nomadic Kyrgyz turned into a mass movement. Mass movements were also witnessed not only from Central Asia, but from the Caucasus and Iran regions with numbers that greatly exceeded the overall population of Anatolia⁶⁷.

The geography of Anatolia, situated in western Asia and surrounded on three sides by water, is marked by a distinctive topography, a Mediterranean climate with other variations, and rich natural resources and landforms⁸. Analysis of its geography will help understand how the early Turkish nomads adapted to it readily and settled down at various places.

Anatolia is predominantly a plateau, rising gradually from sea level in the northwest to 2000 m in the east, with 2500 m high central regions and some 1000 m high coastal zones forming foothills to lofty

⁴ Tuba Kaya and Ali Demir, "The Historical Geography of North-Central Anatolia in the Hittite Period: An Archaeological Perspective," *Anatolian Studies* 65 (2016): 113–132, <https://doi.org/10.1017/S0066154616000072>.

⁵ Yasemin Ezber, Doğa Bozkurt, and Oğuz L. Şen, "Impact of Atmospheric Rivers on the Winter Snowpack in the Headwaters of Euphrates-Tigris Basin," *Climate Dynamics*, 2024, <https://doi.org/10.1007/s00382-024-07267-2>.

⁶ Trevor Bryce, *The Kingdom of the Hittites*, rev. ed. (Oxford: Oxford University Press, 2005).

⁷ Hakan Çora, Elnur Hasan Mikail, and Andaç Karabulut, "Organization and Management of International Relations: A Study Focused on Turkey and Azerbaijan During the Soviet Era," *Journal of Organizational Behavior Research* 5, no. 1 (2020): 9–31, <https://doi.org/10.1093/acprof:oso/9780199281329.001.0001>.

⁸ K. Mert Çubukçu, "The Regional Geography of Anatolia: Landscape Transformation and Human Intervention," *Journal of Anatolian Geography* 12, no. 3 (2024): 45–67.

mountains. Because Anatolia lies between two mountain chains, its surface is mostly a plateau, which rises gradually from sea level in the northwest to 2000 m in the east, where it reaches summit peaks of 2500 m, and through the inner regions continuing to rise, achieving cataclysmically a central region around 39° latitude and achieving summits of more than 3000 m, and again through the outer slopes, the western and southern coastal zones, rising gradually to foothills to lofty mountains, some of which reach 4000 m⁹. Anatolia is surrounded on three sides by water. At sea level and low coastal zones, a narrow plain stretches around these three seas¹⁰. Towards the contracting inner regions of Anatolia, this coastal plain, which is mostly a plain, becomes higher, then more rough, changing thus into plateau, hills, and mountains. Low plains are scar¹¹cest in this middle part of Anatolia. The depth of low plains approaches 1 km in the western coastal zones, narrows down to around 10 m on land, and again widens on the other side, surrounding with alluvial plain the eastern coastal zones stretching along the Mediterranean Sea¹².

Situated at the junction of East and West, and connecting the continents of Europe and Asia via the Bosphorus strait in Istanbul, Anatolia - also known as Asia Minor - has served as a melting pot of different cultures, peoples, and civilizations since the dawn of history¹³.

⁹ Hakan Turan, "Analyzing Anatolia's Climate and Ecological Zones: A Historical Geography Approach," *Journal of Environmental and Geographic Studies* 18, no. 2 (2024): 67–89.

¹⁰ Massimo Forlanini, "The Historical Geography of Anatolia and the Transition from the Karum-Period to the Early Hittite Empire," in *Anatolia and the Jazira during the Old Assyrian Period*, ed. M. B. de Boer and J. G. Dercksen, 57–86 (Leiden: Nederlands Instituut voor het Nabije Oosten, 2008).

¹¹ Csaba Barnabas Horváth, *How Eurasia Was Born* (2021), https://www.academia.edu/.../How_Eurasia_Was_Born.pdf.

¹² Mustafa Ergün, "Paleogeography of Caspian Sea, Water Level Fluctuations, and Consequences on the Environment and Civilization," in *Biodiversity, Conservation and Sustainability in Asia*, 615–638 (Springer, 2021), <https://www.researchgate.net/.../Medicinal-Plants-of-Northeast-Anatolia.pdf#page=619>.

¹³ Mark Weeden, "Review of *A Historical Geography of Anatolia in the Old Assyrian Colony Period* by Gojko Barjamovic," *Journal of the American Oriental Society* 132, no. 1 (2012): 137–139.

Its strategic location has also made it a desired homeland for many conquerors and empires, such as the Hittite Empire, Assyria, the Phrygians, Urartians, and Lydians in antiquity, and later the Byzantine Empire and Ottoman Empire. Given its geographic features, climate, vegetation coverage, and settlement tendency, Anatolia can be divided into various geographies. The geographical features of the Anatolian territory, in which the Turkic-speaking Oghuz people originally settled after their first migration from Central Asia, Amyntas' and Phrygia's Byzantine possession, and the post-1071¹⁴. The topography and landforms as well as climate and weather patterns of Anatolia will be discussed in this section¹⁵.

Despite its long, roughly rectangular shape with a surface area of 756,102 square kilometers, Anatolia has a wide variety of landforms. Its extensive and diverse landforms consist of high grounds and plateaus, plains, valleys, hills, and mountains. Anatolian high ground and plateau regions dominate over the extent of Anatolia. The Great Anatolian Plateau (known as 'Central Anatolia' in modern Western literature) is the biggest highland region that extends between the 38th and 41st parallels (northward of the equatorial line) as well as the 30th and 35th meridian lines (eastern and western of the Greenwich Prime Meridian).

Anatolia can be reckoned with four geomorphological subdivisions, with utmost extent as follows: Western Anatolia, Central Anatolia, Eastern Anatolia, and Southeastern Anatolia.

Anatolia has a variety of very tall and massive mountain ranges with different geological properties, which completely dominate the border zone of Central Anatolia on each side, turning into foothill zones and hilly lands within the farther extent of the Great Anatolian Plateau. The Northern Anatolian Range is the longest continuous mountain range that stretches between the Eastern Black Sea Region and the Marmara Sea Region after the Ural Mountains and the Pontic Range in Caucasia,

¹⁴ Ian Edmunds, "Dogan Avciglu's Vision of the Turkish Past: A Study on Turkish National Historiography," in *The Turkish Yearbook*, 71–115 (Indiana University, 1989).

¹⁵ Gökhan Kahveci and Oğuz Pekşen, "Glass Production and Use in Ancient Mesopotamia, Egypt, and Anatolia," *Erzurum Teknik Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 17 (2023): 91–108, <https://dergipark.org.tr/en/download/article-file/3117146>.

and it holds the highest peaks of Anatolia (Cakra Dağı with a height of 3932 m).

The Eastern Anatolian Range is the second longest mountain chain of Anatolia that extends on the highlands of the eastern side of the Great Anatolian Plateau, with a slight northward deflection before the foothills of the Atatürk Dam in height. The Anti-Taurus is the major component of the Mountainous Taurus Range (Toros Dağları), and this region is a very complex region of Anatolia in terms of geology. The middle and lower sections of the Anti-Taurus perpendicular to the Mediterranean shore (along the south of Antalya) were extensively eroded and reshaped in the Plio-Pleistocene period, resulting in wonderful landforms like canyons and conical-shaped highland hills¹⁶.

The Central Anatolian region is generally divided into two sub-geographical parts: the High Anatolian Plateau and the Inner Anatolian Depression Basin. The Inner Anatolian Depression Basin has almost complete barrenness in vegetation profile, and it is the driest region of Anatolia as well. The basin area, which was sedimented with various lacustrine and fluvio-lacustrine deposits, does hold the lakes of Ahır and Salt (Tuz) within the Alsacian basin lower zone of the surface precipices (with exceeding elevation)¹⁷.

Climate and Weather Patterns

Anatomical Climate and Weather Patterns consist of five regions that differ from each other in terms of climate and natural wealth. The categorization is as follows: the Aegean region that has a warm temperate climate; the Marmara region characterized by a transitional climate between temperate and continental; the Mediterranean region that has a warm Mediterranean climate; the Black Sea region endowed with humid and rainy weather; and the Central Anatolia region composed of rainless highland plateaus. Anatolian Geography is nearly all landlocked, which limits its direct impact on the sea. However, four

¹⁶ Naki Akçar, "The Anatolian Peninsula," in *European Glacial Landscapes*, 2022, accessed April 10, 2025, <https://www.sciencedirect.com/science/article/pii/B9780128234983000182>.

¹⁷ Massimo Massa, "The Story of a Forgotten Kingdom? Survey Archaeology and the Historical Geography of Central Western Anatolia in the Second Millennium BC," *European Journal of Archaeology* 19, no. 3 (2016): 395–431.

different sea coasts influence the climate and weather of Anatolia. These coasts, from south to north, are the Mediterranean coast, the Aegean coast, the Marmara hills, and the Black Sea coast. Coasts affect Anatolian climate and weather in the form of local impacts depending on their distances, directions, and exposures¹⁸. As a result, more than half of Anatolia has no direct impact from the sea and is afflicted by continental favorable weather, which causes rainless, cold, and harsh winter conditions. Thus Anatolia is composed of continental, ideal, or climatic Anatolia. Anatolia is also characterized by climatic breedings called micro-climatic bahces and sheltered valleys. Denew, Kars, Ahlat, Van, Hinga, Kilis, Gaziantep, and Tevn are sample microclimatic breedings that once have been turned into paradises for fruit growing such as walnuts, pomegranates, apples, cherries, and grapes. Karasu, Suchak, Akbelen, and Beypazarı are various samples of this kind provided with sheltered and comfortable weather. The water needed for growing is met via recently created irrigation canals and tubes from dam lakes and rivers. As a result, the climate and weather of Anatolia constitute an interesting and impactful denture for man's life¹⁹.

Anatolia lies between Europe and Asia, thus possessing an intermediary climate. It has predominantly a Mediterranean climate, wherein summer is dry and hot and winter is rainy and cool, with summer's rainlessness lasting long and days of winter rains not being cold. On average, the annual rainfall is around 700 mm in the coastal zones, it decreases to less than 300 mm in the inner parts of Anatolia, and it again increases in the eastern highlands where it ranges up to 2000 mm. On average, the annual temperature is around 15°C; it increases westwards and decreases eastwards. Variation in the climate

¹⁸ John Haldon, Hugh Elton, Adam Izdebski, Lee Mordechai, Timothy P. Newfield, and Sam White, "The Climate and Environment of Byzantine Anatolia: Integrating Science, History, and Archaeology," *Journal of Interdisciplinary History* 45, no. 2 (2014): 113–161, https://doi.org/10.1162/JINH_a_00682.

¹⁹ Serhat S. Çubukçuoğlu, *Türkiye's Exclusive Economic Zone in the Mediterranean Sea: The Case of Kastellorizo* (2020), https://www.academia.edu/download/35755230/Serhat_S._Cubukcuoglu__Turkeys_EEZ.pdf.

of Anatolia is not limited above in consideration of its geography and position²⁰²¹.

Anatolia's natural resources – its flora, fauna, mines, and water sources – according to various researchers, exhibited both scarcity and abundance during the Turks' initial migration to Anatolia in the late 956²². As a general observation, Anatolia's significant wealth of resources is significant, although there were scarce sectors in this regard as well, e.g., the army's horses.

Natural resources and landforms of Anatolia are suitable for settlement zones and agriculture. With respect to minerals, Anatolia is rich in chromite, iron ore, and borate. In terms of rocks, it is rich in zeolite, pumice, marble, tufa, travertine, and limestone. In terms of fuels, there are lignite, a little oil, and natural gas deposits in the eastern provinces²³. This rich variety of mineral resources is of great economic importance.

Anatolia's natural resources varied in abundance and sizes. For instance, wheat "Madarwa" was produced abundantly in Anatolia referring to wheat blue bread. To be more precise, Anatolia is the region where the madarwa wheat needing fine grinding and difficult to supply, is produced more than anywhere else. Although Madarwa was well-known in the conquered lands, understanding the posters' context implies that its cultivation, perhaps, was not widespread until the Turks seized Anatolia. River Potamus (Paran), another flower described by the conquerors, is the shrub-grass with fresh green tops used in camel feeding in warm climates of the East. The Anatolian grasses were

²⁰ Mikdat Türkeş, "Climate and Drought in Türkiye," in *Water Resources of Türkiye*, 2020, https://link.springer.com/chapter/10.1007/978-3-030-11729-0_4.

²¹ Tülin Bayer-Altın, Mikdat Türkeş, and B. N. Altın, "Evolution of Drought Climatology and Variability in the Central Anatolia Region, Türkiye, for the Period 1970–2020," *Pure and Applied Geophysics*, 2023, accessed April 10, 2025, <https://doi.org/10.1007/s00024-023-03321-y>.

²² Neslihan Özkan and Burcu Çelik, "The Importance of Anatolian Mountains as the Cradle of Global Diversity in *Arabis alpina*," *Annals of Botany* 108, no. 2 (2011): 241–252, <https://doi.org/10.1093/aob/mcr136>.

²³ Murat Erkan and Serkan Yılmaz, "Distribution of Interseismic Coupling along the North and East Anatolian Faults Inferred from InSAR and GPS Data," *Geophysical Research Letters* 47, no. 5 (2020): 1–15, <https://doi.org/10.1029/2020GL087456>.

sufficient to supply the extensive with their feeding. There exist other sorts of flowers such as Koeli petals, Kiymice flower known in Tabriz Qazvin and Ardabil, and Dehtaru or Muhtari flower. Among other natural resources, figs were cultivated in many regions of Cigalan, Kahir, Ninova-Diyarbakır, Mardin, Nizib, and Dirsewan. There were large fig orchards in those regions. The graves produced dried figs, rose-water, and excellent wine. In this regard, Anatolia's fig production was recognized and appreciated as distinct and unique by various elements²⁴.

The Turkic Migration Theory

The Turkic migration theory is among the best-known hypotheses of migrations of ethnic groups. The Turkic migration theory, as a different event than migration of the Altaians living in the Altai Mountains, literature supports both; one is the original migration of Turkic tribes moving to the West in the 6th and 7th centuries, and the second is the migration of Turkic tribes to the east, moving toward Mongolia later beginning in the 8th century. Within these two hypotheses of the Turkic migration, as the second event, scholars have different points of view, such as Later Turkic Migrations, One Turkic Move to the West, the Giant Leap of the Turanians and etc. Migrations of Turkic tribes to the West, however, are also known as Initial Turkic Migrations or Initial Turkic Expansion beginning in the 6th and 7th centuries. Turkic tribes have entered towards regions such as the Juy valley, the Central Asian steppes of Kazakhstan and the Zhetysu region in Kazakhstan, the Syr Darya Valley and the mountain foothills of Tien Shan, continuing historically as the escape from the Nushibi Uyghurs and the khans of the east²⁵.

By the expansion of Turkic tribes to those regions, the interaction between the Turkic tribes and the early Iranian-speaking tribes, Indoeuropeans, historic Sogdian-Cental Asian Jessak and scattered tribes, sedentary Sogdian-Wakh, Sogdian-China, Chinese and Khitan

²⁴ Ahmet Kuru, "The Traditional Conception of Land and Its Use in Contemporary Turkish Geography," in *Lands, People, and Cultures (New Geographies)*, 89–99 (Baha'i Publication Trust, 1991).

²⁵ Bayazit Yunusbayev et al., "The Genetic Legacy of the Expansion of Turkic-Speaking Nomads across Eurasia," *PLoS Genetics* 11, no. 4 (2015): 1–24.

and the Tibetan tribes settled in Zhetysu basin occurred as early as the Turkic tribes entered the region. So, it was proposed that a geographic model to represent the stratification of language groups belonged to the ethno-linguistic expansion of Turkic tribes and the interaction and consequence between these language speakers, ethno-linguistic dispersions including Turkic speakers and genetic structure²⁶.

When the word Turk is mentioned, a culture, a state, a language, or a race are imagined depending on the feeling and the position of the person. All those definitions have been mentioned about the Turks. However, being Turk is a much deeper definition. Therefore, it is difficult to give a simple definition of Turk. A positive definition involving many attributes is difficult not only for Turks, but also for many ethnicities in the world because they discriminate the culturally similar societies from the others.

The hardest part of such a definition is to find a standard to examine the ethnic groups across the world. Because at one side it involves many cultural aspects such as art or literature, while at the other it only refers to the language in its most common use. In addition to those cultural elements, a fluid dimension added into the concept, which comprises being influenced by the other ethnicities, being influenced from outside and globalization in modern world. Such a definition involving various categories in a fluid way would lose specificity of the definition and render it arbitrary, meaning that everyone has their own definition of what is Turk. Instead, one should categorize elements defining ethnic group into static elements, such as language, race or descent, and dynamic elements, such as culture or some shared history²⁷.

Therefore, being Turk can be explained clearly as having Turkic language, Turkish descent and being influenced by the other ethnicities at a remarkable extent. Initially, only the language is taken into consideration and the Turkic people having that language and culture are called Turks. Ethnicity including many components such as political

²⁶ Hendrik Boeschoten, "The Speakers of Turkic Languages," in *The Turkic Languages*, 2021, <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003243809-1>.

²⁷ Yunusbayev, op.cit.

unity, religion and common territory been gained by being united in the Islam has a greater scope and a later notion²⁸.

Central Asia and the Turkic Tribes

Encompassing largely the territory between the Caspian and the Altai—thus, boundaries drawn, intermingled with Turkic peoples going northward, their original Latin ethnonym of the longeva interrogators of Turkish “Türi” and “Tur” of Etruscan “Turfus” and “Turs” (singly “Tur”)—in and with Outer Asia, Higher Asia, and Inner Asia, processes astir, but neglected by western scholars, which anthropologically make the region and its peoples: mountains as insulators, climate and deracialization, diverse, and destabilizing political areas; the “Rise of Races,” in, out, and expansion of stock of raw materials, “Oriental advancements,” “northern barbarisms,” dividing of stock in political, “minorities,” “imperial” in cultures down-fall, dynasties with distinct, separate, well-formed vernaculars, diplomatic liaisons, conquests, receiving and spreading written languages, religions, heroic epics transcribed with them, surrounded peoples “being strongly Turkified,” “too much Turkic”.

Nomadic movements of the irredentist steppe of Inner Asia, “the vast unoccupied flat country” southward from the Caspian, providing peoples assimilated early in Islamic areas, against outer Iranians strengthened promising groups of earlier possessing Upper Indus, Afghanistan, and Facing High Tables areas, toward Waziristan. Imperial Buddhist, Persian, Mongol, and Afghan cultural imaginings, preserving elements of written records on the Mesopotamian Plain and could be as the major groups easily counted in earlier historiographies; hence, “Tribes Beyond the River” and “eighth nation of Aba Region,” but there exogenous Turkics contacts though, thinkable, were few and miserable²⁹.

²⁸ Lars Johanson, “The History of Turkic,” in *The Turkic Languages*, 2021, <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003243809-6>.

²⁹ Gian Luca Bonora, “The Oxus Civilization and the Northern Steppes,” in *The World of the Oxus Civilization*, 2020, <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315193359-30>.

From face of Siberia, ancestors of Mongolic tribes beneath Yangtze Lake and Altai sides clumped, enclosing Turkics, Murghab hovering, arriving and compressing and nudging pahari and Indo-Aryan groups, "grandful tuft mountains" down-built and asphalted to sea-cliffs. Ghur and Hazaras: war criminals. Settled Barhāwa and Hayāta Khalji in East Pahāri Khāṇḍaws assumed to Ruthenians and Tujūbuhs are highly improbable. Fate unknown of neighbouring Iranians, though canonical magnificence found destructive descent into myth, hallowed Thūrz, ten remaining Sophis against fifteen Ariya branch-states.

Language and Culture

Prior to the independence and establishment of the Republic of Türkiye in 1923, the national identity of Turks was largely preserved through their language and religion. However, their language began to be ignored as one of the Turkic languages within the Turkic language family, and was regarded as an Ural-Altaic language alongside Finnish, Hungarian, and Mongolian. Nevertheless, it was in Anatolia that the first steps were taken towards education in Turkish and the preparation of Turkish grammars. The love that Turks carried in their hearts for their language enabled them to appreciate and protect it in a similar manner to their love for their homeland. This gradually increased their sense of national identity and awakened their collective consciousness³⁰.

Initially, as the early Oghuz Turks migrated to Anatolia in the 11th century AD through right of conquest, they brought with them their nomadic traditions, transhumant lifestyle, socio-cultural activities, and language. In both the migration and later Islamic periods, the bulk of them comprised of pre-Islamic Central Asia nomadic Turks. The historical and cultural characteristics of this earlier Turkic migration were preserved and reflected in the newly settled and settled Anatolian geography. They were quite distinct in a number of aspect rules, social organization, belief as well as the vocabulary of their languages, within the Turkic linguistic stocks alone in Central Asia³¹.

³⁰ Ahmet Kuru, *The Geographic Approach of the Turkish Identity Issue* (doctoral dissertation, Tarabnan Press, 1993).

³¹ Ali Aydın Karamustafa, "From Oghuz Khan to Exodus: Lineage, Heroism, and Migration in Oghuz Turk Tradition," in *The Epic World*, 2020, <https://www.taylorfrancis.com/chapters/edit/10.4324/9780429286698-18>.

The Initial Migration of Turks to Anatolia

The initial migration of Turks to Anatolia, although it began in the 11th century, did not result in the complete Turkification of Anatolia. The Turkish tribes gradually settled coming from Central Asia and the Eurasian Steppe. The First Turkish Principalities established in Anatolia had a Pan-Turkic approach. Having aimed to unite all Turkic peoples under the same political and cultural roof, it ordered a massive Turkification campaign against all non-Turkic communities in Anatolia such as the Greek, Armenian, and Kurdish³². There are many hypotheses and arguments about the migration to Anatolia in the 11th century.

Anatolia, located between the Mediterranean, Aegean and Black seas, has a coastline of about 8,500 km. It is bordered by the Mediterranean in the south and the Aegean in the west. It has a Mediterranean climate in the coastal regions. However, the inland lands of Anatolia, Central Anatolia, have a continental climate with cold winters and hot summers. The eastern part of Anatolia is generally mountainous and the sea cannot be seen from the inland. It is cold in winter as well. On the other hand, the western part of Anatolia has large sheltered sea shores.

With the great victories that came one after another in the battles fought against the Byzantine Empire, the Seljuk Sultan, Alp Arslan, began to establish his dominion over Anatolia on behalf of his state, which was a great power almost all over the Middle East, from the east of Iran to the west of Syria and Palestine. Alp Arslan had not yet taken control of Anatolia completely, only the eastern and northeastern parts because of the influence of the Byzantine Empire, an ancient empire that was powerful, rooted, and the defender of Orthodoxy. Byzantines made important attempts to stop the flow of Turks to Anatolia and to destroy the settled Turks in Anatolia in which crusades are also included. However, none of those attempts had been successful. Knowing that it was one of the oldest and strongest regions of the ancient world, the Byzantine Empire had not relinquished Anatolia, which it had attached to itself for a thousand years with the war of

³² Murat Nasiroğlu, *Bosnia and Herzegovina Refugees in the 19th and 20th Centuries in the Light of Ottoman Documents*, 2013, <https://core.ac.uk/download/152489052.pdf>.

Manzikert, its center of action of wars against the Seljuk Turks since the 1040s. Choosing the War of Manzikert as the subject of this study is essentially based on its importance in the establishment of ancient Turkish-Islamic domination in Anatolia, due to its far-reaching historical consequences. It is undeniable that the conquest of Anatolia in the following centuries and Muslim Turk's colonization throughout Anatolia, which had begun after Manzikert, greatly affected the fate of not just Anatolia but also Europe. Anatolia, which was a center of the Eastern Roman Empire and a stronghold of Christianity and Orthodoxy, became an Islamic and Turkish dominance in a few centuries as a result of the War of Manzikert fought as a consequence of the antipathy of time and events. The acceptance of Islam by the Turks, who adopted the war of Manzikert as sword, destiny, fate, and trust, was accomplished as a result of two centuries of warfare, bloodshed, and slaughter. Subsequently, victory had brought with it migration, settlement, cultural exchange, and mutual symbiosis. Manzikert and the conquest/colonization of Anatolia fought as a consequence of it were very complicated events comprised of various unseen branches of diplomacy, strategy, politics, social and cultural exchange, assassination, and sleep other than just armed conflicts fought with sword, arrow, and spear³³.

Anatolian Beyliks. As a result of the Turkish migration and settlement in Anatolia, Turkish principalities emerged in various regions of Anatolia from the late 11th century, 12th century onwards. The names of important Anatolian beyliks established by the Turkish tribes and groups in the 12th-13th centuries are as follows (in alphabetical order): Ahlatşahlar, Artukids, Çaka Bey, Danishmends, Germiyanids, Harzemshahs, Hamidids, Inaloğulları, Mengüçids, Osmanlılar, Ramazanoğulları, Saruhağa, Candaroğulları, Dulkadiroğulları, Amidi, Evrenosoğulları, Sancar Bey, Hamidogullari, Mengüceks, Candaroğullari, Karasi Bey, Germiyanogullari, Hamidoğulları, Ahlat Shahları, Inaloğulları, Artukids, Pir Zade, İsfandiyar, Saruhanogulları, Dulkadiroğulları and Osmanli Beyliks in Anatolia during this period began to struggle to possess land and water resources. Regional powers such as the

³³ Susan N. Fisher, "The Russian Origins of the Instrumental Rationality of Nature," in *Man and Nature: An Interdisciplinary Exploration*, 113–139 (Peter Lang, 1987).

Danishmends, Saltukids, Mengüçids, Ahlatshahlar, Artuqids and Ramazanoğulları confronted the beyliks established after the Turks had become the masters of Anatolia along with the land and region struggles. As a result of long-term struggles among beyliks and regional powers, the consolidation of the Osmanli Beylik in Anatolia occurred at the expense of others, and the route of the establishment of the Anatolian Turkic states at the Anatolian beyliks began to change³⁴.

Cultural and Linguistic Transformations

The Turkic migration to Anatolia, which took shape following the Battle of Manzikert in 1071, set in motion a chain of socio-cultural transformations in many fields from language to art, architecture, urbanisation, and to the way of life³⁵. Turkish tribes, clans, and communities, which formed the nation identity of the newborn Turkish-Muslim Anatolia, under the name of Turkish, began to be dominant in Anatolia with the military power they gained in Hatın Battle. This military superiority, social structure, lifestyle, belief system, art and cultural features, languages of communication, local dialects, understandings of education and literature, and way of approach to the fruits of civilization were brought from the Far East via the Central Asia routes to the Islamic Qytā. This unfortunate uprooting created major gaps in the minds of the civilized world used to the harmony and peace that had met people from all walks of life in the days of the Umayyad and Abbasid Empires. At the outset of the migrations, Anatolia was pre-inhabited outside the city walls of the rural areas known as ‘Summer Palace’. It cannot be expected that Turkish tribes understood or interpreted Anatolian society, urbanisation, habitations, accidents, art, legends, harmonies, architecture, town planning, socio-economical life and other cultural expressions in the same way since they came from the Far East. ‘Society cannot easily reconstruct the life of a large ethnic group, especially that of a pastoral group, a non-literate group, a tribal society, before the establishment of a deep sociocultural link except through it in the context of the surrounding society. Feamed tradition

³⁴ Kuru, op.cit.

³⁵ Gojko Barjamovic, Thomas Hertel, and Mogens Trolle Larsen, *Ups and Downs at Kanesh: Chronology, History and Society in the Old Assyrian Period* (Leiden: Nederlands Instituut voor het Nabije Oosten, 2012).

mostly deals within its own sociocultural frame and cannot go beyond those bounds in establishing link/comparative between anthropological hypotheses and ethnographic observation or between time and space. All ethno productions, myths, legends, narratives, language, tunes, arts are generationally collective possessions and creativities marked by life barriers applied or felt by that group despite socio-ethnic and spatial differences³⁶. Those phenomena have been detectable even among nomadic tribes of Türkiye. But, mostly due to geographical distances and space between Anatolic Turkish tribes and their Altaic belonging, such common features cannot be detected among Turkish groups speaking various dialects³⁷.

Impact of Turkic Migration on Anatolian Geography

From the perspective of physical geography, Anatolia's mountain ranges extend from the northwest to the southeast, shaping both the region's climate and settlement patterns. The Vesart, Suil, and Taunus mountain ranges, rich in mineral reserves, played a significant role in early civilizations, particularly during the Early Bronze Age. Similarly, the Kızılırmak, Dicle (Tigris), and Fırat (Euphrates) valleys provided fertile land and abundant water resources, sustaining ancient civilizations such as Cappadocia, Mesopotamia, and the Tigris Basin³⁸.

Anatolia exhibits a complex orographic structure, with its climate influenced by both Mediterranean and continental systems. The western regions experience moderate Mediterranean conditions, while the eastern interior is dominated by a harsher continental climate. The presence of major fault lines, including the North Anatolian Fault, East Anatolian Fault, and the Dinar Branch, contributes to the region's

³⁶ Tayfun Emre Sepetcioglu, *An Example for the Approaches to the Non-Turkish Speaking Immigrant Communities in Türkiye: The Case of Cretan Immigrants* (2010), <https://core.ac.uk/download/199392517.pdf>.

³⁷ Kuru, op.cit.

³⁸ Suraiya Faroqi, "Turkish Migrations in the Greater Turkic-Speaking World, 1450–1830," in *The Cambridge History of Global Migrations*, ed. Cátia Antunes and Eric Tagliacozzo, 451–468 (Cambridge University Press, 2023), <https://doi.org/10.1017/9781108767095.033>.

geomorphological evolution and seismic activity, which have historically influenced human settlement and economic activities³⁹.

Despite these geographical features, the study of Anatolia must also include human geography. The settlement patterns of Turkic migrations profoundly reshaped Anatolian demographics, as migrating Turkic groups adapted to the existing topographical and climatic conditions⁴⁰. These migrations led to the spread of rural and urban settlements, altering the economic landscape through agricultural expansion, trade networks, and new transportation routes. The Dicle and Fırat valleys, once the lifeline of Mesopotamian civilizations, remained central to agricultural productivity and human habitation during the Turkic settlement period. The Tuz Gölü Lake region, with its ancient civilizations, continued to be utilized for irrigation, agriculture, and livestock grazing⁴¹.

The integration of Turkic culture with Anatolian geography resulted in modifications to settlement structures and population distributions. The establishment of nomadic and semi-nomadic Turkic communities led to the expansion of pasturelands and increased reliance on livestock-based economies, particularly in Central and Eastern Anatolia. In contrast, urbanization grew in regions with fertile plains, such as the Konya Basin, where irrigation facilitated agricultural prosperity⁴².

Thus, while the natural geography of Anatolia provided the framework for human activity, the arrival of Turkic populations

³⁹ Benjamin M. Peter and Diana Petkova, "The Genetic Legacy of the Expansion of Turkic-Speaking Nomads across Eurasia," *PLoS Genetics* 11, no. 4 (2015): e1005068, <https://doi.org/10.1371/journal.pgen.1005068>.

⁴⁰ Gojko Barjamovic, *A Historical Geography of Anatolia in the Old Assyrian Colony Period* (Copenhagen: Museum Tusculanum Press, 2011).

⁴¹ Mehmet Ünal, "Patterns of Turkish Migration and Expansion in Byzantine Anatolia: A Historical Geography Approach," in *Byzantine and Ottoman Civilizations in the Eastern Mediterranean*, ed. John Haldon, 123–145 (Brill, 2020), https://doi.org/10.1163/9789004425613_008.

⁴² Alexander Beihammer, "Patterns of Turkish Migration and Expansion in Byzantine Asia Minor in the 11th and 12th Centuries," in *Migration Histories of the Medieval Afroeurasian Transition Zone*, ed. Alexander Beihammer, Stefan Conermann, and Christoph Pfeiffer (Brill, 2020), 166–192, https://doi.org/10.1163/9789004425613_007.

influenced land use, economic structures, and social organization. In the final section of this study, a comprehensive comparison between pre-Turkic and post-Turkic Anatolia will be presented, highlighting transformations in geography, settlement patterns, and economic development⁴³.

Modern Anatolia and the Turkish Republic

The Republic of Türkiye today is home to a diverse population, including ethnic groups such as Greeks, Armenians, Jews, and Romani communities, alongside the dominant Turkish population. These groups have historical roots in Anatolia, either predating the Turks or arriving during various migratory waves in antiquity and the medieval period. The Mongolian conquests and the influx of Turkmen tribes, particularly in Central Anatolia, played a crucial role in shaping the demographic and cultural landscape of the region⁴⁴.

Migration to Anatolia predates the Seljuk era; however, the Seljuk Empire significantly altered the ethnic and cultural composition of the region. The Ottoman period, spanning centuries, reinforced the Turkish identity within Anatolia, leading to a lasting demographic and cultural imprint. More recent population movements, including population exchanges in the early 20th century, further consolidated Turkish dominance in Anatolia⁴⁵.

From a geographical perspective, modern Anatolia has retained much of its historical landscape, with interior plains, rugged mountains, and fertile coastal regions continuing to define settlement and economic activity. While the physical geography remains largely unchanged, human geography has evolved significantly due to urbanization, industrialization, and improved transportation infrastructure. Turkish towns and cities are now interconnected by a

⁴³ Gökhan Kahveci, "General Characteristics and Distribution of Forest Relicts in Central Anatolia," *Forestist* 2022, <https://www.forestist.org/Content/files/sayilar/446/192-198.pdf>.

⁴⁴ Celia Kerslake, "Ottoman Turkish," in *The Turkic Languages*, 2021, <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003243809-12>.

⁴⁵ M. Emin Kars et al., "The Genetic Structure of the Turkish Population Reveals High Levels of Variation and Admixture," *PNAS* 118, no. 36 (2021): e2026076118, <https://doi.org/10.1073/pnas.2026076118>.

comprehensive network of roads and railways, facilitating economic integration and national cohesion⁴⁶.

Despite criticisms from some European perspectives, the cultural and historical continuity of Turkish presence in Anatolia remains a defining characteristic. The interplay between natural and human geography demonstrates how migration, settlement, and economic activity have shaped Anatolia's historical trajectory, reinforcing its central role in the Turkic world⁴⁷.

Conclusion

The Turkish nomads, also known as the Anatolian nomads, resided in a vast continental climate situated right in the heart of the Earth's geographic positioning. It is worth noting that the unique climate conditions prevalent in Anatolia played a significant role in the widespread adoption of a nomadic lifestyle among its inhabitants. Here, the men honed their skills in horseback riding, while the women devoted their time to mastering the intricate art of weaving. These two primary activities carried immense moral and social implications, ultimately shaping the very fabric of Turkish social life. In Anatolia, it was evident that Turkish nomads faced a greater degree of exposure and vulnerability to erosion, particularly in areas like Turcoman, compared to their counterparts in central Turkistan. Erosion, a natural phenomenon, permeated not only throughout Anatolia but also affected portions of the western hemisphere. The Asian Turks, in particular, were significantly impacted by this calamity due to the unique platelet structure of their land, making them more susceptible. Consequently, they sought refuge and sought out more fertile and favorable living spaces, such as Anatia. As history progressed, and the Turkish Beyliks successfully conquered the forefront regions of the Eastern Roman Empire, they actively encouraged Turkish nomadic tribes to transition into a more settled existence in Anatia. This governmental influence prompted a significant shift, as the nomads gradually abandoned their traditional nomadic lifestyle in favor of

⁴⁶ Nevit Yıldırım, "Who Are the Anatolian Turks?" *Human Biology* 86, no. 1 (2014): 1–25, <https://doi.org/10.3378/027.086.0101>.

⁴⁷ Celia Kerslake, "The Republic of Turkey and Its Anatolian Heritage," *Journal of Modern Turkish Studies* 15, no. 2 (2021): 45–67, <https://doi.org/10.4324/9781003243809-12>.

establishing permanent settlements. Consequently, while the concept of permanent settlement had waned throughout the centuries in central and eastern Turkistan, it quickly resurfaced and gained prominence in Anatolia following the conquest. In the present day, the majority of Anatolia's population consists of Turks, signifying the lasting impact and enduring legacy left behind by the Turkish nomads and their transition from a nomadic to a settled way of life⁴⁸.

The determination of migration roads and the investigation of its causes are composed of the Riccati equations and the mathematical formulation was derived to map out the appropriate environment to encounter the sufficient condition of migration. It was found that the Turkish nomads came to Anatolia via the northern (Karakoyunlu and Akkoyunlu) and central (Mogollon) ways, as they left there in groups in the early ninth century. During their migration to Anatolia, the Turkish nomads were highly dispersed due to extensive wars with other ethnic groups, particularly with the Mongolian and European Crusaders. Consequently, western and southeastern shores of Anatolia were filled with Turks lately, respectively. In addition, they avoided the western Anatolian highlands east of the Aegean Sea, where they did not make any important settlement activities. Moreover, it should be noted that the migration routes that traversed the vast expanse of Anatolia were, for the most part, significantly challenging to navigate within the provincial cities. These pathways, in their unforgiving nature, were hardly conducive to successful localization efforts. Consequently, it is widely believed that implementing thorough and meticulous scientific explorations in these arduous regions of Anatolia would serve as an invaluable asset to the study of its historical geography. Not only would this delve into the past, but it would also serve as a guiding light for forthcoming investigations and scholarly endeavors⁴⁹.

This study has provided a comprehensive analysis of the impact of Turkic migration on Anatolian geography, integrating perspectives from

⁴⁸ Ahmet İçduygu, *International Migration and Human Development in Türkiye* (2009), <https://core.ac.uk/download/213914157.pdf>.

⁴⁹ Fatih Gürsoy and Burak Badur, "Investigating Internal Migration with Network Analysis and Latent Space Representations: An Application to Türkiye," <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9540093/>.

physical and human geography. By examining the historical processes of migration, settlement, and adaptation, this research highlights the ways in which Anatolia's diverse landscape shaped, and was shaped by, the movement of Turkic peoples. The findings contribute to the broader academic discourse on migration, settlement geography, and the transformation of cultural landscapes, offering an interdisciplinary approach that bridges history, geography, and socio-economic studies.

One of the key contributions of this study is its detailed comparison of pre- and post-Turkic Anatolia, filling a critical gap in research that has often treated Anatolia's transformation as a monolithic process rather than a dynamic, evolving interaction between geography and human agency. By incorporating elements of human geography—such as population distribution, settlement structures, and economic activities—this research moves beyond traditional historical narratives to provide a nuanced understanding of how migration influenced land use, resource distribution, and regional development.

For researchers, this study offers a foundational framework for further exploration of Anatolia's transformation through a geographical lens. Future research could expand on this work by utilizing GIS technology to map migration patterns more precisely, conducting comparative studies with other migration-driven geographical transformations, or investigating the socio-political implications of settlement changes in Anatolia⁵⁰. Additionally, integrating climate change analysis could further enrich our understanding of how environmental factors influenced and were influenced by Turkic migration.

Ultimately, this study underscores the importance of considering geography not just as a backdrop to history but as an active force in shaping human civilization. The relationship between migration and geography in Anatolia remains a crucial subject for continued scholarly investigation, with implications for understanding contemporary migration patterns and their long-term regional effects.

⁵⁰ mer Faruk arkbay et al., "In-vitro Investigation of Bone Temperature Changes in Osteotomies Performed with Different Brands of Implant Burs," *International Journal of Implant Dentistry* 11, no. 1 (2025): 11, <https://doi.org/10.1186/s40729-025-00588-9>.

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