Houses made from reeds are still found along the Tigris and Euphrates Rivers in modern Iraq, as they were in ancient Mesopotamia. Photo © Nik Wheeler. Opposite: Marsh village on a body of water formed by the union of the Tigris and Euphrates Rivers, near Basra, Iraq. Photo by Homer Sykes/Alamy.
As it is today, southern Mesopotamia (modern Iraq), in the deep past, was a distinctive landscape. It provided, in abundance, the basic materials to sustain human life: water, food, clothing, and shelter. Water came not from rain, which is infrequent, but from the Tigris and Euphrates Rivers which also carried rich soil washed down from higher elevations.

BY HOLLY PITTMAN
Mud and marsh reeds provided building material for houses constructed of mudbrick and for boats vital to local and long-distance transportation. Poor quality stone was available in accessible outcrops and bitumen oozing from the ground served as waterproofing for containers and boats. Date palm trees provided nutritious food, fibrous trunks, and endlessly useful fronds. But apart from these fundamentals, more diverse materials associated with urban life were nowhere to be found. In this marshy, muddy landscape, there were no metals, no tall and strong hard wood timbers, and no hard and colorful stones. For these, lowland communities had to look beyond their immediate environs to the surrounding highlands. This radical discrepancy in natural wealth encouraged interaction from a very early date. Indeed, such interaction was fundamental to the development of an urban lifeway starting in the 4th millennium BCE.

Living Together in Cities
The sites of Uruk (ancient Warka), as well as Ur, Nippur, and Lagash were among the places where, for the first time in human history, large numbers of people congregated to live close together in cities. Their basic nutritional needs were met by fish and birds from the rivers and marshlands combined with abundant harvests of grain, vegetables, and fruits, brought to the centers from the nearby farming hamlets. Like the rich agricultural land, which only needed water to produce a surplus of food to feed the urban population, the surrounding uplands on either side of the rivers provided vast expanses of pasture for huge herds of sheep and goats. These animals were valuable not only for their meat and milk, but also, more importantly, for the wool and hair that was transformed through human labor in the cities into clothing that ranged from the coarsest to the finest quality. Women spun the thread and prepared the skeins which were delivered to factory workshops in the cities. Like their agricultural counterparts, textile specialists, employed in large numbers,
produced vastly greater quantities than were needed to clothe the local population. These workers, alienated from the production of their own food, were sustained by rations that were dispersed periodically through an increasingly elaborate bureaucracy.

By the end of the 4th millennium BCE, textile production had become the most important manufactured commodity in southern Mesopotamia. To support it, such fundamental inventions as writing and accompanying scribe specialists appeared. These textiles, together with some specially prepared foods and ointments, served as the equivalent with which Mesopotamians could engage in exchange for the raw materials from the highlands they needed for their urban project. Cloth of varying qualities was exchanged for both necessities and for exotic and precious luxury materials.

**Interaction and Exchange**

We know about this system of interaction and exchange both through archaeological research and through economic and literary texts preserved in the cuneiform tradition. Both lines of evidence tell us that from around 2900 to 1700 BCE there existed a vibrant relationship linking Mesopotamia to the Arabian Peninsula, the Iranian Plateau, and the Indus valley in modern day Pakistan. From Oman came copper and the very hard black stone diorite and its close relative gabbro. From the Iranian Plateau came all sorts of materials including timber, gold, silver, copper, objects carved from soft, dark steatite or chlorite, alabaster objects, and colorful semi-precious stones used for cylinder seals and jewelry. From the Indus valley came carnelian, both as a raw material and distinctively decorated beads, as well as shells, exotic animals, and timber. Beyond those lands to the northeast in Afghanistan, lay the only source of lapis lazuli. This rich blue stone was highly prized across the entire ancient Middle East, especially during the period of the city states of the Early Dynastic period. Close by this single source of lapis lazuli were gold mines. Surely this precious cargo was also extracted and carried together out of the mountains of the Hindu Kush either overland north of the great deserts or toward the south to boats waiting to convey it west in the Indian Ocean and the Persian Gulf. In the resource-rich lands to the east...
of Mesopotamia, a variety of societies co-existed, each one uniquely adapted to its distinct environment. In Arabia, urban centers never formed. Instead smaller communities linked by kinship ties and life ways resided both along the coast and inland. They lived through a combination of hunting, farming, fishing, and mobile pastoralism. During the Umm an Nar period of the middle of the 3rd millennium BCE, larger communities did form, as exemplified by Tell Abraq and Umm an Nar in the modern United Arab Emirates. These communities expanded in response to the increased movement of goods and people. Copper and the black hard stones (diorite/gabbro) were mined in the mountains of eastern Oman and shipped by boat to Mesopotamia as raw material. The black hard stone was especially prized by elites and royalty who used it to create images that would endure forever. To judge from the archaeological remains, they were active participants in the lively commerce that plied the waters of the Persian Gulf. While they did not have locally available commodities to inject into the stream of goods beyond delicious dates and shells, the sites are perfectly positioned to serve as meeting points for merchants or traders coming from all directions. Connections from the Iranian Plateau and Central Asia are visible together with those from the Indus valley. In the early centuries of the 2nd millennium BCE, Dilmun traders operating out of the modern-day island nation of Bahrain, facilitated trade along the entire length of the Persian Gulf. We know them from a few cuneiform references as well as through their distinctive stamp seals.

The Harappan civilization in the valley of the Indus River, called Meluhha in antiquity, was the most like Mesopotamia. For about 600 years in the 3rd and early 2nd millennium BCE, urban society flourished in five or six important and large centers, including Harappa, Mohenjo Daro, Dolavira, and Chanhu Daro. Unlike Mesopotamia, however, the society of the Indus valley seems not to have been highly stratified with multiple levels of political and economic elite organized in a single interlocking ideology. Rather, various centers of power organized and sustained Harappan society. In texts from the Old Akkadian period, we are told that ships from Meluhha docked at the quay of the capital city Akkad. In addition to highly distinctive craft products including biconical and etched carnelian beads, we know that perishable commodities and exotic animals were imported from the Indus valley. Evidence for the presence of Meluhhans in Mesopotamia comes in the form of distinctive stamp seals as well as a remarkable figurine of an ithyphallic male found at the site of Nippur, certainly imported from Harappa or Mohenjo Daro.

The Iranian Plateau
The Iranian Plateau is a vast highland that always had an important relationship to the civilizations in the Tigris and Euphrates River valley. Unlike the other eastern neighbors, the Iranian Plateau supports a variety of very different ecological niches, ranging from riverine alluvial valleys to highland plateau and valley settings, to vast deserts. Distinctive of Iran and Central Asia to the northeast is the prevalence of oases environments. Unlike the Mesopotamian and Harappan rivers which flow into open water, most of the rivers in Iran flow from higher elevations with heavy snow cover to terminate at lower elevations into marshy oasis zones. Three of these oasis river systems were home to indigenous societies during the 3rd millennium BCE. They were all part of.
Carved in Stone

The black hard stones of diorite and gabbro (above) were imported from Oman. They were valued especially by rulers and nobility for portrait images that would withstand the ravages of time. Photos by VwoeVale and Wikimedia. ABOVE RIGHT: Head of Gudea, ruler of Lagash from ca. 2144–2124 BCE, wearing a turban. PM object B16664. RIGHT: Fragment of a Gudea-type diorite statue excavated at Ur and dated to the Ur III (2112–2004 BCE) period. PM object B15609.
The Iranian Plateau

LEFT: The Iranian Plateau is a vast highland that provided Mesopotamians with access to necessary and luxurious raw materials. In addition, the people of the Plateau developed valuable technologies such as metalworking. Photo by Tina Manley/Alamy.

The long-distance interaction that linked Mesopotamia to the Persian Gulf and the Indus valley. Settlements along these rivers, some of which were cities, were the centers through which the riches of the plateau were circulated. One of these depended on the Halil River in the province of Kerman in modern Iran. Urban sites, although smaller than those in Mesopotamia, were supported by local agriculture and animal husbandry. Although not fully literate, these societies had an elaborate symbolic world preserved to us through vessels and other objects carved from steatite and chlorite. Such objects carry images of fantastic creatures, as well as abstract designs, and were found in large numbers of burials in the region. Some of these found their way to Mesopotamia where they were understood as exotic objects from faraway lands. Most often they were deposited in temples as votive offerings to the deity. More rarely, such as the examples from the Royal Cemetery at Ur, they were buried in a grave together with other imported objects used in the funerary feast. Although these distinctive carved objects were only manufactured for several centuries, they retained their exotic character for the Mesopotamians. An example in the Museum’s collection of a dark stone vase carved around 2400 BCE on the Iranian Plateau was exported to Mesopotamia. The fact that it was inscribed more than 800 years later during the reign of Hammurabi shows its value as an exotic object from the fabulously rich eastern lands.

One of the images commonly carried on this carved dark stone tradition was borrowed by the Mesopotamians and incorporated into their own symbolic language. This was the scorpion man which is depicted on the bottom register of the plaque on the front of the Great Lyre from the Kings Grave PG 789 at Ur. This image occurs frequently in the Halil River valley culture primarily on dark stone objects but also on cylinder seals. We do not know what it means precisely, but it is shown either along with, or dominated by, other human/animal heroes who obviously have greater powers. While there are no contemporary texts telling us of the role of the scorpion man at the time of the Royal Cemetery at Ur, from the cuneiform texts of a later period we know that scorpion men were guardians of the underworld, associated with the sun god Shamash and guardians of the gates at the mountains of Mashu. These were the gates into the Kurnugi, the land of darkness. The creatures would open the doors for the sun god each day and close them behind him after he returned to the underground at night.

Alabaster and Other Exotic Raw Materials

Another society flourished on the Helmand River flowing southwest out of the mountains of eastern Afghanistan during the 3rd millennium BCE. Two major centers were located along the river: Mundigak in the north and Shah-i Sokhta in the south, where the river debouched into the sands of the central Iranian deserts. Alabaster is particularly abundant in the region. A workshop which made small bowls and canisters similar to those found throughout the Plateau and in graves in Mesopotamia...

CIRCLE INSET ABOVE: The scorpion man motif is depicted on the bottom register of the plaque on the front of the Great Lyre from the Kings Grave PG 789 at Ur. PM object B17694A.
was excavated at the southern site. It is possible that, like the steatite objects from the Halil River valley, the workshops in the Helmand region supplied all of the thousands of alabaster vessels that are found throughout Iran, Central Asia, and Mesopotamia.

Finally, to the northeastern region of western Central Asia, smaller centers of the Oxus River civilization dotted the courses of the Murgab, Tedjen, and Atrek Rivers. Close to the source of lapis lazuli, gold, and later tin, these centers flourished and accumulated great wealth during the 3rd millennium BCE Age of Exchange. The desire for the deep, luxurious blue stone for Mesopotamian gods and kings was powerful. While we have no evidence that Mesopotamians ever visited its far away source, they imagined this place as the eastern extent of the known world.

Coming full circle in this early interregional trading network of contact and commerce are two sites known through excavations undertaken by the Penn Museum in the 1930s. To the east of the Caspian Sea, on either side of the Elburz Mountains are Tureng Tepe and Tepe Hissar, both important craft production sites in the 3rd millennium BCE. Located close to important sources of copper and silver, both sites extracted and processed metal ores into ingots and finished products. These commodities were consumed locally as well as being sent abroad together with other goods moving around the Plateau and into resource-poor Mesopotamia.

These sites shared a highly distinctive tradition of ceramic production which was clearly inspired by its parallel investment in metalworking. Some of the most beautiful ceramics of the 3rd millennium BCE were produced at these sites. They have highly polished, uniformly dark grey surfaces that emulate tarnished silver; and their shapes have sharp carinations and right angles, which are also clearly copied from metal vessels.

**Changes in Trading Methods and Control**

Over the course of the 3rd millennium BCE, the way in which Mesopotamia engaged with its eastern neighbors changed. At first Mesopotamians went out, probably as individual traders sponsored by the ruler or temple, to bargain for material and to distribute textiles in exchange. Both overland and maritime routes must have been followed. As the trade increased in volume, transport by sea was preferable as it was cheaper and safer. When Sargon of Akkad unified the independent city states around 2300 BCE, he sought to bring the flow of commodities exclusively under royal jurisdiction. This meant resting control away from local authorities usually by dint of force and intimidation. Commerce gave way to tribute and to threats of violence. During the Ur III period (2112–2004 BCE), the Neo-Sumerian kings controlled the movement of commodities into Mesopotamian cities, providing massive quantities of textiles as the currency of exchange. Copper was extracted in huge quantities from Oman, and precious materials for the palace and the temples came from the Iranian Plateau. It is at this time that a trading center arose on the island of Bahrain, and a society developed with monumental architecture and apparently a political hierarchy. The Dilmun traders continued to play an important role in facilitating the trade until sometime in the 18th century BCE, when Mesopotamian traders turned their attention west to a more easily accessible and abundant source of copper on the island of Cyprus. At the same time, a new community of Old Assyrian traders located at the site of Assur on the Tigris River initiated a new trade link with the east. They received tin, that vital component of bronze, shipped by donkey caravan in great quantities from its source in Afghanistan and sent it on with their merchants to trading colonies in Anatolia. In exchange, they received copper now extracted from the Anatolian plateau. In order to meet its ever-increasing need for vital commodities not available locally, Mesopotamian cities pivoted from the east and the sea to the west and overland. During the 2nd and 1st millennia BCE, many cities in southern Mesopotamia were eclipsed by capital centers of the burgeoning kingdoms and empires that emerged in northern Mesopotamia.

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