Geography of the Old World

What is the Old World? The globe can be sliced from pole to pole at any point, but a natural division of east and west is through the Atlantic and Pacific Oceans. The Western Hemisphere includes North and South America. The Eastern Hemisphere includes Africa, Asia, Europe and Australia. The Eastern Hemisphere is often called the Old World. For thousands of years, before people there knew about the Americas, the main stage of history was the continents of Africa, Europe and Asia; and the Spice Islands in the southeast.

Three continents of the Old World make up the largest connected land mass on the globe. Africa, Asia, and Europe are linked together by a land bridge called the Arabian Peninsula, located in Southwest Asia. Because it lies between the eastern and western parts of the hemisphere, this region is also called the Middle East.

For ages, people of the Old World thought that they were surrounded by a great sea with nothing beyond. According to some myths, the Old World was like the shell of a giant turtle swimming in the great sea. The first globes ever made were called planispheres and looked much like the top half of a turtle shell.

The lands of the Old World are also linked by bodies of water. Asia, Europe and Africa are bordered by the Atlantic and the Pacific. The Indian Ocean joins parts of Africa, Asia and the islands of Southeast Asia. The Mediterranean Sea joins Europe, Southwest Asia and North Africa. The Arabian land bridge is surrounded by four waterways: the Mediterranean, the Red Sea, the Persian Gulf, and the Indian Ocean (the part called the Arabian Sea). Great rivers and inland seas on each continent link the land’s interior with the coasts and seas.

Ancient Trade Routes

Over thousands of years, people encountered one another through trade. Among the longest routes across the Old World were the famous Silk Roads. The Silk Roads stretched from China in the east toward the Mediterranean in the West, linking many regions of Eurasia. Traffic on these routes increased and decreased from time to time, and from place to place, but gradually trade expanded to link most of the lands of the Old World. In the years between 500 CE and 1500 CE, contact across the Old World increased dramatically. After 1500, of course, when the Americas were rediscovered, the New World became linked to the Old World. Trade contacts became global in what became known as the Columbian Exchange.

Since ancient times, civilizations thrived at centers in China, India, Persia, Africa, and Europe. Trading and warfare were two ways in which people came into contact. Empires grew and shrank over the centuries, though some, like China, remained stable. While wars were usually short, trade continued over hundreds of years. As a peaceful activity, trade produced many kinds of contact between cultures. People transported valuable goods, religious ideas, scientific knowledge and inventions from place to place.

Artistic styles and languages spread from cultural centers as well. Cities grew up in places where people regularly traded, often along seacoasts and rivers. Rulers established beautiful capital cities to which people flocked like birds to seed, looking for opportunities.
Growth of Trade and Cities in Muslim Lands

The rise of Islam during the 600’s and 700’s brought a new center of culture that developed and expanded in the Eastern Hemisphere. It began with a rapid conquest, between about 650 and 750 of lands from the Atlantic Ocean to Central Asia. As an empire under one ruler, the Muslim state lasted only a short time. Muslim civilization, however, lasted many centuries, and helped to link many lands, people and cultures of the Old World.

Over time, the spread of Islam linked ancient cities together by spreading beliefs and a way of life that were similar. Many new cities developed, and older cities grew in Muslim lands. Trade and travel opportunities expanded. Scholars went out to search for rare books and wise teachers to help them unlock secrets of knowledge. Merchants went out in search of precious goods like silk, gems and spices. They brought new products and inventions that caught people's fancy. Traders and scholars spread their language and ways of doing business. People in trading centers learned Arabic, and began using Arabic numerals (digits from 1 to 10) which we use, today. They were first invented in India. Beliefs and knowledge of Islamic religion spread among people in lands where Muslim merchants and scholars traveled.

Travel and Scientific Development

Travel and geographic skills developed in Muslim lands for several reasons. One reason was the size and diversity of these lands and their central location in the Old World. Another important reason was that Islamic teachings and practices encouraged travel and exploration among Muslims. These include:

- The Qur’an, the holy book of Islam, encourages people to travel. It tells about the earth’s natural roads and landmarks, about navigating, or steering by the stars and winds. It tells believers to seek what God has provided, and to depend upon God's mercy.

- Islamic worship encouraged knowledge of geography. No matter where they are on the globe, Muslims pray five times a day, facing in the direction of Mecca, a city in Arabia. This required people in the farthest Muslim lands to learn where it was!

- Muslims everywhere use only Arabic language for prayer and for reciting the Qur’an. Arabic was also the main language used for writings about Islamic teachings. Arabic language and the Arabic alphabet spread widely among Muslim people; Having a common language breaks down barriers between different societies.

- Every Muslim was encouraged to make a journey to Makkah for the Hajj (pilgrimage) once in a lifetime. Even a 10th-century Muslim living in remote village could imagine completing the journey. Muslim leaders’ duty was to ensure that their subjects could connect with trade routes headed toward Makkah by land or sea.

- Islamic duties like prayers, fasting and holidays require accurate calendars and time-keeping. Time was calculated by studying the positions of the stars, the sun and the moon. The skies became the calendar and “world map” for Muslim travelers. The need for this knowledge helped make travel easier, and helped to advance the sciences.

These religious activities are required for all Muslims. The need to perform these duties encouraged brilliant developments in geography, astronomy and mathematics. From the 700s, leaders in Muslim lands had become confident rulers of a large region. These leaders brought together scholars, scientists and merchants to explore the world around them and expand upon the learning of ancient cultures.
Mapping and Exploring in Muslim Lands

Many types of travel in Muslim lands encouraged exploration, geography and navigation. To find the way through empty seas and sandy deserts, navigators fixed their location by the stars. Observing the stars during different seasons and locations, early astronomers mapped the skies. The Greeks, the Persians and others had put this knowledge into books. These books were translated into Arabic, and Muslim astronomers began to build and improve upon that ancient knowledge. They developed instruments for measuring the position of stars. The astrolabe, a set of metal discs inscribed with numbers, lines and designs, was used to measure the height of mountains, depth of wells and position at sea.

Observatories and models of the heavens were constructed with the aid of Muslim rulers. Another navigation tool, the magnetic compass, was probably invented in China. Compasses were widely used in Muslim lands, and spread to Europe from there.

An important tool for studying the stars, the planets and even the shape of the earth is mathematics. Mathematicians in Muslim lands gathered together knowledge from Greece, India and Persia. They made many advances of their own in mathematics, like algebra and trigonometry. Al-Khwarizmi and Umar Khayyam were two of many mathematicians still famous today. Al-Faraghanli and al-Biruni were two Muslim scientists who used math to measure the surface of the earth. Al-Faraghanli led a team that measured a degree of longitude 1100 years ago. Their calculation came close to the true circumference of the earth. Al-Biruni traveled and mapped the position of cities using latitude and longitude, and made many observations about geography too. He even wrote about the mathematics of shadows, so people could make accurate sundials.

Mapping the seas and lands in which they traveled, pilots and cartographers worked for different purposes. Ship captains used knowledge passed down from father to son, memorizing the valuable information, and guarding it closely. They used both simple and complex instruments to safely steer the ships. Some, like Ibn Majid and Sulaiman Tajir, wrote the secrets of their voyages on pilot charts. These charts were used to make maps. Al-Idrisi worked for 15 years making maps for Sicily’s Christian king, Roger II. His team of mapmakers used charts, astronomy and geographic information to map parts of the world they knew at that time.

Muslim scholars set out to explore the geography of the vast lands of Islam. Some, like Ibn Fadlan, were diplomats on a mission. Ibn Fadlan described the Vikings, the Khazars and other groups on his visit to Russia. Al-Masudi, al-Maqdisi and many other geographers traveled to collect information about the people, lands and ways of life in Muslim lands and beyond. Many historians also traveled to gather facts. Some travelers set out for their Hajj (pilgrimage), but went far beyond the road to Mecca to visit other places. Ibn Jubayr and Ibn Battuta are two famous travelers who wrote about the geography of places they visited. People can learn from their books even today.

Zheng He’s Seven Chinese Voyages

One of history’s greatest sea explorers was the Chinese Muslim, Zheng He. Between 1405 and 1433, he was Admiral of the Seas for the Emperor of China. Setting out in huge Chinese ships like mountains on the waves, they made seven voyages round the rim of the Indian Ocean and back. Zheng He also made the Hajj journey to Mecca. He told people along his route of the Chinese Emperor, and took
gifts of silk, porcelain, coins and other treasures of China. Chinese gifts included a huge bronze bell given to the Muslim Sultan of Aceh, on Sumatra, which still rings today. Other mementos of Zheng He’s journey can still be seen along the route. The voyagers brought back rare animals, including a giraffe, as well as jewels, spices, fabrics and dyes to China on their return. Zheng He wrote several books, like *Traveling Exotic Lands by Sea*.

**What Did Some Famous Cities Look Like?**

Among the greatest of Muslim cities was Baghdad, in Iraq. It was built by the Abbasid Caliph al-Mansur as a capital city in 762. He housed the government in a round, walled complex called the City of Peace (Madinat al-Salam). The Round City’s triple walls held offices, residences and markets, with the Caliph’s palace and a great masjid (mosque) in the center. Later, the markets were moved out, causing suburbs, gardens, markets and new districts to grow outward from the Round City’s walls. Migrants poured in through the city’s four gates to seek their fortunes. Baghdad developed into one of the largest, richest, and most exciting cities in the world with nearly one million people.

Baghdad lay between the Tigris and the Euphrates Rivers. A network of canals between the rivers provided both water and transportation. Barges brought goods up river to Baghdad’s markets from ships on the Persian Gulf. Trade routes from the Indian Ocean brought silks, porcelain, spices, ivory and gold. Caravans followed overland trade routes from all directions, bringing products from the north like furs, honey, and wax. From Asian mountains, seas and rivers, came gems like lapis lazuli, turquoise, pearls, amber, and rubies. Perfumes, spices and cosmetics included jasmine and rosewater from Persia, frankincense from Arabia, and musk, ambergris and sandalwood from various lands. Important crops like sugar, indigo, hemp and cotton spread to other countries through contact with Baghdad. Samarkand exported paper, and was one of the first cities on the ancient Silk Road to reveal the Chinese secret of making paper. The secret of making silk cloth also found its way to Baghdad. Baghdad was like the hub, or center of a wheel, where trade routes from many lands met, and from which a variety of goods were carried to other places.

Many people have read about life in Baghdad in the stories *Thousand and One Arabian Nights*. The setting of these stories is Baghdad, but many of them originated as traditional tales of India, Persia and China. Many kinds of literature, however, were written in Baghdad itself. Just as merchants met in Baghdad’s markets, so scholars, writers and artists flocked to Baghdad seeking another kind of wealth. Literature, science and the arts flourished in the city. At the Bayt al-Hikmah (House of Wisdom), center a wealth of knowledge from the world’s ancient cultures was gathered and shared with others. Baghdad produced many books and many scholars-riches that were shared with other Muslim cities, and with other cultures. Eventually, the treasures of Muslim libraries (in the Arabic language) would be shared with Europe’s scholars to help develop modern science.
Other Cities in Muslim Lands

As people traveled along the wide network of trade routes over the next centuries, they carried with them Islamic religion, urban culture and high standards of living. Cities like Timbuktu, Cairo, and Tunis in Africa, Delhi in India, and Bukhara in Central Asia became well-known centers of trade and Muslim culture. Xian, the largest city in China boasted a Muslim place of worship. In Europe, Muslim Spain was a window on eastern culture, with cities like Cordoba, Seville, and Toledo. Muslim merchants were one of numerous trading groups in the Indian Ocean. They shared the seas and ports with people of many lands, cultures, and religions.

Muslim cities were in some ways very similar. Each city had a great mosque, for example. Like the cathedrals in Europe’s cities, they were showcases of fine architecture, skill, and wealth. Some cities had many large libraries, stocked with thousands of hand-written books, maps, and artwork. Fine homes or palaces were found in most cities, along with lots of humble dwellings. Bazaars (or covered markets) handled the cities’ trade and crafts, with markets for each branch of business. Like indoor streets lined with shops, they snaked through the cities. Some were covered by domes that let light in and let hot air out the top. Cool air came in through the arched doorways.

Between cities, and along the Hajj (pilgrimage) routes, travelers might stop at a caravanserai. Developed along the great trade routes, they offered safe and convenient places where traveling merchants could find water, food, news, and a place to rest. They were arranged around a courtyard, and usually had two levels, one for the animals and servants, and the second for merchants who could pay more. The caravanserai was surrounded by a high wall and locked at night behind heavy gates as tall as a loaded camel. In a caravanserai, travelers exchanged prices and news, as well as stories, songs and poems.