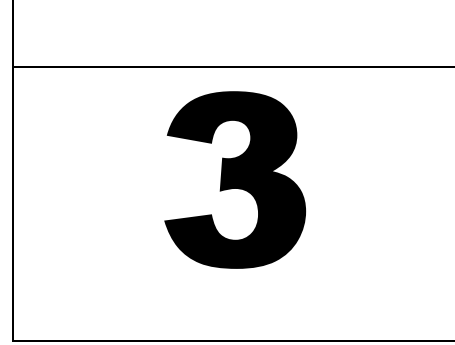




M. A. Akşit Koleksiyonundan



## Göç Yolları \*

## The main way of migration \*

*M Arif AKŞİT\*\**

*\*İnsanlar nereden ve nereye, hangi yollardan göçerler, geçmişlerdir?*

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*Göç yolları uygun yerlerden ancak olabilir. Deniz, nehir, engeller olduğu gibi, dağ ve tırmanılmayanlar da bir manidir. Teknolojik cihazlar olsa bile, uygun yerler tercih nedenidir.*

*Buzulların Avrupa'da olması yanında, ilk yerleşim olan Afrika'da, Sabra mümbit yer iken, giderek çölleşmesi ile orada yaşayanlar göçmek zorunda kalmışlardır.*

*Geniş göç konusuna değinme yerine, kabaca gidilen yollar belirtilecektir.*

**S**evgi, her boyutun temelidir, güçlenen yerde sevilecek, yaşanacak yer olmalıdır. Paylaşılacak, zenginlik, etkin yaşam ve diğer imkanları da yaratmalıdır.

Düşmanlık ve savaş boyutu ise, hâkim olunursa kalınır, bu geçici olacaktır, yoksa göçe devam edilir. Göç yolları böyle oluşur. Barış ancak devamlı yerleşmenin yöntemidir.

**Unutmamak gerekir, hepimiz aynı tür, kardeşiz, birimiz hepimiz, hepimiz birimizindir. Sevgi ve insanlıkta olmayan yerde işimiz olamaz, yürümeye devam denilir.**

### Özet

#### Göç Yolları

**Amaç:** İnsan zulüm ile karşılaşınca, haklarını savunması, mücadele etmesi, zarar oluşturanları yok etmesi beklenir. Yapamıyorsa göç etmek bir zorunlulukta olmaktadır. Bu huzurlu ve yaşanabilecek ortam bulana kadar devam edecektir. Göç yolları bu ana hatları tanımlamaktadır.

**Dayanaklar/Kaynaklar:** Göç yollarının tanımlandığı kaynaklar sunulmuş, yazar Yorum yapmıştır. Makale kaynaklar bilgi edinmek için olduğu gibi sunulmuş, bu konularda yorum pek yapılmamıştır.

**Giriş:** Yaşam yerinin çölleşmesi, yaşanacak yerin kalmaması ve varlığın devamlılığı, nesiller boyu sürmesi için, göç etmek gerekir bu kısa değil, uzun bir yol ile Evreni kaplayacaktır.

**Genel Yaklaşım:** Yaşamın riskli olduğu, tehditler ve imkanların olmadığı yer yerine, göçmek gerekir. Bu boyut uygun nesillerin sürdürebileceği yere kadar devam edecektir.

**Başlıca boyutlar:** İnsanların, Afrika'dan başlıca 3 yol ile Dünya'ya yayıldıkları gözlenmiştir. Kafkasya'dan Orta Asya ve oradan Amerika'ya, Kızıldeniz'den güney ve Okyanusya, Çin bölgesine ve Anadolu'dan Avrupa ve medeniyetler oluşturmaları gözlenmiştir.

**Yaklaşım:** Tüm göç edenlerin genetik kardeş olduğu vurgusu yanında, zamanla bunlar farklılaşma ile sanki ayrı türler gibi çatışma ve ayrımcılık içinde olmuşlardır.

**Sonuç ve Yorum:** İnsan insanca yaşayabileceği yeri bulana kadar bu Evrende dolaşmaya, halen sıklıkla eğitim ve yaşam riski olması, terör olaylarının olması durumunda gözlenmektedir.

**Anahtar Kelimeler:** Göç yolları, tarihsel boyutta irdelenmektedir.

## Outline

### The main way of migration

**AIM:** Cruel act, if noticed, defending their rights, struggle and overcome requires possibilities, if not have power, and not overcome the destruction, be immigrant to where to live, in peace at humanity. The migration ways as indicated in this Article.

**Grounding Aspects:** The migration as indicated by references, thus given full text, thus not evaluated all, indicating for knowledge based.

**Introduction:** Where you settled and lived, as turned to desert, and for generation to generation being on this land, thus, migration is essential, as not short, up to find a place to live, thus, covered the World.

**General Considerations:** When living at this ground, full of risk, and a lot of threatening factors, so, migration is essential, obligatory. This voyage, migration, up to find a place to live.

**Proceeding:** From Africa the migration ways at three aspects: First, Caucasian to Middle Asia and later to America, the second to Red Sea to South, Islands, and third form Anatolia to Europa, making civilizations.

**Notions:** The point; all the people at genetically at brotherhood and by time the evaluation, differentiation occurred and later cause conflict.

**Conclusion:** Up to the place to live found, being migrate on Universe, as now mostly on education and in danger at life risk, terrorism confirmed places.

**Key Words:** Migration ways, at historical background

## Giriş

Hiçbir kişiye rızası olmadan zorlama yapılamaz. Bilgilendirme yapılır, öğüt verilir, karar ve sorumluluk kendisindedir. Göç ise zorunluluktur, yaşam, varlık boyutudur.

Genetik değişim bir kaçınılmaz boyuttur. Burada kabilelerin kendi aralarında belirli kümeleşme ile genetik özellik kazanmaktadırlar.

Orta Asya kökenli olanların süt şekeri, laktozu sindirmelerinde sorun vardır. Bu açıdan yoğurt ve ayran bu neslin ana buluşu olmaktadır. Bunun gibi belirli bir özellik olması ile o kitleler ayrılmaktadırlar.

Bir başka örnek, bacak uzunluğudur. Symphysis pubis, göbek altından bacak boyu ile başa kadar olan uzunluğun kıyaslanmasında, bire bir ile 1,7/1 gibi farklılıklar olabilmektedir. Afrika kökenlilerin bacak uzunluğu daha fazladır. Orta Asya kökenlilerde de gövde daha uzun gözüktür, atın üstünde daha heybetli dururlar.

Kısaca 3 kol temel olduğu söylenebilir.

- Afrika'dan Filistin yolu ile, Kafkaslardan yukarı yayılma, Kafkas orijinli olanlar.

- Suudi Arabistan yolu ile güneye, oradan da Okyanusya'ya yayılma, Çin ve sarı ırk denilen kol.
- Anadolu yolu ile Avrupa ve Anadolu'da medeniyet kuranlar.

Elbet bir de göçmeyen, ama Afrika kıtasında gruplar halinde kümeleşme gösteren kabileler olmaktadır. Pigmeler kısa boylu iken, çok uzun boylu olanlarda vardır.

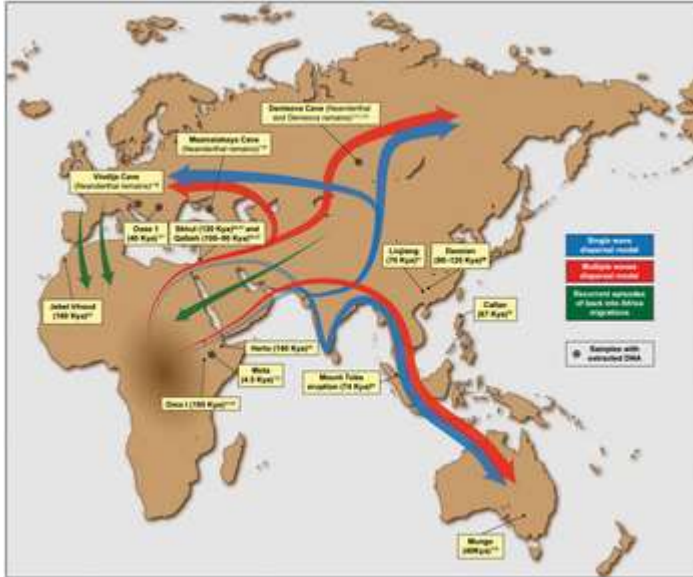
Bu yolların oluşması ile insanlar sanki farklı türler şeklinde davranması ile, aynı tür olduğumuzu vurgulamak amacı ile bu Makale gündeme gelmiştir.

İlerideki Makalede göçen kabileler konusu irdelenecektir.

## Kaynak

İnsan türünün göçü konusunda Ansiklopedik bilgi sunulmaktadır.

Early human migrations, Wikipedia<sup>1</sup>



**Şekil 1:** Tahmini göç yollarıdır.

Putative migration waves [out of Africa](#) and back migrations into the continent, as well as the locations of major ancient human remains and archeological sites (López et al.2015).

**Early human migrations** are the earliest [migrations and expansions](#) of [archaic and modern humans](#) across continents. They are believed to have begun approximately 2 million years ago with the [early expansions out of Africa](#) by *Homo erectus*. This initial migration was followed by other [archaic humans](#) including *H. heidelbergensis*, which lived around 500,000 years ago and was the likely ancestor of [Denisovans](#) and [Neanderthals](#) as well as modern humans. Early hominids had likely crossed [land bridges](#) that have now sunk.

Within Africa, *Homo sapiens* dispersed around the time of its [speciation](#), roughly 300,000 years ago.<sup>[[note](#)]</sup>

<sup>[1]</sup> The [recent African origin](#) paradigm suggests that the anatomically modern humans outside of Africa descend from a population of *Homo sapiens* migrating from [East Africa](#) roughly 70–50,000 years ago and spreading [along the southern coast](#) of Asia and to Oceania by about 50,000 years ago. Modern humans spread [across Europe](#) about 40,000 years ago.

Early Eurasian *Homo sapiens* fossils have been found in Israel and Greece, dated to 194,000–177,000 and 210,000 years old respectively. These fossils seem to represent failed dispersal attempts by early *Homo sapiens*, who were likely replaced by local Neanderthal populations.

The migrating modern human populations are known to have [interbred](#) with earlier local populations, so that contemporary human populations are descended in small part (below 10% contribution) from regional varieties of archaic humans.<sup>[note 2]</sup>

After the [Last Glacial Maximum](#), [North Eurasian](#) populations migrated [to the Americas](#) about 20,000 years ago. Arctic Canada and Greenland were reached by the [Paleo-Eskimo](#) expansion around 4,000 years ago. Finally, [Polynesia](#) was populated within the past 2,000 years in the last wave of the [Austronesian expansion](#).

Early humans (before *Homo sapiens*)

The [earliest humans](#) developed out of [australopithecine](#) ancestors about 3 million years ago, most likely in the area of the [Kenyan Rift Valley](#), where the [oldest known stone tools](#) have been found. Stone tools recently discovered at the [Shangchen](#) site in China and dated to 2.12 million years ago are claimed to be the earliest known evidence of hominins outside Africa, surpassing [Dmanisi](#) in Georgia by 300,000 years.<sup>[6]</sup>

## Yorum

Erken dönemde Akdeniz 360 metre aşağıda bir çukurluk iken, 210bin yıl önce Fosillerinin Yunanistan'da gözlenmesi, orijin Nil vadisi, [Ethiopia](#) Bölgesinde olduğuna göre imkânsız gibidir. Anatomik benzerlikten söz edildiği sanılmakta, genetik ispatlı olmalıdır.

### *Homo erectus*

Between 2 and less than a million years ago, *Homo* spread throughout East Africa and to [Southern Africa](#) (*Homo ergaster*), but not yet to West Africa. Around 1.8 million years ago, *Homo erectus* [migrated out of Africa](#) via the [Levantine corridor](#) and [Horn of Africa](#) to [Eurasia](#). This migration has been proposed as being related to the operation of the [Saharan pump](#), around 1.9 million years ago.<sup>[citation needed]</sup> *Homo erectus* dispersed throughout most of the [Old World](#), reaching as far as [Southeast Asia](#). Its distribution is traced by the [Oldowan](#) lithic industry, by 1.3 million years ago extending as far north as the [40th parallel](#) ([Xiaochangliang](#)).

Key sites for this early migration out of Africa are [Riwat](#) in Pakistan (~2 Ma?<sup>[7]</sup>), [Ubeidiya](#) in the Levant (1.5 Ma) and [Dmanisi](#) in the Caucasus (1.81 ± 0.03 Ma, p=0.05<sup>[8]</sup>).

[China](#) shows evidence of *Homo erectus* from 2.12 mya in Gongwangling, in Lantian county.<sup>[9]</sup> Two *Homo erectus* incisors have been found near Yuanmou, southern China, and are dated to 1.7 mya, and a cranium from Lantian has been dated to 1.63 mya. Artefacts from Majuangou III and Shangshazui in the [Nihewan basin](#), northern China, have been dated to 1.6–1.7 mya.<sup>[9][10]</sup> The archaeological site of [Xihoudu](#) (西侯渡) in [Shanxi](#) province is the earliest recorded [use of fire](#) by *Homo erectus*, which is dated 1.27 million years ago.<sup>[11]</sup> [Southeast Asia](#) ([Java](#)) was reached about 1.7 million years ago ("[Meganthropus](#)"). Western [Europe](#) was first populated around 1.2 million years ago ([Atapuerca](#)).<sup>[12]</sup>

[Robert G. Bednarik](#) has suggested that *Homo erectus* may have built rafts and sailed oceans, a theory that has raised some controversy.<sup>[13]</sup>

### After *H. erectus*

One million years after its dispersal, *H. erectus* was diverging into new species. *H. erectus* is a [chronospecies](#) and was never extinct, so its "late survival" is a matter of taxonomic convention. Late forms of *H. erectus* are thought to have survived until after about 0.5 million ago to 143,000 years ago at the latest,<sup>[note 3]</sup> with derived forms classified as *H. antecessor* in Europe around 800,000 years ago and *H. heidelbergensis* in Africa around 600,000 years ago. *H. heidelbergensis* in its turn spread across East Africa (*H. rhodesiensis*) and to Eurasia, where it gave rise to [Neanderthals](#) and [Denisovans](#).

*H. heidelbergensis*, Neanderthals and Denisovans expanded north beyond the [50th parallel](#) ([Eartham Pit](#), [Boxgrove](#) 500kya, [Swanscombe Heritage Park](#) 400kya, [Denisova Cave](#) 50 kya). It has been suggested that late Neanderthals may even have reached the boundary of the [Arctic](#), by c. 32,000 years ago, when they were being displaced from their earlier habitats by *H. sapiens*, based on 2011 excavations at the site of Byzovaya in the [Urals](#) ([Komi Republic](#), [65.02°N 57.42°E](#)).<sup>[15]</sup>

Other archaic human species are assumed to have spread throughout Africa by this time, although the fossil record is sparse. Their presence is assumed based on traces of [admixture](#) with modern humans found in the genome of African populations.<sup>[5][16][17][18]</sup> *Homo naledi*, discovered in South Africa in 2013 and tentatively dated to about 300,000 years ago, may represent fossil evidence of such an archaic human species.<sup>[19]</sup>

Neanderthals spread across the Near East and Europe, while Denisovans appear to have spread across Central and East Asia and to Southeast Asia and Oceania. There is evidence that Denisovans interbred with Neanderthals in Central Asia where their habitats overlapped.<sup>[20]</sup> Neanderthal evidence has also been found quite late at 33,000 years ago at the 65th latitude of the Byzovaya site in the [Ural Mountains](#). This is far outside of any otherwise known habitat, during a high ice cover period, and perhaps reflects a refugia of near extinction.

*Homo sapiens*

### Dispersal throughout Africa

*Homo sapiens* are believed to have emerged in Africa about 300,000 years ago, based in part on thermoluminescence dating of artifacts and remains from [Jebel Irhoud](#), Morocco, published in 2017.<sup>[note 4][22]</sup> The [Florisbad Skull](#) from Florisbad, South Africa, dated to about 259,000 years ago, has also been classified as early *Homo sapiens*.<sup>[23][24][25][26]</sup> Previously, the [Omo remains](#), excavated between 1967 and 1974 in [Omo National Park](#), [Ethiopia](#), and dated to 200,000 years ago, were long held to be the oldest known fossils of *Homo sapiens*.<sup>[27]</sup>

In September 2019, scientists reported the computerized determination, based on 260 [CT scans](#), of a virtual [skull shape](#) of the last common human ancestor to anatomically modern humans, representative of the earliest modern humans, and suggested that modern humans arose between 260,000 and 350,000 years ago through a merging of populations in [East](#) and [South Africa](#).<sup>[28][29]</sup>

In July 2019, anthropologists reported the discovery of 210,000 year old remains of a *H. sapiens* and 170,000 year old remains of a *H. neanderthalensis* in [Apidima Cave](#) in southern [Greece](#), more than 150,000 years older than previous *H. sapiens* finds in Europe.<sup>[30][31][32][33]</sup>

Early modern humans expanded to Western Eurasia and Central, Western and Southern Africa from the time of their emergence. While [early expansions](#) to Eurasia appear not to have persisted,<sup>[34][20]</sup> expansions to [Southern](#) and [Central Africa](#) resulted in the deepest temporal divergence in living human populations. Early modern human expansion in sub-Saharan Africa appears to have contributed to the end of late [Acheulean](#) ([Fauresmith](#)) industries at about 130,000 years ago, although very late coexistence of archaic and early modern humans, until as late as 12,000 years ago, has been argued for West Africa in particular.<sup>[35]</sup>

The ancestors of the modern [Khoi-San](#) expanded to Southern Africa before 150,000 years ago, possibly as early as before 260,000 years ago,<sup>[note 5]</sup> so that by the beginning of the [MIS 5 "megadrought"](#), 130,000 years ago, there were two ancestral population clusters in Africa, bearers of [mt-DNA haplogroup L0](#) in southern Africa, ancestral to the Khoi-San, and bearers of [haplogroup L1-6](#) in central/eastern Africa, ancestral to everyone else. There was a significant back-migration of bearers of L0 towards eastern Africa between 120 and 75 kya.<sup>[note 6]</sup>

Expansion to Central Africa by the ancestors of the [Central African forager](#) populations (African Pygmies) most likely took place before 130,000 years ago, and certainly before 60,000 years ago.<sup>[37][38][39][40][note 7]</sup>

The situation in [West Africa](#) is difficult to interpret due to a sparsity of fossil evidence. *Homo sapiens* seems to have reached the western [Sahelian zone](#) by 130,000 years ago, while tropical West African sites associated with *H. sapiens* are known only from after 130,000 years ago. Unlike elsewhere in Africa, archaic [Middle Stone Age](#) sites appear to persist until very late, down to the Holocene boundary (12,000 years ago), pointing to the possibility of late survival of [archaic humans](#), and late [hybridization](#) with *H. sapiens* in West Africa.<sup>[35]</sup>

### Yorum

En eski buluntular 300,000yıl önce [Ethiopia](#)'ya dayanmaktadır.

Afrika içinde ilk kümeleşme gözlenmektedir.

### Early northern Africa dispersal

A fragment of a jawbone with eight teeth found at [Misliya Cave](#) has been dated to around 185,000 years ago. Layers dating from between 250,000 and 140,000 years ago in the same cave contained tools of the [Levallois](#) type which could put the date of the first migration even earlier if the tools can be associated with the modern human jawbone finds.<sup>[42][43]</sup>

These early migrations do not appear to have led to lasting colonisation and receded by about 80,000 years ago.<sup>[20]</sup> There is a possibility that this first wave of expansion may have reached China (or even North America<sup>[dubious - discuss][44]</sup>) as early as 125,000 years ago, but would have died out without leaving a trace in the genome of contemporary humans.<sup>[20]</sup>

There is some evidence that modern humans left Africa at least 125,000 years ago using two different routes: through the [Nile Valley](#) heading to the [Middle East](#), at least into modern Israel ([Qafzeh](#): 120,000–100,000 years ago); and a second route through the present-day [Bab-el-Mandeb](#) Strait on the Red Sea (at that time, with a much



lower sea level and narrower extension), crossing to the [Arabian Peninsula](#)<sup>[45][46]</sup> and settling in places like the present-day United Arab Emirates (125,000 years ago)<sup>[47]</sup> and Oman (106,000 years ago),<sup>[48]</sup> and possibly reaching the Indian Subcontinent ([Jwalapuram](#): 75,000 years ago.) Although no human remains have yet been found in these three places, the apparent similarities between the stone tools found at [Jebel Faya](#), those from Jwalapuram and some from Africa suggest that their creators were all modern humans.<sup>[49]</sup> These findings might give some support to the claim that modern humans from Africa arrived at southern China about 100,000 years ago ([Zhiren Cave](#), [Zhirendong](#), [Chongzuo City](#): 100,000 years ago;<sup>[note 9]</sup> and the [Liujiang hominid](#) ([Liujiang County](#)): controversially dated at 139,000–111,000 years ago<sup>[54]</sup>). Dating results of the [Lunadong](#) ([Bubing Basin](#), [Guangxi](#), [southern China](#)) teeth, which include a right upper second molar and a left lower second molar, indicate that the molars may be as old as 126,000 years.<sup>[55][56]</sup>

Since these previous exits from Africa did not leave traces in the results of genetic analyses based on the Y chromosome and on MtDNA (which represent only a small part of the human genetic material), it seems that those modern humans did not survive in large numbers and were assimilated by our major ancestors. An explanation for their extinction (or small genetic imprint) may be the [Toba eruption](#) (74,000 years ago), though some argue it scarcely affected human population.<sup>[57]</sup>

### Yorum

120,000 yıl önce Orta-Asya'da İsrail'de olduğu, Kızıl Deniz kenarından da 140,000 yıl içinde Çin yörelerinde tanımlanmıştır.

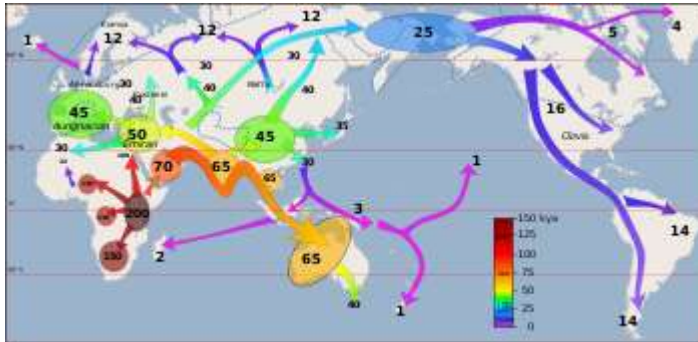
Kısaca 100,000 yıl Afrika sonrası dağılım oluşmuştur.

### Coastal migration

Overview map of the peopling of the world by early humans during the [Upper Paleolithic](#), following to the [Southern Dispersal](#) paradigm.

The so-called "[recent dispersal](#)" of modern humans took place about 70–50,000 years ago.<sup>[58][59][60]</sup> It is this migration wave that led to the lasting spread of modern humans throughout the world.

A small group from a population in East Africa, bearing [mitochondrial haplogroup L3](#) and numbering possibly fewer than 1,000 individuals,<sup>[61][62]</sup> crossed the [Red Sea](#) strait at [Bab-el-Mandeb](#), to what is now [Yemen](#), after around 75,000 years ago.<sup>[63]</sup> A recent review has also shown support for the northern route through Sinai/Israel/Syria (Levant).<sup>[20]</sup> Their descendants spread along the [coastal route](#) around [Arabia](#) and [Persia](#) to the [Indian subcontinent](#) before 55,000 years ago. Other research supports a migration out of Africa between about 65,000 and 50,000 years ago.<sup>[58][64][60]</sup> The coastal migration between roughly 70,000 and 50,000 years ago is associated with mitochondrial haplogroups [M](#) and [N](#), both derivative of L3.



**Şekil 2:** Kıyı ve 70-50bin yıl önceki göç durumu.

Along the way *H. sapiens* interbred with Neanderthals and Denisovans,<sup>[65]</sup> with Denisovan DNA making 0.2% of mainland Asian and Native American DNA.<sup>[66]</sup>

### Nearby Oceania

Migrations continued along the Asian coast to Southeast Asia and Oceania, colonising [Australia](#) by around 65,000–50,000 years ago.<sup>[67][68][69]</sup> By reaching Australia, *H. sapiens* for the first time expanded its habitat beyond that of *H. erectus*. Denisovan ancestry is shared by [Melanesians](#), [Aboriginal Australians](#), and smaller scattered groups of people in Southeast Asia, such as the [Mamanwa](#), a [Negrito](#) people in the [Philippines](#), suggesting the interbreeding took place in Eastern Asia where the Denisovans lived.<sup>[70][71][72]</sup> Denisovans may have crossed

the [Wallace Line](#), with [Wallacea](#) serving as their last [refugium](#).<sup>[73][74]</sup> *Homo erectus* had crossed the Lombok gap reaching as far as Flores, but never made it to Australia.<sup>[75]</sup>

During this time sea level was much lower and most of [Maritime Southeast Asia](#) formed one land mass known as [Sunda](#). Migration continued Southeast on the [coastal route](#) to the [straits](#) between Sunda and [Sahul](#), the continental land mass of present-day Australia and [New Guinea](#). The gaps on the [Weber Line](#) are up to 90 km wide,<sup>[76]</sup> so the migration to Australia and New Guinea would have required seafaring skills. Migration also continued along the coast eventually turning northeast to [China](#) and finally reaching [Japan](#) before turning inland. This is evidenced by the pattern of [mitochondrial haplogroups](#) descended from [haplogroup M](#), and in [Y-chromosome haplogroup C](#).

Sequencing of one Aboriginal genome from an old hair sample in [Western Australia](#) revealed that the individual was descended from people who migrated into East Asia between 62,000 and 75,000 years ago. This supports the theory of a single migration into Australia and New Guinea before the arrival of Modern Asians (between 25,000 and 38,000 years ago) and their later migration into North America.<sup>[77]</sup> This migration is believed to have happened around 50,000 years ago, before Australia and New Guinea were separated by rising sea levels approximately 8,000 years ago.<sup>[78][79]</sup> This is supported by a date of 50,000–60,000 years ago for the oldest evidence of settlement in Australia,<sup>[67][80]</sup> around 40,000 years ago for the oldest human remains,<sup>[67]</sup> the earliest humans artifacts which are at least 65,000 years old<sup>[81]</sup> and the extinction of the [Australian megafauna](#) by humans between 46,000 and 15,000 years ago argued by Tim Flannery,<sup>[82]</sup> which is similar to what happened in the Americas. The continued use of Stone Age tools in Australia has been much debated.<sup>[83]</sup>

### **Dispersal throughout Eurasia**

The population brought to [South Asia](#) by [coastal migration](#) appears to have remained there for some time, during roughly 60,000 to 50,000 years ago, before spreading further throughout Eurasia. This dispersal of early humans, at the beginning of the [Upper Paleolithic](#), gave rise to the major population groups of the [Old World](#) and the [Americas](#).

Towards the West, Upper Paleolithic populations associated with mitochondrial haplogroup [R](#) and its derivatives, spread throughout Asia and Europe, with a back-migration of [M1](#) to North Africa and the Horn of Africa several millennia ago.<sup>[dubious – discuss]</sup>

Presence [in Europe](#) is certain after 40,000 years ago, possibly as early as 43,000 years ago,<sup>[84]</sup> rapidly replacing the Neanderthal population. Contemporary Europeans have [Neanderthal ancestry](#), but it seems likely that substantial interbreeding with Neanderthals ceased before 47,000 years ago, i.e. took place before modern humans entered Europe.<sup>[85]</sup>

There is evidence from [mitochondrial DNA](#) that modern humans have passed through at least one [genetic bottleneck](#), in which genome diversity was drastically reduced. [Henry Harpending](#) has proposed that humans spread from a geographically restricted area about 100,000 years ago, the passage through the geographic bottleneck and then with a dramatic growth amongst geographically dispersed populations about 50,000 years ago, beginning first in Africa and thence spreading elsewhere.<sup>[86]</sup> Climatological and geological evidence suggests evidence for the bottleneck. The explosion of [Toba](#), the largest volcanic eruption of the [Quaternary](#), may have created a 1,000 year cold period, potentially reducing human populations to a few tropical refugia. It has been estimated that as few as 15,000 humans survived. In such circumstances genetic drift and [founder effects](#) may have been maximised. The greater diversity amongst African genomes may reflect the extent of African refugia during the Toba incident.<sup>[87]</sup> However, a recent review highlights that the single-source hypothesis of non-African populations is less consistent with ancient DNA analysis than multiple sources with genetic mixing across Eurasia.<sup>[20]</sup>

### **Europe**

The recent expansion of [anatomically modern humans](#) reached Europe around 40,000 years ago from Central Asia and the Middle East, as a result of cultural adaption to big game hunting of [sub-glacial](#) steppe fauna.<sup>[88]</sup> [Neanderthals](#) were present both in the Middle East and in Europe, and the arriving populations of anatomically modern humans (also known as "[Cro-Magnon](#)" or [European early modern humans](#)) [interbred with Neanderthal populations](#) to a limited degree. Populations of modern humans and Neanderthal overlapped in various regions such as the Iberian Peninsula and the Middle East. Interbreeding may have contributed Neanderthal genes to palaeolithic and ultimately modern Eurasians and Oceanians.

An important difference between Europe and other parts of the inhabited world was the northern latitude. Archaeological evidence suggests humans, whether Neanderthal or Cro-Magnon, reached [sites in Arctic Russia](#) by 40,000 years ago.<sup>[89]</sup>

Cro-Magnon are considered the first anatomically modern humans in Europe. They entered [Eurasia](#) by the [Zagros Mountains](#) (near present-day [Iran](#) and eastern [Turkey](#)) around 50,000 years ago, with one group rapidly settling coastal areas around the [Indian Ocean](#) and another migrating north to the steppes of [Central Asia](#).<sup>[90]</sup> Modern human remains dating to 43,000–45,000 years ago have been discovered in Italy<sup>[91]</sup> and Britain,<sup>[92]</sup> as well as in the European Russian Arctic from 40,000 years ago.<sup>[89][93]</sup>

Humans colonised the environment west of the Urals, hunting reindeer especially,<sup>[94]</sup> but were faced with adaptive challenges; winter temperatures averaged from  $-20$  to  $-30$  °C ( $-4$  to  $-22$  °F) with fuel and shelter scarce. They travelled on foot and relied on hunting highly mobile herds for food. These challenges were overcome through technological innovations: tailored clothing from the pelts of fur-bearing animals; construction of shelters with hearths using bones as fuel; and digging "ice cellars" into the permafrost to store meat and bones.<sup>[94][95]</sup>

A [mitochondrial DNA](#) sequence of two Cro-Magnons from the [Paglicci Cave](#) in Italy, dated to 23,000 and 24,000 years old (Paglicci 52 and 12), identified the [mtDNA](#) as [Haplogroup N](#), typical of the latter group.<sup>[96]</sup>

## Yorum

Neandertallere Avrupa'da etkinliği gözlemlendiği bilinmekte, İnsan türü ise 20,000 yıl önce buraya ulaştığı ve Orta-Asya kanalı sıklıkla olduğu vurgusu vardır.

45,000 yıl önce İtalya ve İngiltere'de kalıntılar ise bulunmuştur.

### Migration of modern humans into Europe, based on simulation by Currat & Excoffier (2004)<sup>[97]</sup>

The expansion of modern human population is thought to have begun 45,000 years ago, and it may have taken 15,000–20,000 years for Europe to be colonized.<sup>[98][99]</sup>

During this time, the Neanderthals were slowly being displaced. Because it took so long for Europe to be occupied, it appears that humans and Neanderthals may have been constantly competing for territory. The Neanderthals had larger brains, and were larger overall, with a more robust or heavily built frame, which suggests that they were physically stronger than modern *Homo sapiens*. Having lived in Europe for 200,000 years, they would have been better adapted to the cold weather. The anatomically modern humans known as the [Cro-Magnons](#), with widespread trade networks, superior technology and bodies likely better suited to running, would eventually completely displace the Neanderthals, whose last refuge was in the [Iberian peninsula](#). After about 25,000 years ago the fossil record of the Neanderthals ends, indicating extinction. The last known population lived around a cave system on the remote south-facing coast of [Gibraltar](#) from 30,000 to 24,000 years ago.

From the extent of linkage disequilibrium, it was estimated that the last Neanderthal gene flow into early ancestors of Europeans occurred 47,000–65,000 years [BP](#). In conjunction with archaeological and fossil evidence, interbreeding is thought to have occurred somewhere in Western Eurasia, possibly the Middle East.<sup>[85]</sup> Studies show a higher Neanderthal admixture in East Asians than in Europeans.<sup>[100][101]</sup> North African groups share a similar excess of derived alleles with Neanderthals as non-African populations, whereas Sub-Saharan African groups are the only modern human populations with no substantial Neanderthal admixture.<sup>[note 10]</sup> The Neanderthal-linked haplotype B006 of the dystrophin gene has also been found among nomadic pastoralist groups in the Sahel and Horn of Africa, who are associated with northern populations. Consequently, the presence of this B006 haplotype on the northern and northeastern perimeter of Sub-Saharan Africa is attributed to gene flow from a non-African point of origin.<sup>[note 11]</sup>

### East, Southeast and North Asia

"[Tianyuan man](#)", an individual who lived in China c. 40,000 years ago, showed substantial Neanderthal admixture. A 2017 study of the ancient DNA of Tianyuan Man found that the individual is related to modern Asian and Native American populations.<sup>[105]</sup> A 2013 study found [Neanderthal introgression](#) of 18 genes within the chromosome 3p21.31 region (HYAL region) of East Asians. The introgressive haplotypes were positively selected in only East Asian populations, rising steadily from 45,000 years ago until a sudden increase of growth rate around 5,000 to 3,500 years ago. They occur at very high frequencies among East Asian populations in contrast to other Eurasian populations (e.g., European and South Asian populations). The findings also suggest that this Neanderthal introgression occurred within the ancestral population shared by East Asians and Native Americans.<sup>[106]</sup>

A 2016 study presented an analysis of the population genetics of the [Ainu](#) people of northern Japan as key to the reconstruction of the early peopling of East Asia. The Ainu were found to represent a more basal branch than the modern farming populations of East Asia, suggesting an ancient (pre-Neolithic) connection with northeast Siberians.<sup>[107]</sup> A 2013 study associated several [phenotypical](#) traits associated with Mongoloids with a single mutation of the [EDAR](#) gene, dated to c. 35,000 years ago.<sup>[note 12][note 13]</sup>



Mitochondrial haplogroups [A](#), [B](#) and [G](#) originated about 50,000 years ago, and bearers subsequently colonized [Siberia](#), [Korea](#) and [Japan](#), by about 35,000 years ago. Parts of these populations migrated to North America during the [Last Glacial Maximum](#).

A review paper by Melinda A. Yang (in 2022) summarized and concluded that a distinctive "Basal-East Asian population" referred to as '*East- and Southeast Asian lineage*' (ESEA); which is ancestral to modern East Asians, [Southeast Asians](#), [Polynesians](#), and [Siberians](#), originated in [Mainland Southeast Asia](#) at ~50,000BC, and expanded through multiple migration waves southwards and northwards respectively. This ESEA lineage gave rise to various sublineages, and is also ancestral to the [Hoabinhian hunter-gatherers](#) of Southeast Asia and the ~40,000 year old [Tianyuan](#) lineage found in [Northern China](#), but already differentiated and distinct from [European-related](#) and [Australasian-related](#) lineages, found in other regions of prehistoric Eurasia. The ESEA lineage trifurcated from an earlier East-Eurasian or "eastern non-African" (ENA) meta-population, which also contributed to the formation of Ancient Ancestral South Indians (AASI) as well as to Australasians.<sup>[111]</sup>

### **Last Glacial Maximum**

Around 20,000 years ago, approximately 5,000 years after the Neanderthal extinction, the [Last Glacial Maximum](#) forced northern hemisphere inhabitants to migrate to several [shelters \(refugia\)](#) until the end of this period. The resulting populations are presumed to have resided in such refuges during the LGM to ultimately reoccupy Europe, where archaic historical populations are considered their descendants. The composition of European populations was later altered by further migrations, notably the [Neolithic](#) expansion from the Middle East, and still later the [Chalcolithic](#) population movements associated with [Indo-European expansion](#). A Paleolithic site on the Yana River, Siberia, at 71°N, lies well above the Arctic Circle and dates to 27,000 radiocarbon years before present, during glacial times. This site shows that people adapted to this harsh, high-latitude, Late Pleistocene environment much earlier than previously thought.<sup>[112]</sup>

### **Americas**

[Paleo-Indians](#) originated from [Central Asia](#), crossing the [Beringia land bridge](#) between eastern Siberia and present-day Alaska.<sup>[113]</sup> Humans lived throughout the Americas by the end of the [last glacial period](#), or more specifically what is known as the [late glacial maximum](#).<sup>[113][114][115][116]</sup> Details of Paleo-Indian migration to and throughout the American continent, including the dates and the routes traveled, are subject to ongoing research and discussion.<sup>[117]</sup>

Conventional estimates have it that humans reached North America at some point between 15,000 and 20,000 years ago.<sup>[118][119][120][121]</sup> The traditional theory is that these early migrants moved when sea levels were significantly lowered due to the [Quaternary glaciation](#),<sup>[114][117]</sup> following herds of now-extinct [pleistocene megafauna](#) along *ice-free corridors* that stretched between the [Laurentide](#) and [Cordilleran](#) ice sheets.<sup>[122]</sup> Another route proposed is that, either on foot or using [primitive boats](#), they migrated down the Pacific coast to [South America](#) as far as [Chile](#).<sup>[123]</sup> Any archaeological evidence of coastal occupation during the last Ice Age would now have been covered by the [sea level rise](#), up to a hundred metres since then.<sup>[124]</sup> The recent finding of indigenous [Australasian](#) genetic markers in Amazonia supports that a coastal route and subsequent isolation did occur with some migrants.<sup>[125]</sup>

### **Holocene migrations**

The [Holocene](#) is taken to begin 12,000 years ago, after the end of the [Last Glacial Maximum](#). During the [Holocene climatic optimum](#), beginning about 9,000 years ago, human populations which had been geographically confined to [refugia](#) began to migrate. By this time, most parts of the globe had been settled by *H. sapiens*; however, large areas that had been covered by [glaciers](#) were now re-populated.

This period sees the transition from the [Mesolithic](#) to the [Neolithic](#) stage throughout the [temperate zone](#). The Neolithic subsequently gives way to the [Bronze Age](#) in [Old World](#) cultures and the gradual emergence of the [historical record](#) in the [Near East](#) and [China](#) beginning around 4,000 years ago.

Large-scale migrations of the Mesolithic to Neolithic era are thought to have given rise to the pre-modern distribution of the world's major [language families](#) such as the [Niger-Congo](#), [Nilo-Saharan](#), [Afro-Asiatic](#), [Uralic](#), [Sino-Tibetan](#) or [Indo-European](#) phyla. The speculative [Nostratic theory](#) postulates the derivation of the major language families of Eurasia (excluding Sino-Tibetan) from a single proto-language spoken at the beginning of the Holocene period.

### **Eurasia**

Evidence published in 2014 from genome analysis of ancient human remains suggests that the modern native populations of Europe largely descend from three distinct lineages: "[Western Hunter-Gatherers](#)", derivative of the Cro-Magnon population of Europe, [Early European Farmers](#) introduced to Europe from the Near East during the [Neolithic Revolution](#) and [Ancient North Eurasians](#) who expanded to Europe in the context of the [Indo-](#)

[European expansion](#).<sup>[127]</sup> The Ancient North Eurasian component was introduced to Western Europe by people related to the [Yamnaya culture](#).<sup>[128]</sup> Additional ANE ancestry is found in European populations through Paleolithic interactions with [Eastern Hunter-Gatherers](#).<sup>[129]</sup>

### Sub-Saharan Africa

West-Eurasian back-migrations started in the early [Holocene](#) or already earlier in the [Paleolithic](#) period (30-15kya), followed by pre-Neolithic and [Neolithic](#) migration events from the [Middle East](#), mostly affecting Northern Africa, the Horn of Africa, and wider regions of the Sahel zone and East Africa.<sup>[130]</sup>

The [Nilotic peoples](#) are thought to be derived from an earlier undifferentiated [Eastern Sudanic](#) unity by the 3rd millennium BCE. The development of the Proto-Nilotes as a group may have been connected with their domestication of [livestock](#). The Eastern Sudanic unity must have been considerably earlier still, perhaps around the 5th millennium BCE (while the proposed [Nilo-Saharan](#) unity would date to the [Upper Paleolithic](#) about 15kya). The original locus of the early Nilotic speakers was presumably east of the Nile in what is now [South Sudan](#). The Proto-Nilotes of the 3rd millennium BCE were [pastoralists](#), while their neighbors, the Proto-[Central Sudanic](#) peoples, were mostly agriculturalists.<sup>[132]</sup>

The [Niger-Congo](#) phylum is thought to have emerged around 6,000 years ago in West or Central Africa. Its expansion may have been associated with the expansion of Sahel agriculture in the African Neolithic period, following the desiccation of the Sahara in c. 3900 BCE.<sup>[133]</sup> The [Bantu expansion](#) has spread the [Bantu languages](#) to Central, Eastern and Southern Africa, partly replacing the [indigenous](#) populations of these regions, including the [African Pygmies](#), [Hadza people](#) and [San people](#). Beginning about 3,000 years ago, it reached South Africa about 1,700 years ago.<sup>[134]</sup>

Some evidence (including a 2016 study by Busby et al.) suggests admixture from ancient and recent migrations from [Eurasia](#) into parts of Sub-Saharan Africa.<sup>[135]</sup> Another study (Ramsay et al. 2018) also shows evidence that ancient Eurasians migrated into Africa and that Eurasian admixture in modern Sub-Saharan Africans ranges from 0% to 50%, varying by region and generally higher in the Horn of Africa and parts of the [Sahel](#) zone, and found to a lesser degree in certain parts of Western Africa, and [Southern Africa](#) (excluding recent immigrants).<sup>[136]</sup>

### Indo-Pacific

The first seaborne human migrations were by the [Austronesian peoples](#)<sup>[dubious – discuss]</sup> originating from [Taiwan](#) known as the "[Austronesian expansion](#)".<sup>[137]</sup> Using advanced sailing technologies like [catamarans](#), [outrigger boats](#), and [crab claw sails](#), they built the first sea-going ships and rapidly colonized [Island Southeast Asia](#) at around 3000 to 1500 BCE. From the [Philippines](#) and [Eastern Indonesia](#) they colonized [Micronesia](#) by 2200 to 1000 BCE.<sup>[137][138]</sup>

A branch of the Austronesians reached [Island Melanesia](#) between 1600 and 1000 BCE, establishing the [Lapita culture](#) (named after the archaeological site in Lapita, [New Caledonia](#), where their characteristic pottery was first discovered). They are the direct ancestors of the modern [Polynesians](#). They ventured into [Remote Oceania](#) reaching [Vanuatu](#), [New Caledonia](#), and [Fiji](#) by 1200 BCE, and [Samoa](#) and [Tonga](#) by around 900 to 800 BCE. This was the furthest extent of the Lapita culture expansion. During a period of around 1,500 years, they gradually lost the technology for pottery (likely due to the lack of clay deposits in the islands), replacing it with carved wooden and bamboo containers. Back-migrations from the Lapita culture also merged back Island Southeast Asia in 1500 BCE, and into Micronesia at around 200 BCE. It was not until 700 CE when they started voyaging further into the Pacific Ocean, when they colonized the [Cook Islands](#), the [Society Islands](#), and the [Marquesas](#). From there, they further colonized [Hawaii](#) by 900 CE, [Rapa Nui](#) by 1000 CE, and [New Zealand](#) by 1200 CE.<sup>[138][139][140]</sup>

In the [Indian Ocean](#), Austronesians from [Borneo](#) also colonized [Madagascar](#) and the [Comoros Islands](#) by around 500 CE. Austronesians remain the dominant ethnolinguistic group of the islands of the Indo-Pacific, and were the first to establish a [maritime trade network](#) reaching as far west as [East Africa](#) and the [Arabian peninsula](#). They assimilated earlier [Pleistocene](#) to early [Holocene](#) human overland migrations through [Sundaland](#) like the [Papuan](#)s and the [Negritos](#) in Island Southeast Asia.<sup>[137][138]</sup> The Austronesian expansion was the last and the most far-reaching [Neolithic](#) human migration event.<sup>[141]</sup>

### Caribbean

The [Caribbean](#) was one of the last places in the Americas that were settled by humans. The oldest remains are known from the Greater Antilles (Cuba and Hispaniola) dating between 4000 and 3500 BCE, and comparisons between tool-technologies suggest that these peoples moved across the Yucatán Channel from Central America. All evidence suggests that later migrants from 2000 BCE and onwards originated from South America, via the Orinoco region.<sup>[142]</sup> The descendants of these migrants include the ancestors of the [Taíno](#) and [Kalinago](#) (Island Carib) peoples.<sup>[143]</sup>

## Arctic

The earliest inhabitants of North America's central and eastern Arctic are referred to as the [Arctic small tool tradition](#) (AST) and existed c. 2500 BCE. AST consisted of several [Paleo-Eskimo](#) cultures, including the [Independence cultures](#) and [Pre-Dorset](#) culture.<sup>[144][145]</sup>

The [Inuit](#) are the descendants of the [Thule culture](#), which emerged from western Alaska around CE 1000 and [gradually displaced](#) the Dorset culture.<sup>[146][147]</sup>

## Yorum

Geniş bilgi sunulmuştur. Burada geçiş yolları zamanımızdaki boyuttan farklı olması, 70-50bin yıl önce buzulların olması ve geçişin zor olmasıdır.

Orta Asya'da halen 3 farklı grup vardır.

1)-**Göçebe**: Devamlı gezen, hayvancılık ile uğraşanlar.

Büyük kitle olarak, kabileler oluşturmakta, bunlar belirli yerlerde geçici buldukları için, üstün ordu ile gelerek bunları yok etmek olası değildir. Klasik geri çekilir gibi yapmak, çevrelemek ve düşmanı yok etmek başlıca metot olmuştur. Ciddi disiplin ötesinde, zamanlama çok önemli, korku duymamak gereklidir. Geri çekilmeyi kabul etmeyen bir ordunun, geri çekilebilir gibi yapmasını öğrenmesi de oldukça zordur.

En ideal yerde bulunur, mevsimlik olarak göçerler, daima çevreden faydalanırlar.

Akrabalık önemli bir bağ olmaktadır. Cengiz Kaan'ın 40 bin çocuğu olduğu abartı olsa da reisin kızı ile evlenmek bir adet gibi olmuştur.

2)-**Şehirde oturan**: Okumuş ve medeniyetlere katkısı olan gruptur. Orta Asya önemli kültür merkezleri olmasına neden olmuşlardır. Zaten bir Türk boyu, göçtüğü yerde ilk olarak Medrese kurar ve ordu hiçbir zaman medrese olan yerden çekilmemiştir. Türk Ordusunda da ilk ve ön safhada Yedek-Subay, kısaca Üniversite mezunu kişi vardır.

3)-**Dağda ve izole yaşayanlar**: Dağlarda, ormanlık yerlerde yaşayanlar oluşturmaktadır. Bunlara Bilgin, Alim, Derviş gibi tanımlamalar yapılarak, toplum bunlardan görüş alırlar. Bir felsefe deryaları olmaktadır.

Bu açıdan göç yolları devamlı yürünen değil, yerleşilen, çevre ve ortam nedeni ile tekrar yola çıkılan olarak da görülmelidir.

Bir boyutta, eğitim almak, bazı yerlerde olmak, Peygamber yuvasında bulunmak, Haç ötesi oturmak, etkilenmek boyutları da sayılmalıdır.

## Sonuç

Her kabile ve Erendeki bütün alanlar, yerler kendi içinde de bir göç yaşamıştır.

Burada başarı başlama ve yerleşme ile alakalıdır.

Konu ile detaylı bilgi okunması için sunulmuştur.

Göçerken ölenlerin ruhlarına dua etmek görevimiz olmalı. Dua canlıların algılaması içindir, ölene gitmez ama bir farkında olalım, onlar bize yeni yer için göçmüşler.

Unutmamak gerekir ki tüm Resuller göçmüşlerdir.

## Kaynaklar

1) Early human migrations, Wikipedia