

# 2

## Ancient Man

### Part I

#### Introduction

Man lives on the earth. It is the world of every one of us. It is the home for man as well as for other animals and trees. The earth provides food and other necessities for all of us. All animals and vegetation living on earth are different from each other. These differences occurred due to the changes in the environment of various parts of the earth. The earth affected man, other animals and vegetation equally. Therefore, it is important for everyone of us to learn something about the earth on which we live. In this lesson you will learn about the formation of the earth and the origin of species on it.

#### 2.1 The Environment Where Man's Origin Took Place

##### Origin of Earth and Life

The earth where we live is a planet. Its origin goes back to a past of four thousand five hundred and forty million years. Scientists hold different views on the formation of the earth. However, the common belief is that the earth was formed from a cloud of dust in the sky. Such a cloud of dust is known as a 'nebula'. When the earth was formed, it was very warm. But gradually it became cool. However, the central part of the earth is still extremely hot. It has been calculated that its temperature is about 6,000 degrees of Celsius. Water boils at 100 degrees of Celsius. Now you can imagine the intensity of the temperature



Fig. 2.1. The earth was formed from a cloud of dust like this.



Fig. 2.2. How lava poured out after the eruption of the ‘Sukurajima’ volcano in Japan.

in the inner part of the earth. When volcanoes erupt, the elements seething in the central part of the earth pour out. They are called 'lava'.

Species originated sometime after the formation of the earth. What first appeared on the earth with a life is a thing which could not be seen with the naked eye. It is known as ‘Prokaryote Bacteria’. This bacteria appeared on the earth two thousand and five hundred million years ago.

A fossilized mark of a creature, which lived five hundred and forty two million years ago, has been discovered in Canada. This creature is between 4 cm and 7 cm in length. It had lived in the sea bed. It had a mouth to eat and five eyes. It is known as ‘Opabinia’.

First species in the world originated in water. They came to the land sometime later. First, a type of creatures similar to millipedes appeared on land. That happened four hundred and twenty million years ago. It is called ‘The Silurian’ era.

First, plants spread on the land before animals. That happened five hundred forty two million years ago. This time is known as ‘The Paleozoic’ era. In comparison with the time when plants and animals appeared on the earth, man appeared many years later. It will be described in the next lesson.

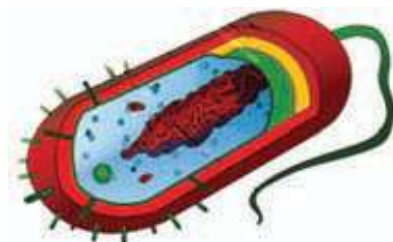


Fig. 2.3. A sketch of a Prokaryote Bacteria.



Fig. 2.4. A fossilized mark of an 'Opabinia', which lived five hundred and forty two million years ago. This was found in Canada.

### Important Points

1. The earth was formed four thousand five hundred and forty million years ago. It was formed from a cloud of dust in the sky.
2. The earth, which was very warm, gradually got cool. But it has not yet become completely cool.
3. Living beings originated on the earth much later. Life first originated in water.
4. First, a tiny bacteria originated in the world.
5. First, plants appeared. Secondly, animals originated on the earth.



### Activity 04

Make a collection of pictures of plants, animals and man belonging to different eras, under the instructions of your teacher.

## Part II

### 2.2 The Evolution of Ancient Man

#### The Origin of Man

Man is an animal that belongs to nature. But he is more unique than other animals. Man invented many arts and crafts of making various things (technology), exchanging ideas (language), and engaging in aesthetic performances such as dancing and singing (art). These abilities cannot be seen in other animals. Today, man is capable enough to go to the moon. Man achieved this progress as a result of facing and overcoming various challenges over a long period of time. You will learn in this lesson how man, who too is an animal among other animals, surpassed them and achieved so much. By learning it you will get a chance to realize how you should serve the society as you belong to the human race.

Man originated from a generation of apes. It is certainly an interesting story. The earth, on which we live, was extremely cold 2.5 million years ago. That time period is known as 'The Great Ice Age'. At the beginning of the Great Ice Age, a type of Chimpanzees in Africa started shaping themselves in a different way than that of their relatives. These chimpanzees underwent some changes in their faces and in the teeth as they had to adapt themselves to the extreme coldness of that time and to eat unfamiliar food due to the lack of food. They got used to walk on their two feet. These changes set the background for mankind to evolve from chimpanzees.



Fig. 2.5. Man who was an ape first and then achieved progress over some hundred thousand years, is now powerful enough to influence the earth.

One of the main reasons that influenced the evolution of a human generation from an ape generation is the climate of the Great Ice Age. During this time, northern and southern parts of the earth were completely covered with ice layers. Trees did not bear fruit. Therefore, food was not in plenty. Mammoths lived during this period.

There were short warm periods during the era known as the Great Ice Age. There were four extremely cold periods and four short warm periods during the Great Ice Age. It was a happy time for all animals during the warm periods since there was food in abundance. Man evolved from a chimpanzee which belonged to an ape family during this Great Ice Age. This process is called 'human evolution'.

At the initial stage there was not much difference between apes and humans in the shape of their bodies, but humans



Fig. 2.6. A picture of the environment during the Great Ice Age, drawn by an artist.

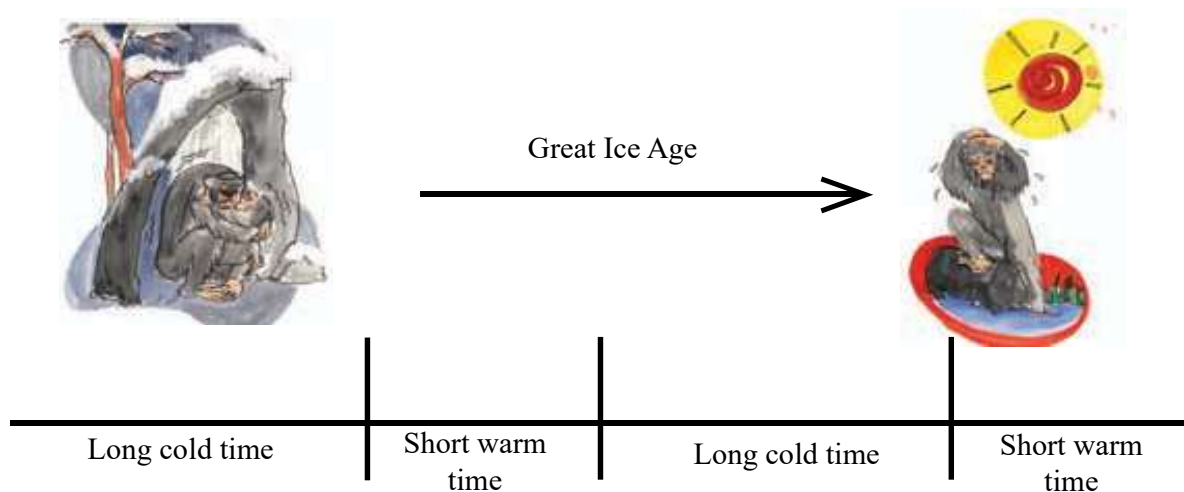
started doing one thing that was not done by other apes; that is, using tools. They picked up and collected round shaped stones from places of naturally running water. They used those stones to beat various types of nuts to eat and for other purposes.

Thus, the oldest ape who showed a tendency to become a man was known as 'Australopithecus'.

Humans were able to do what the other apes could not as the humans had the ability of walking on two feet. It has now been discovered that the Australopithecus who lived 3.8 million years ago had walked on two feet. When the time went on, they made more advanced tools out of stones. Its first stage was to hit one stone against another to break a splinter off and make a sharpened blade out of it. The first to make an attempt like this was called 'Homo Habilis'. Its meaning is 'capable man'. He lived during a period of 2.3 - 1.4 million years ago.

Man has acquired the skill to invent the modern tools today due to the past learning of making simple tools.

In addition to using stone tools, another fact that contributed to the progress of human beings was their use of fire. They could bake their food with the help of fire.



Therefore, they could digest their food easily. They could keep themselves warm during the cold seasons with the help of fire. As a result, their life became more comfortable and it made their bodies more beautiful.

The evidence, which shows using fire by man for the first time in the world has been found in Israel. That evidence goes back to seven hundred and ninety thousand (790,000) years. The man called 'Homo Erectus' first used fire. He lived 1,800 million years ago.

Though originating from an ape's generation, man's body changed from that of an ape into the present form with time. Gradually, the brain developed. Since the human brain was larger than that of an ape's, human skull underwent transformation accordingly.

Linking first humans to the man who lives today happened through another developed man; he is known as 'Homo Neanderthalensis'. He lived six hundred thousand years ago. This human had built houses out of bones of huge animals. He

ate cooked vegetables. He was a good hunter too.

Man developed his abilities over a period of about 2 million of (2,000,000) years. His brain developed well as a result of thinking to invent new things. Therefore, they discovered a language to express their ideas and arts such as dancing, music and painting to express their feelings one hundred thousand years (100,000) ago. The particular type of man who discovered such sophisticated things is known as 'Homo Sapien'. He is the closest relative of all of us. We all belong to the family of Homo Sapien.



Fig.2.7. A skull of the man called Australopithecus who lived 2.5 million years ago.

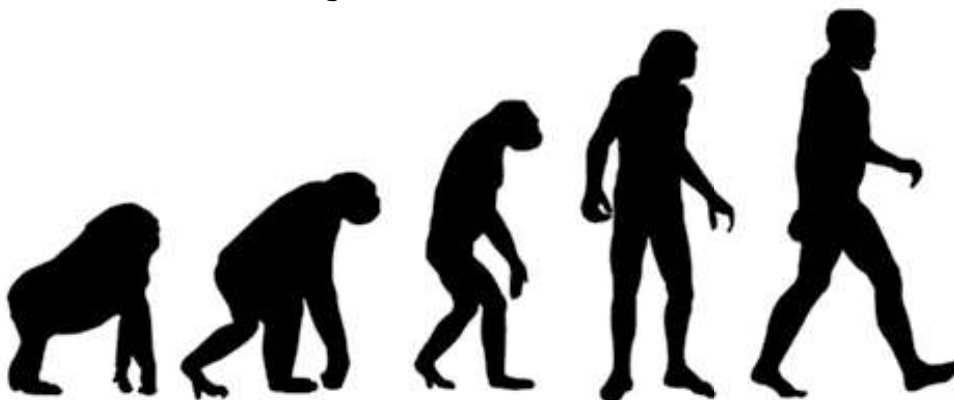


Fig. 2.8. Man evolved from an ape into a well developed human over a period of 2.5 million years.

What was discovered by the first humans is very important for us even today. The best example for this is the discovery of fire and learning to use it.

We learnt some practices such as building houses and eating cooked meals from the humans who lived in ancient time.



Fig. 2.9. A well shaped old tool made of stone.



Fig. 2.10. A flute made by Homo Sapien man thirty thousand years ago. It had been made out of a bone of an animal.



#### Activity 05

Draw the pictures of the different stages of man's evolution.

## 2.3 The Cultural Evolution of Man

Man, who developed both his body and brain from a process of being a chimpanzee to a human, changed his way of living too for a long period of time. This is known as 'cultural change'. This fact is very obvious to us when we study the way in which the man changed the shape of the stone tools he invented in the ancient time.

The way in which man shaped his life, gradually changed over about 2.5 million (2,500,000) years. Stone tools, dwellings and food underwent changes and developed. We mentioned above that the stone tools made by man helped us to understand the progress achieved by man for a long time. Stone tools last long since they do not decay. It could be seen that with time stone tools had developed in shape, size and efficiency. According to the nature of the stone tools, man's cultural progress is divided into three main stages; those are,

1. Paleolithic era
2. Mesolithic era
3. Neolithic era

### How did people live during the Paleolithic Era?

People encamped and lived in different places as groups in the Paleolithic era. One such group had a few families consisting of between 20 to 30 members in each. People started the custom of performing

funeral rites for their dead relatives during this era. One of the main tasks that they followed was applying colours on skeletons. Red ochre was used to make colours. Barter system started when people, who lived in the areas where red ochre was not abundant, received it from those who lived in the areas where there was red ochre abundantly. There was not a high population during this era. People in the Paleolithic Era lived by hunting and gathering food while roaming.

They started drawing pictures and making figures out of stones at the end of the Paleolithic Era.



Fig. 2.11. A figure of a woman made during the latter part of the Paleolithic era. This has been made out of a piece of bone.

### Progress in the Mesolithic Era

Mesolithic era started in different time periods in different regions in the world. However, it can be stated with certainty that this era started in a time period between 20,000 and 18,000 years ago. As in the Paleolithic era the man in this era too, lived by hunting and gathering food. Man started hunting with bows and arrows during this era.



Fig. 2.12. A painting done by the people who lived during the Mesolithic era.

It was also during this era, that man started eating nuts, leaves and yams instead of hunting for food. Man had the habit of roaming from place to place in the Paleolithic era, but during the Mesolithic era he started to stay in one place for a long time. The people in that era were able to build their houses using sticks and leaves of trees. They drew pictures on rock surfaces using different colours. It is evident that when compared to the Paleolithic man, the Mesolithic man had a more developed lifestyle.



Fig. 2.13 Man in the Mesolithic era started building huts like this with sticks and leaves of trees.

### Changes that occurred in the Neolithic Era

Neolithic era started about nine thousand years ago. Man started several important activities during this era. The most prominent one among those activities was starting agriculture. He started cultivating grains such as wheat, barley, paddy, and kurakkan (finger millet) during this era. Some animals were tamed and milk, eggs, meat and fur were taken from them. Therefore, in addition to agriculture, animal husbandry too became widespread among Neolithic people. For the first time, they discovered iron during this time. As a result of this discovery, they were able to make tools out of iron instead of stones. Their habit of living in one place, which started in the Mesolithic era, developed to the extent of forming villages. Worshipping gods for protection of animals and agricultural activities started in this era. Therefore, the tendency of people towards engaging in religious activities too started in the Neolithic era.



Fig. 2.14. This is a sickle made by the people who lived in the Neolithic era. This was made of clay. This belongs to 3,000 BC.

This lesson explained to you clearly how man developed himself gradually for a long period of time. The things that he developed during this period are still useful for us today.

Among the most important activities related to the human development that occurred during the Neolithic era were agriculture and animal husbandry as well as living in villages. These in turn influenced the origin of civilizations to a great extent. As a result of engaging in agriculture for a considerable period of time, there was an abundance of food. This led to an increase in wealth and property among some people. Thus, during the Neolithic era, the division between rich and poor occurred for the first time. The rich who lived in the societies became powerful and they got used to urban living. You will learn about it in the next lessons.

### Important Points

1. Man developed from a generation of apes. It happened 2.5 million years ago.
2. The process in which a human being emerged from an ape is known as 'human evolution'.
3. A greater part of human evolution took place during the Great Ice Age. It was an extremely cold time period.
4. Man developed himself as a result of encountering various types of challenges.
5. Man differs from other animals because of the fact that he invented many things. These inventions are useful to us even today.
6. The 'Homo Sapien' introduced things such as language, music, painting and dancing to the world about one hundred thousand years ago.



### Activity 06

Find the victories achieved by man during the different stages in which he lived. Complete the grid. Get instructions from your teacher.

Paleolithic era	Mesolithic era	Neolithic era

## Part III

### Beginning of Agriculture

You are well aware of the fact that man's development or human evolution took place during the Great Ice Age. About 12,000 years ago there appeared signs of an end to the then existing Great Ice Age. The extremely cold climatic condition became warm. Trees, plants and creepers grew lush due to this new change. Food was abundant for animals. People too felt this excitement. The era, in which this new climatic condition started, is known as 'the Holocene Era'.

During this time people started farming instead of hunting animals. They found iron and utilized it for their use. They tamed animals and started animal husbandry instead of hunting them. People who lived in each country had cultivated different types of grains. For example paddy cultivation started in China for the first time. Wheat was first cultivated in Mediterranean region. Given below are some places where several types of grains, which we eat today, were first cultivated.

Maize – Central Mexico (3,000 B.C.) 5,000 years ago.

Wheat – Mediterranean region (9,000 B.C.) 11,000 years ago.

Paddy – China (7,000 B.C.) 9,000 years ago.

As a result of engaging in agriculture, man tended to live in one place with his family

members. As a result, people built houses to live in. Several families lived in one area. This in turn led to the formation of villages. Man formed villages for the first time in about 6,000 B.C. Ruins of these first villages have now been discovered.

With the beginning of agriculture, man attempted to identify edible varieties of grains and propagate them.

The houses built at the beginning were very simple. Their walls were made of clay and roofs were thatched with leaves. These houses were known as wattle and daub houses. In some countries, walls of houses were made of sticks cut out of trees.

Learning to cultivate is a great achievement of man. As a result of



Fig. 2.15. An artist has painted a village of the ancient farmers.

Such varieties of grains that we eat today were propagated in different parts of the world in different time periods. In addition to the propagation of grains, people made tools that they needed for their agricultural activities. They were able to make strong and durable tools since they had found iron by this time. However, man had attempted to make agricultural tools even before he discovered iron. For example, a sickle, made of clay and belonging to an ancient period, has been discovered, in a cave in Israel, by archaeologists.

farming, he started living in one place instead of roaming to hunt. After reaping the harvest, man had his leisure time. He had the opportunity to do various other activities. As a result, the artistic activities such as painting, sculpture and music developed. Thus, his engagement in agriculture and animal husbandry enabled man to build civilizations.

This lesson explained to you how earliest species originated in water and spread on land later. Animals developed themselves

on land. The species, which live in the world at present, such as birds, reptiles, fish, insects, worms, arthropods and mammals grew in such a manner. They all originated from a single source though they have many differences. Man too is one of them among such different types of animals. He evolved from an ape to an intelligent human called 'Homo Sapien'.

We all belong to the species of Homo Sapien, but there are dissimilarities in the faces of people who live in different regions in the world. The faces of people who live in China are different from those who live in Africa. Based on these differences, Homo Sapien man has been categorized into four groups namely Caucasoid, Negroid, Australoid and Mongoloid. The differences in the environments in which they live affected these differences.

#### Important Points

1. About 12,000 years ago, the cold weather that had existed up until then started to change.
2. A suitable background was created for man to start agricultural activities due to the fact that the weather in the world became warm.
3. Most of the grains we consume today are those that were first grown by people in ancient times.
4. Starting agriculture by man and using metal instead of stones took place during the same period.

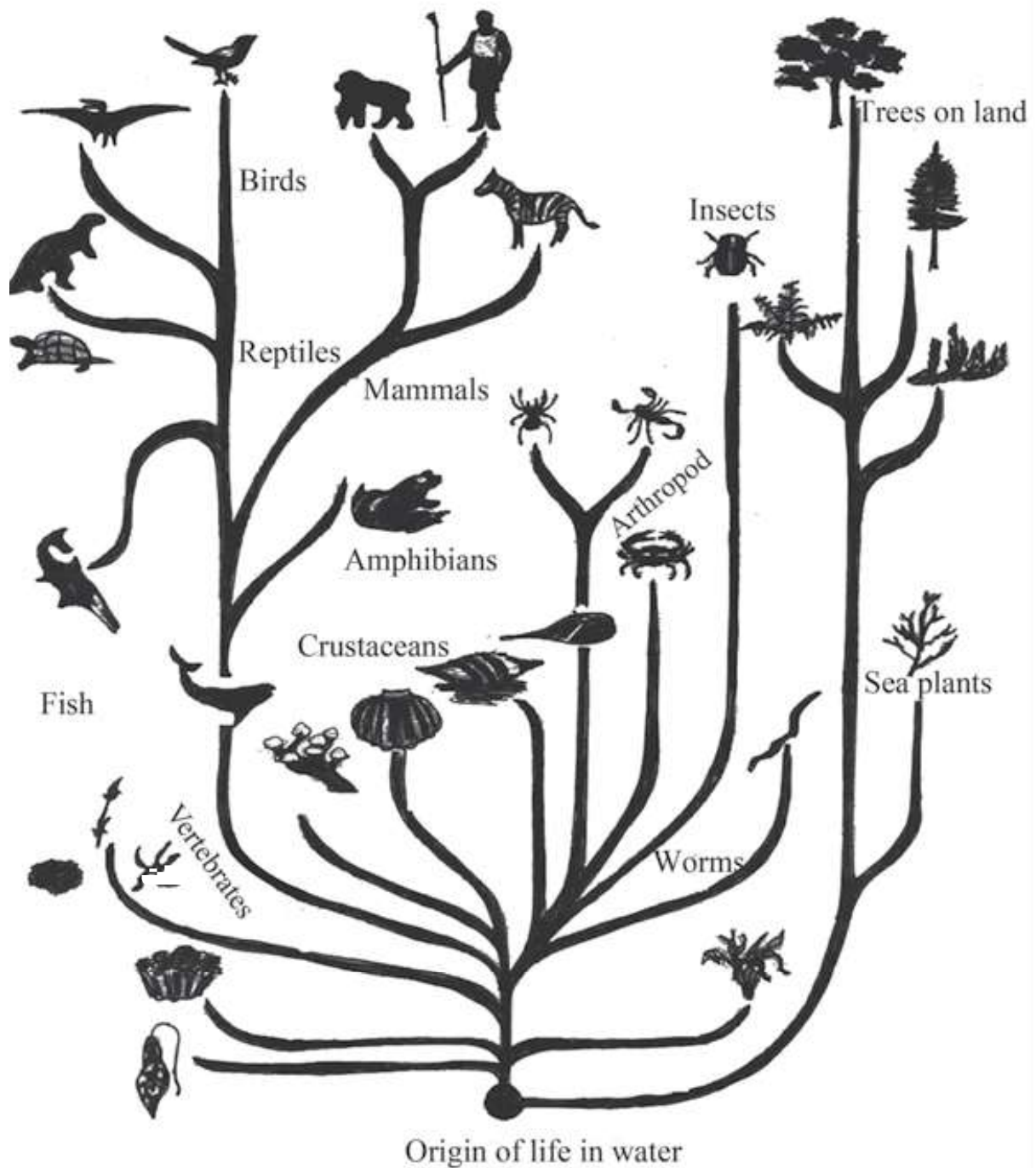


Fig. 2.16 Life started in water. It started as a germ with one cell. Later, developed beings originated. This process speeded when the beings moved to land. Life, which belongs to nature, started in one place. Therefore, every living being has the right to live in this world safely. Hence, it is the duty of all of us to love and protect nature.



Australopithecus



Homo Habilis



Homo Erectus



Homo Neanderthalensis



Homo Sapien

Fig. 2.17 Man developed over a period of about 2.5 million years. The signs of change from an ape to a man could be seen in the physique of man. Face is prominent in the process of changing. These are some pictures designed in accordance with the skull shape of ancient men.

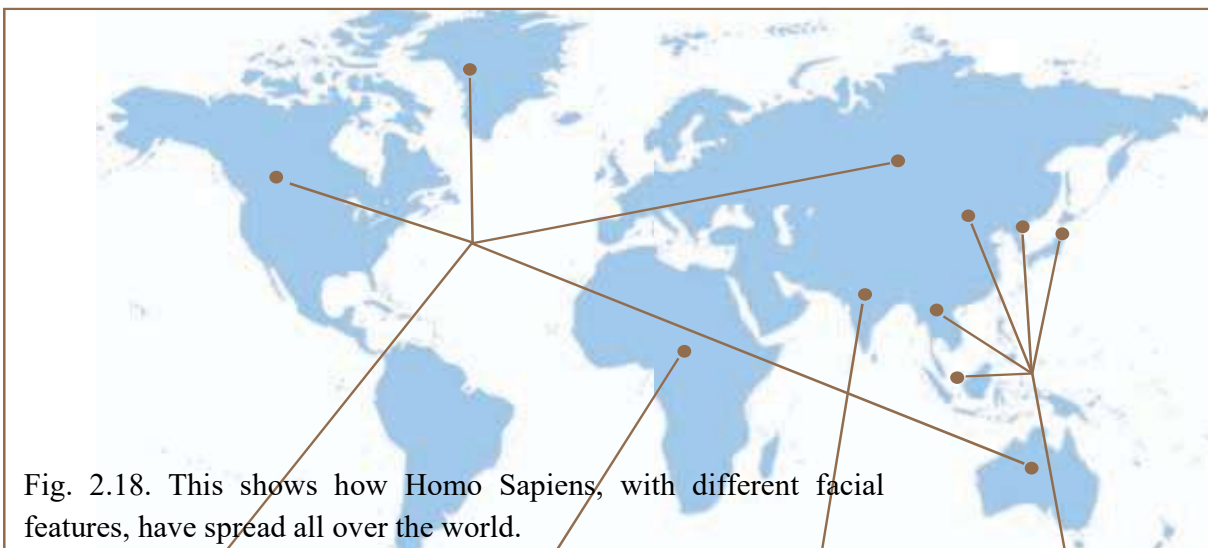


Fig. 2.18. This shows how Homo Sapiens, with different facial features, have spread all over the world.



Caucasoid



Negroid



Australoid



Mongoloid