From the Queen of Sheba to the Republic of Yemen

K-12 Resource Guide and Classroom Ideas

By Marta Colburn
Illustrated by Maha al-Hibshi and Bruce Paluck

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K-12 National Standards

The lesson plans contained in this resource have multiple tie-ins to national and state pre-collegiate education curriculum standards for various disciplines. The list below refers to websites with grade-specific national standards for disciplines relevant to this curriculum:

Social Studies at: <www.socialstudies.org/standards>.

Notes on Text and Arabic Transliteration

For foreign words, Yemen-specific terms, and acronyms see the glossary (Appendix I). Transliterating Arabic in a consistent and readable manner is no easy task. For this document I have relied on commonly accepted English geographic terms and Arabic words that have made their way into the English lexicon. The standard transliteration for the ’ayn in English is ‘ (beginning quotation mark) and for the glottal stop is ’ (the ending quotation mark); I have not distinguished between the two in this document. For readability I have refrained from using other diacritical marks, hopefully achieving internal consistency within the document.

About the Author

Marta Colburn has lived in Yemen periodically since 1984. From 1984-1989 she worked for several international development agencies, the last 2 ½ years as the Deputy Country Representative for Oxfam UK. From 1998-2000 she served as the Resident Director of the American Institute for Yemeni Studies and, since March 2000, as an independent consultant on a variety of projects in Yemen. Ms. Colburn’s education is in Political Science and Middle Eastern Studies, and for seven years she served as the Outreach Coordinator and Associate Director of the Middle East Studies Center at Portland State University. Ms. Colburn has written on a range of topics related to Yemen including gender, development and democratization. Among Ms. Colburn’s unique experiences in Yemen are living with a Yemeni family for two years, and being kidnapped in 1999 by tribesmen, an incident that was resolved peacefully and without the payment of a ransom. Since 2002 Ms. Colburn has worked for Mercy Corps, a non-profit international relief and development organization based in Portland, Oregon, and she is currently serving as their Country Director in Amman, Jordan (<www.mercycorps.org>). In 2002-2004 she served as the President of the Middle East Outreach Council, a national organization of educators working to increase public knowledge about the peoples, places, and cultures of the Middle East (<http://inic.utexas.edu/emenic/meoc/>).

Author’s Preface

During the eight years I spent as the Outreach Coordinator/Associate Director of the Middle East Studies Center at Portland State University, I collected, promoted, and developed a wide range of educational resources on the Middle East. While there are increasing numbers of high-quality resources on Islam, the Arab World, and specific countries, and on various aspects of Middle Eastern culture and society, there is nearly a complete absence of classroom resources on Yemen. As an educator and someone who considers Yemen my second home, I hope that this publication will help parents, educators in schools and in community organizations, and ultimately American youth to expand their understanding of this wonderful country on the Arabian Peninsula.
The majority of classroom ideas in this resource focus on themes in Yemeni history, although a number of activities have been included that highlight contemporary issues and challenges. The lessons have been developed to provide accurate and appropriate curriculum on Yemen, but not to duplicate readily available resources about Islam or the Arab World (see Appendix IV).

Why Yemen?

Some may associate Yemen with breathtaking architecture, the Queen of Sheba, or even the British-Yemeni boxing champion Prince Naseem. Unfortunately, much recent media focus on the southwest corner of the Arabian Peninsula has been negative. From tribal kidnapping to the 2000 explosion at the USS Cole (which killed 17 and injured 39 American sailors) the attention of the media focuses on the violent and unusual. This is a very narrow perspective on Yemen’s rich cultural heritage and current realities. Additionally, the limited knowledge that many Americans have of Yemen is shaped by the broader context of stereotypes about Arabs and Islam. It is hoped that these lessons will expand understanding beyond the headlines, challenge stereotypes, and bring this culture alive for educators and students.

How to Use this Resource

This publication provides extensive resources for teaching about Yemen. It begins with a brief introduction to Yemen’s geography, climate, and history. This resource contains a variety of Appendices: I - a glossary of vocabulary words and terms used throughout the publication; II - statistical information; III - a timeline of Yemeni history; IV - further resources; V - the plates, which reproduce in a larger format many of the illustrations that appear in the lessons. These plates are given at the end to facilitate reproduction for classroom use.

Each lesson is organized into two parts. The first part provides background information (an introduction) for teachers and adults; the information can also be used as a handout for older students. There are definitions of vocabulary words (underlined in the text) that may be unfamiliar to the students (see Appendix I for a full glossary of terms introduced in each lesson) and a bibliography.

The second part of each lesson contains ideas for a classroom activity; lessons were designed for grades K - 12 according to national standards. Each lesson targets a specific grade level(s) and subject area (for those with two target grade levels, follow the instructions for the “younger” and “older” students as appropriate). The “Goals/Focus” for each lesson summarizes the main learning outcome that is anticipated; it can be used by educators to select appropriate lessons. The lesson includes a list of the materials that are needed and the “Anticipatory Set” is designed to help introduce the activity. Each lesson also contains guidelines on how to proceed and conclude each lesson. Each activity is designed for a typical classroom session (approximately 30 - 40 minutes long), unless stated otherwise. “Lesson Extension” and “Further Resources” can be used to expand or to continue the lesson. While each lesson addresses the learning needs and skills of a particular grade level, they are presented as guidelines and can usually be adapted to the needs of other ages and educational settings, such as faith groups and community organizations. If you want to adapt an activity for a different age group or a special setting, familiarize yourself with the essay, activity, extensions, and further resources; then be creative! These lessons can easily be enhanced by inviting guests from the region to your classroom from local Muslim institutions, universities and from your
community. The lessons have been developed to provide accurate and appropriate curriculum on Yemen and not to duplicate readily available resources about Islam or the Arab World. Appendix IV lists organizations that produce and distribute excellent materials on the Arab World and Islam. Inviting guests from the region to your classroom from local Muslim institutions, university campus, an international grocery store, or community groups to enrich the use of these classroom ideas will enhance these lessons.
The Republic of Yemen: Geography, Climate, and Maps

The Republic of Yemen was created on May 22, 1990 by the unification of two separate countries, the Yemen Arab Republic and the People’s Democratic Republic of Yemen. This new country occupies the southwestern corner of the Arabian peninsula, covers 214,030 square miles (roughly the combined size of Arizona and Nevada), and has a population of 19.7 million according to the 2004 census. The country is divided into 19 governorates (provinces), with the national capital in Sana’a. Yemen shares borders with Saudi Arabia to the north and with Oman to the east, and faces the Indian Ocean to the south and the Red Sea to the west. This position is historically important, because the ruler of Yemen could control the passage of ships between these two bodies of water, and he was in a position to block or to profit from trade and communication between the Mediterranean Sea to the north (through the Red Sea), the coast of East Africa to the south, and the Persian Gulf and India to the east.

The Yemeni Landscape

The character of Yemen’s geography is best approached by its geological history. Yemen’s geological “basement” is a group of very old igneous and metamorphic rocks that were covered by extensive deposits of limestone and sandstone during the Jurassic period. Then, about 40 million years ago, the Arabian peninsula started moving away from East Africa, which eventually created the Red Sea and the great rift valley in East Africa. During the rifting (a process in which the earth’s crust is pulled apart) the western side of the Arabian peninsula lifted upward and the eastern part tilted downward, creating the Persian Gulf to the east. A chain of mountains with volcanic eruptions and expansive lava flows formed along the west coast of the peninsula. As the mountains formed, erosion increased across the limestone that was still exposed in eastern Yemen; the erosion created deep wadis. The rifting is an on-going process: the Bab al-Mandab—the strait separating Arabia and Africa at the southern end of the Red Sea—opened only 5 million years ago, volcanoes continued to erupt in geologically recent times, and Yemen still occasionally experiences violent earthquakes.

Yemen’s geological history gives it an extremely diverse landscape. Broadly speaking, we can distinguish three zones: the coastal plain, the mountains, and the interior desert plain.

The size of the coastal plain varies. The plain extends 30 miles wide along the Red Sea and the Gulf of Aden, but along the southern coast sometimes it is merely a narrow strip separating the ocean from the mountains. The plains are sand and gravel surfaces that rise gently toward the mountains; old river beds (wadis) cut into the surfaces, and they still carry flood water from the mountains to the sea. The continuous plain along the Red Sea is called the Tihama; the southern plain is interrupted by mountains at several points and has no special name.

The mountains rise dramatically from the coastal plain, forming an elbow that parallels the coast. The western mountains commonly reach heights of 6,500-8,000 feet above sea level and many places are more than 3,000 feet higher. The tallest peak in Yemen, at over 12,000 feet above sea level, is the highest point in the Arabian peninsula. The southern mountains do not rise over 6,500 feet above sea level and most reach
a height of 4,000 - 5,000 feet above sea level.

The western mountains rise sharply from the coastal plain, and in some places, they reach a height of over 7,000 feet just 15 miles from the plain. Due to their violent origin, the mountains are extremely rugged, with sheer drops of a thousand feet and more, deeply cut and often very narrow valleys, and dramatic vistas. In the higher elevations there are plateaus and plains where many of Yemen’s larger and historic cities developed.

The southern mountains also present a dramatic landscape. In Hadhramawt, the central portion of the southern mountains, the mountains rise from the coastal plain to a limestone plateau. Erosion has cut a network of deep stream channels into the plateau. The most important of these channels is Wadi Hadhramawt, which runs from the east to the west about 100 miles north of the coast. Erosion cut the bed of Wadi Hadhramawt 1,000 feet into the limestone, and it is over a mile wide between vertical cliffs. Several large and historically important cities are located in the Wadi Hadhramawt. Other wadis lead from the plateau to the sea, and some of these offer relatively easy access to the plateau and to Wadi Hadhramawt.

In the east and north of Yemen the mountains drop to an elevation of 4,000 feet above sea level, and they frame a lower-lying and fairly flat district that slopes gently down to the northeast. The most prominent feature of this interior zone in the northeast of Yemen is a sand sea. It is called the Ramlat al-Saba’tayn, where ranges of sand dunes seem to stretch endlessly. This zone is really an extension of the Empty Quarter (the Rub’ al-Khali) of Saudi Arabia, the largest sand sea in the world.

Yemen’s complicated topography interacts with regional climatic patterns to create very different effects across the country. Yemen is within the tropics and in Arabia. Some parts of Yemen are indeed hot and sultry, especially along the coast, and other parts have extensive sand dunes. Many areas of Yemen, however, escape these stereotypes about hot, tropical Arabia.

The most important factor in Yemen’s climate is the monsoon system. Monsoons are prevailing winds that blow from the northeast in the winter and from the southwest in the summer. Yemen is at the northern edge of the monsoon system and does not enjoy a true monsoon climate like that in India. Instead, the southwest winds—carrying moisture from the ocean—run into the high western mountains and the moisture condenses and falls as rain. Most of the rain comes in two seasons, in March-April and July-September, as the southwest wind develops and then disappears. The western mountains benefit most from the monsoons, especially along the seaward side, where 20-25 inches of rain falls in an average year. The area around the city of Ibb can even receive over 30 inches per year. The rainy seasons, however, are not entirely reliable and in some years almost no rain falls. On the other hand, the northern and eastern sections of the mountains may receive only 10 inches of rain per year. Other regions of Yemen—the lower elevations of the western mountains, the southern mountains, the coastal plains, Hadhramawt, and the desert interior—receive relatively little rainfall, less than 8 inches per year and in many places only 2-4 inches or less in an average year. These regions receive lower amounts of rain because the moisture has difficulty crossing the western mountains and because the southern mountains are not high enough to induce rainfall.

The mountains also play an important role in moderating temperatures. In most of the country daytime temperatures rise into the upper 90s and low 100s (°F) throughout the summer and stay in the 70s during
the winter. The high elevations of the western mountains, however, experience more moderate temperatures throughout the year—in the Sana’a area the average high temperature in the summer is in the mid-80s (°F) during the day and winter frosts are common. The less torrid conditions also increase the benefits of the rainfall in the mountains by reducing the amount of water that evaporates from the soil.

These characteristics mean that the plants, animals, and even the people of Yemen are accustomed to conditions that range from very hot and dry to temperate and fairly wet. The plants and animals have developed to endure seasons, and even years, of unusually harsh conditions. In addition, the landscape of present-day Yemen is deeply shaped by people who, for thousands of years, created agricultural terraces, cut trees for firewood, grazed their flocks, and hunted wild animals.

Visitors today are struck by the contrasting aspects of the landscape: barren mountain slopes, lush green farms, and scattered, stunted trees that follow the course of wadis in barren deserts. Natural forests also still exist in a few places in Yemen, and botanists believe that many parts of Yemen would support a much richer plant life if human activity had not interfered with its development. The western mountains currently host a variety of fairly large trees, including junipers and wild olives, as well as many kinds of shrubs and grasses. Drier parts of the country sustain many kinds of acacia and tamarisk trees, as well as grasses. In addition, the incense trees, for which Yemen is famous, grow in the lower elevations of the southern mountains.

Wild animals, apart from insects, are not as visible as the plants, and many wild animals may be endangered. Gazelle and ibex, once plentiful, are now hard to find (see lesson 6), and the baboons that once frequented many parts of western Yemen are now limited primarily to a few natural preserves. Lions and wolves have not been seen for many decades, but smaller mammals such as foxes, hedgehogs, rabbits, and many kinds of rodents are fairly common, as are lizards, snakes, toads, and other kinds of reptiles and amphibians. The bird life of Yemen is rich, and many migratory species cross Yemen during certain times of the year as they fly between their summer and winter habitats.

Making a Living

The people of Yemen have also had to adapt themselves to the difficult, occasionally harsh, conditions of their surroundings. For farmers, the critical issue is not simply how much rain falls in a year, but also when the rain comes during the year; the crops must have enough water during the growing season if they are to mature and ripen. Although parts of Yemen receive enough rainfall to sustain agriculture, much of the country does not, and Yemeni farmers have devised several ingenious ways to solve this problem.

When rain falls in the western mountains, some of the water seeps into the ground, but most of it runs off down the hill slopes. The run-off travels down the hills, flooding into the valleys and into the dry river beds (the wadis) that come together into a large, natural, drainage system; this system carries large amounts of rainwater out of the mountains. In the western mountains, half a dozen wadi systems carry rainwater westward toward the Red Sea, other wadis carry flood water south toward the Gulf of Aden, while still others carry rainwater into the sand sea of the Ramlat al-Saba’ayn. Farmers capture the water by building a barrier partially or entirely across a wadi; the barrier deflects flood water onto nearby agricultural fields, or into cisterns that store the water for later use in irrigation. Farmers in Hadhramawt developed similar
techniques for using flood water, but they relied predominantly on drawing water out of numerous wells to feed their irrigation systems. In a few well-favored spots, the farmers could direct water from springs onto the fields.

The famous dam at Marib, the capital of Saba (Sheba), worked on this principle. The dam did not block and then store water in the way that a modern dam works. Instead, the dam deflected the rushing floods to each side of the wadi where strong stone structures directed the water through sluice gates and into irrigation canals that carried the water to the distant fields. Other investigations in Tihama have recorded the workings of a sophisticated early system of water control for farms around the Islamic city of Zabid and for the city itself.

In the western mountains farmers had to develop a variety of techniques to cope with local circumstances. A basic technique in the mountains is terracing; walls are built into a hill slope retaining the soil, which keeps the valuable agricultural soil from being washed away. In the wetter parts of the mountains the terraces are built into the hillside one after another, like steps down the slope, allowing run-off water to flow down the terrace steps, soaking deeply into the soil of each field as it goes. In drier parts of the western mountains the agricultural fields are paired with uncultivated land directly up-slope, so that rainwater flows onto the agricultural fields, increasing the amount of water the field receives. The amount of run-off water that a field receives is also increased by shallow channels that are cut obliquely down a hill slope and into a field.

In the past well irrigation was difficult because it required people, or their animals, to spend long hours hauling up the water. So this technique was used in city gardens where farmers grew vegetables, fruits, nuts, and fodder that they could sell in the market. Today, however, diesel pumps make irrigation with well water very popular, but this technique is dangerous because it rapidly exhausts ground water and aquifers, and recreates a water shortage. In the past the water table was 10-30 feet below the surface and wells provided a ready supply of water for drinking and irrigation, but today in many parts of Yemen pump irrigation has lowered the water table by hundreds of meters, and it threatens the supply of drinking water in many cities.

The main crops in Yemen are sorghum, millet, and, more recently, corn, smaller amounts of wheat and barley are also grown. Farmers also grow legumes such as peas and lentils, potatoes, tomatoes, squash, and many other crops. Yemen has long been famous for its grapes, and vineyards are still common in the mountains north of Sana’a. Orchards of pear, peach, apple, pomegranate, orange, and other citrus trees, are common in the mountains, along with groves of almonds, walnuts, coffee and qat. Bananas, papaya, and mangoes thrive at lower elevations. Date palm plantations are widespread in Tihama and Hadhramawt.

Farming families in the western mountains typically keep a cow or two, and a small flock of sheep and goats. The cows eat sorghum leaves and straw, while the sheep and goats graze on naturally growing plants or stubble in the fields after the harvest. Some villagers also keep donkeys and a few camels for carrying loads of water and firewood, and for plowing. Moving away from the western mountains towards the east, farming becomes more precarious and then simply impossible. Goats and camels are the domestic animals best suited to this harsher environment and, in the interior deserts, only camels can live. The people in this rugged area are less tied to the land, leading a nomadic or pastoral life that is suitable to this environment.
Honey is one of the outstanding products of this hostile eastern region. As elsewhere in Yemen, the beekeepers move the hives—traditionally made from hollowed logs—from place to place according to when the acacia trees and other plants start to flower. These flowers in the rugged eastern region produce the best Yemeni honey, a dark and intensely flavored honey that is famous throughout the Arabian peninsula. It is highly prized in the Arab world for its medicinal qualities, and it is very expensive.

Fishing is another very important activity. Today, even as foreign factory ships work the waters off the Yemeni coast, local fishermen still pursue their livelihood in ways that their forefathers would recognize. In the past and even today in Hadhramawt, some of the catch is dried and stored for future consumption, or dried and salted for export. Many people in Wadi Hadhramawt still have a taste for dishes based on chunks of dried fish. Sardines were also dried but normally eaten by camels rather than people; this is another practice that can still be seen today along the coast of southern Arabia. Fish oil, in addition to being exported, was used in the local boat-building industry. The unwanted parts of the catch were converted into fish meal and used to fertilize agricultural fields. There have been changes, however, and the fish are now processed mostly in packing plants, or shipped on ice to urban markets. The fish markets of Sana’a are filled with various tunas, snappers, mackerels, sharks, and other species, along with shrimp, cuttlefish, lobsters, and crabs.

The Yemeni boat-building industry has nearly disappeared; fiberglass and metal crafts are replacing the traditional wooden boats. The old-fashioned boats had a fascinating design. They were made from hardwoods brought from southern India; the boats were constructed by first laying out the spine, then attaching the ribs to it, and then attaching planks to the ribs to form the sides of the boat. The fascinating part of the design is how the different pieces were attached to each other—the boat-builder drilled small holes at the appropriate places in each piece, and then tied the pieces together with rope made from palm fronds. In other words, the boat was “sewed,” not nailed, together. After letting the boat sit while the wood dried, the boat-builder then sealed the planks with fish oil, and coated the surface of the boat with a mixture of plaster and animal fat. These “sewn” boats may sound strange and dangerous, but Arab writers mentioned them nearly a thousand years ago, when the boats carried precious cargoes throughout the Indian Ocean.

**Many Yemens**

There are a number of factors that contributed to the distinctive and varied local character of Yemeni culture: the diversity of the Yemeni landscape, the different ways in which Yemenis adapted to it, and the different local histories of international contacts. The variations can be seen in the clothing that people wear, the kinds of food that they eat, and the way that they speak Arabic (sometimes, they speak another language altogether; see lesson 19). For an outsider visiting Yemen, the different styles of houses is one of the most noticeable indications of this cultural variety.

In Tihama, the coastal plain along the Red Sea, many people live in circular huts made of reeds covered inside with mud plaster and often decorated with vivid painted scenes and symbols. Yet in the towns of Tihama, for example Hudaydah and Zabid, people live in one- or two-story houses made of baked brick, whose exterior walls are ornamented with geometric patterns in the brickwork and with richly carved plaster. Similarly, in Wadi Hadhramawt the town of Shibam is famous for its very tall, plain houses made of mud brick.
and faced with whitewash, which have earned Shibam the nickname “Manhattan of the desert.” On the other hand, the mud brick houses of Tarim, also in Wadi Hadhramawt and only 35 miles from Shibam, have an altogether different style that borrows ideas from India and colonial Southeast Asia; the style reflects the great number of people from Tarim who lived much of their lives abroad. The houses built in the mountains are different once again. In Sana’a the houses are like rectangular towers of stone and baked brick that rise five or six stories; the inside is decorated with ornately carved stucco, the windows are fitted with fanlights of colored glass in geometric designs, and the outside ornamented with bands of geometric patterns in the brickwork, highlighted with white plaster (see lessons 8-11). In northern parts of the country, in Sa’dah and Marib for example, people build houses of adobe (mud brick) laid in bands or courses, which gives the walls the appearance of a layer cake; the layering effect is sometimes emphasized with parallel painted bands.

International Connections

Yemen does not enjoy a wealth of products that might be sold abroad. The country has a few natural resources of commercial value: some metals, both precious (gold, silver) and base (copper, iron); semi-precious gemstones (carnelian, chalcedony, agate); other stones used to make household items (soapstone) or art (alabaster); incense and related plant products, notably frankincense, myrrh, and aloes (see lessons 3 and 5). The country now produces petroleum and natural gas, and it is discovering mineral deposits of potential economic use. In the past Yemeni products for foreign markets also came from the labor of farmers, herdsmen, and craftsmen: coffee, cotton, indigo dye, textiles of cotton and wool, hides and leather, preserved fish and fish oil, and honey. The demand for most of these products is now satisfied by cheaper sources.

In the ancient past commerce was mostly conducted by overland caravans that carried incense—frankincense and myrrh—as well as other products. The caravan routes ran northward from Yemen through what is now western Saudi Arabia to Gaza and other ports in the eastern Mediterranean Sea. Other routes branched off the main road and went northeast to the Persian Gulf and to Iraq.

After the incense caravan trade subsided (nearly 2,500 years ago), Yemen relied on its strategic position and its own products to gain a place in international commerce. Beginning about 2,000 years ago, vast maritime networks of trade were slowly created; they linked, directly or indirectly, China with Europe, and southeastern Africa with Iraq. Yemen occupied a pivotal point in these networks; its crucial position at the entrance to the Red Sea gave the country a commanding access to Egypt and Europe from the Indian Ocean. The monsoon winds dictated the sailing calendar. Merchants, whose sailing ships needed the wind to fill their sails and propel their boats, used the southwest monsoon to reach the Persian Gulf, Iran, and India during the summer; they returned to Yemen on the northeast wind in the winter. Alternatively, they sailed to East Africa during the winter and returned with the southwest monsoon. Travel northward through the Red Sea to Egypt and Jordan was more difficult because the winds were unpredictable and there were many coral reefs in these waters; shipwrecks were common. Bab al-Mandab, the entrance to the Red Sea, means “door of lamentation” because so many sailors died after entering these waters.

Along Yemen’s coast the ports of Shihr, Mukalla, Qana (Bir Ali), Aden, al-Mukha, and Hudayda have been important at different times as stopping points for international merchants coming from India, the Persian
Gulf, East Africa, Egypt, and Europe. Yemeni products were exported from these ports and foreign goods arrived that Yemeni consumers sought. Yemen’s rugged terrain limited the routes that connected the coast with cities in the interior; Yemen’s modern network of major roads follows the routes that were established so long ago. One major route led from Aden northward into the mountains, passing through the towns of Dhamar, Sana’a, and Sa’dah. Branches of this route led westward to Ta’izz and then to the Red Sea port at al-Mukha; another branch went eastward through Rada’ to Hadhramawt. A second major route led from the area of Hudaydah into the mountains to Sana’a, and then continued eastward to Marib and on to Hadhramawt. Within Hadhramawt, routes connected the ports at al-Shihr, Mukalla, and Bir Ali with Tarim and Shibam in the Wadi Hadhramawt and with Shabwa.

These routes served the cities of the interior well, but they left large parts of Yemen without access to foreign goods. This problem was solved by “periodic markets,” in which—on a certain day of the week set by tradition—people in a rural district would gather in a set place to sell their products and to buy things that they wanted. Peddlers came from the big cities to attend these markets, bringing imported goods for sale. Even with periodic markets, however, people in the countryside remained fairly isolated; they tried to be as self-sufficient as possible.

Emigration

Yemen was, and to a surprising degree still is, a rural country. Even today when the capital, Sana’a, has grown to over a million inhabitants and when the residents of other major cities number in the hundreds of thousands, roughly three-quarters of Yemenis live in a village or a small town. The villages might be very close to each other, as in the wettest parts of the mountains, or a village might be dozens of miles from its nearest neighbor. The villages were often built on the tops of mountain peaks, at the edges of mountain plains, or in Wadi Hadhramawt. These building sites were chosen for defensive reasons, in case of attack, and for food production—they left the best land available for agriculture. Cities also existed, but they rarely had more than 50,000 inhabitants. Cities in the interior were usually established along important transportation routes in places with good possibilities for farming. The coastal cities, where farming was often less reliable, often depended on imported food.

Yemeni farmers mastered the art of using water effectively, and herdsmen and fishermen added to the resulting bounty. Indeed, in the past Yemen produced enough food to feed itself, and at times even exported food to neighboring areas. Occasionally, however, the seasonal rains failed to arrive and Yemen suffered from famines in which thousands, sometimes tens of thousands, of people died. This happened at the beginning of the 20th century and again during the 1940s. The unreliable food supply was a major motive for Yemenis to seek their fortunes abroad. Hadhramis (people from Hadhramawt) are famous for venturing far from home, and they established large communities in Southeast Asia, India, and East Africa, especially during the 19th and early-20th centuries. During the 1930s, according to one estimate, roughly one-third of Hadhramis lived outside Hadhramawt. In the west, the mountain villages as far north as Ibb provided another stream of Yemeni emigration. Starting in the mid-19th century, these people first went to Aden in search of employment. Then they began to work as laborers in British-run mines or plantations in Africa, or they signed
on as merchant sailors. The sailors often ended up in Great Britain, Europe, or the United States, where they established the Yemeni communities that still exist today (see lesson 1).

Dr. Christopher Edens
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Map of Geographic Zones and Characteristics
The Republic of Yemen (ROY), located at the southwestern corner of the Arabian Peninsula, was created on May 22\textsuperscript{nd}, 1990, by the unification of the Yemen Arab Republic (YAR, or North Yemen) and the People’s Democratic Republic of Yemen (PDRY, or South Yemen). Yemen is located between the latitudes of 12° 40’ North and 19° North and between longitudes 42° 30’ East and 53° East. Yemen can be divided into six distinct geographic zones with associated climates, flora, and fauna (see chart and map below). Yemen’s territory also includes 112 islands in the Indian Ocean and the Red Sea. These two bodies of water merge at the strait of Bab al-Mandeb ("Door of Lament") separating Yemen from the Horn of Africa by a mere 20 miles at its narrowest point.

<table>
<thead>
<tr>
<th>Zone</th>
<th>Elevation</th>
<th>Annual Rainfall</th>
<th>Additional Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Coastal</td>
<td>0-200m</td>
<td>0-100mm</td>
<td>Wadi agriculture, larger landholdings with a high percentage of sharecropping</td>
</tr>
<tr>
<td>2. Western</td>
<td>200-1,500m</td>
<td>300-1,000mm</td>
<td>Terraced rain-fed farming, ideal for coffee and qat, some sharecropping</td>
</tr>
<tr>
<td>Escarpment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Northern</td>
<td>1,500-3,600m</td>
<td>100-500mm</td>
<td>Subsistence farming, irrigation on the plateaus, predominantly tribal</td>
</tr>
<tr>
<td>Highlands</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Southern</td>
<td>1,500-2,500m</td>
<td>300-1,500mm</td>
<td>Irrigated and rain-fed, densely populated, some sharecropping</td>
</tr>
<tr>
<td>Highlands</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Eastern</td>
<td>1,500-1,000m</td>
<td>50-200mm</td>
<td>Predominately wadi agriculture, otherwise sparsely populated pastoral/nomadic lifestyle</td>
</tr>
<tr>
<td>Slopes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Desert</td>
<td>500-1,000m</td>
<td>0-50mm</td>
<td>Sparse population sustaining a largely pastoral/nomadic lifestyle</td>
</tr>
</tbody>
</table>
Map of Yemen
Geographic Zones

1. Coastal
2. Western Escarpment
3. Northern Highlands
4. Southern Highlands
5. Eastern slopes
6. Desert (Ramlat al-Saba'tayn/Rub al-Khali)

Map by Bruce Paluck
Vocabulary

**Horn of Africa**: the geographic term referring to the eastern projection of the coast of Africa including Djibouti, Eritrea, Ethiopia, and Somalia.

**Monsoon**: a name for seasonal winds that reverse direction. First applied to the winds over the Arabian Sea that blow for six months from the northeast and for six months from the southwest. It is associated with periods of heavy rainfall. It brings rain to Yemen twice yearly. The word comes from the Arabic *mawsim*, meaning season, i.e. sailing.

**Nomad** (adj.: nomadic): a member of a people that has no fixed residence, but wanders from place to place usually seasonally and within a well-defined territory for the purpose of securing its supply of food.

**Pastoral**: of, relating to, or composed of sheperds or herdsmen.

**Qat**: shiny-leafed shrub (latin name: *Catha Edulis*) cultivated extensively in Yemen. Its leaves are chewed on a daily basis by a majority of men and by increasing numbers of women, producing a mildly stimulating sensation. Qat afternoon gatherings are woven into cultural, professional, and political traditions in Yemen.

**Sharecropping**: a system of farming in which a tenant farmer works the land, and gives the landowner a fixed share of the crops, instead of money.

**Subsistence**: a system of farming or herding that provides for the basic needs of the family, but without any surplus for sale.

**Terraces**: stair step-like fields constructed on hillsides by building retaining walls to hold soil and water.

**Wadi**: a dry watercourse that becomes a river during the rainy season.
A Brief Summary of Yemeni History

The Ancient Past

Humans lived in Yemen many thousands of years ago, during the Old Stone Age (the period more than 10,000 years ago), but we still know very little about the lives of these people. We can suppose that they lived in small groups and that they ate the food that they gathered or hunted in the natural landscape. During the New Stone Age (approximately 7,000 years ago), some of these groups started to keep herds of cattle, but they still relied mostly on wild food and they still lived in tiny communities that constantly moved from place to place.

An important change happened around 5,000 years ago, when people in western Yemen started to farm. Agriculture required people to work a lot harder for their food, but it also allowed them to settle down and to live in larger communities. The people in these villages and small towns in Yemen learned for the first time how to make pottery and to use metal tools. In the highlands they built terraces for their fields, and in the drier zones, to the west and east of the highlands, they developed irrigation. But farther east, in Hadramawt and Mahra, people continued to live in the old ways.

The South Arabian Civilization: Yemen’s Roots

In comparison to some other parts of the Middle East, Yemen was slow to make these changes—sophisticated civilizations had already developed in Mesopotamia (Iraq) and Egypt over 5,000 years ago. Yemen, however, was quick to catch up; around 3,000 years ago, the South Arabian civilization emerged seemingly overnight along the eastern edges of the Yemeni highlands. Some scholars theorize that a new people migrated from the north and established the South Arabian civilization; other scholars propose that the indigenous people of Yemen themselves produced this civilization. In fact, we do not know enough about how the civilization developed in this critical transition period; it remains a mystery.

We do know that during only a few hundred years (which is very fast, compared to the pace of earlier changes), people in the Wadi Jawf, Marib, Wadi Hadramawt and other oases created a new and very sophisticated way of life. In the new towns and cities elaborate stone temples, palaces, and other buildings were erected; they were filled with fine works of art made from alabaster, metal, and other valuable materials. Inscriptions provide ample evidence that this was also a literate civilization; texts were placed on the buildings or worked into the art, announcing the makers of the great works, the purpose of the monuments, and describing the exploits of the rulers.

During its early period the South Arabian civilization belonged to Yemen east of the mountains, from the Jawf to Hadramawt. The most important cities were located next to large, dry valleys (wadis) that carried floods of seasonal rain water from the mountains. The inhabitants were able to control these floods and to divert the water onto their agricultural fields. The famous dam at Marib was only one of these essential flood control systems; similar devices existed at the other South Arabian cities. These elaborate irrigation systems fed the people of each city, and the success of the South Arabian civilization depended on the irrigation systems.

Agriculture was the economic basis of the South Arabian civilization, but these people became rich and famous because of another activity: selling frankincense and myrrh to consumers in Iraq, Egypt, and Palestine.
Frankincense and myrrh are resins from certain species of trees that grow in a zone stretching from western Hadramawt to western Oman (Dhofar); these trees also grow in northern Somalia, western Ethiopia, and Eritrea on the other side of the Red Sea. The resins were highly prized by consumers in the north, and very expensive. South Arabian merchants carried the incense to these markets in camel caravans that moved along established routes. The incense was carried first from the production areas to the South Arabian cities, and then northward through the Arabian peninsula; the caravans took about 70 days to travel the 1,500 miles between Marib and Gaza. The South Arabian cities collected taxes on the incense as the caravans passed, and in return maintained the roads and guaranteed safety from highwaymen.

Although they belonged to a single civilization, the people of this region were divided among several different countries and they spoke different (but closely related) languages. The capital city of each country was placed so that it could control both the flood waters in a particular valley and the passage of caravans carrying incense. Marib, the capital of the Sabaeans (the people of Saba, or Sheba), is the most famous of the capital cities; the Sabaean rulers conquered most of Yemen in the 7th century BC. Sabean rule, however, did not last, and other countries became independent and even dominant. During the last four centuries BC, Yemen was divided into several kingdoms, each of which controlled different parts of the caravan trade. The Minaeans, their capital at Qarnaw in Wadi Jawf, dominated the caravan routes that linked Yemen with the Mediterranean markets; the kingdom of Hadramawt controlled the places where the incense trees grew as far east as Dhofar (western Oman) from their capital at Shabwa. During the same period, the Qatabanians organized a powerful kingdom—its capital was at Tamna in Wadi Beihan—that controlled large sections of the caravan routes within Yemen, even while the Sabaeans continued to profit from the routes around Marib.

Things began to go wrong for the South Arabians around 2,000 years ago. The caravan trade had given the South Arabians great wealth, which had become the stuff of fantastic stories among the Greeks and Romans. In 24 BC, lured by the fabled wealth of the region, Augustus the first Roman emperor ordered a Roman army to invade Yemen; the invasion failed. Ironically, the caravan trade, which generated the wealth that attracted Augustus’ attention, was being undermined at that very moment. Development of sea trade through the Red Sea encouraged merchants to ship their merchandise rather than carry it by caravan. The sea trip from Egypt to a port on the southern coast of Yemen took approximately a month, less than half the time to cover the same distance by caravan, and in addition the merchant ships could continue on to the rich markets of India. The change encouraged the expansion of port cities such as Aden, Qana’ (Bir Ali in Hadramawt), and Sakalan (Khor Rori in modern Oman), and it diverted profits away from the caravan cities in the interior. As a result, the regional centers of power shifted away from the older, inland cities to places that could control both the caravan routes and the sea lanes. The new kingdom of Himyar arose as a result of the growing sea trade, as well as other factors.

The Himyarites, a tribal people in the south of the western mountains, had formerly been within the Qatabanian domain. When the international trade began shifting away from caravans and to shipping, the Sabaeans tried to gain control of their weakened neighbors. At the same time the Himyarites gained their independence from Qataban and extended their power to the coast. Soon after that, the kingdom of Hadramawt re-emerged as a regional power. These three South Arabian kingdoms were evenly matched,
and expended much of their energies in inconclusive conflicts with one another. The resulting stalemate
allowed the Christian Axumite kingdom of Ethiopia to invade western Yemen and even briefly to occupy the
Himyarite capital (at Zafar, near modern Ibb in the central mountains) during the mid-3rd century AD. Himyar,
however, survived these difficulties, and by the end of the 3rd century it had defeated both Saba and
Hadramawt, and had evicted the Ethiopian invaders from Yemen. Himyar then extended its control northward
over central Arabia.

The Himyarites had unified most of Yemen for the first time in nearly a thousand years. The country was
changing in other important ways as well. The incense trade—an important source of wealth—was in decline;
religious authorities in the Christian world disapproved of the use of incense and this attitude greatly reduced
the lucrative market around the Mediterranean Sea. At the same time, Arabic-speaking nomads started
moving into Yemen from the desert. The new-comers—whose arrival had weakened Saba and Hadramawt,
thus helping Himyar to gain the upper hand—contributed to the abandonment of many towns and of the
agricultural systems that had sustained the old centers of the South Arabian civilization.

Religion was also changing. In earlier times the South Arabians worshipped many different gods
(polytheism), but now influences from outside made the idea of one god (monotheism) more popular. Several
Himyarite kings accepted Judaism and others Christianity; these kings built synagogues and churches in major
cities such as Zafar and Sana’a in the expectation that their subjects would also become monotheists. The
temples of the old polytheism were gradually abandoned.

Yemen was also caught up in dangerous international politics and commercial competition, as the
Byzantines were squaring off with the Persians in a struggle over territory and control of the sea trade in the
Indian Ocean. The Byzantines used the Christian kingdom of Axum in Ethiopia as their agents. The Himyarites
had been able to fight off an Ethiopian invasion in the 3rd century, but they were not able to withstand a second
invasion in the 6th century. Ethiopia occupied western Yemen for half a century (approximately 525-575 AD).
In the meantime, the Persians were expanding their power along the southern Arabian coast, and in 575 AD
they replaced the Ethiopians as the rulers of Yemen.

The Arrival of Islam

In the 7th century AD the religion of Yemen dramatically changed again, when it accepted Islam during
the lifetime of the Prophet Mohammed, who died in 632 AD. Several of the oldest mosques in the world are
in Yemen. Yemen was important to the spread of Islam outside the Arabian peninsula for two main reasons:
1) because Yemen’s population was far more numerous than the population of most other part of the peninsula,
and 2) because Yemenis were quick to embrace Islam. Yemenis volunteered for the Muslim campaigns of
conquest, and Yemenis often comprised over half the soldiers in the armies that conquered Syria, Iraq, Iran,
Egypt, North Africa, and Spain during the 7th and early 8th century AD. Yemenis also provided large numbers
of settlers in places that Muslim armies established, such as Basra and Kufa in Iraq, and Fustat (now a part
of Cairo) in Egypt; names of many places as far away as southern Spain have a Yemeni origin. Even today,
many Arabs consider themselves to have a Yemeni origin.

Yemen now belonged to a Muslim world that, in theory, was unified not just in religion but also in
government. Indeed the caliphs (“successors” to Mohammed as the leader of the Muslim community) did rule much of the Muslim world during the first two centuries following the death of Mohammed. During this time, Yemen was a province administered by governors appointed first from Mecca by the “Rightly Guided Caliphs,” Mohammed’s first four successors, then in turn from Syria by the Umayyad caliphs (662-750 AD), and then from Iraq by the Abbasid caliphs (750-1258 AD).

Four Centuries of Turmoil and Change

Yemen, however, was a distant province of the caliphate, whose control over Yemen soon weakened. Hadramawt broke away from the central authority in the mid-8th century, and western Yemen followed early in the 9th century when several important families, some of Himyarite ancestry, set themselves up as local independent rulers. The resulting local kingdoms are almost forgotten today except for the monuments that these rulers left behind. For example, the Ziyadid dynasty (818-1021 AD) of Tihama established the city of Zabid and encouraged the schools there so strongly that the city quickly gained an international reputation and attracted students from around the Islamic world; the Yu’rifid rulers (839-1003 AD) of the central highlands built or expanded several elaborately decorated mosques that are still in use today.

In breaking away from the political and religious authority of the caliphate, Yemen was in fact participating in a general trend within the Islamic world—increasing political fragmentation; it began first at the peripheries and then came closer to the centers of power. During the first two centuries of Islam, the Muslim world was splintered by disagreements about who was qualified to succeed Mohammed as the religious and political leader of the Muslim community. Initially these arguments led to numerous civil wars, but eventually Muslims became accustomed to a separation between political rule and religious authority. The Muslim world was increasingly divided into many political units (imamates, emirates, and sultanates) independent of the Abbasid caliphate. The caliphs retained only nominal prestige as successors to the prophet Mohammed, and the religious authority once vested in them was transformed and transferred to scholars of religion (the ulama’) who together decided matters of doctrine, but who deliberately took little interest in politics.

The early arguments about religion and political rule had their effects on Yemen. In Hadramawt, the first part of Yemen to escape provincial control, the Ibadis, a sect within the Kharijite movement, established imamates that governed Hadramawt for much of the time from the middle of the 8th century to around 1200 AD. The Kharijites believed that selection of an imam (leader) should be based on merit alone, and that an imam might even be a non-Arab (but he still had to be a free adult Muslim man); this doctrine was most successful in the Gulf. Although the Ibad sect largely disappeared from Yemen after 1200 AD, it has remained the dominant sect in neighboring Oman until the present day. The Kharijite movement, however, was always a minor one in the Islamic world.

Most Muslims were Sunnis, while a large minority was Shi’ite, literally “partisans of Ali,” (the fourth caliph, 656-662 AD). The split in Islam into the Sunni and Shi’ite sects resulted from a civil war in 662 AD, during which al-Mu’ayyad, the first Umayyad caliph, ousted the fourth caliph Ali, Mohammed’s son-in-law. Al-Mu’ayyad justified his action by claiming that the caliph must be from Mohammed’s tribe, not necessarily from his immediate family. On the other hand, Ali’s partisans maintained that a caliph had to be a descendant of
Mohammed. During the next several centuries the Shi’ites themselves split into factions that recognized different successions of imams as rightful heirs to the authority of the prophet Mohammed. The members of the Shi’ite sect were most numerous in Iraq and Iran, but late in the 9th century AD, Yemen became a battleground for three Shi’ite groups: the Fatimids, the Qarmatians, and the Zaydis.

The Isma’ili sect belonged to a secretive branch of Shi’ism that arose during the mid-9th century AD. The sect very soon split into two parts, each of which established governments: the Fatimids in North Africa and Egypt, and the Qarmatians on Bahrain in the Gulf. Isma’ili spread their beliefs through missionaries, and during the late 9th century both sects had missionaries in Yemen who competed with each other to gain local support and to establish imamates. The Qarmatian missionary was briefly successful in this, and he ruled Sana’a for several years. The Fatimid missionary, operating in the mountains west of Sana’a, converted some important families, but he did not find lasting political success. However, a century later a descendant of one of the early converts established the Sulayhid dynasty (1038-1138 AD), which ruled large areas of western Yemen and maintained close connections with the Fatimid rulers of Egypt. Queen Sayyidah Arwa was a famous Sulayhid ruler; she was a strong, assured woman who, rare in human history, ruled in her own name. She is still fondly remembered in Yemen even today.

At almost the same time that the Isma’ili missionaries began their efforts in Yemen, tribesmen in the Yemeni mountains invited Yahya ibn Husayn al-Rassi (died 911 AD) to come from Mecca to settle disputes between the tribes. Yahya accepted the invitation, and in 897 AD he established a Zaydi imamate in Yemen that endured in one form or another until 1962. The Zaydi sect held that only a male descendant of Hasan and Husayn, the sons of Ali and the Prophet’s daughter Fatima, could rightly be imam. In addition, the imam should be “the best” of his time in legal learning, piety, political ability, courage, and other qualities (Zaydis list 14 qualifications to be imam). A man who fulfilled the requirements and wanted to be imam would announce his candidacy for the position. The matter was decided by his success in rallying support; he remained the imam only so long as he commanded obedience. This system meant that the Zaydi imamate was not inherited by direct descent, that is, a father could not bequeath the imamate to his son; the office was open to contest. The imamate, however, did tend to stay within certain families, although it did not necessarily pass from father to oldest son. Even so, many Zaydi imams were renowned scholars and warriors in fulfillment of the requirements of their office.

Despite the Shi’ite proselytizing and rule, the majority of Yemenis remained main-stream Sunnis, literally followers of the “customary practice” (sunnah) established by the example of Mohammed. The Sunnis were not a unified group; they were divided into evolving schools of religious law and of theology. During the 9th and 10th centuries the Sunni differences settled into four schools of law, each named after the scholar who first expounded it. All four schools found some early adherents in Yemen, but only the Shafa’i school found widespread and lasting acceptance. Based originally in Egypt and Syria, the Shafa’i school presented a moderate interpretation of law, and Sufis—mystics who sought personal experience of God—often found a congenial home among the Shafa’is. In Yemen, the Shafa’i school first attracted adherents early in the 11th century, in the southern sections of the western mountains where farmers suffered under powerful landlords of Himyarite descent. The new sect soon spread to the nearby coastal plains to the west and south, and its
adherents established new centers of commerce and learning, including Ta’izz, Ibb and Bayt al-Faqih. The Ayyubid and Rasulid kings, foreigners who had long ruled western Yemen starting late in the 12th century, subsequently adopted the Shafa’i school as the official state sect, and so implanted it even more securely in this part of Yemen. During the 12th century the Shafa’i school also spread to Hadramawt, apparently brought by an immigrant scholar from Syria.

Sufi practices came to Yemen with the Shafa’i school, and in Hadramawt descendants of Mohammed’s family assumed a privileged role in the transmission of Sufi practices. In many parts of western Yemen and Hadramawt it became a common practice to make a ritual visit to the tomb of a Sufi saint to pray for intercession with God. The Zaydis in the north strongly disapproved of this practice and discouraged Sufism in general. These differences in religious beliefs and practices would occasionally lead to strained relations in the future between religious groups in Yemen.

Yemen thus endured nearly four centuries of unprecedented internal division, starting shortly after 800 AD. The political turmoil of conflicting small states and tribal interests was itself nothing new to Yemen, although in this case the confusion was particularly severe. Moreover, religious differences had flared up into violence even in pre-Islamic Arabia, most notoriously when the Jewish king of Himyar slaughtered Christians of the city of Najran (now in southwestern Saudi Arabia) in 518 AD. Despite the ideal that the Muslim community should be united, religious distinctions separated Yemenis into three major groups, the Shafa’i Sunnis, the Zaydi, and Isma’ili Shi’ites, plus several smaller groups. Just as doctrinal differences in the Muslim world at large sprang from competing views about political authority, so too in Yemen these differences were an important factor in the conflicts between local states and a rallying cry for recruiting military support. The Shi’ites, in particular the Fatimid, Qarmatian, and Zaydi movements, relied on a combination of proselytizing and war booty to attract and keep adherents. Moreover, the various sects themselves were not fixed; they sometimes split into competing doctrinal factions that occasionally fought each other, as occurred among Shafa’is in the mid-12th century and among Zaydis at the beginning of the 13th century AD. Happily for Yemen, this degree of religious contention proved not to be a permanent characteristic of the land. Over time the Isma’ili community shrank to become an insignificant proportion of the population, while Zaydi doctrine grew closer to that of the Shafa’is, especially after the 18th century, so that today Zaydis are often described as belonging to a fifth school of Sunni law.

Centuries of Foreign Domination

During the 12th century Yemen entered a period of foreign domination that would last for hundreds of years. The name of Saladin (Salah al-Din) is familiar to a western audience for his successes against the Christian crusaders in Palestine. Saladin, however, did more than fight the crusaders; he also established the Ayyubid state in Egypt and then extended his family’s control to western Arabia, including Yemen, in 1174. The Ayyubids governed a large area of Yemen until 1229 from their provincial capital in Ta’izz, a city in the south of the western mountains.

Yemen did not long remain under Egyptian control, but instead of reverting to indigenous rule, the region then fell into the hands of the Rasulids (1229-1454 AD). The Rasulids were a Turkoman family who had come
to Yemen with the Ayyubid occupiers. The Rasulid sultans (kings) kept Ta’izz as their capital, and adorned the city with magnificent mosques. By the end of the 13th century, the sultans ruled a kingdom that stretched from Aden to Mecca and from Zabid eastward to Dhofar (western Oman). The Rasulid sultan did not, however, effectively possess all of Yemen. The Zaydi imams fought the sultans for control of the northern mountains, where the sultans were able to restrict the imams’ authority to remote areas that the Rasulid armies could not conquer. In Hadramawt, the sultans kept careful control of port cities such as Mukalla and Shihir, but they gave a fairly free hand to local dynasties in the interior, provided that those rulers agreed to act as Rasulid governors. The Kathiris were the most important of these local dynasties, beginning in the 15th century.

The Rasulid rulers brought Yemen to a peak of cultural development and economic prosperity. They were themselves often very learned and curious in temperament; some were accomplished scholars who produced valuable works such as agricultural almanacs, a veterinary manual, and astronomical instruments (see lesson 7). On the economic front, Rasulid kings promoted agricultural improvements in many parts of the country; they even introduced new crops to Yemen (such as several varieties of bananas, melons, and rice) and established experimental farms. These efforts were so successful that Yemen exported food to other places, including Mecca. The Rasulid sultans also encouraged the expansion of Yemeni crafts and they took a keen interest in international commerce for the simple reason that the government’s income greatly depended on port taxes, notably in Aden. Merchants and diplomatic missions linked Yemen to ports around the Red Sea, the coast of East Africa, the Gulf, Iran, India, and, at least occasionally, China. The merchandise of this cosmopolitan commerce was typically exotic and expensive: rare spices such as pepper, cloves, and cinnamon; scents and ingredients for expensive perfumes, such as frankincense, myrrh, sandalwood, musk, and ambergris; precious metals and stones, including gold, silver, rubies, emeralds, diamonds, and industrial metals such as copper and iron; cloth and clothing of silk, linen, and cotton; horses, for which Yemen was famous; and slaves. The rich merchant ships attracted pirates, which the Rasulid navy helped to keep at bay. The navy also enforced the rule that ships coming from the Indian Ocean could not sail into the Red Sea. Instead the ships had to dock in Aden and transfer merchandise to other ships coming from the Red Sea. This procedure enabled Rasulid customs officers to collect the taxes that the state needed for its income.

The Rasulid sultans enjoyed far larger revenues than the Ayyubid rulers before them, but the commercial methods of the Rasulids also eventually contributed to their downfall. Early in the 15th century, the port tax officials grew greedy and tried to extort even higher payments from merchants. The merchants responded by avoiding Aden and, despite the efforts of the Rasulid navy, they sailed into the Red Sea to other ports. Over the course of twenty years, the tax revenues plummeted 90%, and eventually the sultan was unable to pay his soldiers. This financial disaster, plus family squabbling over the succession to the throne, doomed the Rasulid sultanate. In 1454 the Tahirid family succeeded the Rasulids and became the ruling family.

The Tahirids (1454-1515 AD), whose forebears had been Rasulid officials in Aden, moved the capital to Muqranah (about 80 miles southeast of Sana’a), and re-established the political and economic stability that the Rasulids had lost. The Tahirid sultans inherited and maintained the previous dynasty’s system of governance and economic policies, its patronage of the arts, and its international outlook. The international spirit of the Tahirid dynasty is perhaps best illustrated by the Amiriya Madrasa in Rada’, where the exuberant
painted decoration inside the domes of the prayer hall borrow patterns found in Indian textiles (see lesson domes XX).

However, things did not go well for long for the Tahirids. The Kathiri family had come to power in their native Dhofar (western Oman) late in the 14th century, and although they acknowledged subordination to the Rasulid and Tahirid sultans, the Kathiris extended their control to Hadramawt early in the 15th century. Then in the middle of the 15th century they asserted their full autonomy, seizing the important port at Shihir from the Tahirids. The Kathiri sultans relied on soldiers recruited in Yafi', a mountain area north of Aden, to sustain their power. This tactic was successful, and the Kathiri sultan soon ruled all of Hadramawt from his capital in Say’un. Eventually, however, the mercenaries from Yafi’ would strip the Kathiri family of almost all its power and establish their own local dynastic rulers.

At the end of the 15th century another development carried repercussions far more profound to the Tahirid dynasty, and ultimately to the entire world. In 1497 the Portuguese succeeded in sailing around the continent of Africa and entered the Indian Ocean. This feat allowed the Portuguese, and soon other Europeans, to obtain profitable commodities directly from producers in India and Southeast Asia. For the first time, Middle Eastern powers faced serious military and economic challenges from the south. The Portuguese were interested in commercial profit and, wanting to arrange trade in the Indian Ocean on their own terms, they used military force to reach this goal. They immediately established a network of fortresses along the coasts of East Africa, southern and eastern Arabia, India, and Southeast Asia, from which they imposed a system of trade permits on the local merchants. The Portuguese also attempted to extend their system into the Red Sea, but here they met armed resistance from the north. Since the 14th century the Ottoman Turks had been creating a powerful empire around the eastern end of the Mediterranean Sea and in 1517 they occupied Egypt. The Ottomans saw the Portuguese as a clear threat, which they countered by invading and occupying western Yemen. The Ottomans even sent their navy as far as the north Indian coast to battle the Portuguese.

In fact, Yemen endured two invasions during the first half of 16th century. The first invasion in 1515 came from Egypt, whose Mamluk rulers were subordinate to the Ottomans. The Mamluks destroyed the Tahirid sultanate and killed the Zaydi imam. The Mamluk invaders, however, soon withdrew and the new Zaydi imam moved south to fill the power vacuum. The expansion of Zaydi power did not last long. In 1538 the Ottomans themselves invaded Yemen and, for the second time in little more than a generation, Yemen suffered the ravages of foreign conquest. The Ottomans remained in western Yemen, including Aden, for nearly a century (1538-1636). The Ottoman Turks also obliged the Kathiri sultan in Hadramawt to accept subordination to the Ottoman Empire. During Ottoman rule, the authority of the Zaydi imams was once again restricted to remote areas in the northern mountains, from which they stubbornly resisted the invaders.

The Ottomans successfully kept the Portuguese out of the Red Sea, but the conflict between them also reduced western Yemen’s contacts with the Indian Ocean. The introduction of a new and valuable commodity to the world market, however, helped revive Yemen’s international trade—that commodity was coffee. The origins of the coffee bush are uncertain, but the plant is probably indigenous to Ethiopia. It was introduced to Yemen as a crop during the 14th or 15th century. At first devout Muslims debated whether coffee was a religiously acceptable beverage; they finally decided that it was. The drink was especially popular with Sufis,
who used it to focus their minds on their devotions. By the 16th century Yemeni merchants were carrying coffee for sale in Cairo, and by the middle of the 16th century a coffeehouse culture had spread to Istanbul. During the 17th century the taste for coffee spread from Istanbul across Europe, and Europeans carried their new habit with them to the New World and to distant parts of the Old World as well. During the early years of coffee-drinking Yemen supplied the world market. Yemeni coffee plantations—on the mid-range slope of the western mountains—grew the beans that were then taken to ports along the eastern Red Sea coast where international merchants congregated to purchase and export coffee. The most important of these ports was Mukha, and the English slang for coffee—mocha—refers to this port. Yemen’s domination of the world coffee market was brief. In the early 18th century European entrepreneurs managed to smuggle live plants out of Arabia and they introduced the crop to Brazil and Java. Yemen’s share of the market decreased precipitously. By the mid-19th century Yemen contributed only 0.5% of the world’s coffee production, and that share is now under 0.1%, around 5,000 tons a year.

The Ottomans were forced to leave Yemen in 1636. Starting around 1600 they had to contend with increasingly aggressive opposition from the Zaydi imams. The Zaydis harassed and gradually dislodged the Ottoman forces from their positions in the northern highlands and then from Tihama. Once the Turks were gone, the Zaydi imams did not stop their expansion; they soon controlled Aden and Hadramawt as well. Although Zaydi rule over all Yemen did not last long, it was only the third time that a Yemeni government ruled the entire country.

The 18th century and the first half of the 19th century was a period of increasing political fragmentation across Yemen. In Hadramawt, Kathiri power virtually disappeared, and the area was divided among many local warlords, especially of Yafi’ origin. East of Hadramawt the sultanate of Mahra also ruled the island of Soqotra. Aden and its hinterland achieved independence under the Abdali sultans of Lahj (an area of Yemen between Aden and Ta’izz), but Aden itself had become an insignificant place. Other parts of the south also split off from Zaydi rule. The imams still held sway over most of the western highlands and the Red Sea coast, but the Zaydi state was deeply troubled by political strife and economic lassitude. Yemen had again become a deeply divided land. Then foreign invaders returned, this time from two different directions.

The British had taken firm possession of India by the mid-19th century, and much of Britain’s strategic planning focused on protecting that possession. The government of India decided to occupy Aden because of the port’s strategic location; following a bombardment of the town, the British took Aden in 1839. They obliged the sultan of Lahj to sign an agreement that recognized British possession of the port in exchange for an annual payment.

By the mid-19th century the Ottoman Empire had lost much of its former power, but it still possessed the strength to extend its forces southward once again. First they occupied the Red Sea coast in 1849 and then in 1872 they occupied the western highlands. These actions restricted the Zaydi imam yet again to a tenuous position in remote northern sections of the western mountains.

The strategic importance of Yemen to both the British and Turkish invaders increased dramatically in 1869 when the Suez Canal opened. The canal—connecting the Mediterranean and the Red Seas—allowed direct shipping between the Mediterranean and the Indian Ocean, eliminating the need for overland transport of
goods between the two seas or for the long passage around the southern tip of Africa. Furthermore, the British and the Turkish navies now had more direct access to the Indian Ocean. Soon the two foreign powers came into direct confrontation within Yemen.

After several decades of difficulties, the sultan of Lahj and the British in Aden settled into a fairly amicable stand-off that was based largely on the British need to import food from Lahj and the sultan’s inability to evict the British from Aden. The British also established friendly relations with other neighboring rulers, but initially they had no real interest in the interior. The Ottomans tried to isolate Aden. First they attempted, unsuccessfully, to occupy Mukalla and Shihir, the two main ports of Hadramawt; then they successfully, although briefly, took control of Lahj during the year 1873. During the remaining years of the 19th century the British reacted to the Ottoman presence by strengthening their relations with the various rulers around Aden and with Hadramawt to the east.

Hadramawt had also undergone important political changes during the mid-19th century. The Kathiris again created a state from the political fragmentation of Wadi Hadramawt. The Kathiri sultan built a palace in his capital, Say’un; it still stands today as a regional museum said to be the largest mud brick structure in the world. The Kathiris, however, faced new opponents. The Yafi’ mercenaries, who several centuries before had fought for them, overpowered the Kathiris. They created the Qu’ayti sultanate, which initially ruled only the coast from their capital at Shihir and then from Mukalla. By the 1880s the Qu’aytis had extended their power over most of Hadramawt. They left the Kathiris in control only of a small enclave in the vicinity of Say’un and Tarim in Wadi Hadramawt.

Emergence of Modern Yemen - The 20th Century and a Unified Nation

At the beginning of the 20th century Yemen was largely divided between two foreign powers. The Turks ruled directly in the north, where they created schools with a European-based curriculum, laid telegraph lines between the important cities, brought in a printing press, and published Yemen’s first newspaper. They also involved Yemenis in debates about reforming and modernizing the Ottoman Empire. These innovations, however, were only superficial, and they touched the lives of a very small proportion of Yemenis. On the other hand, the British initially provided even less to their Yemeni subordinates. The British directly ruled only Aden, where they invested in improvements for themselves; they waited until the 1930s before they established schools for their Yemeni subjects. Beyond Aden the British ruled indirectly through treaties with local rulers. The treaties left local rulers in place and made them responsible for the internal affairs of their domains, but the British had power over the foreign relations of the rulers. The British and the Ottoman Turks also signed treaties in 1905 and 1914 that established the Yemeni boundaries between these two imperial powers. This border continued to divide Yemen into two parts until 1990, long after both foreign powers left Yemen.

The Ottomans did not have an easy time ruling Yemen, especially after Yahya Hamid al-Din became imam in 1904; he waged a dangerous rebellion against the occupation. In 1911 the Ottomans eventually managed to reach a power-sharing understanding with Yahya, but not before so many soldiers had died that Yemen became known as the “graveyard of the Turks.” The Ottoman alliance with the Germans and the defeat of this alliance in World War I caused the Ottomans to withdraw from Yemen; the last Turkish troops left Yemen
in early 1919. Imam Yahya then expanded his authority across Yemen north of the British zone, filling the political void that the Ottoman departure had created.

Imam Yahya essentially transformed northern Yemen into a hereditary monarchy, and he named his son Ahmad crown prince; both of these innovations were antithetical to Zaydi doctrine of governance. In addition, Yahya tried to limit northern Yemen’s interactions with the rest of the world. These aspects of Yahya’s rule made many Yemenis unhappy. Matters worsened in 1934 when Yahya lost a war with Saudi Arabia, and the Saudis took away the northern district of Asir. The 1934 peace treaty established the border between the two countries that still exists today, and Asir is still part of Saudi Arabia. This event proved to be a catalyst; groups opposed to the imam emerged, at first calling for reform and then for revolutionary change. Imam Yahya was assassinated in 1948 and the rebels tried to create a constitutional imamate, but Yahya’s son, Crown Prince Ahmad, rallied tribal support and kept his throne. Ahmad faced several coup and assassination attempts before he died in 1962. Then Ahmad’s son al-Badr became king, but he was overthrown only a week later by the September 26 revolution. The revolutionaries immediately declared a republic, but they had to wage a protracted civil war against royalist forces before the Yemen Arab Republic (YAR) became a functioning reality in 1970.

Meanwhile, the British were deepening their hold on southern Yemen. Aden became a Crown Colony in 1937, which meant that the government in London now ruled it. In the same year the British also organized other areas of the south into the Western and Eastern Protectorates, and they assigned a British political officer to monitor each protectorate. Shortly after these actions, the British started replacing the original protectorate treaties with advisory treaties, under the terms of which a British advisor counseled the local ruler. These measures effectively gave the British control of southern Yemen’s domestic affairs as well as foreign relations.

The boundaries of the protectorates were disputed and vague at first. The northern boundary of the Western Protectorate had been established in treaties with the Ottomans at the beginning of the 20th century, and a British political officer roughly defined the border of the Eastern Protectorate with Oman to the east during the 1930s. The northern boundary of the Eastern Protectorate, however, remained undefined. When exploration for oil accelerated in the Rub al-Khali (the Empty Quarter) of Saudi Arabia during the 1940s and 50s, the British also claimed that a portion of the Empty Quarter belonged to the Eastern Protectorate. Arguments arose over which government controlled potential oil-bearing areas. The British unilaterally declared a border between the Eastern Protectorate and Saudi Arabia in 1955, but this line did not become the recognized boundary between Yemen and Saudi Arabia until the two countries reached an agreement in 2000.

The British eventually created schools for Yemenis and some Yemenis pursued advanced studies abroad, but most administrators and office managers continued to be either British or Indian. Later, job opportunities expanded for Yemenis, especially when an oil refinery was built in Aden in the early 1950s. Shipping increased and Aden became the second busiest port in the world, surpassed only by New York, but labor strikes were common, and labor organizations provided a forum for expressing nationalist feelings and unhappiness with British rule. During the 1950s Arab nationalism spread widely through the Middle East, and the successful 1962 revolution in the north also encouraged southerners to take up arms against the British. Violent
confrontations occurred between Yemenis and the British during the 1950s, but British rule continued. In October 1963 a confrontation north of Aden marked the beginning of the southern revolution. The rebellion escalated until the British withdrew from southern Yemen on November 30, 1967. In 1970, after struggles between several factions, the southerners established the People’s Democratic Republic of Yemen (PDRY).

Both governments were founded on fundamentally different philosophies. In the north, the YAR was founded on republicanism, laissez faire economics, and non-aligned foreign relations. In the south, the PDRY was founded on Marxist party control, a state planned economy, and an alliance with the Soviet block. The results, however, were not dissimilar. The economies of both countries relied heavily on foreign aid, often from the same donors. The economy of North Yemen also benefited enormously from remittances, the money that Yemeni laborers sent home from their jobs in the Gulf. Oil was discovered during the mid-1980s and both countries began to export oil. Realizing that Yemen’s reserves were relatively small, both governments emphasized national development. They introduced modern educational systems, built roads and water systems, installed electric lines, and founded hospitals and medical clinics.

The two new republics of Yemen co-existed uneasily for two decades; they even fought border skirmishes on several occasions. Despite their deep differences in political ideas and economic systems, however, the two Yemens entertained the idea of unification as early as 1972. After several false starts, unification was achieved on May 22, 1990; the border between the two countries disappeared and the Republic of Yemen was established.

**North and South Yemen**

Prior to unification in 1990, Yemen was divided into North Yemen (the Arab Republic of Yemen) and South Yemen (the People’s Democratic Republic of Yemen).
The Republic of Yemen was founded on the principles of political pluralism and democratization, and of opening up social and economic life. Yemen is the only country on the Arabian peninsula with universal suffrage—all adult citizens, men and women, can vote. Since the establishment of the republic in 1990, the citizens of Yemen have participated in politics; international observers of the parliamentary elections of 1993, 1997, and 2003 concluded that the elections were generally free and fair. Yemen also has a relatively free press, important in a democracy for political and social debate; opposition newspapers can and frequently do express dissatisfaction with the government. Yemen’s press still remains one of the most open in the region, despite increasing restrictions since the late 1990s.

The process of unification and democratization has not been easy. Unification came shortly before Iraq invaded Kuwait in the summer of 1990. Yemen was a member of the United Nations Security Council that year, and during the debate in the United Nation’s concerning an appropriate response to the invasion Yemen abstained from the vote to condemn Iraq. This position angered the Gulf States and the United States, which responded with economic punishments. The Gulf States cancelled their economic assistance to Yemen, worth $300 million, and the United States reduced its aid to Yemen from $42 million to $3 million. In addition, approximately a million Yemenis working in Saudi Arabia, Kuwait, and other Gulf states, were deported back to Yemen. The resulting economic crisis was severe. Yemen abruptly lost a large proportion of its annual budget, lost the benefits of remittances, and faced the problem of finding a million new jobs.

Still reeling from the economic crisis, Yemen then faced a domestic political crisis in 1994. Elements of the former PDRY attempted to secede from the union and started a civil war. The war lasted only two months and resulted in a crushing defeat of the southern forces. However, the war (and the reconstruction in its aftermath) was expensive and set the economy back even further. Shortly afterward, East Asia experienced its own economic crisis and Yemen’s trade with that region collapsed. Moreover, the price of petroleum dropped to the lowest level since the early 1970s, reducing Yemen’s income from its main export.

Other events since the mid-1990s have hindered economic recovery. Kidnapping (hostage-taking) and terrorism have hurt Yemen’s economy. Tribal leaders, seeking to embarrass the government, kidnapped foreign tourists and released the hostages in exchange for government concessions. Incidents of tribal kidnapping ended peacefully and the hostages were usually treated hospitably; the kidnappings stopped in 2002 but flared up again in 2006. Terrorism, however, is perhaps a more critical factor. In 1998 a fundamentalist Islamic group kidnapped 17 tourists, four of whom died when government forces rescued them. The bombing of the USS Cole in Aden (2000), the bombing of the French freighter Limburgh at sea near Mukalla (2002), together with several other events, gave Yemen the reputation as a safe haven for Islamist terrorist organizations. The attacks on the Cole and Limburgh doubled the insurance costs for ships destined for Yemeni ports. In fact, the government of Yemen has been a partner in the US-led war on terrorism, but a reputation once earned can be hard to shake off. Foreign businesses remain reluctant to invest in the Yemeni economy, which is still based largely on the country’s small petroleum industry and on international aid.

These events devastated the economy and worsened the financial situation of most Yemenis. Some numbers illustrate the human cost of events during the 1990s:
per capita GNP plummeted from a 1990 rate of $701 to $275 in 1999; the price of a 50-kilo bag of rice rose 575 per cent from 1990 to 1996; poverty levels doubled between 1992 and 1998; unemployment was estimated at 40% in 1998;
the Yemeni government expenditure on health care decreased by 37% and on education by 28% between 1990 and 1996.

An additional illustration of the tragic circumstances for many Yemenis is the slow but steady decline of the once stable middle class. In 1984, a US dollar bought four Yemeni rials (YR), and the average public school teacher earned about YR 4,000 each month, about $1,000. In 2005 the same teacher earned around YR 15,000 a month, but that year a US dollar was equivalent to around YR 190: the teacher’s monthly income was only $80. Since 1995 the Yemeni government has undertaken a variety of economic and governmental reforms, but many of these programs have yet to be implemented fully and their effectiveness remains uncertain.

Traditional Yemeni Society and Recent Changes

Yemeni society, certainly in the past and even today to a considerable extent, was shaped by the combination of its geography and history. We have seen that Yemen’s geography offers diverse possibilities to farmers and herders, provided that they develop suitable methods for gaining their livelihood from this often difficult terrain. Even today the majority of Yemenis live in the countryside; in the past cities and towns held only a small fraction of the population. The rural majority lived in tribal farming groups that claimed territorial rights to land and water. The members of each tribe claimed descent from a common ancestor, who gave his name to that tribe and the tribe’s territory. The relationships between tribes were also expressed as genealogy, and ultimately all of the indigenous Yemeni tribes claimed descent from Qahtan, the ancestor of all the southern Arabs. So, Yemeni place names simultaneously express a geographical location, a genealogical claim to land, and historical relationships to other Yemenis. Many Yemeni place and tribal names can be traced into the country’s pre-Islamic past, and they attest to Yemen’s impressive continuity and resilience to change over the past two thousand years and more.

The tribes formed the enduring heart of Yemeni society. Tribesmen lived by a code of conduct that emphasized autonomy and self-reliance, personal and group honor, martial skills, and a fierce pride. Obligations of the individual to the tribal group required tribesmen to come together under specific conditions, often concerning a breach of honor, when they took action under the guidance of their shaykh (literally, “old man”). These qualities made for frequent but small-scale wars between tribes, in efforts to maintain group honor. These qualities also made for uneasy relations between tribes and any central government that tried to force tribes to submit to an external authority.

In this regard geography was a formative factor. As we saw, the important regional kingdoms typically had their centers in the richer farming areas of Yemen, where high rainfall, as seen around Ta’izz and Ibb in the southern highlands, or seasonal floodwaters, as in Marib, Wadi Hadramawt and sections of Tihama and Lahj, allowed productive and relatively reliable agriculture that gave central governments a solid revenue
base. Over time many farmers in these areas lost their land and became share-croppers on estates owned by others, and gradually tribes lost their group functions. The northern highlands, however, do not have a rich farming environment; here farming each year faces the real possibility of insufficient rains and of crop failure. This situation encouraged tribes to maintain their boundaries against encroachment by a neighboring group, and also it encouraged them to raid more prosperous areas during difficult times. Governments had fewer possibilities for taxing agricultural products and they also had difficulty imposing rule in the face of the tribal insistence on autonomy. The tribal martial spirit, however, did make the northern highlands an ideal place for an aspiring ruler to recruit armed support for his cause, in exchange for material rewards, including grants of land in greener regions to the south. In fact, many of the large agricultural estates, farmed by sharecroppers, in the southern highlands were owned by tribesmen from the north.

The ecological, historical, and social differences across Yemen coincide with several other distinctions of religion and politics. Many of the various schools of early Islam entered Yemen during the 9th-12th centuries AD, but only a few of them took deep root and persist in Yemen until the present day. The Shafa‘i school was successful in the southern highlands and in Hadramawt, whereas the Zaydi school of Shi‘ism found a home in the northern highlands; the Isma‘ili community in Yemen is now reduced to a small number of people in the highlands west of Sana‘a. The Shafa‘i success was due partly to the efforts of the Ayyubid and Rasulid sultans, who espoused this school, but the tenets of Shafa‘i were just as important; they appealed to the poor tenant farmers who made up the majority of the population in the southern highlands and Hadramawt. Similarly, the Zaydi school of thought was more congenial to the tribal spirit of the northern highlands, particularly as the Zaydi process of selecting the imam, by his ability to rally armed support, allowed tribes to maintain their autonomy and to reap material benefits at the same time.

The tribal farmers and herders were not, of course, the only social groups in Yemen. Other groups existed in tribal territories and also in cities and towns. Sayyids—those who claim descent from Mohammed—enjoyed social prestige and certain privileges. Sayyids commonly were arbitrators and religious specialists, but, depending on their circumstances, they might engage in more ordinary occupations. They formed the government apparatus of the Zaydi imamate in the northern highland, and they were also politically important in Hadramawt. Some tribesmen could, through religious learning, attain the status of “judge” and engage in public activities similar to those of the sayyids. The successful judge could then pass his status down to his children, but he could never attain the social rank of a sayyid because of his “ordinary” ancestry.

Other groups filled occupations that a tribesman considered dishonorable. People working in the market—merchants, retailers, peddlers, craftsmen and suppliers of specific services such as barbers, butchers, and circumcisers—often lived in cities, but many lived and worked in rural settings where they came under the protection of specific tribes. The ancestors of these people seem once to have been tribesmen who lost that status, perhaps because they lost their land or because they acted dishonorably.

Several groups of outsiders also existed in Yemeni society—members of the Jewish faith, descendants of East Africans, and Indian merchants. Jewish communities, sometimes quite large, existed in many cities alongside the Muslim majority, and also in rural villages. Yemeni Jews were famous for their skills as
silversmiths; they also engaged in other crafts and some were farmers. Jewish communities, present in Yemen from pre-Islamic times, came under the protection of the Muslim majority, but they were obliged to wear identifying markers (e.g. long side-locks) and to pay a special poll tax. Muslims of African origin, variously said to be the descendents of Ethiopian invaders or of former slaves, formed their own communities mainly in the coastal areas, where they were share-croppers and hired labor in agriculture and fishing; they also lived in coastal cities where they performed tasks considered degrading such as street-sweeping and collecting night soil (human waste). Small groups of Indian merchants lived in the major cities both along the coast and in the interior, where they engaged in international trade and banking.

The specifics of these social groups, and of the relationships between them, varied considerably in detail across Yemen, but many places held in common a core hierarchy of social rank and prestige. The tribesmen were considered to be the “real” Yemenis at the social center, because of their ancestry and because of their honorable actions; they typically carried arms to proclaim their status. Tribesmen acknowledged that descent from the family of Mohammed gave the sayyids a superior social status, but this descent also implied that the sayyids were not really Yemenis at all. The families of learned men and judges achieved a special social status that somewhat elevated them above ordinary tribal status, yet they retained their tribal links. The detribalized market specialists performed necessary yet demeaning tasks, and fell well below tribesmen in social rank. The outsider communities, defined by different combinations of origin, appearance, and religion, were tolerated and to some extent lived in protected spaces of low status around the edges of tribal society or in the more cosmopolitan confines of the major cities.

The strong emphasis on ancestry and honor that defines all these groups had the effect of limiting upward mobility; the status of your parents basically decided your position in life. For example, if you were born to market-specialist parents you could not become a tribesman or a sayyid, even by buying land or amassing wealth. Moreover, your choices in marriage were largely restricted to partners from the same social status, because of the dishonor implicit in allowing a child, especially a daughter, to marry “beneath” him or her.

This social hierarchy functioned well into the 20th century. Most Yemeni Jews left for the new state of Israel at the end of the 1940s or thereafter (only several hundred Jews remain in Yemen today), but this exodus had little effect on the principles of Yemeni social organization. Real change came with the 1962 revolution in North Yemen and the 1967 departure of the British occupiers of South Yemen. One goal of the 1962 revolution was the elimination of all social distinctions between Yemenis and in the south the socialist government abolished the special privileges of sayyid families. However, deeply engrained attitudes cannot be changed simply by revolutionary ideals or legislation, and just as with the civil rights movement and legislation in the United States, the fruits of these changes in Yemeni society took several decades to emerge.

The remittances from the many Yemeni men working in the Gulf countries during the 1970s and 80s were important for bringing about social change; internal migration to the major cities and expanded opportunities for higher education were other important factors. Many tribesmen invested their savings in small grocery stores or in taxis, entering the money economy, but they did not lose their sense of tribal identity. Some low-status market specialists established businesses and now could use their wealth to create social prestige. People of African origin moved in large numbers to the major cities where some employment programs were
so successful that others claimed to belong to this group in order to qualify for jobs. Government offices employ educated people of all sorts of social background, and military service offers people of humble origin a chance for advancement.

These activities, some by individual choice, some by government policy, some by changing social atmosphere, and all unthinkable just several decades earlier are breaking down the economic and, to a degree, social barriers between the traditional social groups. Social background, however, still counts in modern Yemen, where tribal connections greatly improve one’s chances of success, where prejudice still clings to low-status family backgrounds, and where tribes in some parts of the country still resist government intrusion into its affairs. Yemen has loosened the restrictions of traditional society, but considerable ground remains to be covered before the country attains its revolutionary goals of the 1960s.

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Vocabulary

Ancestor: one from whom a person is descended and who is usually more remote in the line of descent than a grandparent.

Arab: a person, place, or thing that is associated with the ancient and present-day inhabitants of the Arabian Peninsula (southwestern Asia), and often applied to the peoples who share a common ancestry, language, and culture. The Arabic language is the main symbol of cultural unity among these people. There are 22 Arab nations extending from the Arab Gulf in the east to the Atlantic Ocean in the west (including Algeria, Bahrain, the Comoros Islands, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the United Arab Emirates, and Yemen) with a population of about 300 million. Arabs belong to many different religions, although the religion of Islam predominates at this time.

Arabic: the Semitic language originating on the Arabian Peninsula and today the prevailing language in much of southwestern Asia and North Africa.

Autonomy: the quality or state of being independent, free, and self-directing. The degree of self-determination or political control possessed by a group or unit in relation to the state or political community of which it forms a part.

Ayyubid: a dynasty of the end of the 12th to the middle of the 13th centuries, founded by the famous Kurdish officer Salah al-Din Ayyub (the famous Saladin who fought the Crusaders and captured Jerusalem), which ruled Syria, Egypt, and Upper Mesopotamia. Saladin also conquered Yemen and the Ayyubids ruled there from 1174 - 1229 AD.

Byzantine: of or related to the powerful Byzantine Empire from the 4th to the 15th centuries AD; its capital city, Byzantium, is the modern-day city of Istanbul in Turkey.

Caliph/Caliphate: the term used by the dynastic rulers of the Muslim world referring to the successor to the prophet Mohammed as the political and military ruler of the Muslim community. The first four successors to that office were chosen by consensus of the Muslim community’s elders and were known as “leaders of
the believers.” After them the caliphate became hereditary.

**Christianity:** the religion of Christians, who believe in one God and whose beliefs and practices stem from the life, teachings, and death of Jesus Christ. The religion recognizes the Bible (the New Testament and the Old Testament) as the basis for its beliefs and practices. Christianity is a monotheistic religion.

**Crown Prince Ahmad:** Ahmad Bin Yahya Hamid al-Din, the next-to-last Zaydi Imam of Yemen who ruled from 1948 until his death in September 1962. His son, al-Badr Muhammad, succeeded him briefly.

**Frankincense:** a fragrant gum resin from the *Boswellia* tree that is indigenous to south Arabia.

**Genealogy:** an account or history of the descent of a person, family, or group from an ancestor or ancestors or from older forms. A study of family pedigrees and the methods of the investigation of them.

**GNP:** Gross National Product. The total value of the goods and services produced in a nation during a given year; it is the broadest measure of the output of goods and services by an economy. Per capita GNP: a country’s GNP divided by its population, that is, the amount that each person would have if the GNP was equally divided.

**Gulf:** the Arabian/Persian Gulf, a part of the Arabian Sea extending into the land; the Arabian or Persian Gulf is surrounded by the countries of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates, Iraq, and Iran. In general terminology, a part of the ocean or sea extending into the land.

**Gulf States:** the nations surrounding the Arabian Gulf include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates, Iraq, and Iran.

**Hierarchy:** a form of government administered by an authoritarian group. The classification of a group of people with regard to economic standing, social standing, or ability.

**Himyar:** the people and the last great empire of pre-Islamic Yemen that ruled from the southern highlands from 115 BC - 525 AD.

**Imam:** in Yemen the title refers to the theocratic Zaydi ruler who was chosen from among the religious elite to be the spiritual, temporal, and military leader of the community. Also, the leader of prayer in a mosque.

**Imamate:** the Imamate designates the theocratic institution of Zaydi Imams who ruled various parts of Yemen for nearly 1,000 years, until the revolution of 1962.

**Indigenous:** native or belonging to a place.

**Islam:** the religious faith of Muslims characterized by a belief in one God (Allah), the sole deity, and a belief in Mohammed as the last of his prophets. It was established in the 7th century AD. The Quran forms the basis of Islam’s beliefs and practices. Islam is a monotheistic religion.

**Isma’ili:** a Shi’ia Muslim community named after Ismail, the eldest son of Imam Jafar al-Sadiq (d. 765), in whose progeny they have recognized a continuous line of Alid imams. Isma’ili’s attempted, without lasting success, to establish a political base in Yemen in the 9th and 10th centuries AD.

**Judaism:** the religion of the Jews characterized by a belief in one God, who was revealed to Abraham, Moses, and the Hebrew prophets. The Hebrew Bible or scripture (the *Tanakh*) that forms the basis of Jewish beliefs and practices consists of three divisions: *Torah* (Law), *Neviim* (Prophets), and *Ketubim* (Writings). Judaism is a monotheistic religion.

**Marib:** name for a region, province, town, and dam in central Yemen. Marib, the town, was the capital
From the Queen of Sheba to the Republic of Yemen

of the pre-Islamic Sabaean Kingdom.

Monarchy: undivided rule or absolute sovereignty by a single person. A territorial unit (such as a nation or state) having a monarch as chief of state.

Monotheism: the belief in and/or worship of one God (e.g. Judaism, Christianity, and Islam).

Muslim: one who follows the religion of Islam; literally, one who “submits to the will of God.” There are over 1 billion Muslims worldwide.

Myrrh: a fragrant gum resin from the Commiphora abyssinica tree that is indigenous to south Arabia.

Ottomans/Ottoman Empire: a vast state created by Central Asian Oghuz Turks from ca. 1300-1923; its territories ultimately encompassed Southeastern Europe, Anatolia, the Middle East to Iran, and North Africa.

Polytheism: the belief in and/or worship of many gods.

Prophet Mohammed (570 – 632 AD): the last prophet recognized by the Quran, whose teachings, encompassing religious, social, and political principles, became the basis of Islamic religion and civilization. (also: Muhammad)

Proselytize: to attempt to bring converts into a religious group. To recruit members for an institution, team, or group especially by the offer of special inducements.

Protectorate (Eastern and Western): in 1937 Britain made the port city of Aden a crown colony. The nearby land in south Yemen was designated as the Eastern and Western Protectorates. The protectorates were inhabited by numerous separate tribes whom the British treated as under their protection. They were formed and maintained by a complex combination of truces, money, British supervision, and force.

Rasulid: a dynasty (1228 - 1454 AD) of Yemen founded by Nur al-Din al-Rasuli.

Shafa’i: a school of Islamic (and Sunni) law founded by Muhammad ibn Idris ibn al-Abbas ibn Uthman ibn Shafii. Muslims who adhere to the Shafa’i school of jurisprudence (one of the four great doctrinal schools, or branches, of orthodox Sunni Islam). It was permanently established in Yemen by the end of the 13th century; it is still the dominant school of law in southern Yemen. (also: Shafii)

Shi’ia/Shi’ite: Shi’ia Muslims, the followers or party of Ali, believe that Mohammed’s religious leadership, spiritual authority, and divine guidance were passed on to his descendants, beginning with his son-in-law and cousin Ali ibn Abi Talib, his daughter Fatima, and their sons, Hasan and Husayn. (also: Shii, Shism)

Suez Canal: a 101 mile-long canal finished in 1869, connecting the Mediterranean and the Red Seas.

Suffrage: the right to vote.

Sufism/Sufi: Islamic mysticism. Sufis are devotees of various mystical branches of Islam that developed from the 7th century AD. The first historical references to Sufism in Yemen are in the 12th century AD. Sufism focuses inward; its practices strive for closeness to God, beauty of character, and sincerity. Sufism is unrelated to the Sunni/Shi’ia split.

Sunni: The Sunnis are the largest branch of the Muslim community. The name is derived from the sunnah, the exemplary behavior of the prophet. All Muslims are guided by the sunnah, but the Sunnis stress it, as well as consensus (ijma).

Tribe/Tribal: describing a type of social organization of the pre-modern world and still dominant in many
regions (still influential in Yemen) that provides social organization, a system of laws, a code of behavior, and conceptions of honor to individual members of a tribe who often share a common ancestry.

Wadi: a dry watercourse that becomes a river during the rainy season.

Wadi Hadramawt: a long, wide, river valley located in southeastern Yemen.

Zaydis: followers of a sect within Shi’ah Islam. Zaydis separated from the main Shi’ah branch over a disagreement as to who was to be the fifth Imam. They wanted Zayd bin ‘Ali Zain al-Abdin, the son of the fourth Shi’ah Imam and the great-great-grandson of the Prophet Mohammed. Zaydis first established themselves in Yemen in 897 AD, and even today Zaydism is the dominant form of Islam in the highlands of Yemen.

Zaydi Imamate: the “Imamate” designates the theocratic institution of Zaydi Imams who ruled various parts of Yemen for nearly 1,000 years, until the 1962 revolution.

Bibliography


Lesson 1. Between Yemen and America

“It is generally said that the sun does not rise upon a land that does not contain a man from the Wadi Hadhramaut.”
Sir Richard Burton

Introduction

Yemenis have been known throughout history as great travelers, sometimes visiting elsewhere for a short period and at others settling permanently and establishing communities. This Yemeni diaspora scattered communities to other parts of the Arabian Peninsula, Africa, and Asia, including: Ethiopia, India, Indonesia, Malaysia, Borneo, Singapore, Kenya, Madagascar, Comoros, and Zanzibar. In the 7th and 8th centuries AD Yemenis served as soldiers to expand Islamic empires across Asia, into North Africa, and into Islamic Spain, often settling in the places that they conquered. Yemenis from diverse locations served on vessels that sailed the globe to seek their fortunes. Many of these adventurers maintained connections to their homeland, bringing Yemeni influences to their immigrant host countries and enriching life back in Yemen through the transmission of ideas and architecture, and descriptions of life in the outside world.

It is assumed that the first Yemeni travellers arrived in the United States shortly after the opening of the Suez Canal in 1869, departing from the ports of Aden and Hudaydah, but the first documented arrival in the U.S. is found in church records in Buffalo, New York, dating from 1890. Since that time there have been ebbs and flows of immigration, but many immigrants eventually returned to Yemen. Currently, it is estimated that there are over 10,000 Yemenis with US citizenship residing in Yemen. Significant numbers of Yemenis who came to the United States, however, have settled permanently. According to H.E. Abdul Wahab al-Hajjari, Yemen’s Ambassador to the United States, estimates of the number of Yemeni-Americans vary from 80,000 to nearly twice that number. There are significant communities of Yemeni-Americans in New York City and California. Dearborn, Michigan, also boasts a significant permanent Yemeni community that originally worked in the auto industry. Yemenis seeking economic opportunity and political stability began settling in California in the 1960s. The California Yemeni-immigrant community currently numbers an estimated 25,000, with approximately 6,000 in the San Francisco Bay area and a large concentration in the San Joaquin Valley, where they work in agriculture. Another significant wave of Yemenis began arriving in the United States in the late 1950s; they came seeking education. This movement began as a trickle and is now a steady stream, largely due to hundreds of scholarships that Yemenis have received from the United States government.

While many Yemenis have sojourned outside the borders of Yemen, there has also been a steady flow of foreign visitors to south Arabia beginning in antiquity and continuing today. For over twenty-four centuries the southwestern tip of the Arabian Peninsula has been referred to as Arabia Felix (Latin for fortunate, prosperous, or fertile Arabia). This reputation contributed to a Roman attempt to conquer the Sabaean civilization of early Yemen. The Roman Emperor Augustus sent an expeditionary force under the command of Aelius Gallus in 24 BC to gain control of the incense trade. The Roman army turned back at the walls
of Marib; its force was deterred by heat, thirst, and illness. Greek and Roman historians and geographers like Strabo (a friend of Aelius Gallus), Pliny, and Ptolemy recounted the Roman failure and spoke of the fabulous wealth of south Arabia. A commercial guide written in the 1st century AD listed the ports of Arabia and India, and gave advice to merchants about what they could buy and sell in each port. In the early 13th century the famed traveler Marco Polo described in detail the island of Soqotra (see lesson 5), local pirates, and Christian sorcerers. This famed Venetian also spun quite a tale with his account of two islands off the coast of Yemen called Male and Female, the first populated only with men and the second only with women. The great Arab traveler Ibn Battuta visited Yemen, probably in 1330 AD, and he described Sana’a as a large and well constructed city, built with bricks and plaster. The earliest Americans to arrive in Yemen were sailors aboard ships sailing from Salem, Massachusetts, seeking coffee and other products, such as gum Arabic. The first documented American ship called at the port of al-Mukha in 1795 to purchase coffee. By the early 19th century American ships dominated the coffee trade and were the main exporters of these precious beans from al-Mukha, as well as from the ports of Aden and Hudaydah. In 1837 American cotton was introduced for sale in the al-Mukha market in competition with British cotton. The British also had a strong presence in Yemen; in 1839 they decided to occupy Aden in order to protect their Indian Ocean interests.

With the increase in American shipping in the region there were bound to be shipwrecks and other losses due to hazards in the Red Sea and Indian Ocean. In 1806 an American sailing vessel, the Essex from Salem, Massachusetts, was bound for the port of Hudaydah seeking Yemeni coffee. In a mysterious incident the captain and all crew members, except the cabin boy Johannes Herman Poll, were killed by reputed pirates in the employ of a Dhofari Shaykh and merchant Sayyid Mohammed bin ‘Aqil. For unknown reasons the young cabin boy Poll was spared and adopted by Sayyid Mohammed as his own son. He was given the name of ‘Abdullah and converted to Islam. He eventually married a local woman and, after the death of his adopted father in 1832, he was chosen as shaykh of the region. They referred to him as the “White Shaykh.” As the only son of Sayyid Mohammed he captained his merchant ships throughout the region and spent significant time in Yemen. Although he missed America, the love and loyalty that he developed for his adopted family during his early years prevented him from leaving Arabia. He spent the remainder of his life in Dhofar (southern Oman) and was remembered as a just and honest leader. Some of his descendants are still in the Arabian Gulf today.

The Reverend Samuel Marinus Zwemer, the first American known to reach Sana’a, did so in June of 1891. His first visit to Sana’a was only five days in length, but in 1894 he returned to Sana’a for two weeks, when he was arrested for smuggling Bibles. Even so, he was favorably impressed by Yemen, and he observed that after Baghdad, Sana’a was the most flourishing city he had visited in the region of Arabia. Reverend Zwemer went on to publish a number of books on his travels in Arabia (The Golden Milestone; Arabia, the Cradle of Islam; and Zigzag Journeys on Camelback).

Poll and Zwemer may have been the first, but they were not the last Americans to enjoy Yemeni hospitality. Thousands of Americans have had the opportunity to spend time in this mountainous country as tourists, workers, and scholars. The first American archaeologists visited Yemen in 1950 when local rulers
gave Wendell Phillips and his team of scientists permission to excavate the ancient cities of Timna’ and Marib. Archaeology in Yemen today is more scientific under the leadership of the General Organization for Antiquities and Museums in the Ministry of Culture. The remains of towns from Yemen’s past, sometimes nearly 5,000 years old, are still readily visible across the landscape. Yemen’s ancient heritage became known to many Europeans through the major exhibition of south Arabian antiquities that has been touring Europe and North America since 1997. The exhibition contained numerous artifacts excavated by Wendell Phillips in the 1950s and by other archaeologists from many countries. In 2005 the exhibit opened in the U.S. under the title “Caravan Kingdoms: Yemen and the Ancient Incense Trade.” The Yemeni government continues to welcome collaborations with foreign archaeologists in uncovering Yemen’s past. Many teams and individual archaeologists and students have worked in Yemen, many of them under the auspices of the American Institute for Yemen Studies (AIYS – see Appendix IV for contact information). Since 1978, AIYS has supported hundreds of students and scholars from America and around the world. Many of these students have gone on to contribute to the knowledge about this corner of Arabia, its people, and its history. The government’s policy of encouraging research through the General Organization for Antiquities and Museums and the Yemen Center for Research and Studies has provided the opportunity for hundreds of people from around the world to study Arabic in Yemen and to conduct research in all disciplines. In addition to archaeology, foreign scholars have studied Yemen’s history, politics, economics, anthropology, geography, linguistics, literature, as well as geology, and botany. The connections these scholars have forged with Yemeni colleagues, and the fact that many have returned to the United States to teach, has served to broaden the mutual understanding between America and Yemen.

Vocabulary

Aden: a long-inhabited harbor and city on the southwest coast of Yemen, on the Gulf of Aden of the Arabian Sea. In 1839 Aden and the surrounding area became a colony of the British Empire and served as an important commercial link in the Indian Ocean Empire until 1967, when it became the capital of the newly-independent People’s Democratic Republic of Yemen.

Dhofar (adj.: Dhofari): the western region of today’s Sultanate of Oman, bordering on Yemen.

Diaspora: a dispersion of a people of a common origin or beliefs.

Gum Arabic: water-soluble resins of several varieties of plants used for medicine, confectionery, and as an adhesive; called gum Arabic because they were exported from Arab ports and spread by Arab traders.

Hadhramaut: a province of Yemen that stretches from the Empty Quarter to the Gulf of Aden; its chief cities are Shibam, Say’un, Tarim, and Mukalla. It is well-known for the Wadi Hadhramaut, a long, wide river valley in southeastern Yemen.

H.E.: meaning His/Her Excellency, an honorary title used for Ambassadors, ministers, heads of state, and other important personages.

Heritage: something that is passed down or acquired from a predecessor, such as language, traditions, and property.
Hudaydah: city on the Red Sea coast of Yemen.

Ibn Battuta: a 14th century Arab traveler and author whose travels, including a brief stop in Yemen, covered over 75,000 miles—stretching from Spain to China.

Marib: name for a region, province, town, and dam in central Yemen. The town of Marib was the capital of the pre-Islamic Sabaeian Kingdom.

Precious: of great value or high price.

Saba (adj.: Sabean): a pre-Islamic kingdom that dominated the incense trade in the area from the 10th century BC to the 3rd century AD. Its capital was Marib and the Sabaeans built the great Marib dam. One of its reputed leaders was Bilqis, the Queen of Sheba (see lesson 2).

Sayyid (pl.: Sadah): honorary title used in to refer to descendants of the Prophet Mohammed.

Shaykh (pl.: mashayikh): traditional tribal leader of well-known ancestry.

Sojourn: to stay as a temporary resident.

Suez Canal: a 101 mile-long canal finished in 1869, connecting the Mediterranean and Red seas.

Wadi Hadhramaut: a long, wide river valley in southeastern Yemen.

Bibliography


1. Between Yemen and America

Classroom Activity
Appropriate Grade Level: Middle to High School.
Subject(s): Social Studies.
Goals/Focus:
- Inform students about connections between Yemen and America, historically and today.
- Facilitate understanding of the student’s own ethnic background.

Materials:
- Background information on “Between Yemen and America.”
- Collect resources that focus on the immigrant experience in America (videos, books, and maps) and that provide students with resources to research their own backgrounds. Research the history of your town or region, focusing on immigrant contributions. Collect resources related to the Arab-American immigrant experience that refers to the Yemeni experience.
- Have students bring photos, letters, or artifacts related to their family’s immigrant experience.
- A copy of Alexander de Tocqueville’s book *Democracy in America*.
- Find examples of Americans who were deeply influenced by other cultures in their work and creative endeavors (examples include Ernest Hemmingway, the journalist and author John Reed, Malcom X, Gary Snyder a Northwest poet influenced by Japan, the artist Mary Cassatt, and musicians such as Yo-Yo Ma, Linda Ronstadt, and Paul Simon, particularly his “Graceland” album).

Anticipatory Set:
Share the fact that since 1965 more than 20 million immigrants have arrived in the United States, with one million arriving each year during the 1990s. Today the US is experiencing one of the largest waves of immigration in history, where one in five American children are either foreign-born or born to immigrant-headed households. Find appropriate sections in *Democracy in America* that discuss the unique nature of American immigrant society.

Questions for Discussion:
- Why do immigrants leave their home countries and come to the United States?
- Where have significant groups of immigrants come from?
- What have been/are the challenges that immigrants have faced/faced upon arrival in the US?
- What positive (such as diversity) and negative impact (for example, on Native Americans) has immigration had on American history and culture?

The Lesson Procedure:
- Part 1: Ask students to read the background information (summarized for younger children).
- Part 2: Using the information that students have gathered on their own background and immigrant...
experience ask them to write or to give a report on their findings.

Part 3: Ask students to share information that they have gathered on the immigrant history of their local community/region.

Part 4: If there are students in the classroom from recent immigrant families, ask them if they would be willing to relate their personal experiences.

**Conclusion:**

Brainstorm with students on the positive aspects of the US continuing to be an immigrant nation (music, politics, sports, and science with new talent, ideas, and perspectives). Read a section of de Tocqueville’s *Democracy in America* about American diversity and character.

Elicit from students the names of Americans they may know who have lived expatriate lives (actors, musicians, writers, and artists such as Mark Twain, James Baldwin, Charlie Chaplin, and Paul Robeson). Focus on how their lives were enriched by their exposure to other cultures. Conclude by sharing examples that you have gathered about Americans who have been influenced by other cultures.

**Lesson Extensions:**

For younger students, read Janice Shefelman’s book *A Peddler’s Dream* (Houghton Mifflin Co., 1992) and use the accompanying curriculum unit produced by Nick of Time Books (see Appendix IV for contact information).

Explore the resource “Rethinking Columbus: the Next 500 Years,” edited by Bill Bigelow and Bob Peterson from *Rethinking Schools* to examine the impact of the “discovery” of America on native peoples. Available from: <www.rethinkingschools.org>.

Ask students to seek out older members of the community and to interview them about their memories of how their community has grown and changed.

Show the video *Tales from Arab Detroit*, by Joan Mandell. This documentary on the Arab-American immigrant experience features some of the challenges facing a Yemeni-American family in the Detroit community (for Grade 7 and above).

A number of articles on Yemen and Yemeni culture and society can be found on the websites of the British-Yemeni Society (<www.al-bab.com>) and the American Institute for Yemeni Studies (<www.aiys.org>).

**Further Resources:**

*Curriculum on Arab-American Identity.* Middle East Studies Center at Harvard University (<www.fas.harvard.edu/~gstudies/mideast/lessons.htm>). Grades 6-12.


For further information on the silk road see: *Silk Road Project*, which has developed excellent resources for teaching about the historic and contemporary contributions of the region
(<http:teachers.silkroadproject.org>). 


Lesson 2. The Queen of Sheba

Introduction

A royal caravan moves from oasis to oasis across the deserts of Arabia. Camel bags are filled with frankincense, myrrh, spices, gold, and precious stones, gifts befitting one of the world’s greatest kings. The beautiful Queen of Sheba rides sheltered from the harsh elements in her royal litter. She is surrounded by an entourage of soldiers, slaves, court nobles, and advisors and, according to one account, dwarves and green riders on piebald horses. The monotonous plodding of hooves consumes the miles between her kingdom and Jerusalem where she will visit King Solomon. The famed meeting between these two monarchs is described in the texts sacred to Judaism, Christianity, and Islam (I Kings 10:1-13; II Chronicles 9:1-12; and in the Quran, Surat al-Naml, No. 27). Since the 1st millennium BC when the Old Testament accounts were recorded, generations of storytellers have embellished this visit. The rich body of stories surrounding this royal encounter is evidence of the power of oral and written culture to entertain, as well as teach values, history and tradition.

As with many ancient religious events and characters that have been passed down through oral channels, the details are often debated. One central issue of discussion is the location of the rich and prosperous kingdom of the Queen of Sheba. Conflicting claims place her kingdom in the Arabian Peninsula or in Ethiopia. According to Yemeni tradition, the Queen of Sheba was a ruler of the kingdom of Saba, which flourished on the Arabian Peninsula from the 10th century BC to the 3rd century AD. Yemeni tradition and numerous Arab historians give this famed queen the name Bilqis. While historical certainty of the Queen of Sheba remains debated, there is no doubt about the existence of the Sabaeen civilization of Yemen, which flourished for some 13 centuries, with its capital at Marib. Today, one can still see the stone sluice of the famed Marib dam (see lesson 21) that irrigated the desert of Arabia from the sixth century BC to the sixth century AD. The foundation of the Sabaeen kingdom was agriculture, but its role in the incense trade was significant and provided yet another source for its famed wealth. In the Biblical accounts and the accounts of the Quran, the Queen of Sheba brought royal gifts with her; the gifts included spices, incense, and other aromatics.

According to the Biblical version of the encounter between the Queen of Sheba and King Solomon, as well as later accounts from both Arab and Jewish sources, the Queen posed a number of riddles to the King. In one the Queen asked “Tell me what is the water that comes neither from the earth nor the sky?” Solomon easily answered her quiz, “The sweat of horses.” In another riddle she posed the question “What is as black as the night and yet brings daylight to the world?” The King quickly replied “Oh gentle Queen, it is the oil that seeps from the ground and which lights our lamps.” Another question posed by the Queen was “What is as hard as stone and makes us weep with beauty?” King Solomon responded while gazing into the Queen’s lovely eyes “It must be kohl” (a black eye liner made from crushed antimony, a hard shiny rock common in Yemen, that has been used for beautification since ancient times). These riddles, and many others, have been passed down for generations to demonstrate the wisdom and cleverness of both the Queen of Sheba and King Solomon.
As with all great stories, their appeal lies not in the facts that they present, but in the wisdom that they impart and their ability to enchant audiences throughout the centuries. If that is the hallmark of a “great story,” then the tales woven around the meeting between King Solomon and the Queen of Sheba certainly qualify it as a story of great significance. The stones of Arabia may yet answer more questions about this great meeting with the assistance of archaeology and the work of epigraphers!

**Vocabulary**

*Allah*: the Arabic word for God. Arabic speaking Christians and Jews also use the word Allah, with the exact meaning of God, to refer to the single, universal, all-encompassing deity revered in Christianity, Islam, and Judaism.

*Biblical*: like that of the time and region that produced the Bible; from the Bible.

*Christian*: one who follows the religion of Christianity.

*Christianity*: the religion of Christians who believe in one God, and whose beliefs and practices stem from the life, teachings, and death of Jesus Christ. The religion recognizes the Bible (the New Testament and the Old Testament) as the basis for its beliefs and practices. Christianity is a monotheistic religion.

*Entourage*: attendants and associates surrounding an important person.

*Epigraphers*: those who study, decipher, and interpret inscriptions.

*Frankincense*: a fragrant gum resin from the *Boswellia* tree that is indigenous to south Arabia.

*Islam*: the religious faith of Muslims characterized by a belief in one God (*Allah*), the sole deity, and a belief in Mohammed as the last of his prophets. It was established in the 7th century AD. The Quran forms the basis of its beliefs and practices. Islam is a monotheistic religion.

*Judaism*: the religion of the Jews characterized by the belief in one God, who was revealed to Abraham, Moses, and the Hebrew prophets. The Hebrew Bible or scriptures (the *Tanakh*) forms the basis for its beliefs and practices; it consists of three divisions: *Torah* (Law), *Nebhiim* (Prophets), and *Kethubhim* (Writings). Judaism is a monotheistic religion.

*King Solomon*: ruler of ancient Israel (961-922 BC). Second son of King David; he was revered in both Judaism and Islam as a wise man.

*Litter*: a covered or cushioned compartment used to transport an important person; it could be placed on an animal or carried by humans.

*Marib*: name for a region, province, town and dam in central Yemen. The town of Marib was the capitol of the Sabaean Kingdom.

*Millennium*: a period of a thousand years.

*Monotheism* (adj.: monotheistic): a belief in and/or worship of one God (e.g. Judaism, Christianity, and Islam).

*Muslim*: one who follows the religion of Islam; literally, one who “submits to the will of God.” There are over 1 billion Muslims worldwide.

*Myrrh*: a fragrant gum resin from the *Commiphora abyssinica* tree that is indigenous to south Arabia.

*New Testament*: the second part of the Bible accepted by Christians as sacred scripture, comprising
the Gospels, Epistles, the books of Acts and Revelations

Oasis: a fertile or green area located in an arid or dry region.

Old Testament: the first part of the Bible; the term is used by Christians to describe a collection of selected writings composed and edited by members of the Hebrew-Jewish community between the 12th century BC and the Christian era. The number of books constituting the accepted Old Testament varies among religious groups.

Oral: transmitted, or passed on, through the spoken word.

Piebald: of two colors, usually black and white, with the spots making an irregular pattern.

Quran: the book composed of writings accepted by Muslims as revelations made to Mohammed by God (Allah) and as the divinely authorized basis for regulations and practices of the Islamic world.

Saba (or Sheba in English, adj.: Sabaean): a pre-Islamic kingdom that dominated the incense trade in the area from the 10th century BC to the 3rd century AD. Its capital was Marib and the Sabaeans built the great Marib dam. One of its reputed leaders was Bilqis, the Queen of Sheba.

Sluice: a passage for water fitted with a valve, or gate, for stopping and regulating the flow of water.

Surah (spelled and pronounced surat when modified by another word): a chapter in the Quran.

Bibliography


2. The Queen of Sheba

Classroom Activity
Appropriate Grade Level: Grades 1 – 3 / High School.
Subject(s): Elementary – Art / High School – History/Literature/Comparative Religions.
Goals/Focus:
- To learn about the Queen of Sheba.
- Understand the importance of stories and mythology in human history.

Materials:
- Background information on “The Queen of Sheba.”
- For younger students: copies of the books Queen of Sheba by Marion Khalidi or “The Palace of Beaks” by Susan Milord (see references below in further resource section).
- For younger students: coloring handout of the alabaster sculpture nicknamed “Myriam” or the “South Arabian Mona Lisa.” (plate 1). For a photograph of this sculpture see: <www.geocities.com/Baja/Dunes/3147/> for the Yemenite Virtual Museum. The photograph can be found under “Exhibits” (the South Arabian Mona Lisa).
- For older students: collect versions of the Queen of Sheba story from various sources (the Bible, the Quran, internet, and your local library).
- Selections from resources that discuss the power and importance of stories, myths, and legends. See the work of Joseph Campbell, or books such as The Book of Virtues: A Treasury of Great Moral Stories by William J. Bennet and for older students Women Who Run With the Wolves: Myths and Stories of the Wild Woman Archetype by Clarissa Pinkola Estés.

Anticipatory Set:
Share some stories designed to encourage certain types of behavior from Western or American culture, such as Aesop’s fables or the story of George Washington cutting down the cherry tree, demonstrating the importance of selflessness or honesty.

Questions for Discussion:
- Do you know any stories that are designed to encourage certain types of behavior?
- How do stories/myths teach moral and ethical behavior?
- Older students: What are some names of famous queens that you can recall?

The Lesson Procedure:
- Part 1: Students read the background information (summarized for younger children).
- Part 2: Read aloud, or ask a student read aloud, the version(s) of the Queen of Sheba story that you have collected.
- Part 3: Younger students: color the sculpture and then draw a picture of how they think King Solomon
would look using the same stylized form of representation.

Older students: read something from the resources selected on mythology and stories.

Part 4: Older students: write a creative essay or poem on stories that have held meaning for them.

**Conclusion:**

Older students: share some of their writing with the class.

Discuss the importance of stories in our lives.

Students relate a story that held meaning for them.

**Lesson Extensions:**

For an image of the alabaster sculpture nicknamed “Myriam” see: <http://www.geocities.com/Baja/Dunes/3147/>.

Students gather other versions of the Queen of Sheba story and art work related to this figure and compare and contrast these tales. There are many Ethiopian versions of this story that present additional information and perspectives on this famous figure.

Talk about riddles in history using the exchanges between the Queen of Sheba and Solomon as a jumping off point. According to Yemeni Jewish tradition King Solomon had another exchange of riddles with the hoopoe bird when the wise bird tried to calm the famed king whom he had angered. Including: Question – What water never rises from the ground and never falls from the sky? Answer – a tear that falls from the eye in sadness. Question – What is it that is delicate enough to put food in a baby’s mouth, yet strong enough to bore holes in the hardest wood? Answer – A bird’s beak. A well-known riddle contest in 20th century literature is that between Gollum and Bilbo Baggins in *The Hobbit* by J.R.R. Tolkien (Ballantine Books, Chapter 5, pages 77-95). Another riddle asked with crucial consequences is found in *Harry Potter and the Goblet of Fire* by J.K. Rowling (Scholastic Press, 2000, Chapter 31, pages 629-630), when in the third task of the Triwizard Cup the sphinx poses a riddle that Harry must answer before he can proceed. Websites with some great riddles include <www.azkidsnet.com>.


For *Rub al-Khali* map, archaeology quest and satellite imagery activities related to the ancient trade routes of south Arabia created for the NOVA show “Lost City of Arabia” see: <www.pbs.org/wgbh/nova/ubari/index.html>. Grades 3-8.

NASA Observatorium Teacher’s Guides contain lesson material related to the lost city of Ubar on the Arabian Peninsula at: <http://observe.arc.nasa.gov/nasa/education/teach_guide/ubar.html>. Grades 7-12.

**Further Resources:**

Yemeni Sculpture—Head of a Woman

The alabaster head, nicknamed “Myriam,” depicts an unknown, idealized female. The sculpture was originally decorated with black paint on the hair and with blue lapis lazuli for the eyes. The head was adorned with earrings and a necklace (now lost). We know this because the ears are pierced and there is a small opening around her neck (under her curls) for a necklace. The sculpture is probably from the 1st century AD. Dimensions (in inches): Height 14.3, maximum width 7, and maximum depth 6.7. It was found at Timna, in a tomb at the Hayd Ibn Aqil graveyard, by archaeologist Alexander Honeyman (a member of Wendell Phillips’ team) in the early 1950s. The alabaster head has also been referred to as the “South Arabian Mona Lisa.”

Wendell Phillips led the first American archaeological team to work in Yemen. Timna was the capital of the Qataban Kingdom, an ancient south Arabian trading state that ruled in Wadi Bayhan and Wadi Harib area from 5th century BC to 2nd century AD.

See plate 1 for the student handout of “Myriam.”

Drawn by Maha al-Hibshi
3. Fragrance in South Arabia

Introduction

In Arabic, frankincense is known as luban, myrrh is murr, and all incense is called bakhour. These famed substances are actually dried tree resins, and the most expensive varieties grow on the slopes of modern-day Yemen and Oman. The tree resin is harvested by making incisions in the bark of the tree, which causes the sap to ooze out slowly. After the sap has dried, small nuggets are pried off and collected. The fragrance of frankincense and myrrh comes from the volatile oils that they contain: myrrh contains considerably more oil than frankincense (up to 17% of its total volume in the highest quality and when it is freshly gathered).

Myrrh and frankincense have a long history. The Epic of Gilgamesh (circa 2700 BC) states that in ancient Mesopotamia myrrh and other incense were burned to put the gods and goddesses in a pleasant mood. In the 15th century BC in ancient Egypt, Queen Hatshepsut so coveted these fragrant resins that she sent an expedition to the land of Punt (probably the coast of Somalia) to uncover the secret of their source. Myrrh was used to perfume the royal mummies of Egypt. In 450 BC when the Hellenic civilization was at its peak, the Greek historian Herodotus described Arabia’s aromatics: “The whole country is scented with them,” he wrote, “and exhales an odor marvelously sweet.” The Bible tells the story that the wise men presented precious gifts of gold, frankincense, and myrrh to the infant Jesus. By the 1st century AD the Roman writer Pliny estimated that more than 3,000 tons of incense were exported annually from south Arabia to the Mediterranean world. The incense was used to consecrate tombs, to mask the odor of cremation, and to enhance cosmetics and medicines. Frankincense and myrrh were even used widely in China by the 4th century AD.

The price of myrrh and frankincense has declined significantly since ancient times. The decline began with the coming of the Christian era. In the early years of Christianity, its leaders forbade the use of incense because they considered it a pagan tradition. Today in Yemen these two formerly royal substances are inexpensively sold along with an array of other kinds of incense. Strolling through the markets of Sana’a, one finds a wide variety of fragrant items for sale. Some rely on oils, resins or gums to produce fragrant smoke; others are scented woods, such as sandalwood and aloe wood. Women purchase their favorite concoction from a reliable source or create their own recipes. Walking along a street you may encounter the lingering scent of incense from an open doorway or clinging to a passing woman. Many Yemeni women scent their clothing with incense (bakhour). They drape the clothes over a two-foot tall cone-shaped basket frame. Ground incense is then sprinkled onto burning embers held in an incense burner (mabkhara in Arabic) that is placed at the bottom of the basket frame. The smoke of the incense saturates the fabric and produces a scent that clings to clothing for days. Incense is also burned to welcome guests, when rooms have been closed for extended periods, for special events such as births, and when paying respects to those who have died. Men also use incense at their gatherings; the most expensive incense is aloe wood or sandalwood, which are burned in small slivers.

Other fragrances of Yemen include perfume, which many consider a necessity for both men and women. In the marketplace you can find fragrances that imitate contemporary designer labels, such as “Yves Saint
Lauren” (sic), or more traditional essential oils. Yemenis take their personal hygiene seriously, because the Prophet Mohammed encouraged the use of perfume for men and women, as well as brushing the teeth with a miswak, a stick from the arak tree, preferably from the tree’s roots (salvadora persica, the “toothbrush tree”). Since the 10th century AD when the Arab doctor Avicenna invented the process of distilling the oil of flowers for perfume the Arabs have valued aromatic jasmine, lavender, and rose. Other essential oils used in Yemen include 'attar (perfume) from musk, duhn 'ud (aloe wood oil), henna, and ambergris. When in season, the fresh buds of Arabian jasmine are sold on street corners to drivers as they wait at the traffic lights. The off-white, or pale yellow, unopened blossoms are strung in necklace-form (similar to the Hawaiian lei, or flower necklace), or can be woven into a woman’s hair, saturating the air with its sweet delicate fragrance. The bride and groom often exchange jasmine necklaces as part of greeting one another at the wedding celebration. Sweet basil is an herb that is used for special occasions and daily use, worn in the hair, placed in vases around the room, or tucked into clothing of both men and women for its fragrance. Rue is yet another scented herb which is used in weddings and is placed in the room of a newborn baby to protect the mother and child from evil (see lesson 16).

Vocabulary

Ambergris: a fatty pitch-like aromatic substance used in making many perfumes. It is produced in the intestines of the sperm whale and usually found floating in tropical seas in lumps sometimes weighing up to 200 lbs.


Covet: to desire what belongs to another.

Cremation: the process of burning a dead body into ashes.

Distilling: to purify or extract essence from a substance by vaporizing it with heat, then condensing it with cold and collecting the resulting liquid.

Essential oils: volatile essences extracted from aromatic plants by steam, distillation, expression or solvent extraction. Essential oils are applied topically or inhaled, and act on physical, emotional, and psychological processes.

Hellenic: of, or relating to Greece, its people, history, culture, or art.

Musk: a fragrant substance secreted by male musk deer that is used as a base for many perfumes.

Prophet Mohammed (570 – 632 AD): the last prophet recognized by the Quran, whose teachings, encompassing religious, social, and political principles, became the basis of Islamic religion and civilization.

Queen Hatshepsut: Queen of ancient Egypt (1520 –1483 BC).

Volatile: a substance that changes readily from solid or liquid to a vapor.

Bibliography


3. Fragrance in South Arabia

Classroom Activity
Appropriate Grade Level: Grades 3 – 6.
Subject Area(s): Language Arts.

Goals/Focus:
- To introduce the history and origins of frankincense and myrrh.
- To learn about the use of fragrances in Yemen.
- To stimulate students’ olfactory senses.

Materials:
- Background information on “Fragrance in South Arabia.”
- Various scented items (rosewater, lemon, lemon extract, mint, mint extract, vanilla extract, etc.) placed in unlabeled, closed containers (such as an empty film canister or plastic squeeze bottle) with holes in the lids for easy sniffing.
- Blindfolds for the students (optional).
- A story highlighting the importance of fragrance in ancient times. Options include: Gilgamesh, Queen Hatshepsut’s expedition to Punt, or the story of Jesus’ birth and gifts from the wisemen. The following are resources appropriate for grades 3 – 6 related to the three options:
  - *Gilgamesh the King,* *The Revenge of Ishtar,* and *The Last Quest of Gilgamesh,* Ludmila Zeman, a beautifully illustrated Gilgamensh trilogy, Tundra Books
- Paper and pens/pencils for the students to write down their guesses.
- Copy of plate 2, the wooden incense burner.
- If appropriate, incense, matches, and incense burner.

Anticipatory Set:
- Read or tell one of the three story options.
- Share with students the observation by the French philosopher Rousseau that our sense of smell is of the imagination, with the ability to instill and refresh memories.

Questions for discussion:
- What is the importance of scent in your lives?
- What is the strongest scent that you remember and what experience do you remember or associate with it?
- What are the other four senses?
- If you had to choose to do without one of your five senses, which one would it be? Why?
The Lesson Procedure:

Part 1: Students read the background information (summarized for younger children).

Part 2: Set up the scented items (clearly numbered) on a table. The children take turns visiting the table, wearing the blindfold (the blindfold is optional), and writing down their guesses of the contents of each numbered container. Alternately, pass the containers with scents around the room.

Part 3: Reveal the information about what scent was in each container so that the students can see how well they “scored.” Discuss their answers. Did they like any particular scent? Did a scent evoke a pleasant memory? Were any of the fragrances unfamiliar to them?

Part 4: Older students: write a creative essay or poem on a memory that is triggered by a certain scent.

Conclusion:

Show the picture of the Yemeni wooden incense burner (plate 2) and discuss other kinds of incense burners. If appropriate, burn some incense in the classroom and ask students to recall images, memories, or associations that the scent evokes.

Discuss the experience. Older students can share their writing with the class.

Discuss how one’s sense of smell can be developed with practice (examples of a tracker, or a person whose sense of smell is heightened in comparison to that of a normal person).

Discuss how scents are often socialized, that is, how our culture and other cultures define certain substances as pleasant or unpleasant (for example, through advertising of perfumes and household products).

Discuss how smells are mnemonic, that our olfactory senses can trigger memories.

Lesson Extensions:

For images of ancient limestone incense burners from the Yemenite Virtual Museum from the 7th to the 4th centuries BC see: <www.geocities.com/Baja/Dunes/3147/>. Check under “exhibits” and look for the limestone incense altars.

For an exceptional example of a metal incense burner see: “Fountains of Light: Islamic Metalwork from the Nuhad Es-Said Collection” at the Arthur M. Sackler gallery of the Smithsonian. Find the gallery’s introduction at: <http://www.asia.si.edu/edu/essaid/intro.htm> and search the site for the collection (“fountains of light”).

Students make incense burners from clay, or other substance like Femo or Sculpi.

Students research other cultures and their use of incense (e.g. in the Americas the Mayas of Mexico burned balls of copal incense for their gods) and the types of containers used to burn incense.

Students search the web for sites and information on incense and share with the class.

Students research ancient trade in incense and other luxury goods between Europe, Asia, and Africa. See: “Become a Spice Trader,” a great interactive activity in which students (grade 7) take on the role of a Portuguese spice trader. <www.learner.org/exhibits/renaissance/spicetrade/begintrip.php3>

Research the history of fragrance in the library or on the internet.
From the Queen of Sheba to the Republic of Yemen

Further Resources:

Carved wooden incense burner (*mabkhara* in Arabic) from the Hadhramaut, Yemen. A metal plate protects the wood from the burning coals that are placed in the top of the *mabkhara* and then small pieces of incense or fragrant wood are sprinkled on the coals. Height 5”, width at the top 3” x 3” and at the base 2 ¼” x 2 ¼”, handle extension 2”.

See plate 2 for the student handout of the wooden incense burner.

Drawn by Maha al-Hibshi
Lesson 4. Early South Arabian Writing

Introduction

People have been creating visual symbols to communicate since the beginning of humanity. The emergence of signs to represent specific sounds and words, however, occurred relatively recently and fundamentally changed human communication systems. One recent theory about the origins of writing proposes that it grew in prehistoric times from a system of tokens – small clay counters of many shapes that served for counting and keeping track of goods such as animals, grain, and worldly possessions. It is generally agreed that writing first occurred in Mesopotamia, present-day Iraq, around 3300-3200 BC and, shortly after, in Egypt. Wherever writing began to be used, a number of challenges had to be met to communicate ideas, including:

*The writing instrument:* what to write with – throughout the history of writing many items have been used to write, including pointed sticks, chisels, quills, chalk, pencils, brushes, and pens. If one is using a quill or pen what liquid should one write with - e.g., ink, indigo, “dragon’s blood” (cinnabar, see lesson 5)?

*The writing material:* what to write on – cultures often used materials that were commonly found in their environment. Humans have written on varied materials, e.g, clay, wax, treated animal skins, pottery, paper, papyrus, silk, other types of fabric, and stone.

*The symbols:* what to write – humans have variously relied on pictographs (using pictures to represent words or sounds - like hieroglyphics), ideographs (where characters symbolize ideas not sounds), phonetic symbols, or combinations of these.

*The direction of the symbols:* should the characters be read from left-to-right or right-to-left, in columns from top-to-bottom, bottom-to-top, or alternating directions?

Deciphering written records is an important avenue to understanding past civilizations. Egyptologists have been able to recover ancient Egypt through the thousands of carved inscriptions that they have to study, as well as from texts written on papyrus, parchment, and pottery sherds. Writing has been known in Yemen for over 3,000 years; the earliest forms have come down to us in the form of inscriptions chiseled in stone and scratched onto pottery jars, dating from the 9th to 8th century BC. These early inscriptions concern religious rites or building projects. They are written in the south Arabian script that is called musnad in Arabic. Musnad uses only capital letters and has an alphabet of 29 consonant letters and it is read from right to left. Some early inscriptions of musnad are boustrophedon, which means that the direction of the script alternates; one line of script is read from right to left and then the next from left to right. A simple vertical stroke indicates the end of a word. Musnad was used over the millennia to write numerous languages, including the South Arabian dialects like Sabaean, Minaean, Qatabanean, Hadhrami, and Himyari, as well as Ethiopian languages including modern-day Amharic. Similarly the Roman alphabet is used not only for Latin, but for English, French, Spanish, German, and many other languages.

Until recently, scholars studying Sabaean had over 8000 musnad inscriptions engraved on stone as their primary material for study. There were some additional inscriptions cast in metal, a few informal inscriptions in the form of rock graffiti, and texts incised and then baked on pottery. In 1970, however, the
situation changed radically with the discovery of the first of many wooden branches or palm leaf stalks with texts written on them in a new variation of *musnad*. This new discovery was named ‘*usib* (pl. ‘*usub*) and it was nearly twenty years before this growing body of textual information could be studied, deciphered, and translated by a team of international scholars, although very few have actually been published. Today there are thousands of ‘*usub* located in Yemen and in museums throughout Europe. This new source of information significantly broadens our understanding of south Arabian societies. Unlike the monumental inscriptions carved on stone, the content of these ‘*usub* documents is usually personal and takes the form of private messages, letters, or information about business transactions. For example, one such message requests the recipient of the message to redeem his she-camel, left as security with the sender’s master. The ‘*usub* date primarily from the 1st through the 3rd centuries AD, although there are a few pieces possibly dating back as far as the 4th century BC. These valuable documents were preserved in areas of Yemen where the dry climate and conditions at the site of their storage were optimal. The ‘*usub* are written in a cursive, lower case script, contrasting with the capital form of writing used in the monumental inscriptions.

**Vocabulary**

- **Amharic**: a Semitic language spoken in modern day Ethiopia.
- **Boustrophedon**: the writing of alternate lines in opposite directions (i.e. one line of script is read from right to left and the next line is read from left to right).
- **Chisel**: tool with a sharp beveled end for shaping wood, stone, or metal.
- **Cursive**: of writing: flowing, often with the strokes of successive characters joined and the angles rounded.
- **Dialect**: a variation of a language that is distinguished from other expressions by vocabulary, grammar, and pronunciation.
- **Egyptologist**: a person who studies ancient Egypt.
- **Hieroglyphics**: a system of writing in which the characters are, for the most part, recognizable pictures of objects that are used to represent a word, a syllable, or a sound. Ancient Egyptians are well known for their use of hieroglyphs.
- **Himyar**: the people and last great empire of pre-Islamic Yemen that ruled from the southern highlands from 115 BC – 525 AD.
- **Indigo**: deep violet blue dye made from the leaves of the indigo plant. A dye commonly used in India, Egypt, and Rome. Large scale cultivation of indigo began in India in the 16th century; the East India Company imported massive amounts to Europe in the mid-16th century. In certain areas of Yemen indigo is traditionally used for dying cloth.
- ** Millennia**: thousands of years (sing.: millennium - one thousand years).
- **Optimal**: the best or most favorable conditions.
- **Papyrus**: a paper-like substance invented by the ancient Egyptians to write on. It was made from the stem of a water reed.
- **Phoenetic**: of or relating to spoken language or speech sounds; representing the sounds and other
phenomena of speech.

**Quill**: a pen made from the large feather from the wing or tail of a bird. It was dipped in ink and then used to write.

**Bibliography**


4. Early South Arabian Writing

Classroom Activity
Appropriate Grade Level: Grades 4 – 7.
Subject Area(s): Art.

Goals/Focus:
To learn about the history of writing and particularly the ancient south Arabian \textit{musnad} script.
To have students make paper and learn to write their name in \textit{musnad}.

Materials:
Background information on “Early South Arabian Writing.”
The handouts for this activity, the chart on the south Arabian alphabet and the chart comparing South Arabian, Roman, and Arabic alphabets by J.L. Daniels, II.

For supplies needed and detailed instructions for making paper visit this website: \texttt{<www.marcalpaper.com/how_paper_is_made.html>}. Calligraphy pens and appropriate ink.
Research local place names and their meanings, as well as how existing place names were chosen (in some areas by adapting Native American names).

Anticipatory Set:
Share with the students information about the writing tools and materials that humans have used to record language: writing tools—ink, pen, quill, stylus, etc.—and materials to write on—linen, papyrus, leather, paper, clay, etc.

Share the hypothesis that the tools/materials that humans used for writing had an impact on how the written language developed. For example, clay was the most widely available material to use for writing in ancient Mesopotamia. At first signs, some of them pictographic, were drawn in the unbaked clay. Later a faster method was needed and cuneiform script developed. It was made by impressing lines into the clay with a stylus in formalized patterns that developed from early drawn signs.

Questions for discussion:
Based on the above hypothesis, how does this relate to writing Chinese characters with ink on paper, and writing in columns from left-to-right?

What languages do you speak/write? (Have them say/write something in these languages).
What writing system are you using to write the words in another language (the Roman alphabet, a different system of symbols)?

The Lesson Procedure:
Part 1: Students read the background information (summarized for younger children).
Part 2: Students make their own paper (takes 2 sessions).
Part 3: Using the alphabet handouts, students practice writing their names in *musnad*. Students write their name using calligraphy pens on the paper they have made. Write their name in English in small letters on the reverse side of the paper in one corner.

Part 4: Collect all the names and then mix them up and pass them around to students. Students try to decipher their classmates’ names.

**Conclusion:**

Discuss transliteration from one language to another and how even place names can sound different in various languages. Gather information on local place names and their similarity/dissimilarity to the names in other languages from which they were derived.

**Lesson Extensions:**

For various images of *musnad* engraving in stone see the Yemenite Virtual Museum at: <www.geocities.com/Baja/Dunes/3147/>. Look under “Exhibits.”

For older students: use clay (like ancient Mesopotamia) or wax (like ancient Romans) to write on the surface using different instruments. Try writing in different directions, from right to left, left to right, in both directions.

To learn about papyrus see: <http://www.mnsu.edu/emuseum/prehistory/egypt/dailylife/papyrus.html>. For a description of how to make papyrus for a 6th grade social studies project see: <www.hethert.org/papyrus.html>.

Learn about the history, advantages, and problems of iron gall ink (an ancient and permanent black ink): <www.knaw.nl/ecpa/ink/intro.html>

Students look up alphabets in the library and/or on the internet. A site of interest for the history of the alphabet is: <www.ancientscripts.com/alphabet.html>.

To see and hear the pronunciation of the Arabic alphabet see: <www.arabic2000.com/arabic/alphabet.html>.

**Further Resources:**


The Epigraphic South Arabian Alphabet
Compiled by: J.L. Daniels, II

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<thead>
<tr>
<th>ESA Letters</th>
<th>ESA Letters</th>
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אַחָד = Ahmād (أحمد); אֲדָוְד = Edward (أدويد); יָוָן = June (جون)
### The Epigraphic South Arabian Alphabet and its Roman and Arabic Equivalents
Compiled by J.L. Daniels, II

<table>
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<tr>
<th>ESA Letter</th>
<th>Roman Equivalent</th>
<th>Arabic Equivalent</th>
<th>Phonemic Value</th>
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Lesson 5. The Island of Soqotra: Dragon’s Blood and Aloe

Introduction

The island of Soqotra, located off the coast of Yemen in the Gulf of Aden, has produced important trading commodities for millennia. Marco Polo, the 13th century trader from Venice, described Soqotra as an island where the people, though Christian, were such skillful magicians that if any ship sailed past without paying taxes they could reverse the wind and bring it into their harbor. Throughout ancient and medieval times Soqotra was famed for two liquid substances that originated from its monsoon-swept mountains: the juice of the aloe plant and dragon’s blood, the blood-red resin of the dragon’s blood tree. The island’s unique biological diversity has allowed a wide range of plants to flourish, including these two versatile substances that were used for a number of commercial and medicinal purposes.

Aloe is called sabr in Arabic and in Soqotri it is called tayf. More than 100 types of aloe appear around the globe, but three of these grow only on the island of Soqotra. In the ancient world the varieties of aloe indigenous to Soqotra attracted the attention of traders and healers. The healing properties of Soqotri aloe have been known since ancient times. According to the Arab historian Mas’udi, the Greek philosopher Aristotle advised his pupil Alexander the Great to establish a Greek colony on Soqotra in order to cultivate aloe and export it to the ancient world. According to tradition, this is why the Greeks colonized the island in the 4th century BC. In the 9th century AD an Arab merchant maintained that the kings of China were embalmed and their corpses placed in Soqotri aloe and camphor. The medicinal uses of aloe include both external and internal applications. Taken internally, it is used as a laxative, a decongestant, to assist in digestion, and in weight loss. The juice of this plant has been used externally as a disinfectant and to help heal wounds. On Soqotra the juice of the broken aloe fronds is extracted in a lengthy process using the sun and wind. The juice is then dried, concentrating its essential components. Chunks of this dried amber-colored rock like substance are then broken off and dissolved in water when needed.

The oddly-shaped dragon’s blood tree (Dracaena cinnabari), a tree of the agave family, graces the hills of Soqotra and looks like an umbrella blown inside out. Dragon’s blood trees are a common sight above 500 meters on Soqotra and they are a unique type of vegetation. The nearest relative of the tree is in the Canary Islands (Dracaena draco), but it is now almost wiped out in the wild. In the Soqotri language the dragon’s blood tree is called a’arhiyyib and its name in Arabic, dam al-akhwein (blood of the two brothers) is taken from a legend, a tale worth recounting. According to Indian legend dragons and elephants are closely related creatures (almost brothers) and, as brothers will do, they were always fighting. The dragons were crazy for elephant blood, which they would get by wrapping themselves around an elephant’s trunk, biting behind their victim’s ear and then drinking this bloody feast in one gulp. But on one occasion the dying elephant fell to the ground and crushed the dragon underneath. The blood of these two animals combined and seeped out onto the ground creating the dragon’s blood or cinnabar. The latter term became one of the names for the crimson-red resin of the dragon’s blood tree. Since antiquity the dried resin of this tree was highly valued for medicine, magic, and alchemy. Roman gladiators would smear a dragon’s blood salve over their bodies before fighting. The red color of their skin would heighten their
ferocious appearance and its medicinal properties would help prevent infections and assist in the clotting of their battle wounds. Other reputed medicinal uses for dragon’s blood include treating eye diseases, healing wounds, assisting digestion, and stopping post-partum bleeding in new mothers. Dragon’s blood was used in medieval Europe as a sealing wax for letters and documents, because it melts easily, adheres to surfaces, and retains clearly the image that is pressed into it. Dragon’s blood is also a good dye. During the medieval period it was prized as the base for a red ink used especially for the intricate work of illuminated manuscripts. Other uses included a dye for cloth, a varnish for violins and denture palates, and a bronze-like lacquer for Chinese wooden boxes. Today, one of the uses the Soqotris have for this deep-red substance is to decorate pottery.

The resin of the dragon’s blood tree requires special preparations for storage. Pieces of the resin are melted to eliminate impurities and as it cools they are shaped into small flat cakes. Archaeologists have found well-preserved dragon’s blood cakes of similar shape in pre-Islamic tombs on the island, testifying to its long history of use.

A 15th century Italian buyer’s manual for traders provides guidelines for judging the quality of both aloe and dragon’s blood. The highest grades of dried aloe “should be the color of liver; and there are some who say it ought to be like pitch, black inside, glistening, bitter, and strong. You ought to take a piece of it and pound it, and its powder ought to appear violet.” Advice on purchasing dragon’s blood warns the buyer that the substance should be “red and blood-colored, light clear, clean, and glistening.” Keep this advice handy for the next time you’re in the market for these two useful products of Soqotra.

Vocabulary

Camphor: a fragrant gummy substance obtained from the wood and bark of the camphor tree.
Cinnabar: one of the names used for the resin of the dragon’s blood tree (Dracaena cinnabaris), also known as dragon’s blood. The term cinnabar is also used for—and the resin has been confused with—the potentially poisonous mineral cinnabar (mercuric sulfide), a red-colored crystalline mineral mined for its mercury content.
Commer (adj.: commercial): the exchange or buying and selling of products on a large scale, involving transportation from place to place.
Commodity: something economically useful or valuable.
Embalmed: the process of preserving bodies after death to prevent decay, usually through the use of chemical substances.
Indigenous: native, or belonging, to a place.
Lacquer: a hard shiny shellac or varnish put on wooden objects to protect and decorate.
Manuscript: a hand-written document.
Medicinal: something used to cure disease or relieve pain.
Medieval: of or relating to the Middle Ages of Europe, the period of European history extending roughly from 500 AD to 1500 AD.
Monsoon: a name for seasonal winds that reverse direction. First applied to the winds over the Arabian
Sea that blow for six months from the northeast and for six months from the southwest. It is associated with periods of heavy rainfall. It brings rain to Yemen twice yearly. The word comes from the Arabic *mawsim*, meaning season, i.e. sailing.

**Pre-Islamic:** before the beginning of Islam in the 7th century AD, or prior to the arrival of Islam in a particular location.

**Post-partum:** after having given birth to a child.

**Salve:** a soothing substance applied to wounds or sores.

**Soqotri:** the Semitic language of the inhabitants of the island of Soqotra.

**Bibliography**


5. The Island of Soqotra: Dragon’s Blood and Aloe

Classroom Activity
Appropriate Grade Level: Grades 6 - 8.
Subject(s): History/Creative Writing/Art.

Goals/Focus:
To learn about the history and uses of Soqotran aloe and dragon’s blood.
To understand the role of communications in history.

Materials:
Background information on “The Island of Soqotra: Dragon’s Blood and Aloe.”
Red-colored sealing wax.
Supplies to carve personalized seals including femo or artists’ erasers to carve the seal, paper and pencils for drawing out designs, and carving implements such as x-acto blades or etching tools.
Parchment-type paper and writing tools to write secret messages. If time permits and students are old enough they could make their own paper for these messages (see lesson 4).
Gather a few examples of personalized seals from history.

Anticipatory Set:
Share with students some background on heraldry, the practice of applying a unique coat of arms to shields, rings, or other items, that arose in western Europe as a means of identification, including the role of personalized seals in history—the need to assure authenticity, maintain secrecy, and demonstrate the status of the sender.

Questions for discussion:
What is a seal (not the animal)?
Can you imagine why seals played an important role in history? (widespread illiteracy, ensure authenticity, maintain secrecy, and demonstrate the status of the sender).
Does your family have a formal or informal symbol or coat-of-arms?
What symbol or icon would you choose to represent your family/yourself?
Where can we find symbols in our own culture? (e.g. flags, school mascots and logos, product logos)

The Lesson Procedure:
Part 1: Students read the background information.
Part 2: Students design their own emblem for a seal, based on one of their initials, a favorite animal or other character. Students carve their symbol onto the chosen stamp material (femo or erasers). Be sure and allow the seal a handle of sorts to grasp for pressing into the sealing wax.
Part 3: Divide the class into groups of two or three and create the history and persona of characters who need to communicate secretly with one another. Characters could be soldiers, rulers, religious leaders
or traders situated during a period of history that the students are studying. In a creative writing session have students develop the details of these individuals’ lives.

Students write letters to the others in their group on the parchment paper in the name of the character they have developed.

Seal their letters with the dragon’s blood wax and stamp it with their personal seal.

**Conclusion:**

Discuss the importance of reliable communications for economic, political, and social purposes. Examples such as the U.S. postal system and the pony express, also the Mongol development of reliable communication along the silk roads, which stretched from China to Europe.

Have select students read their creative writing or letters to the class.

**Lesson Extensions:**

Students visit the excellent website of the Royal Botanical Gardens, Edinburgh (with maps, drawings, photographs, and text) highlighting its work on the island of Soqotra to document and help preserve the island’s cultural and biological diversity at: <www.rbge.org.uk/Soqotra/home/page01.html>.

The illustrations below are of Soqotri pottery with patterns painted in dragon’s blood. Use the handout for these as a pattern in a pottery making activity.

Students research herbal remedies, such as those used by Native American tribes from your area, remedies from earlier time periods (e.g. the Colonial period) or remedies brought to the U.S. by their immigrant ancestors. Investigate if their reported effectiveness is true or false.

Student’s research uses of aloe in the southwestern United States and in other parts of the world.

**Further Resources:**


See plates 3 and 4 for the student handouts of Soqotri pottery.

Drawn by Bruce Paluck
Lesson 6. The Gazelle and the Ibex

Al-qird fi al-‘uyun ummo ghazal. “The monkey in the eyes of his mother is a gazelle.” Arab Proverb

Introduction

The importance of the gazelle and ibex in Arab traditions is reflected in the wealth of names for these two closely-related creatures. In Yemen the graceful gazelle is called ghazal or zaby and an ibex is called iyyal. Other names for the fleet-footed ibex are baqqar al-wahash or waril. The male ibex is ayl and the female of the species is reem. Today these two creatures are rare in Yemen, but they both have a long and illustrious past at the southern tip of the Arabian Peninsula. Rock and wall art, statues, pottery, seals, and building decorations featuring the ibex and gazelle are a recurring motif in Yemen.

Numerous varieties of gazelle were once found in Yemen. Yemen was known for at least three varieties of gazelle: the Mountain gazelle or Idmi (Gazella gazella), the Dorcas gazelle (Gazella dorcas) and the Sand gazelle (Gazella subgutturosa), but today their numbers are dwindling and they are rarely seen. In addition Yemen was known for the Queen of Sheba’s gazelle or Yemen gazelle (Gazella bilkis), an indigenous species once found only in a small area near Ta’izz. The Queen of Sheba’s gazelle, however, is now considered extinct; one has not been sighted for years (see The World Conservation Union, The IUCN Red List of Threatened Species: <www.iucnredlist.org>).

The gazelle holds an important place in art and literature throughout the Middle East. In pre-Islamic Mecca, there was a golden image of a gazelle located in the Ka’bah. Arab tradition says that the finest examples of Arabic poetry were written on gazelle hides and hung in the Ka’bah. A famous poem by the poet Imru’ al-Qais refers to gazelles when it begins:

![The Sand Gazelle (Gazella subgutturosa)](image-url)
“They turned to flee
Like a necklace around a pretty neck
A string of two kinds of Yemeni agate
That’s what the fleeing herd looked like…”

Swift and graceful, they have been eulogized in art for millennia and even today the gazelle is heralded as a symbol of beauty. Arab tradition idealizes many features of the gazelle as beautiful: large, brown, heavy-lashed eyes, delicate strong legs, and a slender graceful neck.

The ibex (the Nubian ibex, *Capra nubiana*) was once plentiful in Yemen, but the sighting of a living ibex today is increasingly rare. Like the gazelle, the ibex is now an endangered species. The ibex also holds an important place in Yemeni art and history. It was frequently depicted in art, such as the ibex frieze from Ma’rib, which was carved as early as the 5th century BC. The slender, twisting horns of the ibex can still be seen mounted above doors and on the corners and rooflines of buildings in many parts of Yemen, continuing a tradition that is documented as far back as the 11th century BC.

There are many reasons for the decline in the numbers of gazelle and ibex, such as the loss of their natural habitat and hunting. The ancient south Arabian ritual hunting of the ibex was a tradition that persisted in the Wadi Hadhramaut of Yemen into this century. Hunting rituals and arbitration over disputed game are steeped in traditions both ancient and complex. Gazelles were also hunted. One traditional manner of hunting them was practiced in the Tihamah region of Yemen, where the hunters chased the gazelle on foot for as much as four hours until the animal was exhausted and lay down upon the ground. Hunters practicing
this tradition of ritual hunting refused drink or food during the chase in order to heighten the competition.

Today in Yemen wildlife conservation efforts are trying to protect the gazelle, the ibex, and other endangered species. As early as 1977 the former Yemen Arab Republic took action to protect gazelles with *The Command Council Decree No. 40 for the Protection of Hunting Gazelles*. Article 1 states, “The hunting of all varieties of gazelle in all parts of Yemen is forbidden for a period of 10 years.” This law has not been renewed, but there is a growing concern locally and internationally for the bio-diversity and environmental wealth of Yemen.

One cannot discuss the gazelle and ibex in Yemen without mentioning the gazelle hound, known in America as the Saluki. While the history of this breed is shrouded in mystery, it is clear that they are related to dogs depicted in ancient Egyptian art. Although the connection requires further research, these sleek-bodied, swift-running dogs are named for a town in ancient south Arabia located near modern day Ta‘izz. The town of Saluq was famed in antiquity for its shields, as well as for the hunting dogs it produced for the gazelle hunt.
From the Queen of Sheba to the Republic of Yemen

**Vocabulary**

**Abraham:** Biblical and Quranic prophet believed by Jews, Arabs, and Christians to be the father of their peoples.

**Arbitration:** the process of settling a dispute or disagreement.

**Eulogized:** praised highly in spoken or written terms.

**Extinct:** no longer to be found; gone out of use.

**Gazelle:** a fleet-footed animal in the antelope family, both males and females having ringed, curved horns.

**Hadhramaut:** a province of Yemen that stretches from the Empty Quarter to the Gulf of Aden; its chief cities are Shibam, Say’un, Tarim, and Mukalla. The Wadi Hadhramaut is a long, wide, river valley in southeastern Yemen.

**Ibex:** a sure-footed member of the wild goat family with back-curving ringed horns found in mountainous areas.

**Indigenous:** native, or belonging, to a place.

**Ka’bah:** the Muslim shrine in Mecca, Saudi Arabia. Muslims believe that Abraham and his son Ishmael built the shrine.

**Motif:** a recurring distinctive feature, dominant pattern or idea in art, literature, or music.

**Pre-Islamic:** before the beginning of Islam in the 7th century AD, or prior to the arrival of Islam in a particular location.

**Ta’izz:** a city in the southern highlands of Yemen that has served as the capital of a number of dynasties.

**Tihama:** region of the Arabian Peninsula that stretches along the Red Sea coastline running through both southern Saudi Arabia and Yemen.

**Bibliography**


6. The Gazelle and the Ibex

Classroom Activity
Appropriate Grade Level: All Grades
Subject Area(s): Elementary – Art. Middle and High School – History/Art/Environmental Science.

Goals/Focus:
- To learn about the importance of the gazelle and ibex in south Arabian history and art.
- To discuss the conservation of endangered species.

Materials:
- Background information on “The Gazelle and the Ibex.”
- Coloring handout of the ibex.
- Gather information related to endangered species in your area including information on legal, practical, and educational aspects of the issue. For curricula for all ages on Buffalo/Bison see the website for “Friends of the Prairie Learning Center,” the Neal Smith National Wildlife Refuge at: <www.tallgrass.org>, and for excellent curricular recommendations on salmon see the web page “For the Sake of the Salmon” at: <www.4sos.org>.
- Statistics on endangered species around the globe.
- Pictures of endangered species for putting up around the room.
- Pictures of art that depict endangered or extinct animals from your region, such as Native American.
- Pictures of art that depict hunting traditions, such as Native American.

Anticipatory Set:
- Explore with the students the symbolic importance that animals can have in American culture, for example, in American currency—the eagle on bills and quarters, the buffalo on the nickel, and the buffalo again on the 2005 Kansas quarter.
- Share some examples of animals in Native American traditions—art and stories—and the relationship of the hunter to his prey, and how many cultures develop deep reverence for the animals that provide them with sustenance.

Questions for discussion:
- What natural and human factors have a negative impact on animals?
- What are some examples of animals that are endangered or extinct? In your area?
- Why should animals be protected?

The Lesson Procedure:
- Part 1: Students read the background information (summarized for younger children).
- Part 2: Discuss the long history of the ibex and gazelle in Yemen and the importance of hunting. Talk
about animals in the US with symbolic significance (local and national importance), and their status as protected or endangered species: bald eagles, spotted-owls, whales, etc.

Part 3: Elementary: Color the ibex handout. Middle and high school: Students read the material collected on Yemeni wildlife and local endangered species and write for 15 minutes on the importance of animals to humans in the past and today.

Conclusion:
Discuss what has been done to help save particular animals from extinction.
Students share how they have been involved in environmental issues.

Lesson Extensions:
For a photograph of a 53-cm. long alabaster frieze of Ibexes, carved in the 5th century BC, that once adorned a temple in Ma’rib, see: the Yemenite Virtual Museum at: <www.geocities.com/Baja/Dunes/3147/>.

View Renewing the Hanging Gardens of Arabia, a film that documents traditions in sustainable agriculture in Yemen as well as current challenges to these age-old practices. Available at: <www.tve.org/mp6/searchresults.cfm?fid=1895>.

Students research and report on issues related to eco-tourism.
Students research stories, poetry, and art about an animal of their choice.
Students look up gazelle and ibex in various resources, libraries, and/or the internet.
Contact local Muslim organizations and explore their participation in Earth Day and environmental issues in your community.

Further Resources:

Yemeni Ibex Frieze

Copied from a frieze of ibex in red granite from Jawf Bin Nasr.
See plate 5 for the student handout of the frieze.

Drawn by Bruce Paluck
Lesson 7. A Glimpse of the Stars: Astronomy in Yemen

Introduction

Throughout history humans have been interested in the stars, the moon, and the planets. From ancient Egypt to the Native Americans, people have woven stories about celestial bodies and studied their movements. This fascination arises from intellectual curiosity, religious or spiritual inquiry, and pragmatic reasons, such as the need to calculate time, predict eclipses, navigate the seas, or deciding when to plant crops. Since the advent of Islam, Muslims have studied the heavens in order to orient prayer towards the Ka'bah in Mecca, to schedule their daily prayers accurately, and to calculate holidays such as Ramadhan. In order to achieve accuracy in their celestial calculations, Muslim scientists created, developed, and expanded mathematics and technologies. They used a number of instruments for their calculations including the astrolabe, the quadrant, and variations on the armillary sphere. One fine example of such an instrument is an astrolabe on display in the Metropolitan Museum of Art in New York, created 800 years ago by the Yemeni Sultan al-Ashraf 'Umar.

A Syrian named Severus Sebokht wrote the earliest known treatise on the astrolabe in the 7th century AD. The astrolabe had numerous applications, but its principal use was to aid navigation. The astrolabe allows sailors to measure accurately the altitude (from the horizon) of celestial bodies such as the sun or the Pole Star and to use this measurement to determine the latitude of their ship (but not the longitude). The al-Ashraf astrolabe was used to determine precise times of the day based on sightings of both stars and the sun. Then precise tables were calculated for certain locations during each season in order to determine daily prayer times (Muslims pray at dawn, noon, mid-afternoon, sunset, and evening).

The astrolabe now in New York is one of many that al-Ashraf made in the 13th century, and he also wrote a detailed research paper on astronomical instruments and how to construct and use them. Only two copies of this manuscript have survived—one copy is in the Egyptian National Library in Cairo (possibly written in the hand of the sultan himself), and the other is in Tehran, Iran. Al-Ashraf’s combined astrolabe and treatise provide a rare glimpse of Muslim science in the field of astronomy during Europe’s medieval period. Interestingly, appended to one copy of his work is a kind of “report card” on his project by one of his teachers Hasan ibn ‘Ali al-Fihri al-Muzaffari, who wrote:

“I found all of the astrolabes whose markings and dates I have mentioned perfectly and accurately executed, and I approve his making and constructing astrolabes, including casting and striking them and drawing their markings, because of what I have investigated of his precision, knowledge, intelligence, and perspicacity, and (also because) I tested and checked all of the instruments which he made so expertly” (King, 1985).

Another Arab navigational instrument was the kamal. The kamal enabled the user to obtain the relative altitude of the Pole Star (North Star) and then to calculate his own latitude. Originally consisting of nine small wooden rectangles, the kamal later evolved into a single board fitted with a string knotted at differing intervals. To use the kamal, the observer held the string with his teeth at the knot to allow the lower edge of the board to touch the horizon, and the upper edge, the Pole Star. Each knot’s position
corresponded with an *isba*; one *isba* equaled one degree and thirty-six minutes of latitude. The nearer the knot to the board, the greater the elevation or *isba*, and thus the farther north the observer was. This simple yet effective tool was developed much earlier than any similar instrument in Europe and is the direct ancestor of the European cross-staff (used in making star sightings) and the back-staff (used for solar sightings).

**Vocabulary**

*Armillary sphere*: an astronomical instrument made of rings representing the positions of important circles of the celestial sphere.  
*Astrolabe*: an astronomical instrument used to measure the height of celestial bodies above the horizon.  
*Astronomy* (adj.: astronomical): the science of the celestial bodies and of their sizes, movements, and compositions.  
*Celestial*: of, or related to, the sky or visible celestial bodies—the sun, moon, stars, or planets.  
*Equator*: an imaginary line around the center of the earth, forming a large circle that is equidistant between the north and south poles.  
*Ka'bah*: the Muslim shrine in Mecca, Saudi Arabia. Muslims believe that Abraham and Ishmael built the *Ka'bah*.  
*Kamal*: a simple Arab navigational instrument that was used to calculate latitude.  
*Latitude*: from the system of geometric coordinates used to designate locations on the surface of the earth. Latitude lines circle the globe measuring distances from the *equator*.  
*Longitude*: from the system of geometric coordinates used to designate locations on the surface of the earth. Longitude lines run from pole to pole.  
*Mecca*: a city in western Saudi Arabia that was the birthplace of the Prophet Mohammed, founder of Islam; the city is considered sacred by Muslims.  
*Medieval*: of or relating to the Middle Ages of Europe, the period of European history extending roughly from 500 AD to 1500 AD.  
*Perspicacity*: acuteness of perception, discernment, or understanding.  
*Pole Star*: a star of the second magnitude at the end of the Little Dipper’s handle, also known as the North Star, Polaris, and the polar star.  
*Quadrant*: an instrument used for measuring altitudes that is shaped in a quarter circle and uses a plumb line or level for fixing direction.  
*Ramadhan*: the Muslim month of fasting (from sunrise until sunset) that marks when the Prophet Mohammed received the first revelations of the Quran.  
*Solar*: of, derived from, or relating to the sun.  
*Sovereign*: self-governing; independent.  
*Sultan*: a term used in Islamic society for a king or sovereign ruler.
**Treatise**: a written work dealing formally and systematically with a subject.

**Bibliography**


7. A Glimpse of the Stars: Astronomy in Yemen

Make Your Own Kamal

Classroom Activity
Appropriate Grade Level: High School.
Subject Area(s): Geography/Science/History.

Goals/Focus:
To learn about the history of astronomy in Yemen.
To make an early navigational instrument of Arab origin.

Materials:
Background information on *A Glimpse of the Stars: Astronomy in Yemen*.
Visit and print information for students on the history of navigation, from the website developed to accompany a PBS special *Lost at Sea—The Search for Longitude* at: <www.pbs.org/wgbh/nova/teachers/resources/title.html>.

- Pieces of cardboard 1” x 2” square with a hole in the center (older students can make them).
- Two foot length of string for each student.
- A map of the stars that shows the Pole Star and a few other major constellations.
- On the black/white board draw the line of the horizon and plot three different stars at various heights on the board, spaced far apart. These stars represent the Pole Star at various ports. Label each star as a different port in the world.
- Gather information on the history of geography.
- Writing implements.

Anticipatory Set:
Share the importance of understanding where you are in order to get where you’re going. Discuss why learning to read a map is important and the significance of portable GPS (Global Positioning System) for a whole range of practical applications. See *The Geographer’s Craft* at: <www.colorado.edu/geography/gcraft/contents.html> for detailed information. Discuss the history of geography and the quest for measuring longitude and latitude at sea.

*Questions for discussion:*
- Have you or your family ever been lost?
- What tools or questions did you ask to find your way again?
- What tools do we use today to find our way on land or at sea?
- What famous characters got lost? What famous stories depict people who are lost?

The Lesson Procedure:
Part 1: Students read the background information.
Part 2: Prepare the students for the construction of the *kamal* by reviewing the meaning and importance of latitude, longitude, horizon, and Pole Star.

Part 3: Students construct their own *kamal*, a tool used to find the latitude of a ship at sea. Attach a string to the center of a small rectangular piece of cardboard. Tie about seven knots at differing intervals along the string. It may be helpful if the teacher first demonstrates the use of the *kamal*. Students then stand at differing distances from the stars you have drawn on the blackboard pointing the cardboard at the blackboard while holding one of the knots with their teeth. The appropriate knot is that which allows the base of the board to be in line with the lower edge of the blackboard, and the top of the board to be in line with the Pole Star. The closer the knot is to the *kamal*’s board, the greater the latitude, and thus the further north the observer is. (It is believed that navigators would calibrate knots for specific ports or landmarks such as an island, thereby enabling them to know when they had arrived at the latitude corresponding to that port or landmark.) Discuss the results of their experiment with the *kamal*.

Part 4: Students write about what it is like to be lost, or what it was like for Columbus, or other explorers, who were trying to reach places with only the stars to guide them.

**Conclusion:**

Ask students to share their writing.

Students take the *kamal* home with them. If it is during the holidays ask the students to take readings with the *kamal* from various locations during their travels.

Discuss the importance of geography and how we rely on this science in our everyday lives.

**Lesson Extensions:**

Rice University’s extensive webpage *Latitude: The Art and Science of Fifteenth-Century Navigation* contains excellent information on navigation, the history of sailing and determining latitude with activities for all grade levels at: <www.ruf.rice.edu/~feegi/>.

The homepage for the 16th century Golden Hind ship (now based in Brixham harbor in England since 1963), which was used by Sir Francis Drake in the first circumnavigation of the world between 1577 and 1580, contains worksheets and activities related to sailing and navigation at: <www.goldenhind.co.uk>.


**Further Resources:**


*Arabian Seafarers: In the Wake of Sinbad*. Films for the Humanities, 1989. 44 min. VHS.

Lesson 8. The Windows of Yemen

Introduction

Windows are one of the most memorable aspects of Yemeni architecture, testifying to the ingenuity and creativity of south Arabian artisans. Yemen’s rich tradition in windows is spectacular, with many styles and materials, such as the alabaster qamariyyah, the stained glass fanlight (‘aqd mulawwan), or the Hadhrami wooden khalfah. Their beauty not only graces interior spaces but is also visible in the streets at night, as intricate patterns and contrasting colors are illuminated from within.

In classical Arabic and San’ani dialect the term qamariyyah refers only to alabaster or an alabaster window, and ‘aqd mulawwan refers to the stained glass fanlight windows. In most parts of the country, however, the term qamariyyah describes the colorful fan or half-moon shaped glass that adorns the tops of most window openings. These windows are distinctive architectural features in every highland Yemeni home, whether of traditional or modern construction.

Alabaster has long been used in Yemen to create windows; it has also been used for carved inscriptions and sculpture since at least the 5th century BC. One of the reputed features of the fabled pre-Islamic Ghumdan palace of Sana’a was its alabaster ceiling. According to al-Hamdan (a famed Yemeni geographer, antiquarian, and poet) the alabaster slabs of this early skylight were cut so thin that from the inside one could determine the type of bird flying over from its silhouette. Until window glass was imported to Yemen (probably beginning as late as the 18th century from Syria or Iraq) windows were typically made of alabaster. The earliest datable alabaster window in Yemen is from the early 10th century, found in a mosque in Shibam. It is possible that the full- or half-moon shape of these windows, or the moon-like glow of alabaster, led to the name qamariyyah (pl. qamariyyat), because moon in Arabic is qamar. Yemen’s alabaster mines date back thousands of years and a few are still operating today. Alabaster’s popularity throughout history is due to its beauty and the fact that it is easily carved. It is even claimed that the Round Table of King Arthur was carved of alabaster, and for generations alabaster was popular as a substance from which toy makers carved marbles; hence the name “ally” for a light-colored marble.

The qamariyyah fanlight windows are made by mixing gypsum powder into a paste and spreading it in a two-inch thick layer on a board. The exterior edge is shaped into the desired dimensions of this window-to-be. The artisan then draws his design on the still moist gypsum and carves his pattern down to the board. Designs for these patterns vary widely according to the client’s ideas and the artisan’s creativity; natural shapes such as flowers or vines are popular, as are geometric designs. Islamic phrases or Arabic words are often incorporated in the motif, and modern craftsmen may even insert contemporary patterns like airplanes or motor vehicles. When the gypsum has dried, the gypsum frame for the qamariyyah is easily removed from the flat board. Colored pieces of glass are then placed in the openings on the back of the frame, after which the whole back is plastered over and the excess plaster cleaned off the colored glass. While the most common shape for the qamariyyah is a half circle, this style of window can be found in other forms (see below). The most elaborate qamariyyat are often found in the top-floor sitting room (the mafrag) that is used for honored guests or for special occasions.
The Wadi Hadhramaut has a style of windows that adds to the distinctive vernacular architecture of the area. The Hadhramis carve a delicate tracery window, called a khalfah, from the wood of the jujube tree (the 'ilb tree). This screen shelters the occupants from public view while admitting light and cooling breezes. These elegant screens are made from separate flat wooden panels that are decorated with distinctive geometric and organic patterns. The horseshoe arch is an essential theme in the khalfah and other decorative elements are determined by the artisan, who also takes into consideration the window’s location in the house (which floor will it be on, where it will face, and concerns such as visibility and ventilation). Older versions of these windows often have sections that open independently. Glass or shutters are sometimes used in conjunction with the khalfah. In the palatial homes of Tarim and Say’un (two of the cities of the Hadhramaut) colored glass is inserted in the sections of the window.

**Vocabulary**

**Alabaster:** a compact, fine-textured, white or translucent gypsum-based stone that is easily carved. It is highly valued in Yemen and has been used for a wide variety of objects, including lamps, windows, and other decorative crafts. Alabaster is identical to gypsum in chemistry, but its crystalline form is different.

**Antiquarian:** an expert or collector of antiques.

**Dialect:** a variation of a language that is distinguished from other expressions by vocabulary, grammar, or pronunciation.

**Gypsum:** a mineral of hydrous calcium sulfate used in the manufacturing of plaster of Paris, gypsum plaster and plasterboard, wallboards, and fertilizers.

**Hadhramaut:** a province of Yemen that stretches from the Empty Quarter to the Gulf of Aden; its chief cities are Shibam, Say’un, Tarim, and Mukalla. The Wadi Hadhramaut is a long, wide river valley in southeastern Yemen.

**Hadhrami:** from the Hadhramaut.

**Jujube:** several types of tree in the buckthorn family with an edible fruit, common in Yemen.

**Motif:** a recurring distinctive feature, dominant pattern or idea in art, literature, or music.

**Mosque:** Muslim place of worship and gathering.

**Pre-Islamic:** before the beginning of Islam in the 7th century AD, or prior to the arrival of Islam in a particular location.

**Vernacular:** the native language or dialect of a country, region or person, (as used here) pertaining to a style of architecture and decoration that is native to a specific culture.

**Bibliography**


8. The Windows of Yemen

Classroom Activity
Appropriate Grade Level: Grades 2-6/7-9.
Subject Area(s): Art.
Goals/Focus:
To learn about styles of traditional windows in Yemen.
To make an example of a Yemeni window.

Materials:
Background information on “The Windows of Yemen.”
Printed pictures of Yemen, from the internet or another source. MIT’s School of Architecture and Planning in cooperation with the Aga Khan Trust for Culture hosts a free website with extensive images and documentation on Islamic architecture. It has excellent resources on Yemen including many pictures of different kinds of windows at: <http://archnet.org>.
Supplies for crayon melts: scissors (for older students, X-blades), wax paper, crayons, sharpeners, iron and ironing board. Pre-cut the wax paper in the correct sizes to fit the window patterns. Or alternatively, use transparencies and felt-tipped markers.
 Copies of plates 7, 8, 9, and 10. Use as examples and send home to be colored.
Younger students: white paper for folded paper snowflakes.
Older students: sufficient copies of plates 6 and 7.
A story that is appropriate to the age of the students featuring the importance of light, the sun, or the moon. Examples could include a lighthouse rescue story, an underground rescue story with a light/moon serving as a beacon, or a section from “Lord of the Rings” or “The Hobbit” by J.R.R. Tolkein that describes the life of Golum.

Anticipatory Set:
Inform the students about the various window coverings that were used in earlier times in America (such as stretching animal skins or using oiled paper) to keep out wind and to allow light in.
Discussion Questions:
Have you ever been in a place without windows (like a cave)? What did it feel like?
What is the importance of light for humans (give examples of the use of light, such as lighthouses and reading)?
What are the ways that we provide light for our buildings?
What is the most beautiful window that you have ever seen?

The Lesson Procedure:
Part 1: Younger students: summarize the information. Older students: read the handout.
Part 2: Students make a crayon melt. Or alternately, color the transparencies with felt-tipped markers.

Part 3: Younger students: cut out folded paper snowflakes. Older students: prepare one or both windows for mounting. Use scissors or an exacto-blade to cut out the key-shaped section of the *khalfah* window in plate 7. For the fanlight style window, follow the instructions (below) for transforming plate 6 into a Yemeni stained glass window. (It is recommended that the teacher test the activity before introducing it to the class.) On plate 6, the long dashed lines indicate fold lines and the short dashed line in the upper right edge indicates where the paper should be cut.

Part 4: Mount the crayon melt/transparencies behind the snowflake/window cutouts (with either glue or tape). Trim the edges and hang these stained glass decorations in the window.

**Conclusion:**

Read or have the students read the story about the importance of light. For younger students: discuss the story. For older students: write an essay about the story.

**Lesson Extensions:**

Students search for information on alabaster in the library and/or on the internet.

Students research stained-glass traditions around the world.

For an excellent resource on stained glass see Linda Papanicolaou’s article *Stained Glass in the Art Curriculum*, complete with classroom activities for elementary and middle school, and excellent further resources at: <www.teamsmedieval.org/news/2000-2001/stainedglass.pdf>.

For a high school-level activity with geometry and windows see Michael Serra’s *A Term Project: Creating a Geometry Cathedral* at: <www.nexusjournal.com/Didactics-Serra.html>.

(For older students) Direct students to read (or read to them) one or both of the handouts on pages 59 – 65: *The Houses of Sana’a*, and *The Legendary Palace of Ghumdan in Sana’a*. Both handouts are translations of the work of Jamal al-Din ‘Ali, who in the 18th century, described the city of Sana’a and a fabled ancient Yemeni palace. Students can compare and contrast how the architecture of modern Yemen is similar to and different from the past. Other options to pursue: the pre-Islamic history of Yemen and what is happening in other cultures in the pre-Islamic period.

**Further Resources:**


Cut excess paper from the bottom edge of the qamariyyah window. The folds should be done in the same manner as a paper fan.

1. Fold page back along the center line “A.”
2. Fold forward along each line labeled “B.”
3. Fold back along each line labeled “C.”
4. Now cut out the negative space on the pattern provided. The opening to be cut nearest the base of the window can be made along the dotted line through the window frame.
5. Open up your window and do some touch-up trimming if necessary to personalize the pattern.
6. Mount the crayon melt behind it and hang in the window.

See plate 6 for the student handout of the fanlight window.

By Bruce Paluck
Instructions for the Wooden Window

Carved wooden khalfah window from the Wadi Hadhramaut. Reproduce the window from the plate. Cut out the two key-shaped portions of the window. Color the wooden portion, mount the crayon melt behind it and hang in the window.

See plate 7 for the student handout of the wooden khalfah window.

Drawn by Maha al-Hibshi

Arched Windows with Colored Glass

See plate 8 for student handout on the arched windows.

Drawn by Bruce Paluck
Fanlight Window

Fanlight *qamariyyah* window

See plate 9 for the student handout of the fanlight window.
Drawn by Bruce Paluck

Wooden Shutter

Carved wooden window shutter from Sana’a, Yemen.

See plate 10 for student handout of the wooden shutter.
Drawn by Maha al-Hibshi
Introduction to the Handouts

The Legendary Palace of Ghumdan in Sana’a

and

The Houses of Sana’a

The following handouts for “The Legendary Palace of Ghumdan in Sana’a” and “The Houses of Sana’a” are excerpts from The Description of San’a’ written by Jamal al-Din Ali and translated by Tim Mackintosh-Smith.

During the years 1757-58 AD (1171 AH), Jamal al-Din ‘Ali (full name: Sayyid Jamal al-Din ‘Ali ibn ‘Abdullah al-Qasim ibn al-Mu’ayyad bi ‘llah ibn al-Qasim ibn Muhammad al-Shahari) wrote The Description of San’a’. As a recent translator describes the work:

The main body of the work, a personal account of contemporary (i.e. mid-eighteenth century) San’a’, covers: the mosques and mosque gardens; houses, building materials and techniques; food; goods traded; the delights of Ramadan; baths; garden suburbs; and the mafrag, the room set aside for entertainment and relaxation. The text ends on an unexpectedly poignant note: the author reveals that he has been writing in prison and thus has been deprived of the pleasures he so lovingly describes.¹

In 1762 AD, after he wrote the work, Jamal al-Din Ali was released from prison, possibly because his writing pleased the ruler.

In his description of Sana’a he also wrote about the legendary Palace of Ghumdan, a palace of ancient, pre-Islamic times. According to accounts from the early Islamic period, stones from the ruined palace were used to build the Great Mosque in Sana’a and the fortress of Sana’a. The famed palace was noted for its height, elaborate decoration, brass or bronze statues, wooden shutters, and alabaster windows; these latter elements of the legend demonstrate that alabaster windows and wooden shutters are a very old practice in Yemen. In writing about the legendary palace Jamal al-Din ‘Ali drew on the prose and poetry of earlier writers, such as the historian and geographer al-Hasan ibn Ahmad al-Hamdani (10th century AD/4th century AH) and Ahmad ibn ‘Abdullah al-Razi (died 1068 AD/460 AH), the historian from Sana’a.

From the Queen of Sheba to the Republic of Yemen

The Legendary Palace of Ghumdan in Sana’a*
By Jamal al-Din ‘Ali (written 1757 - 1758)

They have said that Ghumdan was one of the most extraordinary buildings any king ever built on earth. It was square in shape, with an extensive courtyard, and had perfectly designed foundations and walls. Each of its four facades was of a different colored stone — one white, one green, one red, and one black. On each of its topmost corners were brass statues of a lion and an eagle, projecting into the air from the middle [of each corner], with hollow interiors and open mouths. When the wind blew, it entered the hollow interiors and they would emit sounds like the roaring of lions or the screeching of eagles. All its chambers had large windows. These had shutters of teak with ebony and ivory borders, and were decorated with patterns of iron plates with gilding and the like.

In addition, each chamber had many apertures fitted with alabaster, which admitted the light but excluded drafts. At the top of the palace were thirteen rooms, similar to those described but decorated even more lavishly, and above these was a square room, the king’s audience chamber. This had views on all sides, superb shutters, and many openings and apertures filled with alabaster and the like. It was covered by a dome like an egg, made of alabaster panels so precisely fitted together that if one lay on one’s back under the dome one could make out the size of birds [flying] in the air. And if lamps or candles were lit in this room, they could be seen at night from the top of ‘Ajib. Usually lights were only lit there if the king wanted to muster the tribes [from the regions] near Sana’a, for when they saw them lit up at night they knew that the king needed to gather them, and would arrive all at once on the morning of the next day. This is a summary of what al-Razi and others have described.

Al-Razi said: And in the immediate environs of the city of Sana’a there are ten thousand inhabited villages. (He means the villages in the district of Sana’a whose inhabitants frequent the city’s markets.) Perhaps, then, the lights of this room were lit up in order to summon all the peoples of these villages, on account of their proximity to Sana’a.

And, for the most part, these villages are still inhabited in our times, as I am not aware that any have fallen into ruin. And Allah is the Most Knowing.

Al-Khazraji said, quoting Ibn Ya’qub: Who is left after the people of lofty Ghumdan That remedy for the heart of one troubled by cares? It rises, climbing into the midst of the sky, Twenty floors of no mean height. It is wound with a turban of white clouds, Its waist girdled with alabaster, And its stones sealed together with mortar of the same, While onyx and marble adorn its halls. On each corner is the head of a flying eagle,
Or of a roaring lion of brass.  
Flocks of birds frequent it,
And its water-channels gurgle ceaselessly,
[Rising from] a spring which is ever clear to drink.
And above this, on its very top, is a belvedere
[Roofed with] an alabaster panel of flawless color. And when
Its lords desire to summon those around it, they are answered,
For the men come, all of them, having seen
Fire shining through clear alabaster;
Such was their rallying-call to their men,
For they had no need of messengers to run around with a summons.
But treacherous Time has taken Ghumdan and its folk away.
They suffered many a trial, until at last the grave enfolded them.


1. Ghulat ‘Ajib is a pass between Raydah and Khamir, about 60 km north of Sana’a.
2. Al-Razi was Ahmad ibn ‘Abdullah al-Razi, a historian from San’ā’ who died in 1068 AD/460 AH.
3. ‘Ali ibn al-Hasan al-Khazraji (died 1409 AD/812 AH) was an historian of the Rasulid Dynasty. Ibn Ya’qub (Abu Muhammad al-Hasan ibn Ahmad ibn Ya’qub al-Hamdani) was a celebrated historian/geographer of Yemen and an accomplished poet; he lived from 893 to after 947 AD (280 to after 366 AH).
4. The word sufr—translated here as brass—could also mean bronze or gilt bronze.
And as for the houses of Sana’a, which are the dwellings of this world and the abodes of the living, they have been built from their foundations to their pinnacles in a manner which has not been used before, and in particular the palaces of the rulers of our time and their trusted assistants.

Beneath ground level, their foundations are made of great rocks. These are left in their uncut state up to the level of the ground, then subsequent courses are built of dressed black habash stone, variegated with red stone and with stone of other colors, as far as the third storey. Above this the courses are of baked brick, which is used to produce decorative friezes and zigzag patterns, for [a further] two storeys or more. Every house is of five or six storeys, the height of each storey being around ten cubits. The houses therefore reach a height of around sixty cubits, and are square in shape with spacious apartments. The staircases by which one ascends and descends are so broad that two mounted horsemen can climb to the top of the house side by side, then go down again. Each house contains large halls, beautiful rooms and strong storerooms, and every apartment has a number of large windows, provided with stout [shuttered] balconies which project into the air. [These are strong and broad enough for] a number of people to sit in them, and are pierced with designs of stars based on the friezes, parapets and other [features of the house]. The shutters are precisely joined together by iron hinge plates and suspended on hinges so that they may be opened or closed at will. They are decorated with [metal] stars plated with gold and lead and furnished with handles resembling rosettes. These shutters have opening sections of wonderful workmanship.

The upper parts of the rooms are provided with round, arched or square openings in rows, one above the other. These openings are filled with pieces of crystal glass of various colors—clear, green, red, yellow and blue—which are brought to al-Yaman from the north and fitted together with gypsum-plaster to the most skillfully executed patterns.

The houses are then finished internally with qadad and gypsum-plaster, which is carved with patterns of various designs. Externally, the houses are similarly finished with gypsum-plaster and reinforced with qadad. They are provided with stout front gates and doors to each floor, in the middle of some of which a smaller door may be opened. The doors are carefully worked in the manner mentioned above.

In his History, al-Razi described most eloquently some of the doors of the houses [next to] the Jabbanah of Banu Zurayq. Some of the houses were provided with covered balconies and oriel windows opening into the air and open on all sides, with Anatolian-style [latticed] windows opening to the outside, and on the inside great panel of glass like doors.

In short, when the sun penetrates these rooms and chambers, its colored rays resemble the colors of a peacock or a rainbow. At the top of these houses there are large parapets, of beautiful form and finished with gypsum-plaster. The hallways and landings of these houses are paved with dressed stone, so seamless and close fitting that they resemble the smoothly plastered court [of a mosque]. This is also the case with stairways by which one climbs to the top of the house. These are lined with decorative [dadoes of] qadad.
and, together with the ceilings, are plastered, with the result that [the interior of] the house is like the inside of an egg, or of a turned wooden box. And when the doorknocker is struck, a great noise can be heard inside the house because of the reverberating echo.

Such, then, are the houses of the rulers, their assistants and followers. The form is imitated in the houses of the wealthy and the merchants, then in turn of those who come after them [in social order], in the houses of the artisans and farmers who follow them, and in the houses of the paupers. Some of the houses of the paupers and of those above them may, however, be built of uncut stone in the lowest courses, with unbaked brick, or sometimes zabur, being used in the upper parts. Whatever technique may be employed, however, they practice it with consummate skill.

As for the finishing processes involving gypsum-plaster, qadad, and alabaster, these are identical in the houses of all [social classes] on account of the ready availability of these materials. Because of this, the use of uniformly-colored alabaster mentioned by the poets of Himyar has in our age spread to the people of moderate means and those beneath them, and to those who wish to make the upper openings of their rooms like large doors but cannot [afford to] provide them with tracery of crystal glass. The upper classes sometimes use this method, although they have mostly begun to use crystal glass and such like.

Such then are the houses of Sana’a and of the suburban resorts surrounding Sana’a, where the houses—whether great, middling or small—rival their equivalents in the city itself, or even surpass them. For the most part, the entire house is plastered and repaired every year, so that the whole of San’a is always gleaming with light like a smile crossing the lips.

As for the mafraj, which is a form of room adopted in our time, set under the vine trellises in gardens planted with trees, words fall short to describe it. Mafrajs are constructed to symmetrical designs, [with floors] raised above ground level to the height of a man, and open on three sides—west, south and east. They are provided with folding doors hung on hinges which open, when their owners wish, on hinge plates. The doors are most expertly made and decorated with various types of iron plates, star-shaped studs, and convex bosses with handles, all embellished with gilding and white lead.

And above these doors and other features are openings in the wall, in which are pieces of transparent colored crystal glass. These mafrajs have been finished with all manner of plaster embellishment and other kinds of decoration. In front of the doors are pools and ponds, with fountains in the center and at the edges from which water shoots up to the height of a man and twice that. The water reaches them via earthenware pipes through which it passes on its way from the tops of the well towers, and these towers incorporate secondary cisterns for the water which is drawn from the wells to the primary cisterns. The water plays from the fountains in an amazing way, because they are provided with oval vessels of copper, and with pipes upon which are wheels expertly designed to revolve continually. These mafrajs present a wonderful sight, especially when the sun falls on them and they are dappled with the colors of crystal, glass, trees and so on.

1. A type of stone called *ju’m* or *mawthar* is used for foundations, because of its impermeability to damp and salts.

2. The cubit used for building is usually 47-1/2 centimeters (about 18-1/2 inches).

3. This, at least in the case of the grandest houses, is no exaggeration.

4. “[Shuttered] balconies,” Arabic *shish shiyash*, is a word of Persian origin defined by the dictionaries as “a window shutter.” Clearly, though, what is intended here is the type of projecting balcony called, today, *shubbak*.

5. The use of colored glass in domestic architecture was a recent innovation at the time that this text was written. Niebuhr, writing a few years after Jamal al-Din, mentioned seeing “small panes of stained glass from Venice.”

6. *Qadad* (also *qudad*) is the traditional and ancient waterproofing plaster of Yemen; it is made of lime and an aggregate (such as fine sand) using a long and work-intensive process. It can only be used on buildings of stone or baked brick (it will not adhere to mudbrick, cement blocks, or concrete). For information on *qudad* see: Selma Al-Radi, “Qudad, the Traditional Yemeni Plaster,” *Yemen Update, Bulletin of the American Institute for Yemeni Studies* 34 (1994) 6–12. Regarding the doors, a small door within a larger one is known in San’a’ as a *farkh*.

7. Al-Razi was Ahmad ibn ‘Abdullah al-Razi, a historian from Sana’a who died in 1068 AD/460 AH. Al-Jabbanah, commonly called al-Mashhad, is the open place of prayer to the north of the city, used in festivals. A mosque was built within its perimeter wall in recent years. According to al-Razi (*History*, 533) it was situated in the region of property belonging to Banu Juraysh, for which Banu Zurayq seems to be a slip.

8. “Anatolian-style” here means Turkish or Levantine. The clear glass described here would have been very rare; window glass only became widespread in recent decades.

9. The Arabic word *masakin*, translated here as “paupers,” probably refers to those exempt from paying the *zakah*, or alms tax, rather than simply to “poor people.”

10. In the *zabur* method of construction, mud is not formed into bricks but is laid down in a single continuous course. It is commonly used in Sana’a for garden walls, and can be seen on a large scale in the city wall.

11. “Himyar” probably the kingdom of Himyar, 115 BC to 525 AD.

A marginal note at this point in the manuscript says: “A certain person said, describing [Sana’a] houses, that if one lets down the curtains of the windows and doors, and closes the doors, the light in the room does not change owing to the alabaster let into the walls. Indeed, if there is a translucent pane of alabaster in the wall, one can see the silhouettes of birds as they fly past it.”
“Like large doors” seems to mean “large and rectangular in shape.” The biggest panes of alabaster reach a maximum dimension of around 1 meter, so the simile is something of an exaggeration.

12. The word mafraj denotes two types of room reserved for entertainment and relaxation. The “tower house” mafraj is a large rectangular room with windows on all sides, built on or above the level of the roof. The ground floor mafraj is the type described here.

13. The head of water for the fountain was provided by the large cistern, marjaw, at the top of the well tower. Subsidiary cisterns next to this (manqasah, pl. manaqis) were opened and closed to control the flow.

14. “Oval vessels of copper” here denotes a copper vessel let into the base of the central fountain, from which pipes distributed the flow to subsidiary jets. The “wheels” were miniature water wheels set in crescent shaped brackets over the jet of the main fountain. The water, on striking the wheel, would spread out in a semicircular pattern.
Lesson 9. Yemen’s Wooden Doors

Introduction

Horses prance and snort, and the noise of clanking swords filled the air. The resonating voice of the Captain of the forty thieves booms out the command “Iftah ya simsim” (known to generations of English speakers as “Open Sesame”). Ali Baba, the simple tailor in the tale, witnesses the opening of one of the most famous doors of history. This enchanted door from the Arabian Nights (known in Arabic as alf layla wa layla, literally meaning 1000 nights and one night) opened to a storehouse of stolen treasures, which Ali Baba soon discovered. Whether on a mysterious cave or sealing your car in the garage, the purpose of the door is to conceal, protect, and allow entrance only to those who hold the key. In Yemen, and many other cultures, doors provide not only a physical boundary but also a symbolic divide separating public and private spaces and, as such, may receive a great deal of attention in craftsmanship and detail. Whether the detail is an Islamic blessing or a fighter jet, one is often delighted by the creativity found in colorful metal doors on many modern villas and homes throughout Yemen.

The focus of this lesson is not on metal doors, but on the heavy wooden doors (between 1” to 2” thick) that adorn many homes in the densely-packed older sections of Yemeni towns. These sturdy barriers insulate the home from intruders and demonstrate Yemeni craftsmanship with ornate carvings and decorative metal. Industrial strength metal knockers usually adorn the middle of the door and send a resounding boom through the many stories above to announce that a visitor has arrived. The type of wood varies regionally as do carving styles and motifs. Many doors have unique and fascinating locking mechanisms. One common mechanism moves a wooden bolt using either a large metal key (it can be up to 10 inches long) or a wooden key with pegs extended upward (looking a bit like a large toothbrush). Another lock is simply a long sturdy wooden bolt the width of the door that is used to prevent uninvited entry. As one leaves the house, a string is pulled to slide the bolt into the doorframe thus holding the door closed. It is opened from any floor of the house by a rope attached to the other end of the bolt, which threads through the house via holes in the floor. This system saves time, and the legs of the occupants, as they can avoid descending their multi-storied house to let in visitors or family.

The beautifully carved wooden doors of the Wadi Hadhramaut are called siddah and they are carved from ilb wood (the wood of the jujube tree). These works of art have many unique features. Some doors have large metal nails with large heads (often one inch in circumference) that are both functional and decorative. In another design a smaller door is set within a larger gate; the smaller door opens independently and has a small niche at the side of the door that serves as a key hole. Today, the art of woodcarving is still practiced in the Hadhramaut region, which is famous for its carved wooden doors, boxes, and window screens (see lesson 8). Carved wooden doors, however, are very expensive and time-consuming to create and the level of intricacy and detail has suffered recently. Many homeowners are choosing ornate metal doors that are much less expensive, but which still show the creative abilities of Yemeni craftsmen.

Carved wooden doors have always been a valued element of a home. According to Serjeant and Lewcock in their book San’a’: An Arabian Islamic City, such doors were often taken as loot when
tribes raided a city in Yemen. They cite the 7th century AD poet Jarir, who described the mounted raid of a tribe called the Tamim, noting that the raiders “left not a door of Sana’a.” The authors also relate an incident in which the then–Crown Prince Ahmad encountered doors in a distant part of Yemen that he recognized as having been taken from Sana’a in a mid-19th century raid. Prince Ahmad ordered the doors to be returned to Sana’a.

**Vocabulary**

- **Barrier**: a structure or object that blocks passage.
- **Boundary**: something that indicates or fixes a limit or extent; a bounding or separating line.
- **Crown Prince Ahmad**: Ahmad Bin Yahya Hamid al-Din, the next–to–last Zaydi Imam of Yemen who ruled from 1948 until his death in September 1962. His son, al-Badr Muhammad, succeeded him briefly, but in September 1962 his Imamate ended, and the Yemen Arab Republic was established.
- **Hadhramaut**: a province of Yemen that stretches from the Empty Quarter to the Gulf of Aden; its chief cities are Shibam, Say’un, Tarim, and Mukalla. The Wadi Hadhramaut is a long, wide river valley in southeastern Yemen.
- **Loot**: goods of considerable value seized in war.
- **Motif**: a recurring distinctive feature, dominant pattern or idea in art, literature or music.
- **Ornate**: heavily decorated.
- **Raid**: a surprise, hostile attack.
- **Resonating**: a noise that leaves a slow echo or vibrating sound.

**Bibliography**


9. Yemen’s Wooden Doors

Classroom Activity
Appropriate Grade Level: Grades 2 - 4.
Subject Area(s): Language Arts/Art.
Goals/Focus:
To learn about the beauty and traditions of Yemeni doors.
To color an example of a carved wooden door.

Materials:
Background information on “Yemen’s Wooden Doors.”
An age appropriate version of the story “Ali Baba and the Forty Thieves,” in which the opening of the magical door is told. Alternately, a story that features a door as part of the plot.
Coloring handout of various Yemeni doors.
Crayons, colored pencils and felt markers.
Collect pictures of doors (both impressive and modest) from cultures around the world.
Paper and pens/pencils for writing.

Anticipatory Set:
Read to the students or students read the Ali-Baba story or an alternative story.
Discuss the story and the importance of doors in any culture.
Discussion questions:
What are some words or phrases that relate to doors? (doorbell, doorway, doormat, threshold, etc.)
What is the most impressive door that you have ever seen?
Why are doors important in your home and how does that differ from other cultures?

The Lesson Procedure:
Part 1: Summarize the background information for students.
Part 2: Each student colors one or more of the Yemeni doors.
Part 3: Students write a story about a magical door that leads wherever the person entering imagines.

Conclusion:
Ask some students to share their writing with the class.

Lesson Extensions:
See the article “The Old Yemeni Wooden Front-Doors” in the weekly English language newspaper the Yemen Times, vol. IX, no. 7 (February 15th to 21st 1999, see the last page) <www.yementimes.com>. The article has a few drawings of regional door styles and can be accessed via the newspaper’s archives.
Have students search the internet for examples of doors around the world. One site that features some carved wooden doors is <www.flatearthimages.com>.

Explore proverbs related to doors with the students. Find nearly a hundred proverbs from around the world related to doors at: <http://creativeproverbs.com>.

**Further Resources:**


**Wooden Doors of Yemen**

See plates 11 – 13 for student handouts of the Yemeni doors.

*Drawn by Maha al-Hibshi*
Lesson 10. The Domes of Yemen

Introduction

The landscape of Yemen is filled with domes. You can glimpse their white curves gracing the cityscape in most urban centers of Yemen and rising from the brown earth in isolated tombs and mosques throughout the countryside. Whether part of a mosque, madrasa (religious school), tomb, or palace, Yemen’s domed structures, with their square bases topped by round caps, are normally executed in mud brick or baked brick. The external shape of domes in Yemen is diverse, from gently rounded humps to sharply angled peaks, and from smooth surfaces to highly carved ornate decorations.

On the inside many Yemeni domes are covered with ornate mural paintings of geometric design and stucco surfaces carved with Arabic calligraphy from the Quran, other religious sources, or poetic dedications to the sponsor of the monument. The exteriors of most domes in Yemen are whitewashed annually and many are surfaced with qudad that protects the dome from the torrential monsoon rains and gives the domes a brilliant white surface. Qudad is a waterproof plaster that has been in use in Yemen for thousands of years. Remains of this early plaster are still in evidence on the standing sluices of the ancient Marib dam. Qudad is the result of a very labor-intensive process. It involves applying a number of layers of lime mixed with aggregate to the surface to be protected. The lower layers use larger pebbles to adhere the material to the surface. Successive layers become finer in composition until the top layers are very fine and smooth. Each layer is pounded for at least three or four days and then polished or buffed for many months. In some parts of Yemen the final procedure is then to apply a coat of animal fat to the finished smooth surface. With proper application and maintenance the qudad surface will remain for centuries, if not millennia. Dr. Selma al-Radi relates that in her restoration of the Amiriya Madrasa in Rada (see lesson 17), the nearly 500-year-old existing qudad was so strong that they had to use a sledgehammer to break it apart.

Domes are very old. The ancient Romans had domes, but they placed them on round buildings. A fine example of an ancient Roman domed building is the Pantheon in Rome, which was built in the early 2nd century AD (AD 118-128). At the practical level, however, building a dome on a square chamber or building was a challenge that had puzzled many builders. The problem was eventually resolved, but we do not know exactly where or when, certainly by the 6th century AD as evidenced by the dome of Hagia Sophia in Istanbul. Pre-Islamic builders from many parts of the Middle East used a brilliant solution to this architectural challenge. Early Middle Eastern master masons built a third section, a zone of transition, which involved building an arch across each corner thereby making the square into an octagon and carrying the same principle upwards. The ability to place a dome on a square allowed multiple domed-rooms to be constructed next to each other, a technique that is space-efficient and structurally sound. It also provides more design options than the round dome on a round base. For example, one of the design options is to leave large open arches on the sides of the room, thus creating a type of pavilion. This type of building was used in pre-Islamic Zoroastrian religious architecture (Zoroastrianism is an ancient Persian monotheistic religion). The strength and beauty of Persian art and architectural traditions have continued since pre-Islamic times and their influence has spread throughout the Middle East, Asia, Africa, and parts of Europe.
Domes apparently became popular in Yemen during the Islamic period. According to Dr. Edward Keall of the Royal Ontario Museum, the dome was introduced to mosques in Yemen somewhere between the 12th and 13th centuries and was derived from a Syrian tradition. This tradition was imported by the Ayyubid and Rasulid regimes that ruled Yemen during this period (1173 – 1229 AD and 1228 – 1454 AD, respectively). It was during these reigns that the dome became a feature common to Yemeni monuments. The Tahirid dynasty (1455 – 1517 AD) continued this tradition of domed architecture; of the twenty major monuments built during that era, seven still remain today.

One clearly-dated example of a mosque dome is found in the Grand Mosque of Zabid, which was extensively rebuilt in the year 1492 to include two small domes. The early 16th-century ‘Amiriya Madrasa in Rada’ provides another example of Yemen’s dome-topped architecture; it contains two types of domes, plain and rounded with decorative ribbed sides. The ribbed dome is a common feature in Yemeni architecture and it has many close parallels to domes in India. According to Dr. Selma al-Radi (who began restoring the ‘Amiriya in 1983) the similarities between the domes of these two countries could indicate that an exchange of ideas and craftsmen took place. The earliest ribbed dome in Yemen graces the top of the minaret of the al-Madrasah Mosque in Sana’a, which was built in 1265-66 AD. It is clear that architectural elements, decorative components, and techniques have observed few boundaries in the Middle East over time, and that the ebb and flow of such influences are difficult to trace and yet strongly evident in Yemen’s domes.

**Vocabulary**

**Arch:** a curved structural member spanning an opening, used to support a wall or other weight above the opening.

**Ayyubid:** a dynasty of the end of the 12th to the middle of the 13th centuries, founded by the famous Kurdish officer Salah al-Din bin Ayyub (the famous Saladin who fought the Crusaders and captured Jerusalem), which ruled in Syria, Egypt, and Upper Mesopotamia. Saladin also conquered Yemen and the Ayyubids ruled there from 1174 – 1229 AD.

**Baked Brick:** mud bricks that are fired in a kiln; use as a building material.

**Calligraphy:** the art of fine handwriting; beautifully or elegantly written text.

**Dome:** a vaulted circular roof or ceiling; concave or hemispherical structure.

**Minaret:** a tower, attached to a mosque, that is used to broadcast the call to prayer.

**Monsoon:** a name for seasonal winds that reverse direction. First applied to the winds over the Arabian Sea that blow for six months from the northeast and for six months from the southwest. It is associated with periods of heavy rainfall. It brings rain to Yemen twice yearly. The word comes from the Arabic *mawsim*, meaning season, i.e. sailing.

**Mosque:** Muslim place of worship and gathering.

**Mud Brick:** a flat square slab produced by filling a wooden mold with a mixture made primarily of mud or clay that has been dried in the sun; used as a building material.

**Octagon:** a plane polygon of eight angles and therefore eight sides; an octagonal object.
**Quran**: the book composed of writings accepted by Muslims as revelations made to Mohammed by God (Allah) and thus the divinely authorized basis for regulations and practices of the Islamic world.

**Rasulid**: a Yemen dynasty (1228 – 1454 AD) founded by one Nur al-Din al-Rasuli, a Turkoman from Syria.

**Stucco**: a fine plaster for interior wall ornamentation. In Yemen craftsmen carve very intricate designs into the stucco plaster.

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**Bibliography**


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**Domes of Yemen**

- parabolic-style or “beehive”
- semi-circular
- ribbed
- alternating ribbed

See plates 14 – 15 for student handouts on the domes of Yemen.

Drawn by Bruce Paluck
10. The Domes of Yemen

Classroom Activity
Appropriate Grade Level: Grades 4 – 7.
Subject Area(s): Art/Architecture History.

Goals/Focus:
To introduce the history of the dome in Yemen.
Students learn about decorative patterns in Islamic art.
To construct a dome (a papier-mâché bowl) and decorate it with a geometric design from Yemeni architecture.

Materials:
Background information on “The Domes of Yemen” including drawings of domes on the handouts (plates 14 – 15).
Papier-mâché supplies: Papier-mâché paste, paper strips (sheets of newspaper), forms to support the wet paper strips, masking tape, paint brushes, paints, plastic table covering, protective covering for the students.
Papier-mâché art paste can be purchased at art supply and craft stores; this may be the best choice because it is non-toxic, easy to mix, and cleans up with soap and water. You can also use wallpaper paste (not recommended for children who may put their fingers in their mouths), white glue thinned with water (not school glue), or you can make your own adhesive paste. There are various recipes for the paste and many can be found on the internet. For example: boil 5 cups of water in a saucepan. In a bowl mix 1/4 cup of sieved flour with a cup of cold water. Mix to a smooth consistency. When completely free of lumps, add the mixture to the water in the saucepan. Gently boil, stirring constantly, for two or three minutes until the mixture thickens. Allow to cool before using. (The Papier Mache Resource: <www.papiermache.co.uk>)

Paper Strips: Tear strips of newsprint, using a ruler as a straightedge. It is easier to tear with the grain of the paper (a little experimenting will soon reveal whether a vertical or horizontal direction is easier). Prepare short strips of paper for the base of the dome and longer ones for the bowl of the dome.

Forms: A balloon will be used to support the papier-mâché strips that will form the bowl-shape of the dome. A long piece of cardboard (or several shorter strips) taped into a circle will be needed as a support for the base of the dome. When the balloon is inflated cut a cardboard strip for the base—a wide strip if the balloon is sharply rounded, or a narrower strip if it has a gentle slope. Make sure that the base is cut and taped into a circle evenly or the bowl-shaped dome will not sit properly. A bowl can also be used as an alternative form, but you will need to treat it in some way to release the bowl from the papier-mâché strips when they have dried. Apply one of the following to the bowl before placing the paper strips: petroleum jelly, cooking oil, dishwashing liquid, or plastic wrap (this last may leave a slightly crinkled texture on the inside of the “dome”).

Paints appropriate for use on papier-mâché.
Examples of Islamic geometric designs displayed around the room.
Geometric pattern from the painted inside of a dome from the ‘Amiriya (see lesson 17).

Anticipatory Set:
Share with students information about building innovations over the centuries and how they have altered the structures that humans were able to build (begin with more ancient and end with items like reinforced steel and the geodesic dome). Show the examples of Islamic geometric designs that you have collected and displayed around the room.

Discussion questions:
What are some domes that you have seen?
How does a dome differ from other architectural elements, visually and structurally?
What are some striking elements of Islamic geometric designs?

The Lesson Procedure:
Part 1: Students read the background information (summarized for younger children).
Part 2: Students construct the papier-mâché bowls:
1. Blow up the balloon and knot the end.
2. Dip a strip of newspaper into the paste, or use a paintbrush and brush the paste onto both sides of the paper strip.
3. Starting at the end away from the knot, place a strip over the balloon. Repeat this process until you have covered about half of the balloon with layers of wet paper strips to form a bowl. Let it dry. (Note: the drying area must not be too cold; very cold air may cause the balloon to deflate, thus removing the support needed for the strips while they dry.)
4. Make a circular base for the dome with a long strip of cardboard. Cover the base with newspaper strips dipped in paste. Let it dry.
5. Tape the circular base to the bottom of the bowl-shaped dome (the papier-mâché covered balloon).
Use strips of paper and paste to cover the tape and make the base sturdier. Let dry.
6. Pop the balloon and take it out.
7. Trim the edges of the papier-mâché to make it smooth.
Part 3: When the papier-mâché bowls are completely dry, paint the inside and outside with geometric designs inspired by the patterns that you have displayed around the room.

Conclusion:
Discuss how buildings and the spaces we are surrounded by make us feel (cathedrals, small closets, etc.).

Lesson Extensions:
Students try various building materials to make domes (lego, blocks, etc.)
Students research the works of Buckminster Fuller and his exploration of the function, cost, and beauty of domes.

Use David MaCauley’s book *Building Big* (Houghton Mifflin, 2000) to explore the history and function of the dome. See “Dome Basics” created to accompany the PBS show of *Building Big* with an illustrated history of domes complete with activities for kids at: <www.pbs.org/wgbh/buildingbig/dome/basics.html>.

Direct students to read (or read/paraphrase) the handout “The Legendary Palace of Ghumdan in Sana’a” (see Lesson 8). Discuss how the description of the legendary palace dome is similar or dissimilar to the domes that they are studying in contemporary Yemeni architecture.

**Further Resources:**

Lesson 11. The San’ani House

Introduction

The founding of the city of Sana’a, the capital of the Republic of Yemen, is still cloaked in mystery. According to tradition it was established by a son of Noah, but even if it was of much humbler origins, there is no doubt that Sana’a is one of the oldest continuously inhabited cities of the Arabian Peninsula. By the first century BC Sana’a was a center on the inland trade route for the flourishing empire of the Sabaeans, for which incense was a major trade commodity. By 100–200 AD Sana’a had become a royal city and was declared a joint capital of the Sabaeans. The fortified and widely renowned “skyscraper” palace of Ghamdan was constructed in Sana’a in the 3rd century AD, and it was topped by a viewing room surrounded by bronze lions that supported a single pane of perfect alabaster (see lesson 8). This ceiling was so translucent, some writers report, that you could distinguish the type of bird flying overhead.

Sana’a has been the capital of pagan, Jewish, Christian, and Muslim rulers. This ancient urban hub has hosted numerous indigenous dynasties – Sabaeans, Himyarite, Sulayhid, Tahirid, and Zaydi (see Appendix III). Moreover, the city has played important roles for conquerors as well – among them the Axumite, Persian, Ayyubid, Mameluk, and Ottoman Empires (see Appendix III). At the center of so many struggles for political, economic, and religious power, Sana’a has seen more than its share of invading armies and tribes looting and pillaging. This fact has certainly influenced the development of its graceful, yet fortified homes. Sana’a means “well fortified” in Sabaeans, a language of ancient Yemen (see lesson 4), and its very name is evoked when one looks up at the recently restored twenty-five foot walls which shelter the old city.

Nestled in a plateau nearly 1½ miles above sea level (between 7,400 and 7,700 ft), Sana’a is distinguished today not only by its traditional style of building, but by its still thriving old quarter. In recognition of this historic treasure, the Yemeni government passed a law in 1974 that required new buildings to conform to traditional elements of Yemeni architecture, such as using qamariyyah windows (see lesson 8). These local efforts were supported in 1984 when UNESCO (the United Nations Educational, Scientific, and Cultural Organization) declared the eastern portion of the formerly–walled city of Sana’a to be a World Heritage City (other Yemeni cities with similar status are Zabid in the Tihamah, and Shibam in the Hadhramaut). Since that time many individuals and numerous projects have worked to preserve this rich built heritage. Even with these efforts, however, many forces contribute to its deterioration: poverty, absentee landlords, rising costs of maintenance, escalating real estate values, and the preference for homes with modern conveniences.

A typical San’ani house has heavy wooden doors that can be barricaded from within and that are framed by the stone masonry of the ground floor (see lesson 9); upper levels are made with baked bricks. San’ani houses often rise five or more stories upwards, and consequently the houses of Sana’a are often referred to as tower houses. The ground level traditionally held animals, often with a mezzanine level used for grain and food storage. The first residence level is often a living room suitable for business. Subsequent floors are for sleeping and cooking. The top floor of the house is a sitting room called a mafraj (also called manzar or tayramah) reserved for special occasions. It is highly decorated with carved gypsum designs, and windows with alabaster or colored glass panels around the room, giving a panoramic view of the city. The final
storey’s flat roof space is used to hang laundry and to dry foods. One reason that San’ani houses are narrow is because the room width is limited by the length of timber available for ceiling beams. Rooms wider than ten feet are very unusual. The exteriors of these tower houses are decorated with whitewash that outlines the windows and highlights the bands of patterned brickwork that grace parts of the building; this gives them a decorative appearance, like white icing against a darker “gingerbread” background. Carved wooden shutters maintain privacy and keep out the heat of summer and cold of winter (see plate 10 for an illustration of a carved wooden shutter). Alabaster windows, either round or rectangular with an arched top, complete the effect of lightness and beauty from inside and out. There is documentary evidence that the foundations of some San’ani houses are up to eight hundred years old, although most houses are not much older than 300 years.

While beautiful monumental buildings like mosques, religious schools, public baths, and caravanserais are common in Yemen, the city’s architectural enchantment for residents and visitors alike is the beauty of the average home. An evening stroll through the cobbled winding streets of Sana’a offers views of alabaster and stained-glass windows glowing from within while the white gypsum patterns are illuminated by the moonlight. It is a sight that once led a Yemeni poet to write “Sana’a must be seen, however long the journey, though the hardy camel droop, leg-worn on the way.”

**Vocabulary**

**Alabaster**: a compact, fine-textured, white or translucent gypsum-based stone that is easily carved. It is highly valued in Yemen and has been used for a wide variety of objects, including lamps, windows, and other decorative crafts. Alabaster is identical to gypsum in chemistry, but its crystalline form is different.

**Beam**: a long, heavy, often squared piece of timber used for structural support in a building.

**Caravanserais**: warehouse for goods carried by caravans, such as spices, incense, and other commodities. Some of these buildings in Sana’a used the lower levels for animal loading and unloading, and the storage of goods. The upper floors were for conducting business and for lodging merchants. At least 58 caravanserais (in Yemen called *samsara*, pl. *samars*) have been identified in the old city of Sana’a.

**Federation**: a sovereign state formed by the union of several states that give up certain powers to the central government while retaining for themselves control over local matters.

**Foundation**: the underlying base or substructure of a building.

**Ghamdan**: a fabled pre-Islamic royal palace built in Sana’a by the rulers of the Sabaean federation of the kingdoms of Saba and Himyar. (also: Ghumdan)

**Gypsum**: a mineral of hydrourous calcium sulfate used in manufacturing of plaster of Paris, gypsum plaster and plasterboard, wallboards, and fertilizers.

**Hadhramaut**: a province of Yemen that stretches from the Empty Quarter to the Gulf of Aden; its chief cities are Shibam, Say’un, Tarim, and Mukalla. The Wadi Hadhramaut is a long, wide river valley in southeastern Yemen.

**Indigenous**: native or belonging to a place.

**Masonry**: something constructed of materials used by masons (for example: stone, brick, concrete
From the Queen of Sheba to the Republic of Yemen

Mezzanine: an intermediate partial level similar to a balcony between full stories of a building.
Mosque: Muslim place of worship and gathering.
Saba (adj.: Sabaean): a pre-Islamic kingdom that dominated the incense trade for over a millennium; it was the reputed home of the Queen of Sheba (see lesson 2).

Bibliography

11. The San’ani House

Classroom Activity
Appropriate Grade Level: Grades 3 – 6.
Subject Area(s): Art/Social Studies.
Goals/Focus:
  Introduce students to the architecture of the city of Sana’a.
  Students create their own models of a “tower house” of Sana’a.

Materials:
  Background information on “The San’ani House.”
  Pictures of homes from around the world.
  Print colored pictures of San’ani houses from the internet (there are many sites with pictures of San’ani homes, for example, try: <www.members.aol.com/yalnet/sanaa.htm> and <www.alovelyworld.com) and/or bring books with images of San’ani houses. Copy the San’ani house cutout (see Plates 16 - 19). For younger students pre-cut along the lines indicated.
  Scissors, tape, and earth colored paints/pencils/felt markers/crayons.
  Gather information on what has been done in your city/region to preserve monuments and historic homes/buildings.

Anticipatory Set:
  Share the pictures of the San’ani houses that you have gathered.
  Discussion questions:
    What is the oldest building that you have ever seen?
    What thoughts or feelings did you have while you were there?
    What thoughts or feelings do you recall when you think about “home”?
    Why is decoration important in a building/home?

The Lesson Procedure:
  Part 1: Students read the background information (summarized for younger children).
  Part 2: Students decorate and put together their own San’ani house.
    If desired, spray mount paper to lightweight cardboard to make a sturdier version.

Conclusion:
  Discuss how a home in Yemen is different from the student’s homes.
  Discuss how homes in this country have changed over time.
  Discuss how many American cities have tried to preserve the integrity of their older sections with mixed success.
Introduce the information on what has been done in your city/region regarding historic preservation.

**Lesson Extensions:**

Rent/buy the 52-minute video *The Architecture of Mud*, produced in 1999 by independent filmmaker Caterina Borelli as a joint preservation project with Pamela Jerome (Columbia University), supported by the American Institute for Yemeni Studies. This documentary examines traditional methods of construction and preservation of mud brick masonry in the Wadi Hadhramaut. Available at: <www.der.org/docued>.

Students research the work of Hassan Fathy, the famous Egyptian architect and his use of vernacular materials and techniques.

Students research adobe architecture of the southwestern United States, and other types of mud architecture around the world.

Students research national legislation that has been implemented in the US to encourage conservation of historic buildings and districts.

Students read one or both of the handouts (see Lesson 8) *The Legendary Palace of Ghumdan in San’a* and *The Houses of San’a*. Discuss how the descriptions of Jamal al-Din ‘Ali, who wrote in the 18th century, are similar to contemporary Yemeni houses.

**Further Resources:**


MIT’s School of Architecture and Planning in cooperation with the Aga Khan Trust for Culture hosts a website with extensive images and documentation on Islamic architecture with excellent resources on Yemen at: <www.archnet.org>.
The San’ani House Model
Instructions for Assembling the Model

By Bruce Paluck
(See Plates 16 - 19)

The 3-D house model should be photocopied onto firm paper. For best visual results, use a beige or brown paper to represent the building’s mud bricks. You can then color in the plasterwork at the windows and each floor level using a white colored pencil. Dark brown should be used for the window frames, dark gray for the first floor basalt (represented by multiple horizontal lines) and a mixed variety of bright colors at the stained glass (qammiriyah) windows (see lesson 8). After you have colored in the two facades of the house, begin constructing it by cutting out the portion titled “Front Façade.” This façade will also need an internal cut best made using a utility knife or X-acto™ Blade. This cut is marked by a dashed line as shown in Figure 1. Make sure that you cut up and around the little window boxes. Next, fold the tab back on the left side of the façade. Then crease the lines marked “fold back” (as shown in Figure 1) and proceed to fold the façade back so that the left and right sides are at a 90° angle. Your cut-out should look like Figure 2.
Now cut out the drawing labeled “Rear Façade.” There are two cuts to be made across this façade as noted by the dashed lines in Figure 3. Be sure to cut up and around the window box. Once the cuts are made, fold back the three vertical lines as shown in Figure 3. The left side of the façade should now be at a 90° to the right as shown in Figure 4. Be sure to fold back the tabs at the left end of each piece. Now apply a glue stick to each of the four tabs on the facades. Bring the two facades together as shown in Figure 5 and secure the tabs neatly and evenly aligning them with the building corners.
See Figure 6 for the remaining activities described below.
While the glue is drying cut out the part of the model titled Base. Fold its four outer tabs downward at a 90° to the Base. Slip this up into the bottom of the house but do not glue the Base yet. The Base will be the last piece of the model to be glued in but, at this point, it will serve to hold the house square while you work. Cut out Roof 1 and fold its tabs up. Place the roof in its appropriate position (as noted in Figure 6). Notice that the shorter tabs will need glue stick applied to the outside while the tall tab will need glue applied to the inside since it will slide up under the façade. Only apply glue to the upper portion the tall tab. Put the roof in place aligning the top of the short tabs with the parapet of the roof.

Cut out Roof 2 and follow the same instructions as for Roof 1, noting that the two tall tabs will need glue on the inside while the shorter tabs will need glue on the outside.

Cut out Roof 3 and follow the same procedure as with the first two roofs.

Roof 4 has all short tabs and glue should only be applied to the outside.

You have probably already taken out the Base in order to fit in the roofs properly. Now glue the outside of the tabs on the Base and slip it into place making sure the tabs align with the base of the house.
Lesson 12. Lamps: Chasing Away the Darkness

Introduction

For thousands of years humans have sought ways to lighten the darkness. Lamps burning animal fat have been found that date to the Upper Paleolithic period, possibly as much as 25,000 years ago. By the fourth millennium BC oil lamps were common across the Near East and Egypt. The earliest lamps were probably a shell or stone dish with a wick floating in some kind of oil. Later lamps made of clay and other substances had a shape resembling a modern ashtray, with the lip of the dish turned up in two or more places for the wick. Lamps such as these found in Palestine date from the 12th to 10th centuries BC, and in Cyprus from the 8th to the 3rd centuries BC. Closed clay lamps found in Mesopotamia date to the 3rd millennium BC. A much later closed design, lamps with a spout for the wick (Aladdin-style lamps), are typical of the early Roman period in Egypt and elsewhere in the Near East; they were also favored in the Byzantine and Islamic periods.

In Yemen a variety of lamps and lighting techniques have been used over time. One model of ancient origin is a round flat dish with a fluted edge, looking like a pie pan; it was hung from the ceiling by a metal ring in the center. Known as mesrejeh, these lamps are most commonly made of alabaster, but can also be made of soapstone (harad in Arabic), or of onyx (marmar). A wick of either animal hair or grass fiber, twisted into a cord, was draped over the edge and floated in olive, sesame, or mustard seed oil. Alabaster and other transparent stones allow the light of the wick to filter through the stone, creating an attractive globe of light. Alabaster and onyx lamps often have carved decorations that show up when the lamp is lit. The Jews of Yemen used this style of lamp to signify the beginning of the Sabbath on Friday evening and, in some parts of Yemen, the observance of Hanukkah.

But candles were used in another traditional style of lamp before there was electrical lighting to light Yemeni houses. Called the fanous (see drawing below), this lamp consists of a metal base and top joined by a simple muslin cloth stretched over a metal spring, which can be folded together like an accordion for storage. A candle resting on the metal base provides a soft filtered light protected from drafts by the fabric. These lanterns were hung from the ceiling to light long dark stairways and rooms with high ceilings.

In ancient times the daily schedule of people was governed largely by the rising and setting of the sun. In general people went to bed at sunset and rose with the dawn. This may seem strange to us because we are located far from the equator where the length of daylight differs radically from summer to winter. However, closer to the equator where Yemen is located (between latitudes 12°40’ N and 19°N), the difference between the length of day in summer and winter is only one hour. For example: on June 21st sunrise is at 5:34 am and sunset at 6:36 pm, and on December 21st sunrise is at 6:25 am and sunset is at 5:38 pm.

Vocabulary

Alabaster: a compact, fine-textured, white or translucent gypsum-based stone that is easily carved. It is highly valued in Yemen and has been used for a wide variety of objects, including lamps, windows, and
other decorative crafts. Alabaster is identical to gypsum in chemistry, but its crystalline form is different.

**Byzantine**: of or related to the powerful Byzantine Empire (Christian), from the 4th to the 15th centuries AD, whose capital Byzantium is the modern-day city Istanbul (in Turkey).

**Equator**: an imaginary line around the center of the earth, equidistant between the two poles.

**Fluted**: decorated with parallel grooves, as a column or ruffle.

**Hanukkah**: a Jewish festival of eight days duration that commemorates a military victory and the rededication of the Temple of Jerusalem. Also called the “Festival of Lights,” or “Feast of Dedication.”

**Muslin**: sturdy plain-weave cotton fabric, used especially for sheets, derived from the famed place of origin, Mosul (Iraq), and from the Arabic word for joining something together.

**Sabbath**: literally, the seventh day of the week, named in the Old Testament of the Bible as a day of rest and observed as such by Jews and some Christians. The majority of Christians use the word, in its derived meaning of “holy day,” to refer to Sunday.

**Bibliography**


**Yemeni Lamps**

*Mesrejeh* style lamps.  
(See Plate 20)

*Fanous*. Lantern with metal base and lid. Circumference 7 1/2 inches, height when fully extended 16 inches.  
(See Plate 21)

See plates 20 – 21 for student handouts of Yemeni lamps.

Drawn by Maha al-Hibshi
12. Lamps: Chasing Away the Darkness

Classroom Activity
Appropriate Grade Level: Grades 5 – 8.
Subject Area(s): Social Studies/History.
Goals/Focus:
Students will learn about traditional lighting in Yemen.
Students will create their own lamp.

Materials:
Background information on “Lamps: Chasing the Darkness Away.”
Collect stories, myths, and poems, in which lamps, lanterns, and light play a role.
Sculpting clay that can be baked (Femo or Sculpi) in a variety of colors.
Candle wicks.
Olive oil.
Paper and writing implements for students.

Anticipatory Set:
Share with the students the stories, myths, and poems that you have collected about lamps, lanterns and light.

Discussion questions:
Why is light so important to humans?
What is the most impressive light/lamp/lantern that you have ever seen?
In colder and winter-darkened parts of the world what are the challenges to survival?

The Lesson Procedure:
Part 1: Students read the background information (summarized for younger children).
Part 2: Students try to reproduce in clay the shape of the lamp as sketched on the handout, or students try to design their own version of an oil lamp, complete with decorative elements. Bake the sculpting clay according to the package instructions. Pour the oil in the finished lamp, insert the wick and light it.
Part 3: Ask students to write about illumination, describing a memory, event, and/or emotions that they associate with light.
Part 4: Students read and discuss the collected writings of the class.

Conclusion:
Students bring in pictures or various types of lamps and lanterns (Aladdin-style lamps, pioneer lanterns, Coleman lanterns, lighthouses, etc.). Use the images for the following discussion points.
Discuss the importance of light throughout history, both symbolically and practically.
Discuss the impact that electric light has had on society and how we live today.

**Lesson Extensions:**

Students research various sources of light used by people throughout history; e.g. when candles were first used, what kinds of substances have been used for illumination (kerosene, olive oil, whale oil, gas).

See the US Coast Guard’s free curriculum on *Teacher’s Lighthouse Resource For Grades K-4* at: <www.uscg.mil/hq/g-cp/history/WEBLIGHTHOUSES/lighthouse_curriculum.html>.

History of World Ceramics, a course developed by Robert Kibler for the Glendale College of Ceramics in California has information and images of ancient Roman oil lamps at: <http://netra.glendale.cc.ca.us/ceramics/romanoillamps.html>.

Students research holidays around the world that use light as part of the celebrations: Ramadhan in Egypt; Diwali, or Festival of Lights, in India; the African-American celebrations of Kwanzaa; St. Lucia Day celebrated in Sweden, Finland, Italy, and the Caribbean islands; Los Posados celebrated in Mexico; Hanukkah, known as the Festival of Lights, celebrated by Jews around the world; Advent which many Christians observe leading up to Christmas; and the Winter Solstice.

Use the Farmer’s Almanac website to calculate the hours of daylight in December and June for their region and compare those times to Yemen or other countries close to the equator. Farmer’s Almanac website: <www.almanac.com/rise/index.php>.

**Further Resources:**


Lesson 13. Ahlan wa Sahlan (Welcome): Food and Hospitality in Yemen

Min akramak be da’awatik lelta’am akramo bil akit.
“Who is generous to you with his food, be generous to him in eating it.” Yemeni Proverb

Introduction

“Sadeeq (friend), come and sit and have tea with me.” The invitation of the shopkeeper interrupts your browsing amongst the enticing rows of silver jewelry. It’s not a ploy to get you to buy something, it’s what many come and return to Yemen to experience—authentic Yemeni hospitality. Visitors to Yemen, whether as tourists, on business, or as long-term employees, experience the hospitality of Yemenis and taste some of their delicious food.

Today, despite the arrival of satellite dishes and the presence of radios, televisions, and VCR’s in many Yemeni homes, the age-old tradition of socializing with family, friends, and neighbors is still the primary form of entertainment. In most Yemeni homes, people visit on a weekly and sometimes daily basis. Bakhoor (incense – see lesson 3), perfume, the water pipe, food and drink, and qat are all elements of Yemeni hospitality. Opportunities for hospitality may be daily, during holidays, celebrating weddings and births, visiting the ill, and offering condolences when someone dies. Visitors to Yemen are gladly embraced in many of these gatherings and language presents little barrier to the hospitable host.

In shops, offices, and homes cold and hot drinks are offered throughout the day. A steaming glass of strong, sweet, loose-leaf tea (shahi) may be offered to you. Yemenis often add cardamom and other spices, or condensed milk, to their version of this popular refreshment. Yemenis also drink traditional coffee very sweet, strong, finely ground with cardamom, and in a style similar to what, in America, is known as Turkish coffee. Among women there are those who tell the fortune of the coffee drinker based on the powder-like coffee silt at the bottom of the dainty cup. Throughout much of Yemen, also, a fragrant drink called qishr (which literally means husk or peel) may be offered to you. This spicy drink is brewed from the roasted husk of the coffee berry, mixed with ginger and other spices. Ironically, the bean is the least used part of the coffee plant in the land where coffee was first popularized, and from where, via the port of al-Mukha or Mocha, this popular drink was introduced to Turkey and eventually to Europe. In some urban homes in Yemen, guests may also be offered instant coffee. The single, tall latté or cappuccino of trendy coffee shops in the West has not yet appeared in Yemen.

Beyond beverages there is also a diverse cuisine, typified by a variety of ingredients, aromas, and history. The strands of this cuisine come from many sources, among them the foreign empires that brought elements of their foods, foreign travelers upon trade routes who transmitted recipes and ingredients, Yemenis traveling abroad who brought foods and ideas back to their homeland, and entrepreneurs from around the world whose bakeries and restaurants have expanded local dining options. These influences have brought spices, ingredients, and beverages from other parts of the Arab World, the Horn of Africa, India and Western countries to the Yemeni palate. Even the local food vocabulary uses words from far corners of the world, for example, Hindi words such as shahi, tea, and ruti (a type of loaf bread) are used in Yemen.
The diversity of Yemeni cuisine has also been influenced by location, climate, elevation, soil types, and water resources, which determine the types of fruit, grains, and vegetables that can be cultivated. Furthermore, popular dishes vary in preparation between villages, and even within a single village women pride themselves on their particular variation of a local dish.

Whether you are eating in homes or restaurants, the meal schedule in Yemen reflects working hours and accommodates the five daily prayers for Muslims. The main meal of the day is eaten early in the afternoon (1:00 or 2:00 PM) often followed by a relaxation period, which may include chewing qat, or taking a siesta. Many workers in offices and shops then return to work from 4:00 to 8:00 PM. Breakfast and supper are light meals, although for those working in agriculture or other manual labor jobs, breakfast is more substantial. In many regions of Yemen breakfast and supper (eaten after 8:00 PM) consist of eggs, ful (fava beans, see recipe below), fasuliya (kidney or pinto beans), or cheese served with various breads.

Fava beans (also known as: faba, broad, horse, field, tick, or Windsor beans) are one of the most ancient and healthy of all legumes (archaeological evidence of human usage dates back to 6800 – 6500 BC). Grown and eaten widely in Yemen and known as ful, this flavorful bean has been a staple of many civilizations including those of the ancient Egyptians, Greeks and Romans. Today the fava bean is grown in over 50 countries including Yemen, with China producing about 65% of the world’s crop. The fava bean, however, presents a problem for some individuals who have a genetic deficiency of a certain enzyme and who rely excessively on it as a protein source; they can develop a type of anemia known as favism.

One can not discuss food and hospitality in Yemen without mentioning bread, the staff of life. The catalogue of Yemeni breads is dominated by a wide variety of flat breads that use little leavening or wheat flour (wheat has more gluten, allowing bread to rise). These variations result from preference, availability of grains and leavening agents, various fuels and oven types, and the influence of other cuisines. Some examples of flat breads, which are usually shaped like a circular pizza from 12” to 18” in diameter, are maluj, qafu, jahin, fittir, qurmah, khubz, tameez, lahouh, ‘aysh, ritib, and khubz tawa (see recipe below). In addition to flat breads there are other types of bread including kidam, a multi-grain roll with an interesting history. This hearty bread was first brought to Yemen during the Ottoman occupation as a staple for soldiers (like hardtack) and has now entered the selection of local breads. Thousands of kidam rolls are still baked daily in the military fort in the Old City of Sana’a for all the soldiers in the area. Freshly baked bread is valued, but so are yesterday’s leftovers. With no preservatives in breads they go stale rather quickly. Frugal Yemeni housewives invented fattah, a dish where yesterday’s bread is broken into small pieces, and soaked in a liquid. Fattah in the village of Kawkaban will be soaked in a milk and clarified butter combination, in the Tihamah it may have bananas or dates mixed with honey, and in Sa’ dah (close to the northern border with Saudi Arabia) this dish will be moistened with soup broth.

One of the most popular grains in Yemen is sorghum, called dhura in Arabic. This hearty grain, one of the most commonly eaten grains in the world, is the most important grain in Africa and is widely grown in India and China. Its popularity is not only due to its slightly sweet and rich flavor, but also because it is generally drought resistant and grows well in warm climates, like Yemen. When sorghum is in season, Yemenis eat it roasted; it is sold on the streets like roasted corn. Sorghum is also ground into flour that is
used in a variety of porridges, breads, and other baked goods. It is also often mixed with other grains. In the past Yemenis used little wheat and relied on the heartier grains such as sorghum, millet, and corn, but today in Yemen wheat is the most widely used grain and Yemen imports 75% of its cereal needs. Interestingly, the United States is the number one producer of sorghum in the world, but it is difficult to buy sorghum fresh in the US because it is primarily used for animal fodder.

The oven in which many of the flat breads of Yemen are cooked is a clay *tanoor* (another word shared with Hindi). This kind of oven has been excavated elsewhere in the region in contexts dating back more than 7,000 years, suggesting that this kind of flat bread has been a staple for inhabitants in the region for millennia. Today a fire of wood or butane gas is lit in the bottom of a beehive-shaped ceramic oven that sits on the ground. The baker flattens out the dough and places it on a convex basket. This brave soul then ignores the heat glowing up from below, and slaps the pizza-shaped dough against the interior side of the oven. The stickiness of the dough and the heat of the clay oven cause it to adhere to the oven’s surface. When the bread is cooked it must be removed quickly, or it will burn, or worse yet, fall into the coals. The mouth-watering freshly-baked bread is slightly bubbled and should be eaten as soon as possible.

Food and drink are but one aspect of hospitality, although an important one. Also important are Yemeni tribal traditions of hospitality that ensure one’s guests are comfortable, both physically and mentally. If you are a tribesman who has been hosted by another tribesman and have broken bread together, the host must protect the guest from bodily harm or theft. It is said in eastern Yemen that “eating meat and bread [together] gives eight days obligation, grapes and raisins, dates and milk give four days, and coffee just one day.”


**Vocabulary**

- **Anemia:** a nutritional deficiency in which the blood lacks red blood cells, hemoglobin, or volume.
- **Arab World:** the geographic designation for the 22 nations that have predominantly Arab populations.
- **Clarified Butter:** butter that is heated until it melts and the milk-solids form on the surface of the melted butter (appearing on the surface as foam); the solids are then removed from the butter by skimming or straining. It is also known as *ghee*.
- **Convex:** curved or rounded like the exterior of a sphere or circle, the opposite of concave.
- **Cuisine:** a manner of preparing food; a style of cooking.
- **Entrepreneurs:** persons who organize, operate, or assume a risk for a business venture.
- **Fodder:** food for domesticated animals such as cows, sheep, or horses, often consisting of coarsely-chopped stalks and leaves of corn mixed with hay, straw, or grains.
- **Gluten:** a protein found in grains, such as wheat, oats, rye, and barley, that forms in the process of making bread and interacts with the yeast. Gluten gives elasticity to bread dough and structure to the resulting bread. Grains with a high gluten content will make a dough that rises higher when baked than doughs made from grains with a low gluten content.
**Hindi:** a major language (with many dialects) in India.

**Horn of Africa:** the geographic term referring to the eastern projection of the coast of Africa including Djibouti, Eritrea, Ethiopia, and Somalia.

**Leavening:** a substance, such as yeast or baking powder, used in batters and doughs to produce fermentation and rising.

**Legumes:** the fruit or seed of pea or bean plants.

**Millennia:** thousands of years.

**Palate:** the roof of the mouth; the sense of taste.

**Qat:** a shiny-leafed shrub (latin name: *Catha Edulis*) cultivated extensively in Yemen; its leaves, chewed on a daily basis by a majority of men and by increasing numbers of women, produce a mildly stimulating sensation. *Qat* afternoon gatherings are woven into cultural, professional, and political traditions in Yemen.

**Siesta:** a rest or nap usually taken after the midday meal.

**Tribe/Tribal:** describing a traditional social system still influential in Yemen that provides social organization, a system of laws, a code of behavior, and conceptions of honor to individual members of a tribe who often share a common ancestry.

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**Bibliography**


13. *Ahlan wa Sahlan* (Welcome): Food and Hospitality in Yemen

Classroom Activity
Appropriate Grade Level: Grades 2 – 5.
Subject Area(s): Social Studies.

**Goals/Focus:**
- To learn about the rich traditions of hospitality in Yemen.
- To experience drinking tea in the Yemeni fashion.

**Materials:**
- Background information on “*Ahlan wa Sahlan* (Welcome): Food and Hospitality in Yemen.”
- A pot (or pots sufficient for the number of groups) of caffeine-free herbal tea (although Yemenis usually drink black loose-leaf tea).
- Cups sufficient for the group.
- Plate(s) of cookies.

Designate an open space for children to sit cross-legged in a circle (or a number of smaller circles). If possible invite a guest who is either an Arab or someone familiar with the traditions of Arab hospitality.

On the blackboard print the following rules of etiquette without the comments in the parenthesis:
- Wash your hands before and after a meal.
- Never step over the food (this is disrespectful of God’s bounty, and at the practical level it could pollute the food with something from the bottom of the foot, or shoe).
- If you touch a piece of food, you must eat it.
- If you have a cold or are sick, eat from a separate plate.
- Take food from the portion of the dish directly in front of you (it is considered ill manners to reach across the dish).
- Always make sure your guests and children are getting enough food, even if the host must go without.
- Do not take the last bite of food on the plate; always offer it to someone else.

*Bismallah ar-Rahman ar-Rahim* (“In the name of God, the most Merciful, the most Compassionate”) and *al-Hammdu lillah* ("Praise be to God").

**Anticipatory Set:**

Share with the students the fact that while Yemenis in urban areas will sometimes eat from separate plates using cutlery, the predominant method of eating in most restaurants and homes is from communal dishes. Point out to the children that approximately 30% of the people of the world eat with their fingers and bread, 30% use chopsticks, and the rest use cutlery.

**Discussion questions:**
- What rules of etiquette do you practice in your home?
What are the traditions of hospitality that you practice in your home?
What is your favorite food?

The Lesson Procedure:

Part 1: students read the background information on hospitality (summarized for younger children).

Part 2: explain/discuss the rules that have been written on the board for the procedure and the reasons for the rules (the information in the parentheses).

Part 3: students sit in a circle, or a number of smaller circles (the ideal number would be 5-10). The ideal size would allow the “host” or “hostess” to comfortably reach all “guests” to pass around the tea and cookies. Ask for a volunteer for each circle to play the role of “host” or “hostess.” Take the volunteers aside and give them instructions on their role. If time allows for a number of children to play the role of host give instructions to the whole class.

Part 4: place a teapot, cups, and cookies in front of each host. Before beginning to pour tea the host should say the following phrase in Arabic: *Bismallah ar-Rahman ar-Rahim* (“In the name of God, the most Merciful, the most Compassionate”). In Yemen this phrase is uttered before beginning a meal, or initiating an activity such as a journey.

The host should pour one glass of tea at a time and offer it to the guests seated around the circle. After serving all the guests, the host should hold the plate of cookies and offer one to each guest in turn.

Part 5: when all the guests have finished, the host should say the words *al-Hammdu lillah*, (“Praise be to God”). In Yemen this phrase is used at the end of meals, or at the conclusion of other events, for example after completing a test.

Conclusion:

Discuss the importance of hospitality in earlier times when travel was more difficult and many hosts/hostesses had little to share.

Lesson Extension:

If available, the hosts/hostesses volunteers could wear traditional Arab clothing to complete their role.


If kitchen facilities are available use the recipes below (pp. 95 - 96) for *ful* and *khubz tawa.* Have students prepare a meal for one another or invite another class to be guests. *Note: Check with parents or guardians for food allergies before preparing and serving food to children.*

For a fun article on fava beans (with other recipes) see: *The Long History of the Mysterious Fava Bean* by Russ Parsons at: <www.s-t.com/daily/05-96/05-29-96/c01li096.htm>, or Some Facts About Mediterranean Food History: Ful – *The Egyptian National Dish* by Clifford A. Wright at: <www.cliffordawright.com/history/ful.html>.

Students read about the history of the table utensils and discuss how eating utensils have changed over
From the Queen of Sheba to the Republic of Yemen


Further Resources:


For an exceptional detailed food timeline, complete with internet-referenced recipes see: <http://foodtimeline.com/>.
Ful Yemeni Style (Fava Beans Yemeni Style)

One 8-oz. can of fava beans (commonly found in international or Middle Eastern grocery stores)
1 small chopped onion (or two green onions)
1 small chopped tomato
1 minced clove of garlic
2 tablespoon tomato paste
1 tablespoon cumin, salt to taste
1 tablespoon vegetable oil
the juice from a half of a small lemon mixed with 1 tablespoon olive oil

Brown the onion and garlic in vegetable oil. Add the tomato, tomato paste, and cumin. Let the mixture simmer for a few minutes. In a separate bowl mash the fava beans along with the liquid from the can with a potato masher. Add to the onion mixture. Let simmer on the stove for five minutes. Add salt to taste. Serve in a flat dish (traditionally it was cooked and served in a soapstone bowl); make a crater in the middle of the mixture, and pour the lemon juice and olive oil in the crater. Serve with khobz tawa, or another flat bread (Arabic pocket or pita bread will do).

Note: Check with parents or guardians for food allergies before preparing and serving food to children.
Khubz Tawa (Bread of the Pan)

A common bread in the Hujariyah district south of Ta’izz.

1 cup each of white and whole wheat flour
½ tsp. salt
¼ cup water, or whatever amount produces the desired consistency of dough

ghee (clarified butter)

vegetable oil

Mix the flours in a bowl. Gradually add water and salt to the mixture until the texture is doughy, but not sticky. Knead slightly and form into a ball. Let the dough sit for ten minutes. Divide the dough into three smaller balls, approximately one 1” diameter each. In a Teflon pan melt enough ghee to have 1 tablespoon. for each small ball. With a rolling pin roll out each ball, one at a time. With a pastry brush spread 1 tablespoon of ghee on the rolled out bread. With the edge of a knife lightly mark the dough with a grid divided into three sections in each direction (see diagram). Fold all four edges of the circle into the center along the lines (as seen in the diagram); this gives you a small square. Flatten the square with a rolling pin.

Fry in a small amount of ghee, turning over when lightly browned. It will bubble when in the pan, but the bubbles will collapse when you remove it from the heat.

Note: Check with parents or guardians for food allergies before preparing and serving food to children.
Lesson 14. Henna Body Art

Introduction

Archaeology has shown that for millennia humans have decorated their bodies with cosmetics, jewelry, and body art. With nearly 9,000 years of history henna, a dye made from the shoots and leaves of the tree *Lawsonia inermis*, is one of the oldest cosmetics in the world. The use of henna was recommended by the Prophet Mohammed to change the color of white hair, which was considered a sign of senility and approaching death. He also encouraged women to dye their nails with henna. Henna is as popular today as it has been over history. Today it is used as decorative body art in over 40 countries throughout much of the Middle East, Asia, and Africa. Furthermore, in Europe and America many shampoos, hair coloring products, and cosmetics contain this versatile substance.

The uses and beliefs about henna vary in the cultures where it is popular. In Yemen, henna has ritual and symbolic roles, is used for medicinal purposes, and to beautify the body. One of the most common uses of henna is as a hair treatment for both men and women. Henna gives a lovely reddish tint to dark hair, but it is also believed that it strengthens the hair, giving it a silken sheen. Henna is grown in various regions of the country, and differing soil conditions and climate produce a range of reddish hues. Women use henna to prevent the build up of calluses on their palms and the soles of their feet, and to strengthen their nails. Some people believe that henna, when spread over exposed skin, particularly the hands and feet, keeps the body cool in summer. Henna is also viewed as a sign of purification and it is used as a good omen in rites of passage, especially at weddings. The dye is applied to the hands and feet of children, infants, and women of all social classes; it is used sometimes by men. Occasionally henna is applied, for good luck, to the wool of sheep and the hair of goats that will be slaughtered and eaten during holidays.

One of henna’s most striking uses is as *naqsh*, an Arabic word meaning “design or decoration.” This tradition is gaining popularity in much of the world and even in the West, where temporary tattoos are increasingly popular. *Naqsh* designs are created by using dried, finely ground henna leaves, mixed with water and other substances including eucalyptus or mustard oil, strained lemon juice, sugar, pepper, and garlic. These additives are used to alter the consistency of the henna, enhance its ability to adhere to the skin, or to darken its color. The henna artist then paints the moist henna paste onto the skin in floral and geometric designs with a toothpick, twig, needle, or device like a miniature pastry cone. The henna decoration dries on the skin for a few hours and is then washed off, leaving the colored design on the skin (the longer it is left on the deeper the color). This specialized, time-consuming art is often part of festive occasions. Few brides today in Yemen go to their celebrations without henna patterns snaking up their arms and feet. But a henna party amongst friends and family creates its own occasion for gathering. When applied to the skin the patterns will last a week or two. When applied to the nails, however, henna is permanent; its telltale red hue remains until the nail grows out.

*Khidhab* is a black ink-like substance that Yemeni women use to decorate their hands and feet, usually in combination with henna. *Khidhab* is made from oak gall and copper oxide. (Oak gall is a substance that, in earlier times, was used to manufacture ink; today it is used to make incense.) Oak gall and copper oxide are
imported from India and cosmetic sellers in Yemen combine them to create the *khidhab*. The ink-like substance is then applied to the arms, hands, feet, and legs to create delicate tracery patterns up the limbs in much the same manner as described above for henna. Due to its consistency the artist, using *khidhab* alone or in combination with henna, can create more intricate patterns of *naqsh* than with henna alone.

Regional patterns of henna vary in Yemen, and decorative influences from other parts of the Arab and Islamic worlds are affecting the patterns used in many urban centers. In many cities and towns *naqsh* patterns on delicate paper manufactured in India can be purchased and applied to the hands and feet. Women in Sa‘dah, an area renowned for its basket weaving, will often incorporate similar patterns in their baskets and in the patterns that they paint on their hands and feet. In the Barat region of Yemen, women use similar patterns in their henna decorations and in the designs they paint around the doors, windows, and the decorative bands around the rooflines of their homes.

**Vocabulary:**
- **Millennia**: thousands of years (singular: millennium - one thousand years).
- **Prophet Mohammed** (570 – 632 AD): founder of Islam whose teachings, encompassing religious, social, and political principles, became the basis of Islamic religion and civilization.
- **Rite of Passage**: a ceremony that takes the initiate through the steps that bring him or her from one stage of life to another.

**Bibliography:**

**Yemeni Naqsh Designs**

See plate 23 for the student handout of Yemeni *naqsh* designs.

*Drawn by Maha al-Hibshi*
14. Henna Body Art

Classroom Activity
Appropriate Grade Level: Adaptable for any level.
Subject Area(s): Art.

Goals/Focus:
- To learn about henna and the tradition of *naqsh* in Yemen.
- To learn how conceptions of beauty vary around the world.
- To create original designs for the hands that replicate traditional *henna* patterns.

Materials:
- Background information on “Henna Body Art.”
- Gather images of the many ways to decorate the human body from around the world (cosmetics, face/body painting, tattooing, piercing, feathers, jewelry, and clothing).
- Find resources on the history of cosmetics such as *Hope in a Jar: The Making of America’s Beauty Culture* by Kathy Peiss, or articles and images from the internet.
- Face painting crayons in red and reddish-brown hues.
- Henna patterns to use as examples and to decorate the room (see plate 22). Many Indian, African, and Middle Eastern groceries will carry pattern books and the appliqué patterns. Photocopy examples from picture books on costume, clothing, and cosmetics from these regions. Henna patterns are also available on the internet at: <www.tapdancinglizard.com/>, or kits complete with henna and patterns from <www.hearthsong.com>.
- Invite a female guest from the Middle East, Africa, or India (possibly a mother of one of the students or someone from the community) who is familiar with henna traditions and who can help in drawing patterns on children’s hands.

Anticipatory Set:
- Share with the students information on practices in body art and show the images collected.
- Share information on the history of cosmetics, what substances are used, why they were/are chosen, and for what occasions.
- Discussion questions:
  - What are your preferences for decorating the body?
  - What is the most attractive/beautiful body decoration that you have seen?
  - Is there a difference in what is beautiful for men and women? Why?

The Lesson Procedure:
- Part 1: Students read the background information (summarized for younger children).
- Part 2: Using pictures and guest artists, the students pair off and paint each others hands in henna-like
From the Queen of Sheba to the Republic of Yemen

**naqsh** patterns.

*Warning!* The use of henna is not recommended in the classroom because some students may have an allergic reaction. Also henna patterns, once set and dried, can’t be removed with soap and water and will last for weeks.

**Conclusion:**

Discuss why people decorate their bodies. Point out that women are not the only ones to beautify themselves. Discuss how men in the US and other cultures, beautify themselves.

**Lesson Extensions:**

Read and discuss the book *Nadia’s Hands* by Karen English (Honesdale: Boyds Mills Press, 1999). Students continue researching decorative body art in various cultures during different periods.

Students go to the cosmetic aisle in the supermarket, or to a cosmetic store, and find out what products contain henna, or other natural substances.

*Millennium: Tribal Wisdom in the Modern World*, the educational television series and book by David Maybury-Lewis, has excellent examples of tribal body art and the cultural contexts that produce such beauty. Visit the website of Cultural Survival an organization dedicated to promoting understanding of indigenous peoples at: [www.culturalsurvival.org](http://www.culturalsurvival.org).

From the Internet resources and henna designs see: [www.hennapage.com/journal/index.html](http://www.hennapage.com/journal/index.html), and [www.mehandi.com](http://www.mehandi.com).

From the FDA website have kids take the test “How Smart Are You About Cosmetics” at: [www.cfsan.fda.gov/~dms/costf.html](http://www.cfsan.fda.gov/~dms/costf.html).

**Further Resources:**


Lesson 15. Silver Jewelry of Yemen

Introduction

It is the norm in many cultures throughout history for women to express their family’s wealth and success with jewelry. Part of the marriage process in Yemen is the gift of jewelry to the bride. While this gift may symbolically express the value that the groom places on his new bride, practically speaking this jewelry is her personal property and her security against economic hardships, in case of divorce, the death of her husband, or financial emergencies in the family. Traditionally in Yemen this wedding gift was silver jewelry, but today most young women and their families feel that gold is a better investment, and it has become the preferred adornment. The silver industry in Yemen has a long history. Al-Hamdani, a famous Yemeni geographer, poet and historian of the 10th century AD, wrote a book on silver and gold and it is a unique resource on these valued substances. This book is the oldest known treatise on techniques of working with these precious metals. Hamdani describes a silver mine in Yemen, operated by Persian miners, that produced large quantities of high-grade silver ore from pre-Islamic times to the 9th century AD.

The silver jewelry found in Yemen reflects decorative traditions influenced by many parts of the world including India, Turkey, Central Asia, Persia, and Africa. The three basic processes used to create silver jewelry are based on sheet metal, wire, and casting. Often jewelry combines the different processes, and the artisan builds upon a base of one form by adding more of the same material, adding another substance, or by removing some metal. Engraving removes a small amount of metal. Filigree and granulation add more metal—either as a wire to make filigree or as small round beads of metal to create granulation. Filigree and granulation are common techniques in Yemeni jewelry, and they are used to create a variety of cultural motifs and patterns, as well as distinct styles of jewelry in different parts of the country. Until the mass exodus of the Yemeni Jews to Israel in 1948, most silversmiths of the highland areas were Jewish. These craftsmen created a legacy of silver jewelry that is still evident today in markets throughout the country.

Other than silver rings men do not commonly wear jewelry in Yemen. The one exception is the decorative jambia, which is an important item of dress for most highland Yemeni men. The j-shaped version of this dagger worn by tribesmen is called asib, and it has a sheath made from wood wrapped with leather or plastic thongs. Judges, legal scholars, and the religious elite wear a more gently curved version of the jambia called a thuma or tuza (the handout for this lesson), which often displays very intricate and exquisite silver craftsmanship on the sheath. The hilt of the knife can be made from substances either common or rare: ivory, narwhal tooth, amber, agate, horn, wood, and, today, even plastic. The most common hilt is from cattle horn and the most expensive is of rhinoceros horn. It is believed that a dagger handle of rhinoceros horn has special properties; for example, such a handle dipped in milk and touched to a wound is said to cure snakebite. The rhinoceros, however, has become endangered in the late 20th century and in 1982 Yemen passed legislation banning its import, although enforcement has remained inadequate. Jambia hilts are now made from substances such as camel nail, plastic, and Indian water
buffalo horn replacing rhinoceros horn. Hilts often have a simple silver inlaid pattern or coins for decoration. The most valuable *jambia* blades are made of Yemeni steel; the strongest metal reputedly coming from recycled military tank treads. The belt is also an important feature of the *jambia*. Leather is used for the base of the belt, covered with woven or embroidered decoration in elaborate designs, often executed in metallic thread. The *jambia* has great symbolic meaning of manhood and membership in the tribe; it is rarely used as a weapon.

**Vocabulary**

*Engraving*: incising or carving a design on the surface of metal or wood.

*Filigree*: delicate and intricate ornamental work made from fine twisted wire of gold, silver, or other fine metal.

*Granulation*: using small round beads of silver or gold to ornament jewelry.

*Legacy*: something received or inherited from an ancestor or predecessor.

*Motif*: a recurring distinctive feature, dominant pattern or idea in art, literature or music.

*Narwhal*: an arctic aquatic mammal, having a spotted pelt and (in the male) a spiral tusk several feet long.

*Treatise*: a written work dealing formally and systematically with a subject.

**Bibliography**


15. Silver Jewelry of Yemen

Classroom Activity
Appropriate Grade Level: Grades 1 - 4.
Subject Area(s): Art.

Goals/Focus:
To learn about the craftsmanship of Yemeni silver.
To make paper jewelry patterned on Yemeni silver.

Materials:
Background information on “Silver Jewelry in Yemen.”
Copies of the handouts for this lesson. (The handout features rings and a jambia for each child.)
Felt pens.
Tape or glue to close the rings with and construction paper to make a belt for the jambia design.
Gather pictures and examples of silver jewelry from around the world.

Anticipatory Set:
Share with students information on jewelry fashions in the past: men wearing jewelry (pirate earrings, etc), as well as women’s jewelry and current trends of nose, navel, and lip rings. Share information on the long history of jewelry that dates to the earliest human settlements and the fact that these often last for thousands of years because they are often made of metal and stones.

Discussion questions:
What is your favorite item of jewelry?
How does wearing jewelry make you feel, or make others feel?
Why is jewelry important to human history?
What is the most impressive piece of jewelry that you have ever seen?

The Lesson Procedure:
Part 1: Students read the background information (summarized for younger children).
Part 2: Students color and make their silver jewelry paper-art and wear it.

Conclusion:
Discuss that what is beautiful to one culture may appear unattractive in other cultures.
Students discuss and draw a piece of jewelry that has meaning for themselves or their family.

Lesson Extensions:
An excellent site with text and pictures of Arab jewelry is at the Tareq Rajab Museum in Kuwait at: <www.trmkt.com>.
See Horace Mann’s website with topics related to Islam including articles on *Muslim and Middle Eastern Clothing, Jewelry, Make-up and Medieval War, Warfare, Weapons, Armor, and Castles* at: <http://www.sfusd.k12.ca.us/schwww/sch618/Islam_New_Main.html>.

Students research gemstones – their history and healing properties. See the website for the 2000 NOVA special *Diamond Deception*, which has a section on gemstones at: <www.pbs.org/wgbh/nova/diamond/>.

Bring a collection of jewelry for students to try on and wear during the lesson.

For an excellent illustrated overview of the history of jewelry see: *Greek Jewelry: 5,000 Years of Tradition* created by the Hellenic Silver and Goldsmith Centre at: <www.add.gr/jewel/elka/>.

**Further Resources:**


**Silver Jewelry of Yemen**

![Silver Jewelry of Yemen](image)

Silver Thumb Ring

Four Silver Rings

Silver Child’s *Jambia*. From end to left handle tip, 10 1/2 inches.

See plates 23 – 25 for the student handout versions of Yemeni jewelry.

Drawn by Maha al-Hibshi
Illustrations on this page are of objects provided by the courtesy of Abdullah Ali Rubaih, *World Friend*, in the Silver Market of the Old City of Sana’a.
Lesson 16. The Hirz: Averting Evil

Tigra Ya-Sin wa-fi yadak hajar.  
Recite the Qur’an’s Surat Ya-Sin, but keep a stone in your hand.  
(Trust in God, but keep your powder dry.) Yemeni Proverb

Introduction

Practices designed to avert evil are common throughout the world. In much of the Middle East folk traditions, the use of talismans (objects believed to act as a charm to avert evil and bring good fortune) has a long history. In Turkey stylized or realistic representations of an eye are thought to protect a person from the evil eye (something bad brought about by the gaze of someone who is envious, angry, has a mean heart, or is just downright evil). In Syria and Jordan particular stones used in jewelry, often worn by children, are believed to have protective properties. It is believed that green stones prevent post-natal infections and that white stones promote lactation. In Afghanistan people believe that red stones help stop bleeding and inflammation. In Yemen some people believe that the evil eye, called hasad or al-’ayn, may result in ill health and even death. This evil is believed to arise out of envy or covetousness. Yemenis have many traditions designed to avert evil or to protect one from it, including not drawing attention to a pregnancy, a beautiful child, or good fortune. The wearing of a local agate stone ring, or other types of lucky jewelry, is also believed to protect one from evil, as well as to promote healing of spiritual and physical ailments. In Yemen, however, the most common item used to ward off evil is the hirz.

The hirz is simply a container, often of silver, that contains verses from the Quran and other symbols to protect against evil (the Arabic root hrz means “to keep, guard, protect or preserve”). A hirz incorporates these religious inscription in some manner—written on a piece of paper contained inside the amulet, inscribed on the silver itself, or on a decorative stone. Newborn babies often have a small, delicate version attached to their clothing. Men frequently wear a hirz on their jambia belt (see lesson 16), and women may wear a hirz as a necklace, a charm pinned to their clothing, or woven into their hair. Triangular shaped amulets are common on the Arabian Peninsula and this shape is considered one of the most ancient shapes that protects against evil. Among the Jews of Yemen a three-sided cloth pouch called khoratah was filled with various amulets, words, or scriptures, dried herbs, grains of wheat and sorghum, sesame, salt, crystals, and myrrh and then decorated with silver filigree pendants or coral. A Jewish bridegroom wore these pouches at his wedding and a male child wore a smaller version at the circumcision ceremony.

Practices designed to avert evil are found in many cultures around the world and sacred texts often refer to the protection of God and averting evil (for example Psalm 121), thus weaving together folk practices and religious beliefs. In Yemen there are numerous spoken expressions that are said to protect one from evil or to avert it, including mashallah (meaning “God willing”) or nazar degnesin (meaning “May you avert/avoid the look). Ya-Sin is a favorite verse from the Quran recited against the evil eye. When someone sneezes or coughs “Ya-sin” is often said to protect from evil, but in modern times, many people in the region do not necessarily believe in the efficacy of such expressions. Similarly in the West,
most people are familiar with folk traditions and superstitions, but have little knowledge of their origin or belief in their power. Examples would include wearing charm bracelets, “knocking on wood” to prevent a mentioned event, avoiding walking under a ladder, or the tradition that a bride should wear “something old, something new, something borrowed, and something blue.” The common practice to say “God bless you” when someone sneezes is not only traditional good manners, but also evidence of the beliefs of earlier times.

Vocabulary

**Circumcision:** the removal of the foreskin of the penis.

**Filigree:** delicate and intricate ornamental work made from fine twisted wire of gold, silver, or other metal.

**Lactation:** the production of milk by the mother for breastfeeding a baby.

**Post-natal:** the period immediately after birth.

**Quran:** the book composed of writings accepted by Muslims as revelations made to Mohammed by God (Allah) and as the divinely authorized basis for regulations and practices of the Islamic world.

**Stylize:** to represent or design an object according to a set plan or style of expression that is recognized as being different from nature.

**Superstition:** any belief, practice, or rite unreasonably upheld by faith in magic, chance, or dogma.

Bibliography


16. The Hirz: Averting Evil

Classroom Activity
Appropriate Grade Level: Grades 4 – 7.
Subject Area(s): Language Arts.

Goals/Focus:
To learn about traditions of averting evil in Yemen and the Middle East, the US, and around the world.
To have children create a Yemeni-style good luck charm of their own.

Materials:
Background information on “The Hirz: Averting Evil.”
Handout of hirz coloring activity.
Glue or tape to complete the hirz.
String or yarn to make necklaces.
Gather pictures, stories, poems and information on other cultures’ practices to avert evil and ways of dealing with fear.
Have children bring from home, or make in class, things that symbolize protection or good luck to them, such as a rabbit’s foot, a poem or religious verse that is meaningful, or some other lucky item.

Anticipatory Set:
Share with the students the pictures, stories, poems, and information that you have gathered about other cultures’ practices to avert evil, to cope with fear, and to bring “good luck” (such as Guatemalan worry dolls or the Native American dream catcher).

Discussion questions:
What makes you afraid?
When you are afraid how do you handle the fear or make yourself strong?
What are some so-called “good luck charms” that you know?

The Lesson Procedure:
Part 1: Students read the background information (summarized for younger children).
Part 2: Students create their own hirz by coloring the handouts. Tape/glue them to complete their shapes and insert a good luck thought or verse. Then make into a necklace with the yarn/string.

Conclusion:
Discuss fear and how individuals and cultures deal with it.
Discuss how our fears and expectations can affect events, for example that dogs can sense fear in humans through their sense of smell and that this elicits a particular response.
Have children share some of their fears and ideas on how they have dealt with these (keeping lights on,
sleeping with a favorite stuffed animal, talking about their fears with others, etc.).

**Lesson Extensions:**

For older students: research the fear of witches in Europe and the US and the extreme measures used to eradicate witchcraft from communities.

Students research the origins of Halloween in the ancient belief that evil spirits roamed freely on a particular day, and the devices used for protection from such spirits.

For history, images, ancient written charms, and beliefs about amulets visit the website created for the exhibit of *Arabic Folk Medicine and Magic: 20th Century Amulets from the Kelsey Museum of Archaeology* at: <www.si.umich.edu/CHICO/amulets/home.htm>.

**Further Resources:**


Biddington, Jake. *Islamic Amulets: An Interview with a Collector of Fine Muslim Art* at: <www.biddingtons.com/content/expertamulet.html>.

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**Yemeni Amulet and Pendant Hirz**

Color this amulet, cut it out, roll it up and tape it into a tube shape. Use as a necklace.

A box-like pendant *hirz* traditionally contained a verse of the *Quran*, but later the shape itself took on amuletic power. Color it, cut it out and use as a necklace.

See plate 26 for the student handout of the amulet and *hirz*.

Drawn by Maha al-Hibshi

Illustrations on this page are of objects provided by the courtesy of Abdullah Ali Rubaih, *World Friend*, in the Silver Market of the Old City of Sana’a.
Lesson 17. Mathematics and Geometric Design

Introduction

Beginning with the early Caliphs in Baghdad, shortly after 750 AD, for nearly six hundred years the Arabs contributed significantly to many fields of science, from medicine to astronomy. Rulers throughout the Islamic world, from Spain to India and from Central Asia to Africa, supported scholarship in wide-ranging fields. They supported the translation of books and research from Greek, Persian, and Indian civilizations, and gathered scholars in their courts. This financial support of scholarship resulted in an unprecedented flourishing of the sciences. One indication of this heritage of Arab civilization is that so many words in science and technology, in English and other European languages, are Arabic in origin. A brief list of this vocabulary includes: alchemy, alcohol, algebra, algorithm, almanac, arsenal, borax, caliber, carafe, cataract, cipher, elixir, ream, retina, zenith, and zero.

The Arabs made many significant contributions to the field of mathematics. They developed a system of counting that used place-values, a system that relied on nine figures and zero. This system originated in India and was adopted, developed, and disseminated through the Islamic world. The characters used to express this system differed in the eastern and western parts of the Arab World and the figures used in the western parts were eventually adopted by Europe, and later America, where they became know as Arabic numerals. The numeral system used in much of the Middle East today relies on symbols that were used in the eastern Arab World. The symbols originated in India and therefore they are called Hindi-Arabic numerals. The Arabs also created the field of algebra, which comes from the word al-jabr (meaning “the reduction”). One of the major contributors to algebra was Ahmad abu Musa al-Jaladi, whom Yemenis claim as a native of Zabid, a town near the Red Sea that was a center of Islamic learning.

The Arabs also significantly influenced the development of geometry. The use of geometric designs is one of the distinguishing features of Islamic art and is expressed in metalwork, woodwork, ceramics, textiles, carpets, miniature paintings, and architectural details. One reason for such highly developed geometric designs, as well as for the intricacy and sophistication of Arabic calligraphy, is that in order to avoid idolatry, Islam prohibits the depiction of human and animal forms. Yemeni craftsmen explored geometric designs and created an exceptional artistic tradition (see lesson 8) in carved stone, gypsum tracery, stained glass windows, qudad carving, and wall and ceiling mural paintings. In Yemen, geometric designs in architecture are used in both homes and monumental buildings.

One Yemeni monument featuring extraordinary examples of geometric patterns in Islamic art is the ‘Amiriya Madrasa in Rada. This early 16th century building is a jewel of craftsmanship and design; it contains 7,100 square feet of ceiling mural paintings and features a wide variety of geometric designs, both painted and in stucco. Since 1983, Dr. Selma al-Radi has been working on the restoration of this building with local craftsmen under the sponsorship of the Yemeni General Organization for Antiquities and Museums and with the generous support from the Government of the Netherlands and other donors. The final phase of this restoration project conserved the beauty of its mural paintings and trained a team of Yemenis in conservation techniques so that they can continue conservation efforts at the dozens of painted mosques in...
From the Queen of Sheba to the Republic of Yemen

Yemen. During the final phase of the project in 2005 the Government of the Republic of Italy provided financial support and the U.S. Ambassador to Yemen also joined the Government of the Netherlands in its long-standing sponsorship of the ‘Amiriya Restoration Project. In addition, a number of international private foundations provided support for the final phase of the project. For details on the restoration project visit the AIYS website at: <www.aiys.org>. This jewel of Yemen’s cultural heritage is now preserved for the appreciation and education of generations of Yemenis and visitors.

Vocabulary

Arab World: the geographic designation for the 22 nations that are predominantly Arab.

Caliph/Caliphate: the term used by the dynastic rulers of the Muslim world referring to the successor to the Prophet Mohammed as the political and military ruler of the Muslim community. The first four successors to that office were chosen by consensus of the Muslim community’s elders and were known as “leaders of the believers.” After them the Caliphate became hereditary.

Calligraphy: the art of fine handwriting; beautifully or elegantly written text.

Gypsum: a white mineral used in the manufacturing of plaster of Paris, gypsum plaster and plasterboard, wallboards, and fertilizers.

Hindi: relating to the major language of India (with many dialects).

Idolatry: the worship of a material image that is held to be the abode of a superhuman entity.

Madrasa: Islamic religious school.

Bibliography


17. **Mathematics and Geometric Design**

Classroom Activity
Appropriate Grade Level: High school.
Subject Area(s): Mathematics/Art/History.
Note: This lesson requires more than a standard 30-40 minute classroom session and can be divided into two parts.

**Goals/Focus:**
To learn about the history of Arabic numerals, Arab contributions to mathematics, other ways to transcribe numbers, and the use of geometry in Islamic art.

Students will produce a geometric design inspired by a work of Yemeni art using the following terms from geometry: square, circle, rotation, 45°, circumference, radius/radii, and intersection.

**Materials:**
- Background information on “Mathematics and Geometric Design.”
- Copy of the eight-page introduction to *The Universal History of Numbers* (see reference above).
- Writing tools and paper for students.
- Tools to execute the geometric design activity.
- Gather examples of various numeral systems including Roman numerals and the Hindi-Arabic numerals (see the chart below for the Hindi-Arabic numerals used in Yemen and other areas of the Middle East).
- Examples of Islamic geometric designs as well as examples of other styles of art that have strong ties to a culture (such as NW Native American art, Indian, etc.).
- Coloring implements to decorate the geometric design.

**Anticipatory Set:**
Share the history of numbers and the importance of numerical symbols to expand mathematical ideas and practical applications (written representations as well as calculating tools like the abacus that rely on a concrete object – a bead – to symbolize the concept of a number). Discuss the importance of place value in numerical systems and introduce/review with students the Roman numeral system to demonstrate the value of the current system that we use. Ask the students to write a large number in Roman numerals to illustrate the difference.

**Discussion questions:**
In addition to Arabic and Roman numerals, what numerical symbols do you know?
Are you familiar with Islamic art? Can you give some examples?
Do you know any other art that has been inspired by Islamic art?
How can mathematics in general, and geometry specifically, contribute to art?

The Lesson Procedure:
Part 1: Students read the background information (summarize the information if you are adapting the lesson for younger children).
Part 2: Share with the students the Hindi-Arabic numeral system. Ask them to write some numbers using this set of numerals.
Part 3: Students do the geometric design activity based on the ‘Amiriya ceiling paintings (see handout below).
Part 4: When their design is complete have them color it.

Conclusion:
Students discuss geometric designs in art and architecture that they know.
Introduce the examples gathered of geometric designs from Islamic art and from the art of other cultures

Lesson Extensions:
Math activity, calculate corresponding Islamic and Gregorian calendar dates.
Have students calculate the elevation of Sana’a International Airport in feet and miles. It is at an elevation of 2,206 meters/7,237 feet above sea level (1 mile = 5280 feet, 1 meter = 1.0936 yards, and 1 yard = 3 feet).
Create an unscrambling activity that uses Arabic, Hindi, and/or Roman numerals (use resources from the library or one of the many websites on the internet that provide a wide range of options) to provide a series of number scramblers which go: If 1=I and 5=V etc.
One item in Yemeni culture that uses both Arabic and Hindi numerals are license plates. Write on the board from 0 to 9 in Hindi numerals (use the chart below) and then have students determine the Arabic license plate equivalents for a series of numbers (e.g. 1357, 2256, etc..). Yemeni license plates from the PDRY (former South Yemen), YAR (former North Yemen) and the present Republic of Yemen can be found at the following websites: <www.pl8s.com/wxyz/ypdr.htm>, and <www.pl8s.com/wxyz/yare.htm>.

Further Resources:


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**Hindi-Arabic Numerals and Arabic Numerals**

Top row: Hindi-Arabic numerals (also known as Hindu-Arabic numerals, still used today)

Bottom row: Modern Arabic numerals (developed from Hindu-Arabic numerals)

Hindi-Arabic numerals are written from left to right, for example:

10 = ٠

1998 = ١٩٩٨
Mathematics and Geometric Design

Instructions
Activity designed and drawn by Bruce Paluck

1. Inscribe a square inside a circle. Draw lightly in pencil—the lines in steps 1 – 5 are construction lines that will be erased when the final design has been accomplished.

2. Inscribe a second square inside the circle, rotated 45° from the first square.

3. Connect the center of the circle with its circumference by radii passing through the intersecting points of the two squares.

4. Connect every other intersection at the circumference of the circle made from the radii drawn in step 3 (as shown above).

5. Connect the opposing line intersections in the manner shown above.

6. Over the previous construction lines drawn, darken the outline as shown above from each corner of the original two squares (noted by the arrow).
Mathematics and Geometric Design
Instructions
Activity designed and drawn by Bruce Paluck

7. Erase all the construction lines and you will have the final design.

The above geometry activity is based on a design painted on the inside of a dome in the early 16th century ʿAmiriya Madrasa in Rada.
Lesson 18. What Yemenis Name Their Children

Introduction

Arabic is the official language of Yemen, and nearly universally spoken there. Yemen’s linguistic heritage, however, is rich and includes numerous other ancient or “relic” languages used throughout history. Semitic languages, such as Mahri and Soqotri, are still spoken in the eponymous areas of Yemen, as is Jebali in neighboring Oman; others, such as Sabaean, Minaean, Qatbanean, Hadhrami, and Himyari are now extinct. These languages, however, have left their mark in numerous ways on modern Yemen. One influence is on place names such as Kawkaban, which means star in Himyari, or Hagar, meaning sacred place, as the root of place names like Haggarayn, Hagara, and Hujariyah. The impact of these languages on Yemeni culture can also be seen in the names that Yemenis choose for their children.

In Yemen parents choose only the first name for their newborn since their second name will be that of their father, the third name that of their father’s father and so on. Even very young children can often recite the names of 10 male ancestors. Most children, especially when they begin school, use two names, their first name and then a second name that has ancestral significance, or sometimes the village of family origin. When a young woman marries she does not change her family name to that of her husband, but retains that of her father, her paternal name, a tradition that is becoming more common in the United States too.

In Yemen choosing a name is an important event. Names all have linguistic meaning or other significance that parents consider when selecting a name for their newborn. A name that is chosen may be in honor of a relative, or may have religious or historical significance. Many choose the name Mohammed, to honor the Prophet Mohammed who brought Islam to the world 1400 years ago. It is the most common first name in Yemen, and, with over one billion Muslims worldwide sharing a deep reverence for the Prophet Mohammed, it is the most popular male name in the world. Others names are of famous Muslim leaders, such as ‘Ali, the 4th Muslim Caliph (successor of the Prophet), or ‘Aisha, one of the wives of the Prophet Mohammed. Also popular in Yemen are names that begin with ‘Abd for boys and Amat for girls. Both mean “slave,” and are followed by one of the names referring to Allah (God in Arabic). Examples of such a name for a son are Abdullah which means “slave of God” or ‘Abdur Rahman “slave of The Compassionate One;” for a daughter Amat al-Ahad “slave of The One” or Amatul Latif “slave of The Gentle One.”

Another popular category of names in Yemen is that of historical leaders of the Arabs and Muslims. For a girl the parents might select Fatimah, which means, “weaned;” it was the name of a daughter of the Prophet Mohammed, the ancestress of the Fatimid dynasty in Egypt. For a boy they might choose Tawfiq, which was the name of a great Muslim military leader. Yemenis also choose names from the Bible because Muslims honor “People of the Book,” particularly Jews and Christians. Names in this group include Miriam (Arabic for Mary, the mother of Jesus), and for boys Ibrahim (Arabic for Abraham, the great leader of the Old Testament). The final category of names includes those that have particular meaning in Yemeni culture. These are often historical figures or names from Yemen’s linguistic heritage. Below is a list of a few such names that are used in Yemen.
Female Names

Arwa - an Arabic word for a mountain goat; it is a very common name in Yemen due to the popularity of Queen Arwa (see lesson 22).

Amat al-Rauf – servant of the most gentle/merciful.

Bilqis – the name attributed to the Queen of Sheba in Arab tradition (see lesson 2).

Bushra – meaning a good omen, or news.

Buthaina – meaning someone with a tender and beautiful body.

Kawkab – meaning star in Himyari.

Saba’ – a pre-Islamic kingdom that dominated the incense trade for over a millennium and that was the reputed home of the Queen of Sheba (see lesson 2).

Sana’a – meaning fortified, but also the name of the capital city.

Shizarher – meaning green (and thus fertile) in the Soqotri language.

Sukaina – a great-granddaughter of the Prophet Mohammed.

Timna’ – the capital of the Qataban Kingdom, an ancient south Arabian trading state that ruled in the Wadi Bayhan and Wadi Harib area from the 5th century BC to the 1st century AD.

Male Names

Dhi Yazan – an ancient Yemeni legendary hero (see lesson 20).

Himyar – the name of a people and of the last great power of pre-Islamic Yemen that ruled from the southern highlands, from 115 BC – 525 AD.

Nashwan – meaning elated, mountain in Yemen.

Osan – historical figure.

Qerehan – meaning horns in the Soqotri language.

Radfan – a Yemeni tribe and mountain.

Sa’beb – meaning pale in the Soqotri language.

Saba’ - a pre-Islamic kingdom that dominated the incense trade for over a millennium and that was the reputed home of the Queen of Sheba (see lesson 2).

Sinan – meaning spearhead.

Shamsan – a mountain in Yemen.

Tahir – an indigenous Yemen dynasty (1454 – 1517 AD) founded by ‘Ali and ‘Amir ibn Tahir.

Vocabulary

Ancestor: (adj.: ancestral) one from whom a person is descended and who is usually more remote in the line of descent than a grandparent.

Arabic: the Semitic language originating on the Arabian Peninsula and today the prevailing language in much of southwestern Asia and North Africa.

Eponymous: bearing the name of, being, or relating to an eponym (eponym: one for whom or which something is named).
Extinct: no longer to be found; gone out of use.
Heritage: something that is passed down or acquired from a predecessor, such as language, traditions, and property.
Linguistic: of or relating to language.
Paternal: associated with the father and his side of the family.
Prophet Mohammed (570 – 632 AD): founder of Islam whose teachings, encompassing religious, social, and political principles, became the basis of Islamic religion and civilization.
Semitic: a family of languages with a common ancestry, today comprising chiefly Arabic, Hebrew, Ethiopian, Amharic, Syriac, and Aramaic.

Bibliography
Qazi, M. A. What’s in a Muslim Name. Chicago: Kazi Publications, 1974.
18. What Yemenis Name Their Children

Classroom Activity
Appropriate Grade Level: Grades 1 – 4.
Subject Area(s): Language Arts.

Goals/Focus:
- To explore Yemeni culture, language, and history through the names that Yemeni parents give their children.
- To learn how to write their own name in Arabic.
- To learn about the meaning of their own names and naming traditions in other cultures.

Materials:
- Background information on “What Yemenis Name Their Children.”
- Have the students’ names written in Arabic. Ask an Arabic-literate student or parent to help in this way, or find someone through a local college or university (with Arabic speaking students), mosque, or Arab church, or an Arab community center.
- Gather information on Native American naming traditions.

Anticipatory Set:
Share the idea that in many cultures the name chosen for a child is believed to be important in shaping the personality of the individual. Note that in some cultures names are not given at birth, but later, after the character of the individual becomes clearer.

Discussion questions:
- When did you first learn how to write your name?
- Does your name have a meaning? What does your name mean?
- Why are names important to families and to the individual?

The Lesson Procedure:
Part 1: Summarize information from the handout appropriately for the age group. Share the information with the students.
Part 2: Ask the guest to write the student’s names, or pass out the names that have been written for you. Children practice writing their own names in Arabic.
Part 3: Students ask their parents about the history of their last name and how they selected their first name.

Conclusion:
Ask students to research the meaning of their names in the library or on the website Behind the Name: The Etymology and History of First Names at <www.behindthename.com/>.
Ask students write about the meaning and history of their own names and then share it with the class.

**Lesson Extensions:**

Invite parents, or resource people, who can write the children’s names in other non-Latin scripts. The children should then practice writing their names in the various scripts.

Students gather information about the history of education in their community. Students interview grandparents or elders in the community regarding their educational challenges.

Students read about the lives of children around the world with books such as, *People* (by Peter Spier, Doubleday, 1980), *Children Just Like Me* (by Barnabas and Anabel Kindersley, Dorling Kindersley Ltd and UNICEF, 1995) and *If the World Was A Village* (by David Smith, Kids Can Press, 2002).

Read the book *The Day of Ahmed’s Secret* by Florence Parry Heide and Judith Heide (published by Gilliland, Lothrop, Lee and Shepard, 1990). Ahmed in Arabic means “much praised” or “praiseworthy” and was one of the names of the Prophet Mohammed.

Discuss how it is a great privilege to go to school. This has not always been the case in the US. Ask students if their grandparents went to school. Ask if they are familiar with the books by Laura Ingles Wilder; these books tell us how it was often a struggle to get an education. Point out that this is still the case in many poor countries in the world where children work instead of going to school, or they don’t have a school close to their homes. Share statistics on literacy for children worldwide.

Students research the reasons why many children around the world do not have the opportunity to learn to read and write. See the following internet resources for information on child labor at: <www.globalmarch.org>, <www.unicefusa.org>, and <www.hrw.org/children/labor.htm>.

**Further Resources:**


Lesson 19. The Arabic Language and Arabic Script

Introduction

The people of Yemen speak Arabic. The Arabic language is a unifying feature of peoples throughout the Middle East, with the exception of Israel, Turkey, and Iran. Over 200 million people in the world speak Arabic, and it is the official language of 22 countries and one of the five official languages of the United Nations. Furthermore, it is a language of tremendous religious importance for over one billion Muslims in the world. Arabic belongs to the Semitic family of languages along with Hebrew, Ethiopic, Amharic, and Aramaic, the language spoken in Palestine at the time of Christ, which is still used today in parts of Syria, Iraq, and Iran.

The spoken form of Arabic varies considerably between countries and even within countries. Yemeni dialects of Arabic are diverse and vary in intonation, pronunciation, vocabulary, and even grammar. For example, the dialect of Arabic spoken in the eastern, coastal region of Yemen pronounces the definite article al (“the”) as am. Another type of dialect difference is found in the Usayfera area of Yemen in the governorate of Ta’izz where the final consonant in the definite article–al–is replaced by doubling the first consonant of the noun, as in ab-bab (for the door, instead of al-bab) and ab-bayt (for the house, instead of al-bayt).

Many words used in English have their origin in the Arabic language. These include: admiral, adobe, alcohol, atlas, average, check-mate, coffee, cotton, gazelle, magazine, saffron, satin, sugar, tariff, and zenith. These words arrived into English in a variety of ways, some via trade as the Arabs introduced products to Europe (gauze, gypsum, muslin), others (magnet, algebra, algorithm, and zero) came through Arab contributions to science and mathematics (see lesson 17 on Arab mathematics and the handout in this lesson for English words of Arabic origin).

The Arabic script is used by one-seventh of the world’s population; languages other than Arabic that use this graceful alphabet are Persian, Kurdish, Urdu, and the languages of Afghanistan, Malaysia, and parts of China.

Arabic is written from right to left (although Arabic numbers are written from left to right, like ours). The Arabic alphabet consists of 18 shapes; with the addition of dots above or below some of these shapes, the alphabet contains 28 letters. Three letters are long vowels (alif, ya, and waw/wow), and all the rest are consonants; ya and waw can also be used as consonants. Arabic letters are connected to form words in a “cursive” style, even when printed in a book. There are no capital or lower case letters, but a letter’s form changes, depending on where it is placed in a word (beginning, middle, or end). Some letters connect on only one side; others connect on both.

The Qur'an is written in classical Arabic, the type of Arabic spoken and written at the time that the Prophet Mohammed preached Islam. Muslims and Arabs believe that classical Arabic is the ultimate example of linguistic beauty and perfection. The Arabic that is printed in newspapers and books is Modern Standard Arabic, which is also the form used in formal communication.
Vocabulary

Adobe: a brick or building material, or technique, using sun-dried earth and straw.
Dialect: a variation of a language that is distinguished from other expressions by vocabulary, grammar, and pronunciation.
Gypsum: a mineral of hydrous calcium sulfate used in manufacturing of plaster of Paris, gypsum plaster and plasterboard, wallboards, and fertilizers.
Intonation: the manner in which verbal tones are uttered.
Muslin: sturdy plain-weave cotton fabric, used especially for sheets, derived from the famed place of origin, Mosul (Iraq) and from the Arabic word for joining something together.
Prophet Mohammed (570 – 632 AD): the last prophet recognized by the Quran, whose teachings, encompassing religious, social, and political principles, became the basis of Islamic religion and civilization.
Quran: the book composed of writings accepted by Muslims as revelations made to Mohammed by God (Allah) and as the divinely authorized basis for regulations and practices of the Islamic world.
Saffron: the dried stigmas of the saffron crocus, used in cooking, for medicine, or formerly as a dye.
Script: written characters used to represent sounds and meanings in language.
Semitic: a family of languages with a common ancestry, today comprising chiefly Arabic, Hebrew, Ethiopic, Amharic, Syriac, and Aramaic.
Stigma: a portion of the pistil of a flower.

Bibliography

19. The Arabic Language and Arabic Script

Classroom Activity
Appropriate Grade Level: Middle school.
Subject Area(s): Language Arts, Social Studies.
Note: This lesson requires more than a standard 30-40 minute classroom session and can be divided into two parts, one on Arabic language and the other on Arabic script.

Goals/Focus:
To introduce students to the Arabic language.
To familiarize students with the appearance of Arabic script.

Materials:
  Background information on “The Arabic Language and Arabic Script.”
  Handout: Introduction to Arabic
  Handout: English Words of Arabic Origin
  Handout: The Arabic Alphabet
  Pictures of objects, food, etc. listed in the handout, Introduction to Arabic. Mount on cards for use as flashcards.
  Examples of Arabic script, pages (or portions of pages) from an Arabic language newspaper or magazine for each student (contact a local library, university, Arab or Islamic community group, or the Embassy of an Arab country), copies of a page, or print articles in Arabic from the internet, see: <http://arabic-media.com/> which has links to Arabic language newspapers).
  Ask an Arabic-literate student or parent to help with this lesson, or find someone through a local college or university (with Arabic speaking students), mosque, or Arab church, or an Arab community center.

Anticipatory Set:
  Discuss the role of the Arabic language in the world.
  Discussion questions:
  Have you ever heard anyone speak a language different from your own?
  Have you ever heard the language called Arabic?
  Where do you think the people live who speak Arabic?
  How many people do you think speak Arabic?

  Introduce the concept that there are many scripts that are used to write language, for example: Latin, Hebrew, Syriac, and Arabic scripts. Scripts can be written in many directions.
  Discussion questions:
  What is the name of the script that is used to write English?
Have you ever seen a different type of writing? Have you ever seen writing that was written in a different direction, such as from right to left, or up and down in columns?

Discuss the fact that Arabic script is used to write Arabic and other languages, just as Roman/Latin script, the one the students themselves use to read and write English, is used for many languages (e.g. French, German, Italian, Spanish, etc.).

The Lesson Procedure:

Part 1: Students read the background information (summarized for younger children).

Part 2: Using the handout Introduction to Arabic, students learn some words and phrases in Arabic. Students can act out simple scenarios in which they greet their friends in Arabic, count in Arabic, and name objects on the “flashcards” in Arabic (verbally and/or in writing).

Part 3: Inform students that Arabic is written with a script that is different from the one that they read. Show them examples of the script. Explain that it is written horizontally from right to left (except for numbers). Using the handout—The Arabic Alphabet—ask students to choose an Arabic letter and to find it in the newspaper, magazine, etc. Underline, circle, or highlight the letter whenever they find it. What is the name of the Arabic letter that they looked for? How many examples of the letter did they find?

Part 4: Students practice writing the Arabic letters.

Conclusion:

Students brainstorm examples of familiar words that originate in Arabic, words that have al/el in them. Examples are: alchemy, alcohol, alcove, alfalfa, algebra, algorithm, alkali, almanac, and Alhambra. Using the handout, English Words of Arabic Origin, discuss the influence that Arabic has had on the English language.

Questions to consider:

What did the word originally mean in Arabic?
Did the meaning change in English?
When and how did the word arrive in the English language?

Students share observations about other items they found on their piece of newspaper. Questions that may encourage the process:

Did they find any products advertised that are familiar?
Did they find any publishing information on their newspaper?
Did they identify any numbers (either Arabic or Hindi numerals – see lesson 17) on their piece of newsprint?

Lesson Extensions:

Invite an Arabic speaking student or guest to the class to read something aloud for the class, speak a few words, teach a phrase or two, write something in Arabic for the students such as their name.

Go to the web site for Amideast and visit Meet Sa’ud, the story of a boy who lives in Kuwait,
<www.amideast.org/offices/kuwait/Saud/default.htm>. The site contains information about his life in Kuwait, but also information about Arabic, English words with Arabic origins, and the Arabic script. You can also order an Arabic Language Alphabet poster: <www.amideast.org/offices/kuwait/saud/catalogue.htm>.

To see and listen to the pronunciation of the Arabic alphabet see: <www.arabic2000.com/arabic/alphabet.html>.

**Further Resources:**


For further information on Arabic also visit the American Association of Teachers of Arabic at <www.wm.edu/aata/>. See also: <http://en.wikipedia.org/wiki/Arabic_language>and http://cecilmarie.web.prw.net/arabworld/arabic/>. These sites have information on the Arabic language and script.
Introduction to Arabic

Guide to Pronunciation

- **aa** is pronounced as “a” in “father”
- **ow** “ow” in “how”
- **u** “u” in “put”
- **dh** “th” in “the”
- **kh** “ch” in “loch”
- **gh** “r” in French “rue”
- **ai** “eye”
- **q** guttural k
- **’** glottal stop

Meeting People

- As-salaam alaykum Peace be with you. (Greeting)
- Wa alaykum as-salaam And with you peace. (Reply)
- Murhuba Hello (Greeting)
- Murhuba Hello (Reply)
- Masaa al-khair Good Afternoon, Good Evening (Greeting)
- Masaa an-noor Good Afternoon, Good Evening (Reply)
- Maa as-salaama Goodbye (Greeting)
- Allah yisullmak Goodbye (Reply)
- Tisbah ala khair Good Night (Greeting)
- Wa inta min ahla Good Night (Reply)

Polite Words and Expressions

- Minfudluk Please
- Shukraan Thank you
- Mashkoor Thank you (a variation of shukraan)
- La shukraan ala waajib Don’t mention it. (Polite response to thank you.)
- Muta’assif or Aasif Sorry!
- Ismahlee Excuse me.
Useful Words

Na’am or Aiwa  Yes
La  No
Taiyyib!  Good!
Mumtaz!  Excellent!

Words for Food

tuffaah  apples
khubz  bread
zibda  butter
jubna  cheese
dajaaj  chicken
qahwa  coffee
baydh  eggs
samak  fish
fawaakih  fruit
laymoon  lemon
lahm  meat
botteekh  melon
haleeb  milk
burtuqaal  oranges
filfil  pepper
bataata  potatoes
ruz  rice
salaata  salad
milh  salt
sandweesh  sandwich
shoorba  soup
sukkar  sugar
shai  tea
tamaata  tomatoes
khudhra  vegetables
moya or maa  water
Other Useful Phrases
Tatakullum Arabee?  Do you speak Arabic?
Bass qoleel.  Only a little.

Al-humdoolillah  Thanks be to God.
Inshaalah!  If God wills!

Numbers
1  waahid
2  ithnayn
3  thalaatha
4  arba’a
5  khamsa
6  sitta
7  saba’a
8  thamaania
9  tis’a
10  ashara
11  ihda’shar
12  itnaa’shar
13  thalaathtaashar
14  arba’taa’shar
15  khamstaa’shar
16  sittaa’shar
17  saba’tashar
18  thamanta’shar
19  tis’ataa’shar
20  ishreen
30  thlaatheen
40  arba’een
50  khamseen
60  sitteen
70  saba’een
80  thamaanee-een
90  tis’aeen
100  meeya

(25 = khamsa wa ishreen; 26 = sitta wa ishreen)
**Days of the Week**
yome al-ahad Sunday
yome al-ithnayn Monday
yome ath-thalaatha Tuesday
yome al-arba’a Wednesday
yome al-khamees Thursday
yome al-juma’a Friday
yome as-sabt Saturday

**Some Vocabulary Words**
(al = the)

al-bustan the park
al-masjid the mosque
al-kaneesa the church
al-maktaba the library
al-baas the bus
al-kitaab the book
al-majalla the magazine
al-jareeda the newspaper
al-baank the bank
as-sooq the bazaar
al-wulud the boy
al-bint the girl
al-mataar the airport
al-hammaam the bathroom, toilet
al-firaash the bed
al-madeena the city
al-baab the door
al-makeena the machine
al-madrassa the school
al-taawula the table
al-taalib the student
al-balad the town
al-qoriya the town
# English Words of Arabic Origin

<table>
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<tr>
<th>English</th>
<th>Arabic</th>
</tr>
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<tbody>
<tr>
<td>admiral</td>
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<td><em>al-bakoura</em></td>
</tr>
<tr>
<td>Alcazar</td>
<td><em>al-qasr</em>, “the castle”</td>
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<td><em>al-keemiyaa</em>, “chemistry”</td>
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<td><em>al-kuhoul</em></td>
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<td>alcove</td>
<td><em>al-qubba</em>, “the arch”</td>
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<td>alfalfa</td>
<td><em>al-fasfasa</em></td>
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<td>algebra</td>
<td><em>al-jabr</em>, “the restoration, fusion”</td>
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<td>algorithm</td>
<td><em>al-Khawarizmi</em>, a ninth-century Arab mathematician</td>
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<td>Alhambra</td>
<td><em>al-hamraa</em>, “the red house”</td>
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<td><em>al-manaakh</em>, “the climate”</td>
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<td><em>daar sinaa’a</em>, “house of manufacturing”</td>
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<td><em>ard al-shawk</em>, <em>al-khurshouf</em>, “choke of the earth”</td>
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<td><em>al-hashaasheen</em>, “users of hashish”</td>
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<td><em>‘itr</em>, “perfume”</td>
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<td><em>buraaq</em></td>
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<td>camel</td>
<td><em>jamal</em></td>
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<td>carafe</td>
<td><em>ghiraaf</em>, “handfuls of water”</td>
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<td>caraway</td>
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<td>checkmate</td>
<td><em>shah maat</em>, “the king is dead”</td>
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<td>cipher</td>
<td><em>sifr</em>, “empty, zero”</td>
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<td>damask</td>
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<td><em>diwaan</em>, “hall, assembly”</td>
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<td>gauze</td>
<td><em>qazz</em>, “raw silk”</td>
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<tr>
<td>genie</td>
<td><em>jinn</em>, “demon”</td>
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<td><em>ghoul</em></td>
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<td><em>zaraafa</em></td>
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<td><em>qithaar</em></td>
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<td>gypsum</td>
<td><em>jibs</em>, “plaster”</td>
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<td>hazard</td>
<td><em>al-zahr</em>, “the die”</td>
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<td><em>hinaa</em></td>
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<tr>
<td>Arabic</td>
<td>English</td>
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<tr>
<td>jar</td>
<td>jarra</td>
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<tr>
<td>kismet</td>
<td>qisma, “portion, destiny”</td>
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<td>kohl</td>
<td>al-kuhl, “powdered antimony”</td>
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<td>yasmiin</td>
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<td>laymoun</td>
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<td>laylak</td>
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<td>lute</td>
<td>‘oud</td>
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<td>macramé</td>
<td>migrama, “embroidered veil”</td>
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<td>makhaazin, “storehouses”</td>
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<td>maskhara, “buffoon”</td>
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<td>mocha</td>
<td>al-mukhāa, “Mocha” [a port in Yemen]</td>
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<tr>
<td>mohair</td>
<td>mukhayyar, “having the choice”</td>
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<td>monsoon</td>
<td>mawsim, “season”</td>
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<td>mummy</td>
<td>mumiyaa</td>
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<td>muslin</td>
<td>mawsili, “from Mosul” [Iraq]</td>
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<td>myrrh</td>
<td>murr</td>
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<tr>
<td>nadir</td>
<td>nazeer, “parallel”</td>
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<tr>
<td>racket</td>
<td>raaha, “palm of the hand”</td>
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<tr>
<td>ream</td>
<td>rizma, “bale, bundle”</td>
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<td>safari</td>
<td>safara, “to travel”</td>
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<td>asfar, “yellow”</td>
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<td>saffron</td>
<td>za’farāa</td>
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<tr>
<td>sash</td>
<td>shaash, “muslin”</td>
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<tr>
<td>sequin</td>
<td>sikkah, “die, coin”</td>
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<td>simsim</td>
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<td>sharba, “a drink”</td>
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<td>sofa</td>
<td>suffa, “stone ledge”</td>
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<td>summaaq</td>
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<td>syrup</td>
<td>sharaab, “beverage, drink”</td>
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<td>talc</td>
<td>talq</td>
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<td>tariff</td>
<td>ta’riifa, “notification, price list”</td>
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<tr>
<td>tambourine</td>
<td>tunbour, “drum, cylinder”</td>
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<tr>
<td>typhoon</td>
<td>tufaan, “flood”</td>
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<tr>
<td>vizier</td>
<td>wazīr</td>
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<td>zenith</td>
<td>samt ar-ra’s, “zenith, vertex”</td>
</tr>
<tr>
<td>zero</td>
<td>sifr</td>
</tr>
</tbody>
</table>
The Arabic Alphabet

(alif)
(ba)
(ta)
(tha)
(jeem)
(ha)
(kha)
(dal)
(thal)
(ra)
(zany)
(seen)
(sheen)
(sod)
(dod)
(ta)
(za)
(ayn)
(ghayn)
(fa)
(qaf)
(kaf)
(lam)
(meem)
(noon)
(ha)
(waw/wow)
(ya)
Lesson 20. Stories and Tales

Introduction

Traditions of oral entertainment have thrived in Yemen throughout history, and still do today. The art of poetry, in many rich and varied forms, is strong in Yemen. Proverbs are woven into the daily life of most Yemenis as a way to express perceptions, emotions, and folk wisdom. Songs of joy are heard during weddings and celebrations. The rhythm of men working in the field, or building a mud-brick house, is often accompanied by chanting and singing. Songs that are rich in poetry about love, sadness, and devotion are part of many women’s daily life as they complete their chores in field and house and pursue the never-ending quest for water and wood. The Yemeni oral tradition also includes a highly-refined humor in the form of jokes and riddles, where no subject is exempt. The art of storytelling is a source of entertainment that also provides opportunities to instruct in moral behavior, be it through religious stories or folktales.

The Islamic education system, with its emphasis on memorization of the Quran, is partly responsible for Yemen’s strong oral culture. Long-standing tradition is another factor: the poetic tradition of the Arabs flourished in Yemen from pre-Islamic times to the present and it celebrates the Arabic language’s rich vocabulary of descriptive words and its modes of expression. Yemenis also love to get together with family and friends to share conversation, life-events, humor, and stories; these social get-togethers may include serving beverages (tea, soda, water), smoking water pipes (tobacco), and the chewing of qat (a mildly stimulating leaf).

Alf Layla wa Layla (1000 nights and one night. i.e. 1001 Nights, better known to many as The Arabian Nights) is a timeless collection of stories. The fictional narrator of the stories, Sheharazade, the daughter of the grand Wazir (Arabic for minister or advisor), is a skilled storyteller who enchants her husband, the King of Persia, with her intelligence and beauty. The oldest stories of the 1001 Nights were collected from at least the 9th century AD, and the collection continued to evolve throughout the Islamic world with some tales added as late as the 18th century. Many of these tales evolved as the collection itself became more complex, and earlier stories were altered, revised, or polished by successive anonymous compilers. The Arabian Nights is the ultimate, multi-cultural work of literature, because it combines folk and fairy tales from many lands including India, Persia, Iraq, Egypt, Turkey, Greece, and China. These tales within tales brought together myths, legends, history, and poetry, as well as anecdotes, biographies of saints, and instructional stories.

On the 416th night of Sheharazade’s marathon of story telling the Yemeni town of Kawkaban is the site for a tale that aptly illustrates the Yemeni sense of humor. The story is titled “The Diwan of Jovial and Indecent Folk: The Historic Fart.” The tale tells of a wealthy widower named Abu al-Hasan who decided to remarry. After the wedding celebrations he entered the wedding chamber and sat at the foot of the bed in a serious and dignified manner. Due to the quantities of rich food he had consumed during the celebrations, however, he let out an extremely loud fart that seemingly was heard by the whole town. In shame he escaped on his horse and exiled himself to the Malabar Coast of India. In time he became prosperous again and after ten years decided to return to his native land. He disguised himself and upon arrival in his
beloved hometown he overheard a young girl asking her mother how old she was. The mother replied that she was born on the night and in the year when Abu al-Hasan’s fart echoed throughout the town. He fled back to India, and he was so ashamed that he never returned to the place of his historic fart.

Another tale from Yemen of great popularity in the Arab world is the story of Seif Bin Dhi Yazan. The escapades of this pre-Islamic hero have enthralled centuries of children and adults on the Arabian Peninsula and the Nile Valley in Egypt. Born the son of the Yemeni king Dhi Yazan, Seif was abandoned in the desert as a baby, rescued by a gazelle (see lesson 6), found by a hunter, and then raised by another king of Yemen. This is a tale of Seif’s quest for his rightful throne in Yemen and for the hand of the beautiful Princess Shama. Seif is helped by seven instruments of power: a magic sword, “The Book of the Nile,” the enchanted horse Barq al-Buruq (who resembles a hippogriff), a pick-ax that can break up mountains, the magic stone of Kush, the tablets of two enslaved jinn, and the powers of the ‘ifrit (a supernatural creature). Although his goals are not accomplished quickly, in the end Seif does achieve his them, while entertaining and enchanting us all along the way.

Vocabulary

**Anecdotes:** short accounts of an entertaining, interesting, or instructive incident.

**Bin:** Arabic word meaning “son of.”

**Biography:** written history of a person’s life.

**Diwan:** a formal sitting room in a house, or, within traditional governance, the open meeting held by rulers, or leaders, named after its setting in a formal room; a follower or citizen could come and discuss any subject with a ruler at a diwan.

**Hippogriff:** a mythical monster having the wings, claws and head of a griffin (another mythical creature with the head and wings of an eagle and the body of a lion) and the body and hindquarters of a horse.

**Jinn:** the spirit of a supernatural being that is able to appear in human and animal form.

**Kush:** an ancient country in northeast Africa in the Nile valley in southern Egypt.

**Pre-Islamic:** before the beginning of Islam in the 7th century AD, or prior to the arrival of Islam in a particular location.

**Proverb:** a brief saying that is a popular byword; a truth couched in obscure language.

**Quran:** the book composed of writings accepted by Muslims as revelations made to Mohammed by God (Allah) and as the divinely authorized basis for regulations and practices of the Islamic world.

Bibliography


20. Stories and Tales

Classroom Activity
Appropriate Grade Level: Grades 4 – 7.
Subject Area(s): Language Arts.

Goals/Focus:
- To learn about oral traditions in Yemen with particular focus on storytelling.
- To introduce students to a story from 1001 Nights which is set in Yemen and also the Yemeni tale of Seif Bin Dhi Yazan.
- Familiarize students with a Yemeni story.

Materials:
- Background information on “Stories and Tales.”
- Handout: How Aden’s Patron Saint, al-‘Aidarus, Worked a Miracle
- Collect stories about folk miracles, tricksters, and pranksters such as Brer (Bruh) Rabbit and Anansi.

Anticipatory Set:
- Share the stories that you collected about folk miracles, tricksters, and pranksters such as Brer (Bruh) Rabbit and Anansi.

Discussion questions:
- Do you know any stories that feature someone who plays tricks (a trickster)?
- Did you learn anything from these characters or stories, or were they just funny?
- Do you remember a funny story better than a serious one?

The Lesson Procedure:
- Part 1: Students read the background information (summarized for younger children).
- Part 2: Read or have a student/s read aloud the story: “How Aden’s Patron Saint, al-‘Aidarus, Worked a Miracle.”
- Part 3: Students recall from their own traditions stories that feature miracles as well as those that have prankster characters like the jinn.

Conclusion:
- Lead a discussion on the al-‘Aidarus story, posing the following questions to the students: Do you know any other stories that have jinn in them? What does the story tell us about mythical creatures such as a jinn? What does the story tell us about Yemen?
- Discuss that idea that belief in magic and miracles can help us through difficult times.
Lesson Extensions:


Take the Yemeni proverbs below (translated by Murad Zafir), discuss them, and ask the students to find equivalent ones from other cultures or countries:

*If I started to sell coffins, no one would die.*
*If it were easy to work as a carpenter, no trees would be around.*
*If the crow were useful edible, hunger would not let it fly over.*
*Give a Riyal (the Yemeni currency) to the wolf, and it will watch over your sheep.*
*When you break a (good) habit you invite animosity.*
*Talk to him of death, he will accept fever.*

Some examples of proverbs to compare and contrast:

*If I dealt in candles, the sun would never set.* (Yiddish proverb)
*If I were to trade in winding sheets, no one would die.* (Arabian proverb)
*Talking is easy, action is difficult.* (Spanish proverb)
*Easier said than done.* (Traditional proverb)
*Things that are useful to people go into the cooking pot.* (Zanzibar proverb)
*Necessity is the mother of invention.* (English proverb)
*Set a thief to catch a thief.* (English proverb)
*Foul water will quench fire.* (English proverb)
*He that plants thorns must never expect to gather roses.* (English proverb)
*As you sow so shall you reap.* (Traditional proverb)
*Better ten times ill than one time dead.* (Yiddish proverb)
*The ugliest life is better than the nicest death.* (Yiddish proverb)

See “Yemen Webdate” on the web site of the American Institute for Yemen Studies and its links to Yemeni Poetry at: <www.aiys.org/webdate/poetry.html#poe>.


Further Resources:


Sayyid ‘Abdallah al-‘Aidarus, the famous saint from Aden, was in his lifetime befriended by the pious Shaykh Jauhar. This story was told about them. One night, at the time when both were living, Sayyid ‘Abdallah al-‘Aidarus and his friend, the pious Jauhar, went for a walk on the beach in the Huqat quarter of Aden. The moon was shining full this night, so bright that a man could pick up a needle from the ground. Al-‘Aidarus said to Shaykh Jauhar,

“You are my witness. If anything happens tonight, whether in the East or the West, I must help.”

“Why is that, my friend?” asked Shaykh Jauhar.

“It just is. I must help and you will be witness to it!” answered Al-‘Aidarus.

At this time, it happened that a man married a beautiful young woman in Baghdad. Her name was Halima, and her family prepared for her a grand wedding feast with many guests. After the day of festivities and happiness was past, the families of the bride and bridegroom left the young newlyweds alone and happy in their house. One evening, the wife wanted to go to the bathroom and asked her husband to come along, because she feared mice. He did not sympathize, and she went ahead into the bathroom with a large lamp in her hand, which she used to bring light into the darkness. A short time later her husband called from the other half of the bathroom, hoping to tease her:

“Halima, are you hiding?”

“No, I never hide!” Halima answered.

The husband saw a beam of light glimmering from the door and said, joking: “Oh lamp, fetch Halima!” A jinn by the name of “Lamp” heard this call. On the spot, he appeared in the bathroom, placed Halima on his shoulders and flew with her to the island of al-Waq. The husband, however, stood before the bathroom door, waiting and waiting. And when Halima did not come out, he called to her without success and without any answer. Soon he began to worry himself, thinking that something had happened to his wife, and he knocked on the door. As he still had not received any answer, he broke down the door and rushed into the bathroom. It was empty! Then he became wild to the point of insanity; he did not know how to behave or what to do.

He ran out, looked everywhere in the house for his wife, but did not find her. He ran to the neighbors. And as he did not discover Halima there, he went to her relatives for he presumed she was with them. No, since the last day of the wedding they had not seen Halima. The relatives of the bride were angry and dragged the man before the judge in Baghdad. The father of the bride explained to the judge:

“This man married my daughter according to the sunnah of God and his Prophet, and now she has disappeared. God only knows what he has done with her. He has to bring her back! We want our daughter back whether from the earth or the heavens!”

The judge questioned the husband in order to find out where the wife could have gone.

“I cannot explain where she has been hidden,” said the husband. “She went into the bathroom to wash...
up and suddenly she disappeared. I have seen her nowhere—not in the bath, not in the house, not at her
neighbors, nowhere!”

Then the judge spoke to the husband:

“Hither you must bring your wife. Look everywhere. The deadline I set before you is three months,
and your three brothers must vouch for you with their lives. If you do not succeed your punishment will be
severe. You will meet with death!”

In the search for his wife the man went from land to land; he went to bilad al-Sham and he searched
in every city. But he did not find her. He traveled to Egypt, went from place to place—in vain. Finally, he
traveled to Yemen, walked in circles and in the end, reached Aden. Here he entered the mosque in which
Shaykh Jauhar resided. He knelt down low and carefully recited his prayers. At sunset, Shaykh Jauhar
saw him and asked:

“Why are you staying here in the mosque overnight? Are you a stranger in these parts?”

“Yes, venerable Shaykh” answered the husband. “Leave this mystery to God. I, however, will stay
here in the mosque until our Father gives me comfort.”

“Perhaps I can help you with your difficulties. Tell me your story!” said the Shaykh.

The husband answered, “By God, oh Shaykh Jauhar, I am from Baghdad and have recently married.
One night, it was a Thursday, the fifteenth, two and a half months ago, my wife wanted to take a bath and
went into the bathroom of our house. She took with her a lamp into the bath, and when she did not come
out for a long time, and I wanted to tease her, I called:

“Oh lamp, fetch my wife, my bride Halima!”

“Good, good.” responded the Shaykh. “Wait a moment so I can write down the information you have
given me, then continue your story.”

The husband waited and then continued his story, “Halima did not come out of the bathroom, so I
finally broke down the door, but instead of finding her, the bathroom was empty! I could not explain where
she could have gone, where she could have been hidden. I asked the neighbors; I asked her family. Since
her relatives felt for the lost Halima, they took me before the judge and accused me of keeping my own
wife hidden. So the judge ordered me to bring back Halima, from heaven or earth. He gave me a deadline
of three months, and my brothers had to vouch for me. One month I wasted in bilad al-Sham and I did
not find her. One month I searched all of Egypt, in vain. My last month has been spent here in Yemen; I
looked for her up north but did not find her. Now I am here in Aden, tired from my wanderings. I came
to this mosque to beg God to find my poor wife, for soon my time will come to an end.”

After the evening prayer in the mosque, the Shaykh brought the husband something to eat and then he
went to al-'Aidarus to relate to him the tale of this stranger from Baghdad. Shaykh Jauhar was full of
sympathy because the stranger was so exhausted and because he appeared to be an honorable and
trustworthy man who no longer knew what to do. Shaykh Jauhar began his report about the man from
Baghdad with reference to their previous conversation. Was it not this night in which they both, the Shaykh
and the Sayyid, walked along the beach at Huqat? Shaykh Jauhar reported to Sayyid al-'Aidarus how the
man from Baghdad had teased his wife while she was in the bathroom and how he called out: “Lamp, fetch
Halima.” Shaykh Jauhar related the rest of the story, how since the time she disappeared the husband had found her nowhere. Now there remained only a single week from the three months. And if he does not find his wife, then on his return to Baghdad he will suffer the death penalty!

Sayyid al-‘Aidarus and Shaykh Jauhar went together to the mosque where the man from Baghdad was staying:

“Tonight you will sleep here in the mosque, and tomorrow—God willing, tomorrow will be fine.”

The man from Baghdad spent all of the next day in the mosque. After the evening prayer, as the pious dispersed, only al-‘Aidarus, Shaykh Jauhar and the stranger from Baghdad were there. Then al-‘Aidarus raised his voice:

“Oh Lamp, bring the young woman, Halima, back. Bring her back in happiness and honor. If you do not do so, then I will burn you and all your kin! Do you hear me, oh Lamp? Bring her here quickly, on the spot, without delay, or else you will be punished!”

A little later, the jinn named “Lamp” appeared with Halima, the wife of the man from Baghdad, and set her down in the mosque with these words:

“Here is your wife, take her, oh man from Baghdad. Since you implored me to take her, I took her—and now at the command of al-‘Aidarus I have brought her back. With my name he has called me, and to his call I have listened!”

“Yes, it is correct that I said, ‘Oh Lamp, fetch Halima.”’ said the husband. “However, it was only a joke. How should I have known that such a ‘Lamp’ existed, that could take her away on the spot?”

Then Sayyid Al-‘Aidarus said, “Now, Lamp, take Halima and her husband on your shoulders and bring them both back to Baghdad where you first took Halima. Then return to us here in the mosque!”

“Good. I will do as you have commanded, Sayyid ‘Aidarus,” answered the jinn. The man from Baghdad thanked the Sayyid and Shaykh Jauhar with the words, “Goodbye and peace be upon you!”

“Yes, may peace be your companion and see you safely back to Baghdad, God willing!” they answered. “Hurry up, Lamp!” ordered Sayyid Al-‘Aidarus.

The jinn named “Lamp” took the man and his wife and brought them back to Baghdad. As he had fulfilled his orders, he returned to Sayyid ‘Aidarus at the mosque as was agreed. The husband went back with his wife to their house and knocked on the door. His mother answered, and he told her everything.

“Al-Hamdulillah! God be praised and thanked,” said the husband. “After much effort I have found my wife again, thanks to the help of a pious man in Aden, named Sayyid ‘Aidarus. May God reward him a thousand times over!”

Overjoyed, they went to bed. The next morning they went to the palace of the judge of Baghdad and told him everything.

“Be blessed that you returned in safety,” said the judge, and he gave them a valuable gift. The man and his wife returned to their home, feeling joyful and blessed. And from then on they lived, the man from Baghdad and his wife, Halima, in good fortune and happiness. They had many sons and daughters and ate raisins and sugar-candy. “We appeal to the Prophet, all of us who love him!”
Vocabulary

Aden: a port city on the southern coast of Yemen.

Bilad al-Sham: the countries of the Levant, i.e. Palestine, Jordan, Lebanon, and Syria.

Jinn: the spirit of a supernatural being that is able to appear in human and animal form.

Mosque: Muslim place of worship and gathering.

Pious: marked by or showing reverence for deity and devotion to the duties and rites of religion.

Sayyid: honorary title used to refer to a descendant of the Prophet Mohammed.

Shaykh: traditional tribal leader of well-known ancestry.

Sunnah: the “beaten path” or body of traditions recounting the deeds, sayings, and silent approval of the Prophet covering the details of community life; one of the main sources of Islamic law.

Lesson 21. The Traditional Arts of Water Management in Yemen

“And from water have We created every living thing.” The Quran

Introduction

As an agricultural society located in an environment of relative water scarcity, the history of Yemen has witnessed millennia of creative conservation of water for human use. Yemen is fortunate that twice annually its slopes are drenched by the Indian Ocean monsoon clouds that rise from the coast and deliver rain as they scale the mountain peaks. Traditionally the primary challenges of water management in Yemen included diverting rainfall for agricultural use during the rainy season and storing water for the dry season. These challenges resulted in ingenious storage systems and carefully-engineered systems of water diversion. Through a complex system of irrigation dams, wadi diversion channels, aqueducts (both subterranean and above the ground), terraced fields on slopes, hillside water harvesting channels, and cisterns, it is estimated that Yemenis succeed in harnessing one quarter of the annual rainfall. A few ingenious systems for water conservation that the ingenuity and hard work of Yemenis have developed over millennia are described below.

The Marib Dam, located in northeastern Yemen, was one of the fabled monuments of the ancient world. Its fame spread not only because the dam was a great benefit to agriculture in Yemen, but because of the prosperity of the Sabaeans that built it. While there is no doubt about the importance of the incense trade (see lesson 3) in the economy of the Sabaeans, their wealth had much more to do with their prospering agricultural system. Archaeological research in Marib has shown that the earliest irrigation structures date from the 2nd millennium BC. However, the technical perfection of these structures and their great size indicates that they were the product of experienced dam builders, indicating that the practice of building dams is indeed very old. The remains of the famed Marib Dam that are visible today date from the 6th century AD. The estimated area that could be irrigated twice yearly by the rain controlled by the dam, was 23,720 acres. The 2,000 foot-dam was built from mud and stone, and spanned the Wadi Dhana. The two cut stone sluices at either end of the dam are still standing today, with traces of qudad on their surface. According to Muslim historians the dam broke and was repaired in 450 AD, and again in 452, but in 570 AD the dam broke for the third and last time, and remained unrepaired.

In 1984, a new Marib dam was built, not far from the old dam, to harnesses the monsoon rains. This massive project was funded by H.E. Shaykh Zayid B. Sultan al-Nahayan, the ruler of Abu Dhabi, who believes his ancestors were compelled to emigrate from Yemen when the original dam burst in the early 6th century AD.

The system of terraced agriculture is another important and ancient method of water conservation in Yemen. The terraced hillsides, resembling giant stair steps, are among the strongest impressions that visitors take away from Yemen. For thousands of years a complex system of construction has allowed these terraces to make good use of the rainfall that gave Yemen the nickname of Arabia Felix (fortunate, prosperous, or fertile Arabia). The earth of these terraces soaks up rainwater and allows farmers to grow
coffee, many types of fruit, vegetables, and grains. One sees the trace remains of ancient terraces still
circling mountains and ascending hillsides throughout the country, even in areas that are no longer inhabited.

Subterranean aqueducts that bring water from mountain springs or aquifers to drier alluvial plains are
know as qanats in Persia, falaj in Oman, foqqara in Egypt, Libya, and Algeria, and khettara in Morocco.
In Yemen they are called ghayl, or miyan. The technology for this water supply system is believed to have
originated in Armenia sometime between the 10th and 8th centuries BC. A ghayl consists of a tunnel dug
from the water source at a slight incline, so that gravity will convey the water from the source to its
destination where the water will be used for agriculture or drinking, with periodic holes to connect the
tunnel with the surface. In Yemen this system of water redistribution is found in the Hadhramaut and in
many of the eastern highland plateaus. It is believed that most of the ghuyul (plural of ghayl) were
constructed between the 6th and 7th centuries AD, during the Himyar Empire of Yemen, when the technology
was borrowed from the Persian Empire. After nearly 1400 years of operation most of the sources of this
type of water system have dried up due to the dropping water table in Yemen, and in fact today Yemen is
facing a severe water shortage that presents challenges to traditional uses and conservation techniques in
the home and on the farm.

Diversionary channels are a technique that is used to harness rainwater. Such channels take the water
of the monsoon rains and carry it directly to the crops or to facilities for the storage of water, such as
cisterns and ablution ponds that are lined with the waterproof plaster known as qudad (Lesson 10). To
the observant eye the low stone ridges that divert the water are evident on many slopes in Yemen.
Unfortunately this system, along with many other labor-intensive agricultural practices, has broken down
over the last few decades. This deterioration was caused largely by the migration of men from rural areas
to work in the cities of Yemen or elsewhere, especially in Saudi Arabia and the Gulf States. It has been
estimated that by the 1980’s Yemenis made up 20% of the work force in Saudi Arabia and the Gulf. This
migration from Yemen caused a severe labor shortage in many areas, so that traditional terraces and water-
harvesting systems fell into disrepair.

The major factors contributing to Yemen’s growing water crisis, however, are: the high population
growth rate (3.7% annually, one of the highest in the world); the growth of water-intensive cash crops like
qat; and the over-pumping of groundwater through new technologies. Even so, it is estimated that Yemenis
use little more than 150 m$^3$ of water per person annually, compared with the Middle East and North
African average of 1,250 m$^3$ and the worldwide average of 7,500 m$^3$. Only half of the rural population has
access to clean water and only one-fifth have access to safe sanitation. These two factors contribute to the
low life expectancy for Yemenis (62 years for women) and the high infant mortality (11.7% of infants born
will not survive into childhood).

Groundwater supply is a problem in most urban and rural communities. Communities are often located
at a considerable distance from water sources, and although government officials and increasing numbers
of citizens are working to find solutions to Yemen’s current and future water needs, at present the situation
is still deteriorating. In many isolated rural areas women may spend up to eight hours daily procuring water
for their families. This is a task given to younger women, who must be strong and have great endurance to
carry their load of water on their heads for great distances. Many towns in Yemen also have severe water supply problems. In 1984, in the Sana’a basin where 10% of Yemen’s population lives, water consumption was 400% over the rate at which rainwater renewed the resource. There is little hope of improvement for the city of Ta’izz, where in 1995 inhabitants received municipal water service only once every 40 days. This means that citizens are forced to buy water from private suppliers whose prices are placing an incredible economic burden on the population, particularly on the middle class and the poor.

**Vocabulary**

Ablution: the washing of one’s body or part of it as a religious rite, historically practised by many people. A practice of ritual washing or cleansing before praying performed by Muslims.

Abu Dhabi: one of the Emirates that make up the country of the United Arab Emirates on the Arabian Peninsula.

Alluvial plain: a plain resulting from the deposit of sediment by flowing water.

Aqueduct: a conduit designed to transport water from a remote source, usually by gravity.

Aquifer: a water-bearing rock, or group of rocks, where water is naturally stored underground.

Cistern: a storage area or tank for catching and storing rainwater.

Gulf: The Arabian Gulf, bordering the countries of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates, Iraq, and Iran. A part of the ocean or sea extending into the land.

H.E.: meaning His/Her Excellency, an honorary title used for ambassadors, ministers, heads of state, and other important personages.

Himyar: the name of a people and of the last great indigenous power of pre-Islamic Yemen that ruled from the southern highlands from 115 BC – 525 AD.

Millennia: thousands of years.

Millennium: period of a thousand years.

Monsoon: a name for seasonal winds that reverse direction. First applied to the winds over the Arabian Sea that blow for six months from the northeast and for six months from the southwest. It is associated with periods of heavy rainfall. It brings rain to Yemen twice yearly. The word comes from the Arabic mawsim, meaning season, i.e. sailing.

Qat: shiny-leafed shrub (Latin name: *Catha Edulis*) cultivated extensively in Yemen. Its leaves, chewed on a daily basis by a majority of men and by increasing numbers of women, produce a mildly stimulating sensation. Qat afternoon gatherings are woven into cultural, professional, and political traditions in Yemen.

Quran: the book composed of writings accepted by Muslims as revelations made to Mohammed by God (Allah) and as the divinely authorized basis for regulations and practices of the Islamic world.

Saba (or Sheba in English, adj.: Sabaean): a pre-Islamic kingdom that dominated the incense trade in Southern Arabia from the 10th century BC to the 3rd century AD. Its capital was Marib and the Sabaeans built the great Marib dam. One of its reputed leaders was Bilqis, the Queen of Sheba (see lesson 2).

Sluice: man-made channel for conducting water with a valve or gate to regulate the flow.
Subterranean: underground.
Terraces: stair step-like fields constructed on hillsides by building retaining walls to hold soil and water.

Bibliography


21. The Yemeni Art of Conserving Water

Classroom Activity
Appropriate Grade Level: Middle school.
Subject Area(s): Earth Sciences/Creative Writing.

Goals/Focus:
- Learn about traditional forms of water harvesting in Yemen as well as about contemporary challenges affecting the water supply.
- Explore other cultures’ traditions in water-harvesting and water-conservation practices.
- Learn about the local community’s water situation.

Materials:
- Introductory information on “The Traditional Arts of Water Management in Yemen.”
- Gather information on local water issues and resources, including information on challenges and future predictions of water resources. Gather materials from governmental reports as well as environmental groups that provide alternative information, perspectives, and predictions.
- Gather comparative statistics on water consumption in different parts of the world, and within the United States.
- Writing materials for the students.
- Pictures of water in natural and man-made situations.

Anticipatory Set:
- Share some of the information and statistics gathered on water issues. Present comparisons of water consumption in different parts of the world. Discuss the fact that when water resources are scarce conflicts often arise over usage and priority systems, and the fact that in many places difficult decisions are currently being made, or will be made in the future, on how water resources will be allocated. Cite conflicts over water in many communities in the United States.

Discussion questions:
- What are words that you associate with water?
- Why is water so important to humans?
- Are you familiar with any conflicts over water in your community? If so, what are the issues involved?

The Lesson Procedure:
- Part 1: Direct the students to read the background information on Yemeni water management (summarized for younger children).
- Part 2: Students write creatively on the importance of water to life and what it means to not have enough water.
- Part 3: Students write about ways they have seen water wasted (in their own household, community,
Conclusion:

Ask some students read from their writings.
Discuss the water situation in your local community. Introduce the resources that you have gathered and have students discuss.
Discuss what students can do to address issues of water conservation in their community.

Lesson Extensions:

Invite speakers from the local municipality and from environmental groups to discuss the water situation in your community.

Students research water conservation practices in US cities that have water shortage problems.

Students read the Ray Bradbury short story “All Summer in a Day,” found in a collection of his stories called “A Medicine for Melancholy and Other Stories.” There is also a 25 min. film, directed by Ed Kaplan, made from the same short story. It’s about a planet where it rains all the time and the sun shines only once in a long while.

Students monitor their own household water consumption one Saturday by counting the number of showers, times the toilet is flushed, loads of laundry, dishwasher cycles, cars washed, etc., to see how they compare to national averages.

Students research the falaj (plural: aflaj) system of water channels in Oman, which is similar to water channels in Yemen.

For an article on Yemen and water by Huda F. Alkaff see: <www.aiys.org/webdate/alku.html>, and <html://www.yementimes.com/98/iss52/lastpage.htm> for an article on the Marib Dam.

Show the film Renewing the Hanging Gardens of Arabia (52 minutes) that documents traditions in sustainable agriculture in Yemen and current challenges facing these age-old practices. It focuses on environmental issues in contemporary Yemen and on how development cooperation can encourage sustainable traditions or destroy them. Directed by Tony Milroy.


Further Resources:


“Water in the Middle East,” produced by Harvard University, Center for Middle Eastern Studies at: <www.outreachworld.org/Files/cmes_harvard/Water_in_the_Middle_East.pdf>.

“Oil and Water in the Middle East Region,” curriculum for grades 6-8 developed by the National Geographic at: <www.nationalgeographic.com/xpeditions/lessons/01/g68/iraqoil.html>.


Sources for teachers on water conservation in the United States can be found at several web sites, such as: <http://water.usgs.gov/education.html>, <http://www.water-ed.org/schoolprograms.asp>, and <http://phoenix.gov/WATER/wttech.html>.

Lesson 22. Women in Yemen

Introduction

The image that most people in America have of women in the Arab and Islamic worlds is one of oppression and suffering. Yemeni culture not only contains indigenous heroines and women of leadership, but also inherits examples and models of women of power from the larger world of Islam. With the coming of Islam in the 7th century AD women were guaranteed many rights. These rights included the right to inherit and own property (a right of recent origin in the West), the right to serve as a witness in court, the right to sue for divorce, and the right to have custody of her children when they are young. Furthermore, many of the Prophet’s wives and daughters not only made places for themselves as spiritual leaders of the young Muslim community, but also as political and military leaders. Khadija, the first wife of the Prophet Mohammed, was a strong older widow of 6th century Mecca who was a very successful businesswoman. After her death Mohammed married ‘Aisha Bint Abu Bakr, who became his second, and most favored wife. After the death of her husband ‘Aisha led Muslims in battle mounted on a famous purebred camel named Askar and throughout her life her advice was respected. Fatimah, the daughter of the Prophet and wife of ‘Ali ibn Ab Talib, became an object of veneration to all Muslims for many reasons.

While there is no doubt that women in Yemen live in a thriving patriarchy, many aspects of women’s lives demonstrate that the situation is far more complex than would appear at first glance. The role of women in Yemen is varied and constantly changing. Many factors influence the ability of a woman to make meaningful choices about her life. First, there is the immediate family situation, including how supportive her parents, brothers, or husband are of her decisions. Furthermore, the economic, social, and educational status of her family is a significant factor in limiting or opening up opportunities for the future. And finally, the community in which a woman lives shapes her life, as there is significant diversity in the role of women in various parts of the Yemen. There are, however, cultural norms, roles, models, and history that Yemeni women share and that provide both challenges and opportunities.

One aspect of Yemeni culture that helps us to understand the contemporary role of women is how women leaders are viewed. In the United States we have yet to elect a female president, yet in addition to Bilqis the Queen of Sheba (see lesson 2) there have been two Arab queens from Yemen in more recent history. Asma Bint Shihab al-Sulayhiyya shared power with her husband and, following his tragic death in 1066, she ruled in the name of her son al-Mukarram until her own death in 1074. Her rule was followed by that of her daughter-in-law Sayyidah (better known as Arwa) who was handed the reins of power by her husband al-Mukarram after he was disabled (a partial paralysis that occurred after the death of his father). Al-Mukarram had been raised by a strong mother and had no problem when his wife Arwa assumed the mantle of power. Arwa was an orphaned cousin who had been raised in the household and educated by Asma as the future wife for her son. Queen Arwa held power for nearly half a century (1091 - 1138 AD) and was not only a popular ruler, but was generally recognized as a fine military leader and political strategist. Both Queen Asma and Queen Arwa were exceptional female rulers. They not only ruled their country openly, but they are the only two Arab queens in history who had the Friday khitba
(like our Sunday sermon) in mosques pronounced in their name. These two Queens, particularly Queen Arwa, are still viewed by Yemeni society with great pride. The Yemenis of the 11th century bestowed upon their queens the honor and affectionate title of Bilqis al-Saghira (the little, or young, Queen of Sheba), as well as *al-hurra* (a sovereign woman).

Another period in Yemeni history when women had significant power was during the Rasulid dynasty, which ruled major portions of Yemen from 1229 to 1454 AD. This dynasty witnessed great economic and cultural development in which women played important roles. The royal lineage of Rasulid women, combined with their independent wealth, established the context for their patronage of the arts and their political involvement. The title *al-hurra*, used during the rule of Queens Arwa and Asma, was also used to refer to the Rasulid female leaders. Al-Dar al-Shamsi, the daughter of the first sultan of this dynasty al-Mansur Umar, was renown for her political acumen and power. She was a major political figure, particularly during periods of transition, such as when her brother assumed the throne at the death of their father (1249 AD), and when her brother died, her support for her nephew as the new Sultan was essential in his ascension to the throne. Beyond the political influence of Rasulid women, their financial independence allowed them to endow and build mosques, schools, public water fountains, hostels for Sufis, and to carry out restoration projects on existing monuments. In the two main Rasulid towns of Zabid and Ta‘izz one third of the monuments built during the Rasulid period were sponsored by women. While no Rasulid woman ruled independently, many wielded considerable influence and power.

Other women of historical note in Yemen have included poetesses, saints, and bandits. Unfortunately, in Yemen as in much of the world, there is a lack of historical research and information on women in roles of leadership. The situation does not mean that women were not influential leaders and heroines, just that history rarely recorded their accomplishments.

This historical context sets the stage for some positive aspects of life in Yemen for women in the 21st century. Today, Yemeni women have the right to vote and run for office (there are currently two women in the parliament). In 1999 Yemen appointed its first female ambassador, H.E. Amat al-Aleem Assoswa, who served as Yemen’s Ambassador to the Netherlands (2000-03), and Non-resident Ambassador to Norway, Sweden, and Denmark (2001-03), until she became Minister of Human Rights in 2003. In that office she succeeded Dr Wahiba Far’a, who was appointed as the first female minister to the newly established Ministry of Human Rights in 2001. Other women serve in the government sector for equal-pay-for-equal-work. Furthermore, Yemeni labor law grants substantial benefits to female employees including full pay during a 60-day maternity leave, paid leave for the six months following delivery, and a five-hour workday if a woman is breast-feeding her child. The Yemeni constitution provides many rights for women and the government of Yemen is a signatory to numerous international treaties and conventions that guarantee the rights of women.

Despite these examples that challenge the western stereotype of Middle Eastern women in general, it is clear that the position of women in Yemen has much room for improvement. Here are a few statistics to illustrate the situation:

- 87% of the females who are economically active in both urban and rural areas are involved with
agriculture and livestock versus only 44% of the economically active male population.

- It is estimated that women are responsible for 70-75% of all agricultural activities in the Republic of Yemen.
- The literacy rate for urban women is 54%, and for rural women it is 16%. Enrollment of females at the elementary school level stands at 37.4%, at the secondary level only 11% of young women are still enrolled, and at the university level only 3%.
- On average, Yemeni women in urban areas have 6.3 children and in rural areas 8, for a national average total fertility rate of 7.4. This is one of the highest fertility rates in the world.
- In Yemen, 1,400 women die for every 100,000 births and Yemeni women face a one in eight chance of dying of pregnancy-related causes.
- The percentage of registered female voters has dramatically increased with each major national election in Yemen: 17.8% in the 1993 parliamentary elections, 27.4% in the 1997 parliamentary elections, 38% in the 1999 presidential election, and 42% in the 2003 parliamentary elections.

Solving the many challenges that Yemeni women face requires the combined efforts of both men and women. Yemen is a very poor country where the vast majority of citizens struggle to meet their economic needs. Social norms and expectations, however, place additional limitations and burdens on women that men do not bear. This gender gap is one that many government organizations, non-governmental organizations, international agencies, and individuals, both male and female, are fighting to narrow. The situation of women in Yemen is complex and diverse, and in a process of constant change. The social, legal, economic, and political conditions related to gender roles in the United States are not static, nor are those in Yemen. There are many challenges on the horizon for women in Yemen, but also many seeds of hope for their future.

**Vocabulary**

**Dynasty**: a succession of rulers of the same line of descent.

**Gender gap**: the culture and time-specific difference between opportunities, access, control, participation, and power for men and women.

**Indigenous**: native, or belonging, to a place.

**Lineage**: direct descent from a particular ancestor; ancestry.

**Literacy**: the ability to read and write.

**Patronage**: support or influence of a person through financial, political, or social channels.

**Patriarchy**: social organization marked by the supremacy of the father, the legal dependency of wives and children, and descent and inheritance through the male line.

**Prophet Mohammed** (570 – 632 AD): the last prophet recognized by the Quran, whose teachings, encompassing religious, social, and political principles, became the basis of Islamic religion and civilization.

**Rasulid**: a Yemeni dynasty (1228 – 1454 AD) founded by one Nur al-Din al-Rasuli, a Turkoman from Syria.

**Sovereign**: self-governing; independent.
Sultan: a term used in Islamic society for a king or sovereign ruler.

Veneration: profound respect or reverence.

**Bibliography**


22. Women in Yemen

Classroom Activity
Appropriate Grade Level: High school.
Subject Area(s): Language Arts/History.
Goals/Focus:
To learn about the situation of women in Yemen in the context of history and contemporary challenges.
To explore the role of women in America.

Materials:
Background information on “Women in Yemen” and the interview with H.E. Amat al-Aleem Assoswa.

Books and articles for students to read that relate to the issues of women in Yemen, the Arab World, and Islam (see resources below).

Gather information on women in the US, such as when they were granted the right to own property, vote, sue for divorce; statistics on earning power, professions that are female and male dominated, who does the housework when both partners work outside the home, etc.

Anticipatory Set:
Share information on changing gender roles of women and men in America. Discuss areas that American women have identified for improvement in their situation (e.g. the wage gender gap—women working full-time in the United States earn an average of 73 cents for each dollar that men earn). Read, have a student read, or summarize key points from an article on gender pay issues.

Discussion questions:
Do you think that it is fair that individuals receive different salaries based on their gender or race if they have the same qualifications and experience?
What do you think are important gender issues for American women?
What does modesty mean to you?
Do you act and dress differently at home and in public arenas?
The Lesson Procedure:

Part 1: Students read the background information and the interview. Share the statistics and information that you gathered on American women.

Part 2: Students write for 15 minutes on five objects/artifacts that they would choose to represent women of today and five objects/artifacts they would choose to represent men.

Part 3: Students list the objects/artifacts that they chose. List on the board.

Conclusion:

Discuss the selection of objects/artifacts and why students chose them.

Discuss what they feel are the most significant gender-based opportunities and limitations for their generation (for both males and females).

Lesson Extensions:

Students conduct their own interviews with a woman they know who has been a pioneer in her career, attitude, or lifestyle.

Students collect statistics about women in the US to compare to those provided for Yemeni women.

Students gather information on female heads of state, ministers, and ambassadors in recent times, and comment on the fact that there have been three female heads of state in Muslim countries (Turkey, Pakistan and Bangladesh). Research the first US female ambassador and where she was appointed. See Lyn Reese’s website on Women in World History for a list of 19 women leaders from various parts of the world throughout history at: <www.womeninworldhistory.com/rulers.html>.


Show the video documentary Four Women of Egypt, by Tahani Rachid. This film looks at the lives of four Egyptian women from very different political and cultural perspectives who have played leadership roles in Egypt.

Students research the challenges of parenting in the United States. Lead a discussion on the results of their research.

Further Resources:


Middle East Research and Information Project (MERIP) teaching modules <www.merip.org>:

Ramla Khalidi and Judith Tucker. “Women’s Rights in the Arab World.”
Sarah Graham Brown. “Women and Politics in the Middle East.”


Interview with H.E. Amat al-Aleem Assoswa*

1. Please give us a brief description of your life and career?

In 1967 I began working in radio in Ta’izz when I was 9 years old. I helped prepare and announce a variety of children’s shows for the only radio station in Yemen that was run by the government. My career in media continued throughout my youth, and when my father died – I was 11 years old – my financial contributions to the family from my work became essential. At age 13 I became a regular news announcer on the radio and when I reached 18, I began my career in television as an announcer for youth, family, health, and cultural programs in San’a,’ the capital. My service to the Ministry of Information continued as I rose in the bureaucracy, first as Deputy TV Programming Director (1984), Assistant Deputy Minister (1991), and finally Undersecretary (1997). I have been fortunate to have had great opportunities in my education, allowing me to get my B.A. in Mass Communications from Cairo University, Egypt, and later when I completed a Master of Arts in International Communications from the American University in Washington D.C. with a scholarship from USAID. I have also been very active in politics since I was young. In 1986 I took my first position in the Peoples’ General Congress (the ruling party) as a member of the Permanent Committee and from 1990-94 I was the Chairwoman of the Women’s section of the party. From 1993 to 1999 I served as the Chairwoman of the National Women Committee, a government unit that coordinates issues related to women. I have also been active in civil society including serving as a member of the Supreme Committee for General Census, Chief Editor of the magazine Mutbaat al-Alimeyah, Head of the National Women’s Union, as well as been active in the areas of human rights and freedom of the press. I have also written numerous books and articles on women and media in Yemen.

2. What is the most significant challenge that you have had to face as a Yemeni woman in a position of leadership?

I would say that the biggest challenge for me has always been to try and excel in all aspects of my life—in my studies, career, and meeting my family responsibilities. I knew that school, and later university, were the only path for me to achieve the goals I had in life, and so I had to do well. At work I always felt a lot of pressure to be the best I could at my job because I was often the only woman and there were so many that were watching my every move. In addition to career and studies I also have always had responsibilities at home. When I was younger, helping financially and in other ways, especially after my father died. This heavy load continued when I married and had to balance career demands with my responsibilities as a mother of two. This responsibility increased when I became a single mother when my children were young. I feel lucky that my career in media, that has allowed me to achieve much, developed in an environment that is relatively free of censorship.

3. Do you think it was easier for women in Yemen to be leaders in the 21st century or in earlier times?

I think there have been times in the past when strong women were leaders in Yemen, as is the case
today. Under certain times in Yemen’s history women were encouraged to play significant roles of leadership. However, I don’t think it has ever been easy for women. Leaders should be chosen on the basis of merit and many women throughout history and today deserve to be decision-makers. In fact women are often more qualified to be leaders. Unfortunately, society often makes it very difficult for them to take their place leading society.

4. What do you think are positive aspects of life for women in Yemen today?

Firstly, if women live in urban areas they have many more opportunities with regard to education and health care than they ever had in the past. However, the situation for women in rural Yemen is still very difficult. Rural women birth many children, work long hours in agriculture, fetch fuel and water, as well as feed and care for their families. Moreover, they have few opportunities to improve their life with education or better health care. Secondly, generally speaking the legal situation for women is good in Yemen, much better than most countries in the Arab world. Women can go to the court if they are denied access to positions they are qualified for. Unfortunately, women—particularly uneducated or rurally–isolated women—are not always aware of their legal rights or are unable to access the mechanisms that guarantee these rights. The third feature working in favor of women today is that the post-Unification political situation is increasingly supportive of women participating in public life. This includes voting and running for elected office, as well as by becoming involved in civil society through non-governmental organizations and the media. However, the social reality is that women still struggle to make careers outside the home, even though there is the political commitment for women’s equality on the part of the government.

5. Do you have any final comments?

I would like to thank you for choosing to interview me. I hope that I have helped students better understand the situation of women in Yemen. I feel that I am privileged to have had many opportunities in my life, even though the path has never been an easy one. The biggest advantage I’ve had in my life was a very supportive family, particularly my father and mother who withstood family disapproval in allowing me to pursue a career in the media. My father was an educated man who was respected as a leader and a religious man. His model and support established the foundation for my life. My father always said that he needed to focus more attention on his daughters because they had to be even stronger than his sons in order to survive and prosper. My mother stood alongside of my father in this position and after he died my mother continued to support me and managed to raise seven children on her own. I also benefited from many mentors in the media industry here in Yemen who encouraged me along the way in minor and major ways. I am proud to say that I am but one strong woman among many in Yemen, since women here have always been strong, although sometimes in quiet and modest ways. Throughout history, particularly in rural areas, women have had to be strong to survive their workload and family responsibilities. I believe that I am but one in a long and broad line of women leaders in Yemen’s past, present, and future. I hope that the future path for Yemeni women like my daughter is made somewhat smoother by the battles that myself and my female colleagues have fought.
* H.E. Amat al-Aleem Assooswa was Yemen’s first female ambassador to serve in the Netherlands (2000-2003), and concurrently the non-resident ambassador to Norway, Sweden, and Denmark (2001-2003). In 2003 she was appointed to the cabinet as the Minister of Human Rights.

**Vocabulary**

Arab world: the geographic designation for the 22 nations that are predominantly Arab in ethnic makeup.

Bureaucracy: systematic administration characterized by specialization of functions; government agencies that administer through fixed rules and procedures.

Censorship: control, usually repressive, of what is said and written in the media.

Concurrently: at the same time.

H.E.: meaning His/Her Excellency, an honorary title used for Ambassadors, royalty, and other important personages.

Mentor: a trusted advisor.

Merit: qualities or actions that are developed and that are worthy of praise.
APPENDIX I

Glossary

Ablution: the washing of one’s body or part of it as a religious rite, historically common to many people. A practice of ritual washing or cleansing before praying.

Abraham: Biblical and Qu’ranic prophet believed by Jews, Arabs, and Christians to be the father of their peoples.

Abu Dhabi: one of the Emirates that make up the country of the United Arab Emirates on the Arabian Peninsula.

Aden: a long-inhabited harbor on the southwest coast of Yemen on the Arabian Sea, Gulf of Aden. In 1839 it became the Aden Colony under the British Empire and served as an important commercial link in the Indian Ocean Empire until 1967, when it became the capital of the newly-independent People’s Democratic Republic of Yemen.

Adobe: a brick or building material, or technique, using sun-dried earth and straw.

Alabaster: a compact, fine-textured, white or translucent gypsum-based stone that is easily carved. It is highly valued in Yemen and has been used for a wide variety of objects, including lamps, windows, and other decorative crafts. Alabaster is identical to gypsum in chemistry, but its crystalline form is different.

Allah: the Arabic word for God. Arabic-speaking Christians and Jews also use the word Allah, with the exact meaning of God, to refer to the single, universal, all-encompassing deity revered in Christianity, Islam, and Judaism.

Alluvial plain: a plain resulting from the deposit of sediment by flowing water.

Ambergris: a fatty pitch-like aromatic substance used in making many perfumes. It is produced in the intestines of the sperm whale and usually found floating in tropical seas in lumps sometimes weighing up to 200 lbs.

Amharic: a Semitic language spoken in modern day Ethiopia.

Ancestor (adj.: ancestral): one from whom a person is descended and who is usually more remote in the line of descent than a grandparent.

Anecdotes: short accounts of an entertaining, interesting, or instructive incident.

Anemia: a nutritional deficiency in which the blood lacks red blood cells, hemoglobin, or volume.

Antiquarian: an expert in or collector of antiques.

Aqueduct: a conduit designed to transport water from a remote source, usually by gravity.

Aquifer: a water-bearing rock or group of rocks where water is naturally stored underground.

Arab: a person, place, or thing that is associated with the ancient and present-day inhabitants of the Arabian Peninsula (southwestern Asia), and often applied to the peoples who share a common ancestry, language, and culture. The Arabic language is the main symbol of cultural unity among these people. There are 22 Arab nations extending from the Arab Gulf in the east to the Atlantic Ocean in the west (including Algeria, Bahrain, the Comoros Islands, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon,
Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the United Arab Emirates, and Yemen) with a population of about 300 million. Arabs belong to many different religions, although the religion of Islam predominates at this time.

**Arabic**: the Semitic language originating on the Arabian Peninsula and today the prevailing language in much of southwestern Asia and North Africa.

**Arab World**: the geographic designation for the 22 nations that are predominantly Arab.

**Arable**: land suitable for plowing and producing crops.

**Arbitration**: the process of settling a dispute or disagreement.

**Arch**: a curved structural member spanning an opening, used to support a wall or other weight above the opening.

**Armillary sphere**: an astronomical instrument made of rings representing the positions of important circles of the celestial sphere.

**Astrolabe**: an astronomical instrument used to measure the height of celestial bodies above the horizon.

**Astronomy** (adj.: astronomical): the science of the celestial bodies and of their sizes, movements, and compositions.

**Autonomy**: the quality or state of being independent, free, and self-directing. The degree of self-determination or political control possessed by a group or unit in relation to the state or political community of which it forms a part.

**Ayyubid**: a dynasty of the end of the 12th to the middle of the 13th centuries, founded by the famous Kurdish officer Salah al-Din bin Ayyub (the famous Saladin who fought the Crusaders and captured Jerusalem), which ruled in Syria, Egypt, and Upper Mesopotamia. Saladin also conquered Yemen and the Ayyubids ruled there from 1174 – 1229 AD.

**Baked Brick**: mud bricks that are fired in a kiln; used as a building material.

**Barrier**: a structure or object that blocks passage.

**Beam**: a long, heavy, often squared piece of timber used for structural support in a building.

**Bible**: the book composed of writings generally accepted by Christians as inspired by God, consisting of the Old Testament and the New Testament.

**Biblical**: like that of the time and region that produced the Bible; from the Bible.

**Bicameral**: a legislature composed of two chambers (for example, as in the US Congress, which has a House of Representatives and a Senate).

**Bilad al-Sham**: the countries of the Levant, i.e. Palestine, Jordan, Lebanon, and Syria.

**Bin**: meaning “son of.”

**Biography**: written history of a person’s life.

**Boundary**: something that indicates or fixes a limit or extent; a bounding or separating line.

**Boustrophedon**: the writing of alternate lines in opposite directions (i.e. one line of script is read from right to left and the next line is read from left to right).

**Bureaucracy**: systematic administration characterized by specialization of functions; government agencies that administer through fixed rules and procedures.
**Byzantine:** of or related to the powerful Byzantine Empire from the 4\textsuperscript{th} to the 15\textsuperscript{th} centuries AD; its capital Byzantium is the modern-day city Istanbul in Turkey.

**Caliph/Caliphate:** the term used by the dynastic rulers of the Muslim world referring to the successor to the prophet Mohammed as the political and military ruler of the Muslim community. The first four successors to that office were chosen by consensus of the Muslim community’s elders and were known as “leaders of the believers.” After them the caliphate became hereditary.

**Calligraphy:** the art of fine handwriting; beautifully or elegantly written text.

**Camphor:** a fragrant gummy substance obtained from the wood and bark of the camphor tree.

**Caravanserai:** warehouse for goods carried by caravans, such as spices, incenses, and other commodities. Some of these buildings in Sana’a used the lower levels for animals, loading and unloading, and for the storage of goods. The upper floors were for conducting business and for lodging merchants. There are at least 58 caravanserais that have been identified in the old city of Sana’a. The Yemeni word for caravanserai is \textit{samsara} (pl. : \textit{samasir}).

**Celestial:** of, or related to, the sky or visible celestial bodies – the sun, moon, stars, or planets.

**Censorship:** control, usually repressive, of what is said and written in the media.

**Chisel:** tool with a sharp beveled end for shaping wood, stone, or metal.

**Christian:** one who follows the religion of Christianity.

**Christianity:** the religion of Christians, who believe in one God and whose beliefs and practices stem from the life, teachings, and death of Jesus Christ. The religion recognizes the Bible (the New Testament and the Old Testament) as the basis for its beliefs and practices. Christianity is a monotheistic religion.

**Cinnabar:** one of the names used for the resin of the dragon’s blood tree (\textit{Dracaena cinnabaris}), also known as dragon’s blood. The term cinnabar is also used for—and the resin has been confused with—the potentially poisonous mineral cinnabar (mercuric sulfide), a red-colored crystalline mineral mined for its mercury content.

**Circumcision:** the removal of the foreskin of the penis.

**Cistern:** a storage area or tank for catching and storing rainwater.

**Clarified Butter:** butter that is heated until it melts and milk-solids form on the surface (appearing on the surface as foam); the solids are then removed from the butter by skimming or straining. It is also known as by the term used in India, \textit{ghee}.

**Commerce (adj.: commercial):** the exchange or buying and selling of products on a large scale, involving transportation from place to place.

**Commodity:** something economically useful or valuable.

**Concave:** a curved recess, a depression resembling a bowl.

**Concession:** a grant of a particular plot of land for extraction of minerals and other resources, such as petroleum.

**Concurrently:** at the same time.

**Convex:** curved or rounded like the exterior of a sphere or circle, the opposite of \textit{concave}.

**Covet:** to desire what belongs to another.
Cremation: the process of burning a dead body into ashes.

Crown Prince Ahmad: Ahmad Bin Yahya Hamid al-Din, the next-to-last Zaydi Imam of Yemen who ruled from 1948 until his death in September 1962. His son, al-Badr Muhammad, succeeded him briefly, but in September 1962 his Imamate ended, and the Yemen Arab Republic was established.

Cuisine: a manner of preparing food; a style of cooking.

Cursive: of writing: flowing, often with the strokes of successive characters joined and the angles rounded.

Dhofar (adj.: Dhofari): western region of today’s Sultanate of Oman where it meets with Yemen.

Dialect: a variation of a language used by a group of people that has features of vocabulary, grammar, or pronunciation distinguishing it from other varieties used by other groups.

Diaspora: a dispersion of a people of a common origin or beliefs.

Distilling: purifying or extracting essence from a substance by vaporizing it with heat, then condensing it with cold and collecting the resulting liquid.

Diwan: a formal sitting room in a house, or the institution of traditional governance where rulers, or leaders, would hold an open meeting where a follower or citizen could come and discuss any subject.

Dome: a vaulted circular roof or ceiling; concave or hemispherical structure.

Dynasty: a succession of rulers of the same line of descent.

Egyptologist: a person who studies ancient Egypt.

Embalmed: the process of preserving bodies after death to prevent decay, usually through the use of chemical substances.

Engraving: incising or carving a design on the surface of metal or wood.

Entourage: attendants and associates surrounding an important person.

Entrepreneurs: persons who organize, operate, or assume a risk for a business venture.

Epigraphers: those who study, decipher, and interpret inscriptions.

Eponymous: bearing the name of, being, or relating to an eponym (eponym: one for whom or which something is named).

Equator: an imaginary line around the center of the earth, forming a large circle that is equidistant between the north and south poles.

Essential oils: volatile essences extracted from aromatic plants by steam, distillation, expression, or solvent extraction. Essential oils are applied topically or inhaled, and act on physical, emotional, and psychological processes.

Eulogized: praised highly in spoken or written terms.

Extinct: no longer to be found; gone out of use.

Federation: a sovereign state formed by the union of several states that have given up certain powers to the central government while retaining for themselves control over local matters.

Filigrée: delicate and intricate ornamental work made from fine twisted wire of gold, silver, or other metal.

Fluted: decorated with parallel grooves, as a column or ruffle.

Fodder: food for domesticated animals such as cows, sheep, or horses, often consisting of coarsely-chopped stalks and leaves of corn mixed with hay, straw, or other grains.
**Foundation**: the underlying base or substructure of building.

**Frankincense**: a fragrant gum resin from the *Boswellia* tree that is indigenous to south Arabia.

**Gazelle**: a fleet-footed animal in the antelope family, both males and females having ringed, curved horns.

**Gender gap**: the culture and time-specific difference between opportunities, access, control, participation, and power for men and women.

**Genealogy**: an account or history of the descent of a person, family, or group from an ancestor, ancestors, or from older forms. A study of family pedigrees and the methods of the investigation of them.

**Ghamdan**: a pre-Islamic fabled royal palace built in San’ā’ by the rulers of the Sabaean federation of the kingdoms of Saba’ and Himyar. (also: Ghumdan)

**Gluten**: a protein found in grains, such as wheat, oats, rye, and barley, that forms in the process of making bread and interacts with the yeast. Gluten gives elasticity to bread dough and structure to the resulting bread. Grains with a high gluten content will make a dough that rises higher when baked.

**GNP**: Gross National Product. The total value of the goods and services produced in a nation during a given year; it is the broadest measure of the output of goods and services by an economy. Per capita GNP: a country’s GNP divided by its population, that is, the amount that each person would have if the GNP was equally divided.

**Granulation**: using small round beads of silver or gold to ornament jewelry.

**Gulf**: The Arabian/Persian Gulf, a part of the Arabian Sea extending into the land; the Arabian or Persian Gulf is surrounded by the countries of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates, Iraq and Iran. In general terminology, a part of the ocean or sea extending into the land.

**Gulf States**: the nations surrounding the Arabian Gulf including Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates, Iraq, and Iran.

**Gum Arabic**: water-soluble resins of several varieties of plants used for medicine, confectionery and as an adhesive; called gum Arabic because they were exported from Arab ports and spread by Arab traders.

**Gypsum**: a mineral of hydrous calcium sulfate used in the manufacturing of plaster of Paris, gypsum plaster and plasterboard, wallboards and fertilizers.

**Hanukkah**: a Jewish festival of eight days duration that commemorates a military victory and the rededication of the Temple of Jerusalem. Also called the “Festival of Lights” or “Feast of Dedication.”

**Hadhramaut**: a province of Yemen that stretches from the Empty Quarter to the Gulf of Aden; its chief cities are Shibam, Say’un, Tarim, and Mukalla. It is well-known for the Wadi Hadhramaut, a long, wide, river valley in southeastern Yemen.

**Hadhrami**: from the Hadhramaut.

**H.E.**: meaning His/Her Excellency, an honorary title used for Ambassadors, ministers, heads of state, and other important personages.

**Hellenic**: of or relating to Greece, its people, history, culture, or art.

**Heritage**: something that is passed down or acquired from a predecessor, such as language, traditions, and property.

**Hierarchy**: a form of government administered by an authoritarian group. The classification of a group of...
people with regard to economic standing, social standing, or ability.

Hieroglyphics: a system of writing in which the characters are, for the most part, recognizable pictures of objects that are used to represent a word, syllable, or sound. Ancient Egyptians are well known for their use of hieroglyphics.

Himyar: the people and last great empire of pre-Islamic Yemen that ruled from the southern highlands from 115 BC – 525 AD.

Hindi: relating to the major language of India (with many dialects).

Hippogriff: a mythical monster having wings, claws, and head of a griffin (another mythical creature with the head and wings of an eagle and the body of a lion) and the body and hindquarters of a horse.

Horn of Africa: the geographic term referring to the eastern projection of the coast of Africa including Djibouti, Eritrea, Ethiopia, and Somalia.

Hudaydah: city on the Red Sea coast of Yemen.

Ibex: a sure-footed member of the wild goat family with back-curving ringed horns found in mountainous areas.

Ibn: Arabic for son.

Ibn Battuta: a 14th century Arab traveler and author whose travels, including a brief stop in Yemen, covered over 75,000 miles – stretching from Spain to China.

Idolatry: the worship of a material image that is held to be the abode of a superhuman personality.

Imam: in Yemen the title refers to the theocratic Zaydi ruler who was chosen from among the religious elite to be the spiritual, temporal, and military leader of the community. Also, the leader of prayer in a mosque.

Imamate: the “Imamate” designates the theocratic institution of Zaydi Imams who ruled various parts of Yemen for nearly 1,000 years, until the 1962 revolution.

Indigenous: native or belonging to a place.

Indigo: deep violet blue dye made from the leaves of the indigo plant. A dye commonly used in India, Egypt, and Rome. Large scale cultivation of indigo began in India in the 16th century; the East India Company imported massive amounts to Europe in the mid-16th century. In certain regions of Yemen, indigo is traditionally used for dying cloth.

Intonation: the manner in which verbal tones are uttered.

Islam: the religious faith of Muslims characterized by a belief in one God (Allah), the sole deity, and a belief in Mohammed as the last of his prophets. It was established in the 7th century AD. The Quran forms the basis of Islam’s beliefs and practices. Islam is a monotheistic religion.

Isma’ili: a Shi’ia Muslim community named after Ismail, the eldest son of Jafar al-Sadiq (d. 765), in whose progeny they have recognized a continuous line of Alid imams. Isma’ili’s attempted, without lasting success, to establish a political base in Yemen in the 9th and 10th centuries AD.

Jinn: the spirit of a supernatural being that is able to appear in human and animal form.

Judaism: the religion of the Jews characterized by a belief in one God, who was revealed to Abraham, Moses, and the Hebrew prophets. The Hebrew Bible or scripture (the Tanakh) that forms the basis of Jewish beliefs and practices consists of three divisions: Torah (Law), Nebhiim (Prophets), and Kethubhim.
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(Writings). Judaism is a monotheistic religion.

Jujube: several types of tree in the buckthorn family with an edible fruit common in Yemen.

Ka’bah: the Muslim shrine in Mecca, Saudi Arabia. Muslims believe that Abraham and his son Ishmael built the shrine.

Kamal: a simple Arab navigational instrument that was used to calculate latitude.

King Solomon: ruler of ancient Israel (961-922 BC). Second son of King David and revered in both Judaism and Islam as a wise man.

Kush: an ancient country in northeast Africa in the Nile valley in southern Egypt.

Lactation: the production of milk for a breastfeeding baby by the mother.

Lacquer: a hard shiny shellac or varnish put on wooden objects to protect and decorate.

Latitude: from the system of geometric coordinates used to designate locations on the surface of the earth.

Latitude lines circle the globe measuring distances from the equator.

Leavening: a substance, such as yeast or baking powder, used in batter and dough to produce fermentation and rising.

Legacy: something received or inherited from an ancestor or predecessor.

Legumes: the fruit or seed of the pea or bean plants.

Lineage: direct descent from a particular ancestor; ancestry.

Linguistic: of or relating to language.

Literacy: the ability to read and write.

Litter: a covered or cushioned compartment used to transport an important person; it could be placed on an animal or carried by humans.

Longitude: from the system of geometric coordinates used to designate locations on the surface of the earth.

Longitude lines run from pole to pole.

Loot: goods of considerable value seized in war.

Madrasa: Islamic religious school.

Manuscript: a hand-written document.

Marib: name for a region, province, town, and dam in central Yemen. Marib, the town, was the capital of the pre-Islamic Sabaaean Kingdom.

Martyr: one who dies or suffers greatly for faith or beliefs.

Masonry: something constructed of materials used by masons (for example: stone, brick, concrete block).

Mecca: a city in western Saudi Arabia that was the birthplace of the Prophet Mohammed, founder of Islam; the city is considered sacred by Muslims.

Medicine: something used to cure disease or relieve pain.

Medieval: of or relating to the Middle Ages of Europe, the period of European history extending roughly from 500 AD to 1500 AD.

Mentor: a trusted advisor.

Merit: qualities or actions that are developed and that are worthy of praise.

Mezzanine: an intermediate partial level similar to a balcony between full stories of a building.
Millennia: thousands of years.
Millennium: one thousand years.
Minaret: a slender lofty tower attached to a mosque from which the call to prayer is broadcast.
Mohammed: see Prophet Mohammed.
Monarchy: undivided rule or absolute sovereignty by a single person. A territorial unit (such as a nation or state) having a monarch as chief of state.
Monotheism (adj.: monotheistic) the belief in and/or worship of one God (e.g. Judaism, Christianity, and Islam).
Monsoon: a name for seasonal winds that reverse direction. First applied to the winds over the Arabian Sea that blow for six months from the northeast and for six months from the southwest. It is associated with periods of heavy rainfall. It brings rain to Yemen twice yearly. The word comes from the Arabic mawsim, meaning season, i.e. sailing.
Mosque: Muslim place of worship and gathering.
Motif: a recurring distinctive feature, dominant pattern, or idea in art, literature, or music.
Mud Brick: a flat square slab produced by filling a wooden mold with a mixture made primarily of mud or clay that has been dried in the sun; used as a building material.
Musk: a fragrant substance secreted by male musk deer that is used as a base for many perfumes.
Muslim: one who follows the religion of Islam; literally, one who “submits to the will of God.” There are over one billion Muslims worldwide.
Muslin: sturdy plain-weave cotton fabric, used especially for sheets, derived from the famed place of origin, Mosul (Iraq) and from the Arabic word for joining something together.
Myrrh: a fragrant gum resin from the Commiphora abyssinica tree that is indigenous to south Arabia.
Narwhal: an arctic aquatic mammal, having a spotted pelt and, in the male, a spiral tusk several feet long.
New Testament: the second part of the Bible accepted by Christians as sacred scripture, comprising the Gospels, the books of Acts, Epistles, and Revelations.
Nomad (adj.: nomadic): a member of a people that has no fixed residence, but wanders from place to place usually seasonally and within a well-defined territory for the purpose of securing its supply of food.
Oasis: a fertile or green area located in an arid or dry region.
Octagon: a plane polygon of eight angles and therefore eight sides; an octagonal object.
Old Testament: The first part of the Bible; the term is used by Christians to describe a collection of selected writings composed and edited by members of the Hebrew-Jewish community between the 12th century BC and the Christian era. The number of books constituting the accepted Old Testament varies among religious groups.
Optimal: the best, or most favorable, conditions.
Oral: transmitted, or passed on, through the spoken word.
Ornate: heavily decorated.
Ottomans/Ottoman Empire: a vast state created by Central Asian Oghuz Turks from ca. 1300-1923; its territories ultimately encompassed Southeastern Europe, Anatolia, the Middle East to Iran, and North
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Africa.
Palate: the roof of the mouth, the sense of taste.
Papyrus: a paper-like substance invented by the ancient Egyptians that was made from the stem of a water reed.
Pastoral: of, relating to, or composed of shepherds or herdsmen.
Paternal: associated with the father and his side of the family.
Patronage: support or influence of a person through financial, political, or social channels.
Patriarchy: social organization marked by the supremacy of the father, the legal dependency of wives and children, and descent and inheritance through the male line.
Perspicacity: acuteness of perception, discernment, or understanding.
Phonetic: of or relating to spoken language or speech sounds, representing the sounds and other phenomena of speech.
Piebald: of two colors, usually black and white, with the spots making an irregular pattern.
Pious: marked by or showing reverence for deity and devotion to the duties and rites of religion.
Pole Star: a star of the second magnitude, at the end of the Little Dipper’s handle, also known as the North Star, Polaris, or polar star.
Polytheism: the belief in and/or worship of many gods.
Post-natal: the period immediately after birth.
Post-partum: after having given birth to a child.
Precious: of great value or high price.
Pre-Islamic: before the beginning of Islam in the 7th century AD, or prior to the arrival of Islam in a particular location.
Prophet Mohammed (570 – 632 AD): the last prophet recognized by the Quran, whose teachings, encompassing religious, social, and political principles, became the basis of Islamic religion and civilization. (Alternately spelled: Muhammad)
Proselytize: to attempt to bring converts into a religious group. To recruit members for an institution, team, or group especially by the offer of special inducements.
Protectorate (Eastern and Western): in 1937 Britain made the port city of Aden a crown colony. The nearby land in south Yemen was designated as the Eastern and Western Protectorates. The protectorates were inhabited by numerous separate tribes whom the British treated as under their protection. The Protectorates were formed and maintained by a complex combination of truces, money, British supervision, and force.
Proverb: a brief saying that is a popular byword; a truth couched in obscure language.
Qat: shiny-leafed shrub (latin name: Catha Edulis) cultivated extensively in Yemen. Its leaves, chewed on a daily basis by a majority of men, and by increasing numbers of women, produce a mildly stimulating sensation. Qat afternoon gatherings are woven into cultural, professional, and political traditions in Yemen.
Quadrant: an instrument used for measuring altitudes that is shaped in a quarter circle and uses a plumb line.
Queen Hatshepsut: Queen of ancient Egypt (1520–1483 BC).

Quran: the book composed of writings accepted by Muslims as revelations made to Mohammed by God (Allah) and as the divinely authorized basis for regulations and practices of the Islamic world. (also: Koran, Qu’ran)

Quill: a pen made from the large feather from the wing or tail of a bird; it is dipped in ink to write.

Raid: a surprise, hostile attack.

Ramadhan: the Muslim month of fasting (from sunrise until sunset) that marks when the Prophet Mohammed received the first revelations of the Quran. (also: Ramadan)

Rasulid: a dynasty (1228 – 1454 AD) of Yemen founded by one Nur al-Din al-Rasuli.

Referendum: political question or issue that is directly voted upon by the general electorate.

Resonating: a noise that leaves a slow echo or vibrating sound.

Rite of passage: a ceremony that takes the initiate through the steps that bring him or her from one stage of life to another.

Saba (or Sheba in English, adj.: Sabaean): a pre-Islamic kingdom that dominated the incense trade in Southern Arabia from the 10th century BC to the 3rd century AD. Its capital was Marib and the Sabaeans built the great Marib dam. One of its reputed leaders was Bilqis, the Queen of Sheba (see lesson 2).

Sabbath: the seventh day of the week, named in the Old Testament of the Bible as a day of rest and observed as such by many traditional Jews and Christians.

Saffron: the dried stigmas of the saffron crocus, used in cooking, for medicine, or formerly as a dye.

Salve: a soothing substance applied to wounds or sores.

Script: written characters used to represent sounds and meanings in language.

Sayyid (pl.: Sadah): honorary title used to refer to a descendent of the Prophet Mohammed.

Semitic: a family of languages with a common ancestry, today comprising chiefly Arabic, Hebrew, Ethiopic, Amharic, Syriac, and Aramaic.

Shafa’i: a school of Islamic (and Sunni) law founded by Muhammad ibn Idris ibn al-Abbas ibn Uthman ibn Shafii. Muslims who adhere to the Shafa’i school of jurisprudence (one of the four great doctrinal schools, or branches, of orthodox Sunni Islam). It was permanently established in Yemen by the end of the 13th century; it is still the dominant school of law in southern Yemen. (also: Shafi’i)

Sharecropping: a system of farming in which a tenant farmer works the land, and gives the landowner a fixed share of the crops, instead of money.

Shaykh (pl.: mashayikh): traditional tribal leader of well-known ancestry.

Shi’i/Shi’ite: Shi’i Muslims, the followers or party of Ali, believe that Mohammed’s religious leadership, spiritual authority, and divine guidance were passed on to his descendants, beginning with his son-in-law and cousin Ali ibn Abi Talib, his daughter Fatima, and their sons, Hasan and Husayn. (also: Shii, Shism)
Siesta: a rest or nap usually taken after the midday meal.
Sluice: a passage for water fitted with a valve, or gate, for stopping and regulating the flow of water.
Sojourn: to stay as a temporary resident.
Solar: of, derived from, or relating to the sun.
Soqotri: the Semitic language of the inhabitants of the island of Soqotra.
Sovereign: self-governing; independent.
Stigma: a portion of the pistil of a flower.
Stucco: a fine plaster for interior wall ornamentation. In Yemen craftsmen carve very intricate designs into the stucco plaster.
Stylize: to represent or design an object according to a set plan or style of expression that is recognized as being different from nature.
Subsistence: a system of farming that provides for the basic needs of the family, but without any surplus for sale.
Subterranean: underground.
Suez Canal: a 101 mile-long canal finished in 1869, connecting the Mediterranean and Red seas.
Suffrage: the right to vote.
Sufism/Sufi: Islamic mysticism. Sufis are devotees of various mystical branches of Islam that developed from the 7th century AD. The first historical references to Sufism in Yemen are in the 12th century AD. Sufism focuses inward; its practices strive for closeness to God, beauty of character, and sincerity. Sufism is unrelated to the Sunni/Shi’ia split.
Sultan: a term used in Islamic society for a king or sovereign ruler.
Sunnah: the “beaten path” or body of traditions recounting the deeds, sayings, and silent approval of the Prophet covering the details of community life; one of the main sources of Islamic law.
Sunni: The Sunnis are the largest branch of the Muslim community. The name is derived from the sunnah, the exemplary behavior of the prophet Mohammed. All Muslims are guided by the sunnah, but the Sunnis stress it, as well as consensus (ijma).
Superstition: any belief, practice, or rite unreasonably upheld by faith in magic, chance, or dogma.
Surah (spelled and pronounced surat when modified by another word): a chapter in the Quran.
Ta’izz: a city in the southern highlands of Yemen that has served as the capital of a number of dynasties.
Terraces: stair step-like fields constructed on hillsides by building retaining walls to hold soil and water.
Tihamah: region of the Arabian Peninsula which stretches along the Red Sea coastline running through both southern Saudi Arabia and Yemen.
Treatise: a written work dealing formally and systematically with a subject.
Tribe/Tribal: describing a type of social organization of the pre-modern world and still dominant in many regions (still influential in Yemen) that provides social organization, a system of laws, a code of behavior, and conceptions of honor to individual members of a tribe who often share a common ancestry.
Veneration: profound respect or reverence.
Vernacular (noun): the native language or dialect of a country, region, or person; (adj., as used here):
pertaining to a style of architecture and decoration that is native to a specific culture.

**Volatile**: a substance that changes readily from solid or liquid to a vapor.

**Wadi**: a dry watercourse that becomes a river during the rainy season.

**Wadi Hadhramaut**: a long, wide, river valley located in southeastern Yemen.

**Wali**: Arabic for governor.

**Zaydis**: followers of a sect within Shi’ah Islam. Zaydis separated from the main Shi’ah branch over a disagreement as to who was to be the fifth Imam. They wanted Zayd bin ‘Ali Zain al-Abdin, the son of the fourth Shi’ah Imam and the great-great-grandson of the Prophet Mohammed. Zaydis first established themselves in Yemen in 897 AD, and even today Zaydism is the dominant form of Islam in the highlands of Yemen.

**Zaydi Imamate**: the “Imamate” designates the theocratic institution of Zaydi Imams who ruled various parts of Yemen, particularly the former North Yemen, for nearly 1,000 years until the 1962 revolution.
APPENDIX II
The Republic of Yemen: A Glimpse through Statistics

The Land:

Area: 207,286 square miles (527,970 square kilometers)
Comparative area: Slightly less than the combined area of Arizona and Nevada (223,405 square miles), or roughly twice the size of Wyoming
Shared borders: 179 miles (288 kilometers) with Oman, 906 miles (1,459 kilometers) with Saudi Arabia
Coastline: 1,184 miles (1,906 kilometers) along the southern Red Sea and the Gulf of Aden
Terrain: Narrow coastal plains rising to high and rugged mountains in western Yemen, and to lower mountains in southern Yemen. The desert interior of the country is a plain, with scattered rocky hills, that slopes gently to the northeast. The highest point in the Arabian Peninsula, 12,024 feet (3666 meters) above sea level, is Jabal Nabi Shu’ayb (“mountain of the prophet Shu’ayb”), just west of Sana’a.
Climate: Coast areas are semi-arid, hot and humid; the western mountains are temperate with two rainy seasons brought by monsoon winds; the southern mountains are semi-arid and hot; the deserts in the northeastern sections of the country are very dry and hot.

Land use:
- Agricultural land 16.0%
- Pasture land 33.5%
- Forest and woodland 4.0%
- Other 46.5%

The People:

Population: roughly 21 million (official census Dec. 2004 19.7 million)
Noun: The people are called Yemeni(s), and matters or things pertaining to the country are called Yemeni. By a common (but not universal) convention, the word “Yemenite” refers to the once-sizeable Jewish community.

Age structure:
- 0-14 years old 46.5%
- 15-64 years old 50.8%
- 65 years old and over 2.7%

Life expectancy at birth (est. 2005):
- Total population 61.9 years
- Male 59.9 years
- Female 63.7 years

Birth rate: 43.07 per 1000 (est. 2005)
Fertility rate (est. 2005): 6.7 born per woman
Infant mortality: 67 per 1000 live births
Annual population growth rate (est. 2005): 3.5%
Ethnicity: Predominantly Arab; Afro-Arab communities are sizable along the western coast and now in the major cities; small South Asian communities are present in the major cities, especially along the southern coast; individuals of partially Indian, Southeast Asian or African descent live throughout the country
Religion: Nearly all Yemenis are Muslim; a small number of Yemeni Jews remain in the country, and some permanent residents of non-Yemeni descent are Hindus or Christians.
Language: Arabic; small groups of Soqotri speakers exist on the island of Soqotra and Mahri speakers exist in eastern Yemen.

**Education**

Literacy (a literate person defined as someone at least 15 years old who can read and write; est. 2003):
- Total 47%
- Male 70.5%
- Female 26.5%

Completion primary school (2003):
- Male 66%
- Female 48%

University enrollment in academic year 2002/3:
- Students enrolled 193,250
- Male 74.8%
- Female 25.2%
- Students graduated 17,510
- Male 65.6%
- Female 34.4%

**Government**

Capital city: Sana’a (alternative spellings: Sanaa, Sana, San’a’)
National flag: Three equal horizontal bands of red, white and black (from top to bottom)
National government: The constitution of the Republic, approved by referendum in 1991 and amended several times since then, provides for three main divisions of government. The President is elected to a seven year term; he appoints a Prime Minister and a Cabinet of Ministers (29 ministers in 2005) charged with executing the responsibilities of government. The second branch is legislative, and is divided into two bodies. The Chamber of Representatives (Majlis al-Nawab) has 301 members, who are elected to six year terms by popular vote to represent districts, and who enact law and deliberate fiscal matters. The Consultative Chamber (Majlis al-Shura) has 111 members appointed by the President to offer him and the Cabinet advice on matters of policy. The third branch is the judicial system, which is divided into a
Supreme Court, courts of appeal, and civil and criminal courts; the President appoints the judges.

Local government: The country is divided into 21 governorates, each headed by an appointed governor. Mayors are in charge of the major cities and towns; traditional headmen are responsible for villages.

Parties and elections: Three major parties – the General People’s Congress, the Reform Grouping, and the Yemen Socialist Party – plus another 10 or so minor parties contest elections for seats in the Chamber of Representatives.

Economy

Natural resources: petroleum, natural gas, fish, rock salt, marble and alabaster; small deposits of coal, gold, lead, nickel, copper

Agricultural products: sorghum, wheat and barley, various fruits and vegetables, potatoes, plus sheep, goats and cattle; mainly for domestic consumption; cotton

GDP: $12.8 billion (2004)
GDP growth rate: 2.7% (2004)
GDP sectoral break-down:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>44.7%</td>
</tr>
<tr>
<td>Services</td>
<td>39.7%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>15.5%</td>
</tr>
</tbody>
</table>

Labor force (2002): 4,091,000 people

Male 76.2%
Female 23.8%

Private sector employment (roughly 4 million over the age of 15)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and fishing</td>
<td>54.2%</td>
</tr>
<tr>
<td>Trade, restaurants, hotels</td>
<td>12.4%</td>
</tr>
<tr>
<td>Public administration</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

Unemployment: estimated at 40%

Average annual income: roughly $600 per capita GDP

Petroleum and natural gas: Proven reserves estimated at 4 billion barrels of petroleum, 480 billion cubic meters of natural gas. Petroleum production 425,000 barrels per day (2005), roughly 0.5% of global production; liquefied natural gas production is scheduled to begin during the coming decade. About 20% of petroleum production is consumed inside Yemen, the remainder is exported; petroleum sales account for roughly 75% of government revenues. Hunt Oil Company (of Houston, Texas) developed Yemen’s first commercial oil field, in Marib, during the 1980s.

Exports: petroleum; coffee, fruit and other agricultural products; frozen or dried and salted fish

<table>
<thead>
<tr>
<th>Destination</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>to China</td>
<td>34%</td>
</tr>
<tr>
<td>to Thailand</td>
<td>31%</td>
</tr>
<tr>
<td>to Singapore</td>
<td>7%</td>
</tr>
<tr>
<td>to South Korea</td>
<td>6%</td>
</tr>
</tbody>
</table>
Imports: various foodstuffs, raw and semi-finished industrial materials, machinery, clothing and cloth, finished consumer goods, medicines
from European countries 31%
from Arab countries 30%
from south and east Asia 25%
from the Americas 11%

Communications and transportation
Telephone lines: 409,000 (2001)
Mobile telephones: 1,380,000 (est. 2005)
Newspaper circulation: 278,000 (2001)
Radios: 1,209,000 (2001)
Televisions: 5,264,000 (2001)
Personal computers: 39,900 (2001)
Internet users: 220,000 (est. 2005)
Paved roads (miles): 4,785 (est. 1999)
Unpaved roads (miles): 36,830 (est. 1999)

A Note about Religion
The constitution of Yemen declares that Islam is the state religion and that Shari’a is the source of all legislation. Virtually all citizens of Yemen are Muslims and they belong to several different schools of Islam: approximately 70% are Shafa’i (a branch of Sunni Islam) and 30% are Zaydi (an order of Shi’a Islam), with small numbers of Isma’ilians (Shi’ah) and Hanbali (Sunni) also present in the country. Fewer than 500 Jews live in Yemen; these mostly in a few villages between Sana’a and Saada in northern Yemen. Most Christians are temporary foreign residents, including Ethiopian refugees; a small number of Christians and Hindus of South Asian origin have long lived in Aden.

The constitution of Yemen provides for freedom of religion, although with some restrictions. The government forbids the conversion of Muslims, requires permission for the construction of new, non-Muslim places of worship, and prohibits non-Muslims from proselytizing. Non-Muslim Yemenis can vote, but they can not hold elected office. Followers of other religions are free to worship according to their beliefs and to wear religious ornaments and dress.

The fact that Islam is the state religion is readily apparent on state television and radio broadcasts, the government’s Ministry of Religious Endowments and Guidance, the government work week (Thursday and Friday are the weekend), the calendar of government holidays, and other official activities. That Islam is also a deeply felt and integral part of daily life is evident in the number of neighborhood mosques, the call to prayer heard five times daily across the country, the sight of prayer beads (sing. misbahah, pl. masabih) used for the recitation of religious texts, and in men and women dressing in accordance with Islamic practices.
Less obvious is the fact that Shari’ah-based law, reinforced by social custom, discriminates against women. Most marriages are arranged between families, and the prospective husband customarily pays a bride price (the \textit{mahr}). Men are allowed to take as many as four wives at a time, provided that all can be treated equally; few men have more than two wives at a time, and most men marry only one wife at a time. The husband and the wife’s “guardian” (usually the woman’s father) sign a marriage contract; the woman signs the contract in only a few areas of Yemen. The law provides that a wife must obey her husband, live with him in the place stipulated in the marriage contract, and not leave home without his consent. Husbands may divorce wives without justifying their action in court, although in practice courts often impose a reconciliation period before granting the husband’s divorce petition. But a woman who files for divorce must provide grounds for her action; acceptable grounds for divorce might involve non-support, impotence, abrogation of the marriage contract, or taking a second wife without her consent. A woman seeking divorce must also repay a portion of the bride price. Shari’ah-based law provides complicated rules for inheritance that assign fixed portions of an estate to various family members. In this system daughters inherit half the portion allotted to sons. Various factors, including limited ability of women to represent themselves in legal matters and high rates of female illiteracy, allow male inheritors to bilk their female relatives out of even these half shares.

Women who want to travel abroad must obtain their husbands’ or fathers’ permission to obtain a passport or to travel. They are also expected to travel in the company of male relatives, although enforcement of this regulation is irregular. Shari’ah-based law permits a Muslim man to marry a Christian or Jewish woman, but a Muslim woman may not marry outside of Islam.
Yemeni National Anthem

Translated by Maha al-Hibshi

To hear the Yemeni National Anthem sung in Arabic visit the Yemen Gateway website: www.al-bab.com/yemen

The whole world, repeat my anthem,
Repeat it over and over again.
Remember in my happiness each martyr,
Clothe him in my shining celebration.
My country, we are the children and grandchildren of your men,
Who will protect the bounty we have in the hands of your majesty.
Every rock in the mountains, every particle of sand and all the dew in the shade,
Will be the shining to light our paths.
This country belongs to us . . . belongs to our great hopes,
It’s our right that arose from the glory of your marvelous past civilizations.
The whole world, repeat my anthem,
Repeat it over and over again.
Remember in my happiness each martyr,
Clothe him in my shining celebration.
Unification, Unification, this wonderful anthem fills my spirit and soul,
It’s a promise held in everyone’s trust.
My banner, my flag, the textile I wove,
With the eternal sunlight brightens every peak.
My nation, my brave treasure provides me with courage and strength,
And keeps me treasuring you, the noblest nation.
I’ve lived my beliefs and love eternal,
I’ll live my life proud that I’m an Arab.
My beating heart will be loyal to this country,
Which will have no guardian but I.
The whole world, repeat my anthem,
Repeat it over and over again.
Remember in my happiness each martyr,
Clothe him in my feast of light.

Vocabulary

Arable: land suitable for plowing and producing crops.
Bicameral: a legislature composed of two chambers (for example, as in the US Congress having a House of Representatives and a Senate).
**Concession**: a grant of a particular plot of land for extraction of minerals and other resources, such as petroleum.

**Horn of Africa**: the geographic term referring to the eastern projection of the coast of Africa including Djibouti, Eritrea, Ethiopia, and Somalia.

**Isma’ilis**: a Shi’ah minority sect of Islam that is frequently characterized as secretive, conspiratorial, and highly politicized; members prefer to be called Fatimids, followers of Fatimah, the Prophet Mohammed’s daughter. Isma’ilis attempted, without lasting success, to establish a political base in Yemen in the 9th and 10th centuries AD.

**Latitude**: from the system of geometric coordinates used to designate locations on the surface of the earth. Latitude lines circle the globe measuring distances from the equator.

**Longitude**: from the system of geometric coordinates used to designate location on the surface of the earth. Longitude lines run from pole to pole.

**Martyr**: one who dies or suffers greatly for faith or beliefs.

**Monsoon**: a name for seasonal winds that reverse direction. First applied to the winds over the Arabian Sea that blow for six months from the northeast and for six months from the southwest. It is associated with periods of heavy rainfall. It brings rain to Yemen twice yearly. The word comes from the Arabic *mawsim*, meaning season, i.e. sailing.

**Referendum**: political question or issue that is directly voted upon by the general electorate.

**Shafi’is**: Muslims who adhere to the Shafi’i school of jurisprudence (one of the four great doctrinal schools, or branches, of orthodox Sunni Islam). Shafi’ism was permanently established in Yemen by the end of the 13th century; it is still the dominant school of law in southern Yemen.

**Zaydis**: followers of the Shi’ah sect of Islam that takes its name from Zayd bin ‘Ali Zain al-Abdin, the son of the fourth Shi’ah Imam and the great-great-grandson of the Prophet Mohammed. Zaydis first established themselves in Yemen in 897 AD, and even today it is the dominant form of Islam in the highlands of Yemen.

**Bibliography**


## APPENDIX III
### Timeline of Yemeni History (excluding the Hadhramaut)
Prepared by Dr. Mohammed al-Arousi

### Pre-Islamic Yemen

<table>
<thead>
<tr>
<th>Kingdom Name</th>
<th>Establishment Date</th>
<th>Termination Date</th>
<th>Capital City</th>
<th>Region of Yemen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saba</td>
<td>1000 BC</td>
<td>6th century AD</td>
<td>Ma’rib</td>
<td>Ma’rib &amp; al-Jawf</td>
</tr>
<tr>
<td>Ma’in</td>
<td>7th century BC</td>
<td>1st century BC</td>
<td>Qarnaw(^1)</td>
<td>Al-Jawf</td>
</tr>
<tr>
<td>Awsan</td>
<td>7th century BC</td>
<td>6th century BC</td>
<td>Markhah(^2)</td>
<td>Wadi Markhah</td>
</tr>
<tr>
<td>Hadhramaut</td>
<td>5th century BC</td>
<td>3rd century AD</td>
<td>Shabwah</td>
<td>Hadhramaut &amp;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Shabwah</td>
<td></td>
</tr>
<tr>
<td>Qataban</td>
<td>5th century BC</td>
<td>1st century AD</td>
<td>Timna’</td>
<td>Bayhan</td>
</tr>
<tr>
<td>Himyar</td>
<td>115 BC</td>
<td>525 AD</td>
<td>Dhafar(^3)</td>
<td>Highlands of Yemen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abyssinian occupation</td>
<td>525 AD</td>
<td>575 AD</td>
<td>Sana’a</td>
<td>All Yemen</td>
</tr>
<tr>
<td>Persian occupation</td>
<td>575 AD</td>
<td>628 AD</td>
<td>Sana’a</td>
<td>All Yemen</td>
</tr>
</tbody>
</table>

1. Today, Ma’in. 2. Al-Beidha’ Governorate. 3. Dhafar & Yarim

### Islamic Period

<table>
<thead>
<tr>
<th>Period</th>
<th>Authority</th>
<th>Period of Rule</th>
<th>Capital</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the Prophet’s lifetime</td>
<td>Walis</td>
<td>628-632 AD</td>
<td>San’a</td>
<td>San’a’, al-Janad, and Zabid</td>
</tr>
<tr>
<td>1st Caliphate</td>
<td>Walis</td>
<td>632-661 AD</td>
<td>San’a</td>
<td>San’a’, al-Janad, and Hadhramaut</td>
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<tr>
<td>Umayyad</td>
<td>Walis</td>
<td>661-750 AD</td>
<td>San’a</td>
<td>All Yemen</td>
</tr>
<tr>
<td>‘Abbasid</td>
<td>Walis</td>
<td>751-818 AD</td>
<td>San’a</td>
<td>All Yemen</td>
</tr>
</tbody>
</table>
# APPENDIX III

## Independent Dynasties and Foreign Occupations in Yemen

<table>
<thead>
<tr>
<th>Dynasty’s Name</th>
<th>Founder</th>
<th>Period of Rule</th>
<th>Capital</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ziyadi</td>
<td>M. ibn Ziyad</td>
<td>818-1021 AD</td>
<td>Zabid</td>
<td>Tihamah</td>
</tr>
<tr>
<td>Ya’furid</td>
<td>Ya’fur Abdu al-Rahim</td>
<td>839-1003 AD</td>
<td>Shibam Kawkaban</td>
<td>Sana’a</td>
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<tr>
<td>Qarmati</td>
<td>‘Ali ibn al-Fadi</td>
<td>884-915 AD</td>
<td>San’a’ and Mudyarkha</td>
<td>Sana’a and Tihamah</td>
</tr>
<tr>
<td>1st Zaydi dynasty</td>
<td>Yahya ibn al-Hussayn</td>
<td>897-1052 AD</td>
<td>Sa’dah</td>
<td>Northern regions</td>
</tr>
<tr>
<td>Najahid</td>
<td>Najah</td>
<td>1021-1159 AD</td>
<td>Zabid</td>
<td>Tihamah</td>
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<tr>
<td>Sulayhid</td>
<td>‘Ali M. al-Sulayhi</td>
<td>1038-1138 AD</td>
<td>San’a’ and Jiblah</td>
<td>Yemen</td>
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<tr>
<td>Sulaymanid</td>
<td>Sulayman</td>
<td>1069-1173 AD</td>
<td>Haradh</td>
<td>Northern Tihamah</td>
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<td>Zuray’id</td>
<td>Saba ibn Zurai</td>
<td>1138-1175 AD</td>
<td>Aden</td>
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<tr>
<td>Hatimid</td>
<td>Hatim al-Yami</td>
<td>1101-1174 AD</td>
<td>Sana’a</td>
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<td>Mahdid</td>
<td>‘Ali ibn Mahdi</td>
<td>1159-1174 AD</td>
<td>Zabid</td>
<td>Tihamah</td>
</tr>
<tr>
<td>Ayyubid</td>
<td>Turanshah ibn Ayyub</td>
<td>1174-1229 AD</td>
<td>Ta’izz</td>
<td>All Yemen</td>
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<tr>
<td>2nd Zaydi dynasty</td>
<td>Ahmad ibn Sulayman</td>
<td>1138-1585 AD</td>
<td>Sa’adah and Sana’a</td>
<td>Northern regions</td>
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<tr>
<td>Rasulid</td>
<td>Nur al-Din al-Rasuli</td>
<td>1229-1454 AD</td>
<td>Ta’izz and Zabid</td>
<td>All Yemen</td>
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<tr>
<td>Tahirid</td>
<td>‘Ali &amp; ‘Amir ibn Tahir</td>
<td>1454-1517 AD</td>
<td>Juban in Rada’</td>
<td>Tihamah &amp; Southern regions</td>
</tr>
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</table>
### APPENDIX III

Independent Dynasties and Foreign Occupations in Yemen, contd.

<table>
<thead>
<tr>
<th>Dynasty’s Name</th>
<th>Founder</th>
<th>Period of Rule</th>
<th>Capital</th>
<th>Region</th>
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</thead>
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<tr>
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<td>1517-1635 AD</td>
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<tr>
<td>3rd Zaydi dynasty</td>
<td>Hassan ibn al-Qasim</td>
<td>1635-1872 AD</td>
<td>Dhawran</td>
<td>Various regions</td>
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<tr>
<td>2nd Ottoman occupation</td>
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<td>1849-1918 AD</td>
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<td>Northern regions</td>
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<tr>
<td>4th Zaydi dynasty</td>
<td>Yahya Hamid al-Din</td>
<td>1918-1962 AD</td>
<td>Sana’a</td>
<td>Northern regions</td>
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<tr>
<td>British occupation</td>
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<td>1839-1967 AD</td>
<td>Aden</td>
<td>Southern regions</td>
</tr>
</tbody>
</table>

**Vocabulary**

*Ibn*: Arabic for son.

*Tihamah*: the region of the Arabian Peninsula that stretches along the Red Sea coastline running through both southern Saudi Arabia and Yemen.

*Wali*: Arabic for governor.
General Reading:

For a well-written examination of hospitality and patterns of socializing among women in Zabid read *Tournaments of Value: Sociability and Hierarchy in a Yemeni Town* by Anne Meneley (University of Toronto Press, 1996).


For a detailed and thoughtful look at tribal poetry and culture in Yemen see Steven Caton’s *Peaks of Yemen I Summon: Poetry as Cultural Practice in a North Yemeni Tribe* (University of California Press, 1990).

For general reading and entertainment from a knowledgeable expert see *Yemen: Travels in Dictionary Land* by Tim Mackintosh-Smith (London, John Murray, 1997). The same book was published in the US as *Yemen: The Unknown Arabia* (Overlook Press, 2000).

For an English-language magazine on Yemen see *Arabia Felix*, a quarterly magazine that was first published in 2005. It is printed in the U.S. and Canada by the Yemen Observer Publishing House. There is also a web site for the magazine at:  <www.arabia-felix.com>.
Films of interest on Yemen:


Some recent films of interest are:


Resources on Yemen for younger readers:


Educational Resources:

The Middle East Outreach Council (MEOC) is a nonprofit organization working to increase public knowledge about the peoples, places, and cultures of the Middle East, including the Arab world, Israel, Iran, Turkey, and Afghanistan. MEOC resources and activities are apolitical and nonpartisan. They are directed primarily to non-specialist audiences at the K-12, college, and community levels. MEOC is an affiliated organization of the Middle East Studies Association (MESA). Resources for teachers can be found at the Middle East Network Information Center (MENIC) at: <www.menic.utexas.edu/menic/Education/K12_Resources>.

AMIDEAST is a private non-profit organization that was established in 1951 to improve understanding and cooperation between the peoples of the Middle East/North Africa and the United States. AMIDEAST programs and services include the production and distribution of educational materials, educational exchange programs between the Middle East and the US, and development assistance in the region. These activities rely upon the close cooperation and joint expertise of staff in their Washington D.C. headquarters and in their network of field offices stretching from Morocco to Yemen. AMIDEAST develops and distributes an excellent selection of educational materials on the Arab world, for example: *Queen of Sheba* (lesson 2), *Seif bin Ziyazan* (lesson 21), *Arabic Alphabet Poster*, *First Arabic Handwriting Book*, and Learn
Suppliers of other educational resources related to the Middle East:

ACCESS Cultural Arts Program, 2651 Sauline Ct., Dearborn, MI 48120 (313) 842-7010. Producers of Arab World Mosaic, which contain stories from Yemen (recommended in Lesson #21). See also: <https://www.accesscommunity.org/index.cfm?location=3>, and look for materials through “cultural arts.”

Nick of Time Books, 2063 Main St. #420, Oakley, CA 94561 (510) 754-7750. Internet: <Nickbooks@aol.com>.


Vendors of Islamic educational resources:


Council on Islamic Education, P.O. Box 20186, Fountain Valley, CA 92728-2714. Tel: (714) 839-2929. Internet: <www.cie.org>.


For a comprehensive list of producers and distributors of educational resources on the Middle East visit the MENIC website (<http://menic.utexas.edu/menic/>) which lists resources, prices and complete contact information.
Yemen on the Internet:

AIYS has an excellent website, <www.aiys.org>. This site includes the Yemen Webdate that has extensive information such as recent publications on Yemen, complete listing of films about Yemen and much more.

Another site worth visiting is Yemen Gateway, or al-Bab, at: <www.al-bab.com/yemen/>. This site includes up-to-date news on Yemen, weather reports, excellent photo images, tide tables for Aden, and links to Prince Naseem Hamed websites.

The Embassy of the Republic of Yemen also has a web site with information and links, at: <www.yemenembassy.org>.
Plates for the Lessons
Plate 1

Head of a statue in alabaster, nicknamed “Myriam,” from the Hayd Ibn ‘Aqil tomb, 2nd century AD
Carved wooden incense burner (*mbkhara* in Arabic) from the Hadhramaut
Plate 3

Soqotri Pottery Decorated with Cinnabar (“Dragon’s Blood”) Patterns

Drawn by Bruce Paluck  Lesson 5
Plate 4

Soqotri Pottery Decorated with Cinnabar ("Dragon’s Blood") Patterns
Ibex Frieze

Drawn by Bruce Paluck
Rendered from a frieze of ibex in red granite from Jawf bin Nasr.
Plate 6

Make a Qamariyyah Fanlight Window

By Bruce Paluck

Lesson 8
Plate 7

Carved Wooden Khalfah Window
Plate 8

Arched Windows of Yemen

Drawn by Bruce Paluck

Lesson 8
Plate 9

Fanlight Style *Qamariyyah* Window

Drawn by Bruce Paluck
Plate 10

Wooden Window Shutter

Drawn by Maha al-Hibshi

Lesson 8
Plate 11

Yemeni Wooden Door with Smaller Inset Door and Metal Decoration

Drawn by Maha al-Hibshi
Plate 12

Yemeni Wooden Door with Metal Decoration

Drawn by Maha al-Hibshi

Lesson 9
Plate 13

Yemeni Wooden Door with Metal Decoration

Drawn by Maha al-Hibshi

Lesson 9
Plate 15

Yemeni Domes

Drawn by Bruce Paluck
Lesson 10
Plate 16

San’ani House, Front Facade

By Bruce Paluck

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Plate 17

San’ani House, Rear Facade

By Bruce Paluck
Plate 18

Roof 2

Roof 1

San’ani House
Plate 19

San'ani House

By Bruce Paluck

Lesson 11
Plate 20

Mesrejeh Style Lamps

Drawn by Maha al-Hibshi
Lesson 12
Plate 21

Fanous Lantern

Drawn by Maha al-Hibshi
Lesson 12
Plate 22

Yemeni Naqsh Designs

Drawn by Maha al-Hibshi

Lesson 14
Plate 23

Four Yemeni Silver Rings

Illustrations on this page are of rings provided by the courtesy of Abdullah Ali Rubaih, World Friend, in the Silver Market of the Old City of Sana’a. Drawn by Maha al-Hibshi  

Lesson 15
Plate 24

Yemeni Silver Thumb Ring

The illustration on this page is of a ring provided by the courtesy of Abdullah Ali Rubaith, *World Friend*, in the Silver Market of the Old City of Sana’a.

Drawn by Maha al-Hibshi
Yemeni Silver Child’s *Jambia*

The illustration on this page is of an object provided by the courtesy of Abdullah Ali Rubaih, *World Friend*, in the Silver Market of the Old City of Sana’a.
The illustrations on this page are of amulets provided by the courtesy of Abdullah Ali Rubaih, *World Friend*, in the Silver Market of the Old City of Sana`a.
Drawn by Maha al-Hibshi

Lesson 16