

## Petra Museum

<https://petramuseum.jo/>

<https://www.visitpetra.jo/>

<https://whc.unesco.org/en/list/326/>

These early people were an ancestral species, the Homo erectus, who made multi-purpose flint tools and first knew how to produce fire. This feat greatly impacted our development, socially and biologically. Can you think how our history, and lives, would have been without human control over fire? The people of the Palaeolithic typically moved in small groups, hunting animals and gathering plants for their food. They lived in caves and rock shelters, but also had open air seasonal camps when the weather was favourable.

### Seasonal Camps near Shawbak

The area of al-Fujayj, currently at the end of the ring's Highway just outside Shawbak, attracted the early hunters-gatherers to set up seasonal camps during the Lower Palaeolithic (around 1.5 million years ago - 150,000 BC). At that time the climate was quite humid. The region was covered with forests and grasslands where wild d flourished.

### Homo neanderthalensis and Homo sapiens

As time passed, the climate got gradually less humid, but still not as dry as the present. The same hunter-gatherer lifestyle continued as the Homo erectus got replaced by the Homo neanderthalensis "the Neanderthals" during the Middle Palaeolithic (around 150,000 — 43,000 BC, then with the dominance of our own species, the Homo sapiens, during the Upper Palaeolithic (around 43,000 and 21,000 BC).

### Hunting 8. Gathering to Producing

The Epi-Palaeolithic is the transitional period between the Ancient (Palaeolithic) and the Modern (Neolithic) Stone Ages. It lasted more than 10,000 years and witnessed the shift from hunting and gathering food to actually producing it.

First Processing of Food and Microliths Between 21,000 and 16,000 BC (the "Early Epi-Palaeolithic"), we have the first evidence in the Petra Region of people processing their food, in the form of a mortar that was used for crushing gathered wild cereals and nuts. The wild cereals were sometimes harvested using tiny flint tools, "Microliths", which could be hafted in wood or bone to make multi-purpose composite tools. Microliths were first made during the Epi-Palaeolithic and stayed popular throughout the period, developing markedly with time.

### Towards a More Sedentary Mode of Life

The climate got cold and dry in the Levant and people started to move slowly towards a more sedentary mode of life. They lived in rock shelters and had small seasonal campsites similar to those of the Palaeolithic. Then the sites got larger, suggesting that people gathered seasonally over long periods of time.

Between 16.000 and 13,000 BC (the Geometric Kebaran), people expanded into new territories and sites were more densely occupied.



One of the earliest burial grounds in Jordan was in the Petra city centre, at Wadi al-Mataha, dating to around 15,000 BC. Archaeologists found there the skeleton of a short and strong male hunter, probably in his 40s. He was buried face down, his arms and legs were tied together behind his back and an oval hole was made in his forehead after his death.

The last phase of the Epi-Palaeolithic, called the Natufian (13,000-10,200 BC), witnessed accelerated movement towards sedentary life. It started with very favourable climatic conditions, which meant an abundance of plant and animal food. This encouraged people to live in larger and more settled communities, and they did not need to go far as their predecessors in search for food. People started then to build oval and round home shelters with stone foundations, in what would be of architecture.

#### First Domesticated Animal

The more settled people of the Natufian produced larger and more localized amounts of refuse than their predecessors, thus attracting scavenging animals to human camps. This created a mutual peaceful association between people and animals, eventually leading to the first ever domestication of an animal, the dog, our oldest and best friend.

#### Worsening Climatic Conditions

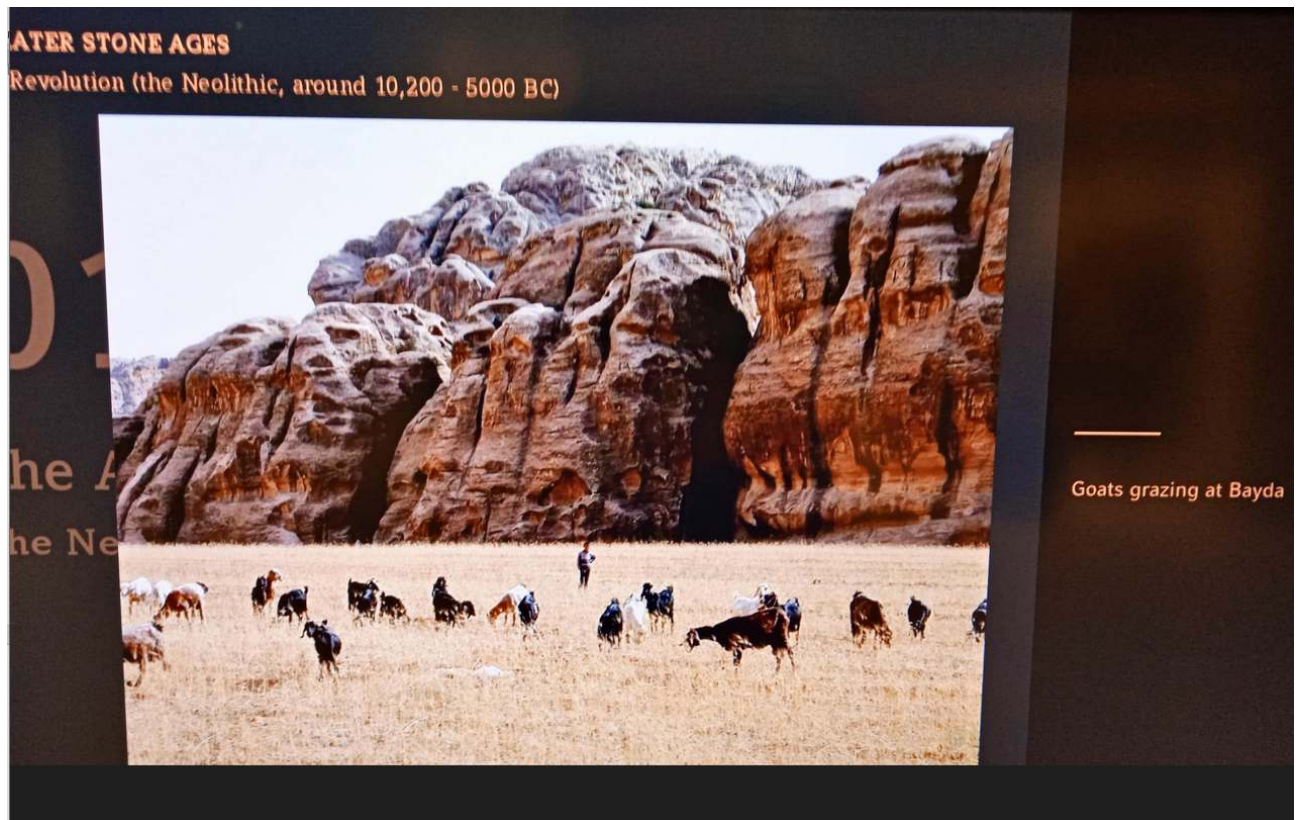
The favourable climatic conditions of the Epi-Palaeolithic lasted for around 2000 years, long enough for the social and artistic developments to take place before conditions worsened at the end of the Natufian. People had then to revert to a more mobile mode of life and to live again in smaller groups.

#### Signals of the Agricultural Revolution

The climate finally improved at the end of the Last Glacial Period, some 12,000 years ago. People began to settle again in much larger groups. The combination of good climate, available nutritious wild cereals and local animals that could be domesticated (in the Levant signalled the beginning of one of the greatest episodes in human existence, "The Agricultural Revolution" of the Neolithic.

The end of the Last Glacial Period (commonly known as the "Ice Age"), at around 10,000 BC, meant moderate climate following a long cold and dry spell in our region. This enabled several

human communities to start a shift towards food production by cultivating wild cereals and managing wild animal herds, which eventually led to the appearance of true agriculture and true domestication of animals.



The impacts of food production on human populations and social organisation were profound. First of all people gathered in settled communities to tend to their crops, which started the first-ever permanent villages.

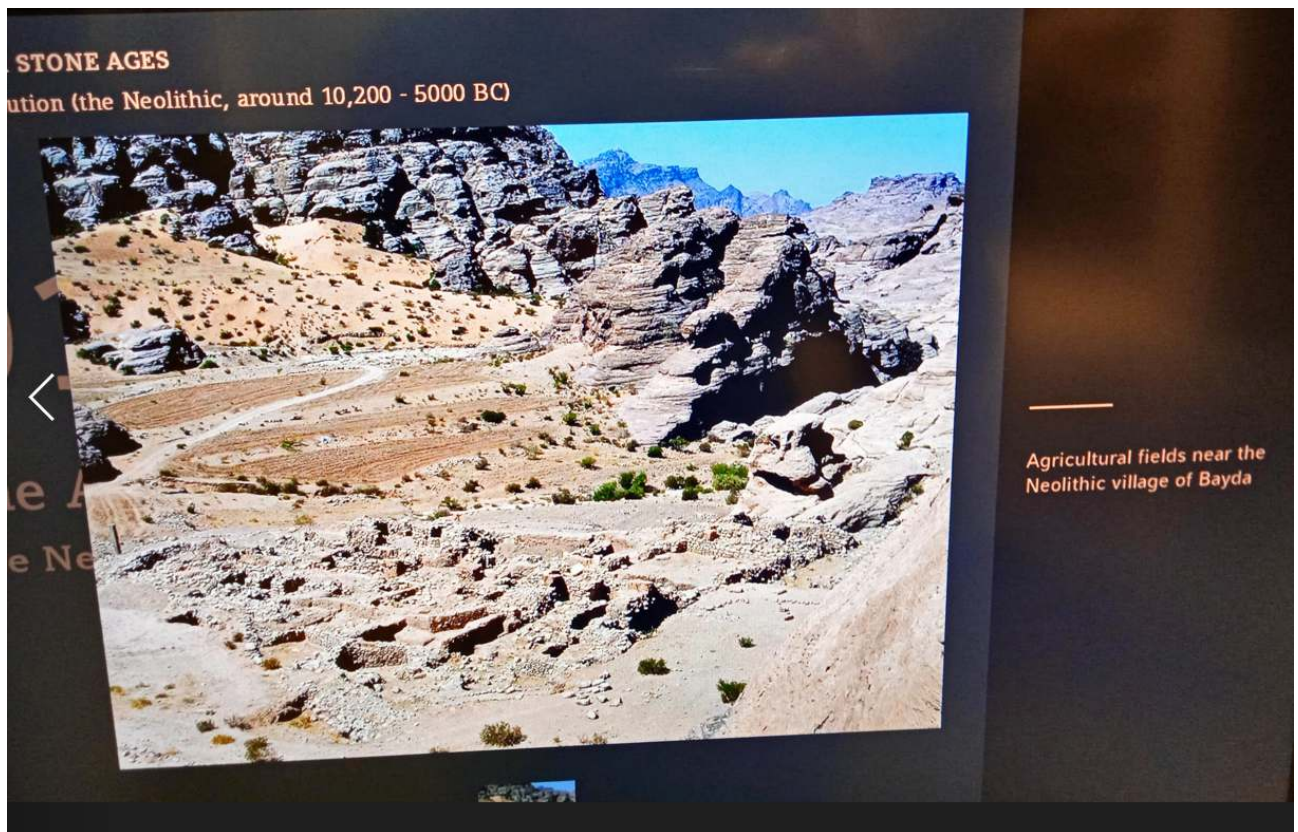
More readily available food and decreased physical danger resulted in the first-ever “population explosions”. Larger communities developed more complex social relationships and spiritual beliefs, while the new connection with specific localities led to the concepts of ownership, inheritance and hierarchical social status.

#### First Agricultural Crops and Domesticated-Flocks

This shift first happened, in patches, within the area stretching from modern southern Jordan up to central Turkey. This region is the natural habitat of the first agricultural crops: wheat and barley, as well as the first domesticated flocks: sheep and goat.

Close contacts with animals, however, also brought along the first animal-human transmitted diseases, such as the flu, cow a chicken pox, and the plague. The grave danger of these diseases more recently manifested in the wiping out of indigenous peoples in far-flung places when they first came in contact with European conquerors. We still suffer from new outbreaks of such diseases in our modern jet-travel world.





People in the Petra Region were among the first in the world to make the shift towards food production. Sites in this region illustrate all the developments that provided the basis for our modern societies.

#### Settlement near Water Sour at Climatic Junctions

At the beginning (Pre-Pottery Neolithic A, around 10,200 — 8,800 BC), people chose to settle near water sources and at the junctions of several climatic zones, in order to benefit from different food resources.

In the Petra Region, this was next to water so first at foothills of Wadi 'Araba. People there started the non-selective cultivation of wild cereals and the management of wild animal herds, along with hunting wild animals and gathering wild plants. There they established their small villages, which constituted of circular houses and probably also communal buildings, constructed using rough stone and mud (pisé).

Village-building and the associated agricultural processes were gradual. Their beginning started in the previous period (the Natufian) and they gained momentum during the period known as Pre-Pottery Neolithic B (8800 — 6900 BC).

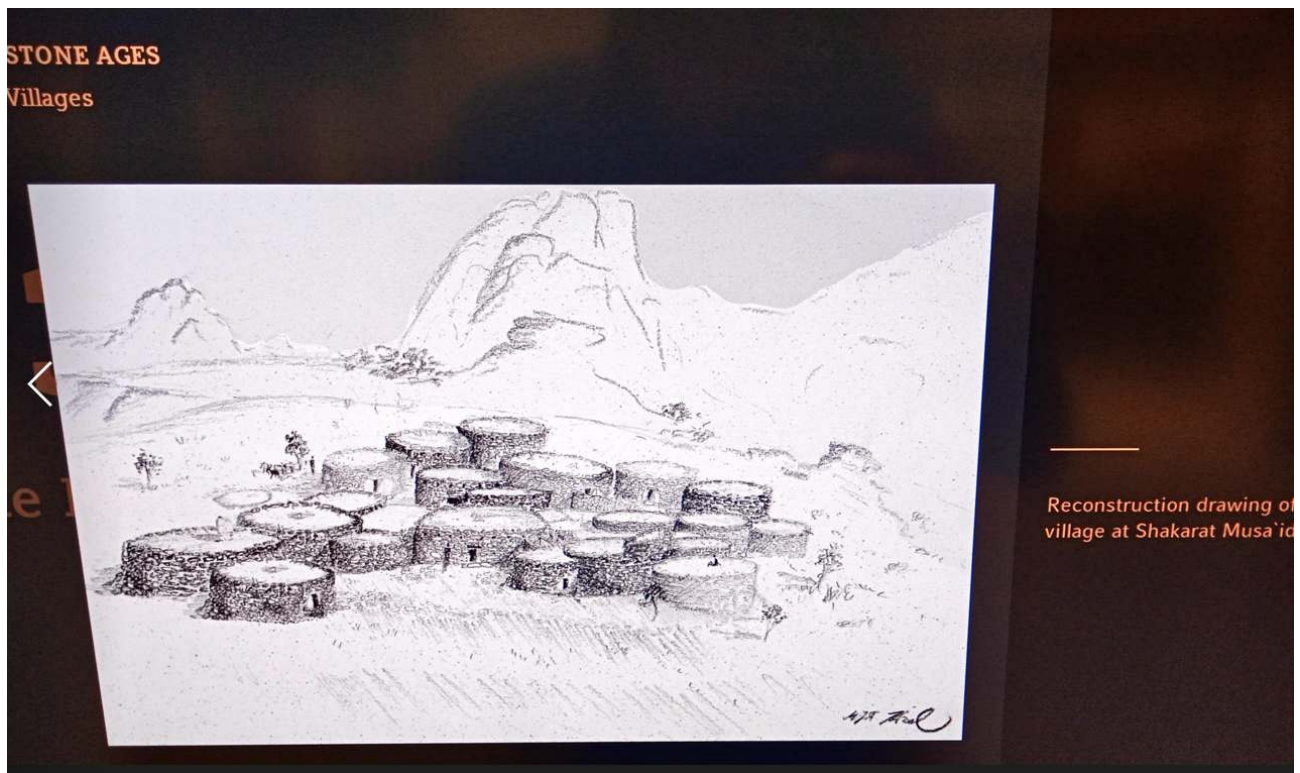
By this period, the actual domestication of plants and animals started. The increased numbers of people spread over the highlands of Jordan, onto the areas that later became the country's main agricultural regions.

They constructed their villages on slightly elevated land (or even on mountains) and close to water sources. Their houses were densely clustered together, probably for safety and defence considerations. Another factor is that such a configuration saves land, especially lower land which could more easily receive rain and thus be better suited for agriculture.

#### Bayda in The Distinctive Architectural Phases

The first site discovered in the Petra Region from the Pre-Pottery Neolithic B was Bayda. Its three

distinctive architectural phases define the development of architecture during this 1900-year-long period.



#### Circular, Rectangular and then Two-floor Corridor

The general trend in the development of village architecture in the Petra Region was from circular structures, whether free standing or clustered, to rectangular and sub-rectangular, then finally to pier or corridor houses with two floors.

At the beginning, the circular houses were dug into the ground, and clustered in a few units in a honeycomb arrangement. The shift to freestanding circular structures during the next phase might indicate a shift in the organisational structure of the community, from the basic social units (clans) to nuclear households. At some point these nuclear households, with private storage facilities, became the principal production units. At Shakarat Musay'id, the circular houses became sub-rectangular but still with rounded corners.

#### Under-floor Channels

Later structures maintained the same separate arrangement but they were not sub-terranean anymore, and the forms were rectangular. Finally houses went upwards, becoming two stories high. Houses of Baja, Basta, Sabra 1 and al-Basit were dominated by these "corridor" two-story structures. Some of them had under-floor channels, thought of channelling the wind in order to cool the houses.

Other than houses, there were special communal buildings that may be considered the forerunner of temples and cultic places. Examples of communal buildings at Bayda include a large circular structure at the western edge of the village and a terrace wall with stairs in its southern part. At al-Basit, a standing stone within a circular structure may have had spiritual significance to the people there.

Plaster was made by heating limestone until it turns into powder, which was then mixed with water for use. People of the late Neolithic seem to have been quite excited about their new discovery, as they extensively used plaster, which at that time was also painted red, for the floors and walls of their structures. The production of lime plaster during the Neolithic may have been the first contributor to the deforestation of the Petra Region.

Hunting still played a decisive role in securing food for the Neolithic village inhabitants until around 8500 BC, as indicated by the large proportion of wild gazelle bones discovered at the earlier sites. By around the same time, goats and sheep became fully domesticated, penned and tended by the villagers.

On the other hand, such experiments with controlled heat to change the physical properties of materials (pyrotechnology) opened a whole new world of inventions. It first led to the production of pottery during the Pottery Neolithic period (around 6400-5000 BC), to be followed by the first smelting of a metal, copper, during the Chalcolithic (around 5000-3600 BC). Advances in pyrotechnology are still being made to this day.

It took another 1000 years (till around 7500 BC for the contribution of hunting to subsistence economy to decrease dramatically. This was accompanied by a sharp decrease in the numbers of domesticated goats as compared to sheep (from 95% down to 60%).

The change in the ratio of wild animals to domesticates might reflect environmental changes, resulting from the destruction of the environment adjacent to the villages. The changed ration in the domesticates might reflect changes of economic strategies, social organisation and the appearance of nomadism.

#### Domestication of Plants

As for the domestication of plants, the economy of the villages was based on a full suite of annual crops such as barely, winter wheat, peas, lentils, chickpeas and flax.

The time period between around 7500-6400 BC was when cattle and pigs were domesticated, well after the domestication of goats and sheep.

Over all this long time, domesticated animals were kept in or around the villages. Herding started during what is known as the Pottery Neolithic (6400–5000 BC). Some people would drive their animals into the desert areas for certain periods of the year, probably in an attempt to reduce the strain on the environment surrounding the villages. This practice developed, more than three millennia later, into the Bedouin way of life.

Nuts, including pistachio nuts, supplemented the diet of the villagers. These were (and still are) collected from the wild.

#### Less Mobile, Bigger and Heavier

As people became less mobile, the tools for daily village use did not need to be portable. The querns, for example, weighed between 25kg to over 50kg.

With the increased production of grains and the need for feeding more people, using the old mortars and pestles became too laborious and time consuming. A new method for crushing wheat and barley was invented, by putting the grains on a hard large flat stone and crushing them with smaller stones. Over time, the small “crushing stones” became smooth and elongated, while the larger stones “querns” acquired a depression on top.

#### Special Status of Stone Bowls

As opposed to the querns, which were used outdoors, bowls were commonly kept inside the houses.

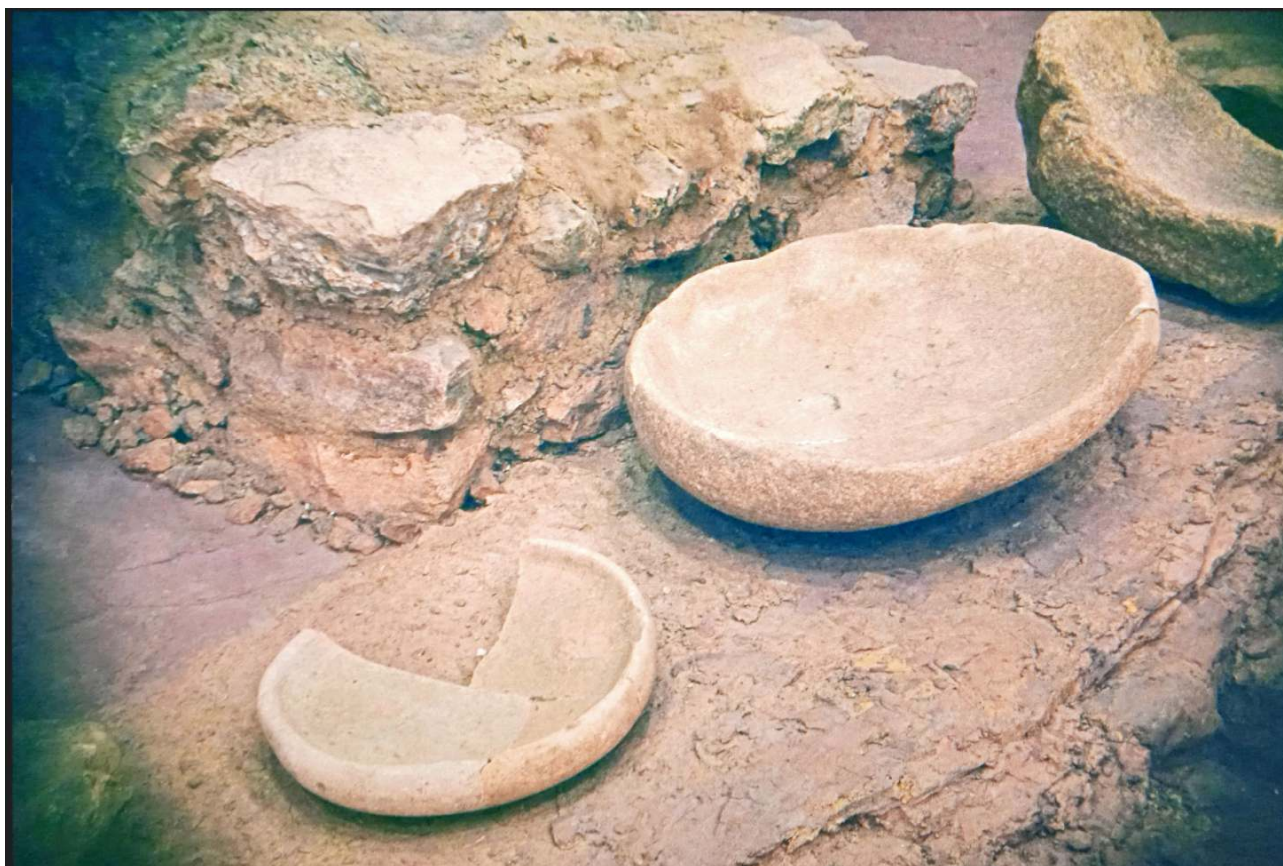


Stone bowls had been quite special, as wooden or even basketry bowls are easier to produce and use. This special status of stone bowls is indicated by a large basin (around 60 cm circumference) made of hard Ma'an limestone. This heavy basin was transported over 30 km of uphill rough terrain to al-Basit, at a time when there were no domesticated animals of burden and no wheels.

#### Invention of White-ware and Pottery

With the invention of plaster during the Pre-Pottery Neolithic B (8800–6900 BC), people did not only use it for their walls and floors but also made small pots by mixing the plaster with ash, what archaeologists call “white-ware” vessels.

Further advancement in pyrotechnology during the Pottery Neolithic (6900–5000 BC) led to the invention of pottery. The first pots were small and made in the palm of the hand, but then pottery became very important for food processing and storage when new methods for producing large vessels got invented (during the Early Chalcolithic...



#### Making of Beads

Small flint tools with long thin protrusions were used for boring holes to make beads from Red Sea shells, animal bones or fancy stones. These “borers” could have also been used to make holes in leather for sewing.

#### All-purpose Adze

The all-purpose adze held its special place in the Neolithic toolbox. These elongated stone tools were either hand-held or tied to a wooden stick, and used for cutting wood, defence, or tilling the earth for planting.



Changes in social structures and ideological-cognitive frameworks resulted from the dramatic changes in lifestyles caused by sedentism, surplus food and goods produced by diverse crafts; all of which were related to population growth during the Neolithic. One phenomenon has to be singled out, namely what is known as the "explosion of symbolism". Although the Neolithic communities carried on symbolic traditions of their hunter-gatherer origin, it was during the Neolithic that human and animal forms were "translated" by a new plastic medium, that is, clay figurines. In the new symbolic systems the previous emphasis on animals shifted to the Neolithic emphasis on fertility, often symbolised by women and bulls.

It appears that a climatic crisis around 6500 BC was the reason behind the collapse of the complex societies of the Pre-Pottery Neolithic B. The societies that subsisted on farming and herding and to a lesser degree hunting-gathering could not cope with prolonged drought conditions, coupled with environmental degradation caused by the societies themselves.

#### Back to Smaller Villages and Various Uses of Soil

During the final phase of the Neolithic (Pottery Neolithic, 6400 (?) BC), people went back to smaller villages or hamlets in more open country. They may have also understood by then how to deal with their most important asset, soil. They started building terraces to retain it and used waste organic materials to fertilize it. They also used special soil to make the first pots.

#### Start of Horticulture

The Chalcolithic is also the time when horticulture started, with the planting of olives, figs and date palms.

"Chalcolithic" means the Copper-Stone Age. This is the time period when people first extracted copper from its ores, using stone tools. The main copper mines in Jordan are in the Faynan area of Wadi 'Araba.

This was also the age of the domestication of the donkey, followed by the horse. The scene was set for the appearance of civilization in the next epoch.

The Greek historian Diodorus described the Nabataeans in 312 BC as nomads, facing the death penalty for constructing houses. By the 1st century BC, however, the historian Strabo described Petra as a thriving city with houses and gardens. This Nabataean transition to settled life seems to have gradually taken place between the 3rd and the 1st centuries BC.





### Dark Age

After the collapse of the Iron Age kingdom of Edom in the 6th century BC, the whole area of southern Jordan went into a dark age: neither historical sources nor archaeological evidence can, so far, be attributed to the following two centuries.

### An Arabian Tribe, the Nabataeans

Suddenly, in 312 BC Hieronymus of Cardia, a Seleucid chronicler and historian preserved in Diodorus of Sicily of the 1st century BC, tells us that Antigonos the one-eyed Seleucid king had sent two military expeditions against the Arabs. Through his description of these military expeditions we know that southern Jordan was dominated by an Arabian tribe who bore the name of “Nabataeans”.

### Nomads Living in Tents?

Hieronymus of Clutha described the Nabataeans as nomads living in tents, They did not drink wine nor planted the land, and they loved freedom.

It appears from the rest of his description that the Nabataean were not nomads proper, that is, they were literate in the Aramaic language and script, as they sent a letter written in Aramaic to Antigonos.

### Process of Self-reorganisation

Some 150 years after their first mention in history, the Nabataeans launched a process of “self-reorganisation”. This was caused by and facilitated through several factors, including their own increased numbers, the decline of the Hellenistic powers in the region, and the intensification of overland caravan trade.

### Nomadism as a Defence Strategy


They were also highly skilled in drilling wells in the desert, wealthy and well organised. Nomadism was for the Nabataeans a defence strategy to maintain their freedom and to remain autonomous.

### Nabataean State and Capital

The Nabataeans successfully established their own state with Raqmu (Petra) as its capital. Their kingdom covered most of modern Jordan; in the north it included parts of southern Syria, in the west southern Palestine and Sinai, in the south and east the northern part of modern Saudi Arabia.

Independence for about 27 Decades

The Nabataean hereditary monarchy able to keep the independence of the state for about 27 decades (168 BC-AD 106). Romans, who occupied north-western Jordan and Palestine in 63 BC, could only annex Nabataea after 143 years.

قبل الميلاد. BC.		بعد الميلاد. AD.	
الملك الأول ARETAS I CA. 168	عبد الله الثاني OBODAS II 60-59	ملك الثاني MALIKHUS II 40-70	
الملك الثاني ARETAS II 120/10-96	ملك الثالث MALIKHUS I 59-30	شقيقة الثانية (الملكة الأم) SHAQLAT II (QUEEN-MOTHER) 70-76	
عبد الله الأول OBODAS I 96-85	عبد الله الثالث OBODAS III 30-9	ملك الرابع ARETAS IV PHILODENE 9 BC - AD 40	
ملك الأول RABEL I 85-84	سليمان SYLLAUS THE MINISTER 9	ملك الثاني RABEL II 76-106	
الملك الثالث الملك الرابع ARETAS III PHILHELLENE 84-60			
ملوك النابطة THE NABATAEAN MONARCHS			

### From Camping to Settlement

Along with the establishment of their kingdom, the Nabataeans started to settle down in villages and towns. This seems to have been a central government policy: by providing hydraulic installations at specific sites (mostly along trade routes), tented camps congregated at these locations; they then developed into permanent localities.

### Military Protection of the Trade Caravans

It appears that military leaders had a high social rank as ? of the facade tombs in the Nabataean city of Hegra-Mada'in Salih were owned by military officials. This could be related to the fact that the geopolitical location of Hegra-Mada'in Salih was crucial to protecting trade caravans militarily. The high priests and rich traders would have shared this same high rank.

### Wealth from Overland Caravan Trade

The political power of the Nabataeans was sustained by wealth, derived from the overland caravan trade of the Arabian frankincense and myrrh and the Indian spices. In a sort of trade-war, the Romans diverted the trade route from South Arabia to go directly to Egypt, across the Red Sea. With the help of the South Arabians who knew the secrets of the Monsoon winds, merchants could avoid the long and expensive desert routes.

### From Ayyubids to Mamluks

The unity of Syria and Egypt that Salah ad-Din founded did not last long. Rival Ayyubid princes fragmented Greater Syria and wars with the Franks continued.

In southern Jordan, an autonomous Ayyubid principality was declared at Karak in 1239 but the main Ayyubid Sultanate in Cairo fell to the Mamluks in 1250. Soon afterwards, in 1258, the Mongols sacked Baghdad and abolished the Abbasid Caliphate.

The Mamluk King Baybars I crushed the Ayyubid principality of Karak in 1263, passing through the Petra Region on his way from Cairo. He repeated the trip in 1276, this time accompanied by the chronicler Ibn 'Abd al-Zahir (whose account of the trip was summarised by Al-Nuwairy). Baybars and his men passed through Petra (which was uninhabited at the time) and Ibn' al-Zahir described its ancient monuments with admiration and awe. They then rested at al-'Udma (in Wadi Musa) and spent another night at Shawbak, before proceeding to Karak.

The Mamluk Period (AD 1260–1516)

The Mamluks of Egypt emerged from the struggles. They defeated both the Ayyubids and the Mongols, and started a new and powerful dynasty, based in Cairo.

Scheme by Syllaesus and its Results

Syllaeus misled Gallus and the Roman troops, and took them through unsafe routes into the desert, which resulted in that the Roman troops got wiped out by hunger, fatigue and diseases. The Roman expedition failed, but the Nabataeans gained: they demonstrated loyalty to Rome on one hand, and on the other they maintained their domination on the Arabian trade of aromatic goods.

Failed Attempts of Syllaesus

In 9 BC, King Obodas III, to whom Syllaesus served as the minister, passed away. Syllaesus went on to usurp the Nabataean throne, and sought Roman recognition. He even minted coins in his name. His attempts, however, failed. Augustus obviously saw a better ally in Aretas IV and he ordered the beheading of Syllaesus, who was finally executed in Rome in 6 BC.