# Lectures 26 and 27 Spices and History

**Spices** are aromatic and pungent products of plants. Their properties are often based on essential oils (from essence) which are oily benzene or terpene derivatives, vaporizing, and flammable. **Herbs** are small temperate plants, usually soft stemmed, used for their aromatic constituents. In contrast to herbs, the term spice has a tropical connotation.

## **Antiquity**

Early attraction of spices was based on:

- 1. magical rites and spells (fragrant plants would ward off evil);
- 2. purification ceremonies and embalming;
- 3. fragrances and perfumes;
- 4. flavoring and condiments;
- 5. food preservation;
- 6. curatives, aphrodisiacs, vermafuges;
- 7. poisons.

Important ancient spices included sesame [used for food, wine and oil; today sesame seeded buns are the basis for Big Macs and the Mideastern delights known as halvah (candy) and tehina (oily condiment)], cardamom, dill, garlic, onion, thyme, saffron, mint, cassia.

Egyptians used spices for embalming (e.g. anise, cumin, sweet marjoram). Body was eviscerated, including brain, and filled with aromatics (myrrh and cassia) then sewn up and placed in sodium solution for 70 days, wrapped in linen, and smeared with gums.

Oils and perfumes were applied in many ceremonies (the term anointing refers to application of holy oils). There were 7 holy oils (probably oils of spices): oil of Libya, oil of cedar, tuatu, nemnen, sefth, heknu, festival oil). **Incense** refers to plant substances that release fragrances when burned.

Biblical sources give evidence for ancient spice trade. As described in the 37th chapter of Genesis, Abraham leaves the Sumerian city of Ur to dwell in Canaan (ca. 2000 BCE). Joseph, his son, is cast in a ditch by his jealous brothers, when they decide against fratricide. "And they lifted up their eyes and looked, and behold, a company of Ishmaelites came from Gilead with their camels bearing spicery and balm, and myrrh, going to carry it to Egypt." The brothers sell Joseph to the spice merchants for 20 pieces of silver.

This story indicates the great age of the spice trade. The caravan route transported incense, oils, and spices from the East (China and India) via the Persian Gulf, Arabia, and eventually overland to Egypt. The route through China, known as the Silk Road, is very old. A filament of silk has been found on an Egyptian mummy of 1000 BCE.

Note biblical spices reported in the old testament included cinnamon and cassia, and myrrh, frankincense, (frank = pure; a fragrant gum resin), galbanum, sweet calamus (sweet flag) whose leaves and rhizomes are aromatic, stacte (unknown, probably oil of cinnamon or cassis or aromatic gem resins), onycha (mollusk shell which give off odor when burnt), onions, garlic. In the new testament spices are also mentioned (e.g. the parable of the mustard seed; Christ's body is wrapped in spices). Spices are also associated with love making: (Refer *Song of Solomon*)

Thy plants are an orchard of pomegranates, with pleasant fruits; camphire, with spikenard, Spikenard and saffron; calamus and cinnamon, with all trees of frankincense; myrrh and aloes, with all the chief spices (Song of Solomon 4:13,14)

Awake, O north wind; and come thou south; blow upon my garden, that the spices thereof may flow out (Song of Solomon 4:16)

My beloved is gone down into his garden, to the beds of spices, to feed in the gardens; and to gather lilies (Song of Solomon 6:2)

# **Ancient Spice Trade**

Cassia and cinnamon do not grow in the Mideast, yet biblical references allude to them. Cassia (*Cinnamomum cassia*, *C. tamala*) and cinnamon (*C. zeylanicum*) are found in China, East India, Ceylon, and the Malabar (SW) coast of India. Ship transport was the obvious route. (Herodotus mentions that Africa was surrounded by water and the Phoenicians circumnavigated Africa.). Arabians plied the Arabian Gulf and monopolized the trade in cassia and cinnamon but concealed the true source. The probable route was Cochin China to S. India and Ceylon (Sri Lanka) to the Persian Gulf, and by camel train (caravan) to the Mediterranean (Assyria, Babylonia, and Egypt).

South Arabia became the great spice emporium of the ancient world. (Note: Shakespeare's Lady Macbeth comments that "all the spices of Araby" could not clean her blood besotted hand. This information is based on **Herodotus** (5th century BCE), **Theophrastus**, **Strabo**, and **Pliny** of the 1st century. Herodotus gives Arabia as "the only" source. These spices, he says, the Arabians do not get without trouble:

Their manner of collecting the cassia is the following: They cover all their body and their face with the hides of oxen and other skins, leaving only holes for the eyes, and thus protected go in search of the cassia, which grows in a lake of no great depth. All round the shores and in the lake itself there dwell a number of winged animals much resembling bats, which screech horribly, and are very valiant. These creatures they must keep from their eyes all the while that they gather the cassia. Still more wonderful is the mode in which they collect the cinnamon. Where the wood grows, and what country produces it, they cannot tell—only some, following probability, relate that it comes from the country in which Bacchus was brought up. Great birds, they say, bring the sticks which we Greeks, taking the word from the Phoenicians, call cinnamon, and carry them up into the air to make their nests. These are fastened with a sort of mud to a sheer face of rock, where no foot of man is able to climb. So the Arabians, to get the cinnamon, use the following artifice. They cut all the oxen and asses and beasts of burden that die in their land into large pieces, which they carry with them into those regions, and place near the nests: then they withdraw to a distance, and the old birds, swooping down, seize the pieces of meat and fly with them up to their nests; which not being able to support the weight, break off and fall to the ground. Whereupon the Arabians return and collect the cinnamon which is afterwards carried from Arabia into other countries.

Theophrastus repeats the legend but mentions the trade between India and Arabia of "other spices." Pliny destroys the myth of Arabia as the source but credits Ethiopia!! He points out that all these tales, "have been evidently invented for the purpose of enhancing the prices of these commodities."

#### **Greece and Rome**

Greeks and Romans were great users of spices: black and white pepper, anise, caraway, cumin, mint, mustard, ginger, sweet basil, laurel, sweet marjoram. Medicinal properties were ascribed to spices and fantastic medicinal uses persisted through **Dioscorides** and the herbalists. In early pre-Christian era sea trade between Middle East and India increased. There was a Nile-Red Sea canal build in 285–246 BCE. When Egypt became a Roman province the route was from India to the Red Sea to Egypt, down the Nile to Alexandria, and then to Greece and Italy via the Mediterranean Sea. Spices became an important source of Roman revenue.

By the 3rd century, Arabians had a direct route to China (for cassia). [By then, China was obtaining

spice from the East Indies (Indonesia). Cloves were used by those addressing the emperor in the Han dynasty (206–220)]. Arabs began trading directly with East India through Malacca, Sunda and other straits.

Constantinople, now Istanbul, founded by Constantine (272–337; Emperor of Rome 324–337), rose as the greatest trading center of the Middle East. Spices (especially cloves, pepper, saffron, nutmeg) became great source of wealth in the 4th to 5th centuries.

### **Middle Ages 476–1492**

Commerce between Europe and the East was limited (robbers, poor roads, slow transport, undeveloped shipping). Moslem Arabs now controlled the Spice Trade. Venice became a great sea power and controlled the Adriatic sea and grew rich based on its trade with the East. Famous travelers brought information on spices from the mysterious east. **Rabbi Benjamin** (1160–1173) visited Europe, Africa, and Asia (from Spain to China). **Marco Polo** (1254–1324), Venetian, visited the Kublai Khan in China and brought back secret source of spices. He described the land routes of spices from Western Asia (**The Silk Road**) and the sea routes to India and the Straits of Hormuz. Introduced the wonders of the East to Europe and exposed the true state of Arabian trade with the East. By the 13th century East India conducted a thriving trade in spices (cloves, nutmegs, mace). The Arab monopolized trade in the East while Venice controlled spice trade in the Mediterranean. However the balance of trade favored the Orient. Europe shipped gold and silver while the Orient traded spices, a renewable resource. Spices became a source of great wealth because of their value in cookery and food preservation and their increasing use as **medicinals**. The plague outbreaks in the 14th century increase the value of spices.

Literature abounds in reference to spices: **Chaucer** (1340–1400), **Boccaccio** (*Decameron*) 1313–1375), *Arabian nights*, **Shakespeare** (1564–1616).

# **Spices and the Age of Exploration**

The medieval world saw the spice trade of the East and Middle East dominated by Moslem merchants. The eastern pivotal points were Calicut, Columbo, and Malacca. The Mideast markets were Constantinople (via India and the Far East to Hormuz in the Persian Gulf) and Alexandria (via Red Sea from Mecca). The middleman were Venetians, the great naval power who moved spices from the Mideast to the rest of Europe. Venice grew rich and was detested. The conquest of Constantinople by the Turks in 1453 brought about the eventual decline of Venice as a great power; the coup-de-grace to Venetian hegemony was the rise of Portugal as a great naval power.

**Prince Henry the Navigator** (b 1394) established navigational schools at Sagres, the southwestern tip of Portugal, was convinced that India could be reached by sailing along the coast of Africa. Encouraged the rise in navigational charts, instruments of navigation, and ship building (the caravel).

- 1460 Portuguese reached Azores, Madeira, Senegal, Cape Verde Islands
- 1471 Equator crossed
- 1487 **Bartolemeu Diaz** (1500?–1550) doubles cape of Good Hope proving Indian ocean is accessible by sea. (At the same time there were overland expeditions)
- 1487 **Pedro de Covilhao** goes overland and by sea to Calicut, Goa, and Hormuz and whets the Portuguese appetite for spices.
- 1497 **Vasco de Gama** (1469?–1524) sails around the cape to Mozambique and then direct to India to Calicut, the fabled city of spices, producing cinnamon, ginger, black pepper. de Gama returns to Lisbon in 1499, the day of ruination for Venice. Spices were making history.
- 1492 **Christopher Columbus** (1451–1506) thinks Portugal errs in sailing East, and looks for a western route. (Not a new concept: Strabo, 1500 years earlier notes: If the extent of the Atlantic was not an obstacle, we might easily pass by sea from Iberia to India still keeping the same parallel.). By serendipity, Columbus discovers America in 1492. Discovers *Capsicums* (red pepper) and *Pimenta officinales* (allspice). In his journal he writes:

We ran along the coast of the island, westward from the islet and found its length to be 12 leagues as fas as a cape which I named Cabo Hermoso (Cape Beautiful), at the western end. The island is beautiful,... I believe that there are many herbs and many trees that are worth much in Europe for dyes and for medicines; but I do not know them and this causes me great sorrow.

There are trees of a thousand sorts, and all have their several fruits; and I feel the most unhappy man in the world not to know them, but I am well assured they are valuable.

I desired to set out today for the island of Cuba, which I think must be Cipangu, according to the signs these people make, indicative of its size and riches,... It is better to go where there is great entertainment, so I say that it is not reasonable to wait, but rather to continue the voyage and inspect much land, until some very profitable country is reached, my belief being that it will be rich in spices. That I have no knowledge of the products causes me the greatest sorrow in the world, for I see a thousand kinds of trees, each one with its own special trait, as well as a thousand kinds of herbs with their flowers; yet I know none of them.

The English join the game; their goal was to find a Northwest Passage to India. It was never found in time and proved to be too far north and too tortuous. **John Cabot** (born Genoa 1450) sailed west and finds Gulf of Saint Lawrence, later New Foundland for England's Henry VII.

## **Portugal Masters the Spice Trade**

**Pedro Alvares Cabral** sails off course and discovers Brazil for Portugal, later Madagascar; returns with six of 13 ships and a cool reception; retires and establishes spice factories.

An adventurer, Amerigo Vespucci sent to Brazil and gives name to America.

**Vasco da Gama** in 1502 subjugates the Moslems and Portuguese establish control in India. (Goa was Portuguese until 1952). **Francisco de Almeida** assumes title of Viceroy of India; title passes to **Alfonso de Albuquerque** who monopolizes the spice trade for Portugal by conquest. Spice Islands discovered (Malluccas, now part of Indonesia) in 1509 Hormuz in Red Sea becomes Portuguese until conquered by the English in 1622.

**Ferdinand Magellan** circumnavigates the globe in 1519 for Spain; fleet discovers spice islands. European Competition

**Francis Drake**, English captain and pirate, circumnavigates to globe and discovers San Francisco in 1579! The defeat of the Spanish Armada by England is the beginning of the end for Spain and Portugal and England and the Dutch dominate the Age of Exploration. The Dutch (**Cornelium Van Houtman**) break the Portuguese monopoly and dominate the East Indies and make a foothold in Brazil. In the 17th century, Portuguese hegemony declines and falls. Conflict erupts between the Dutch and English. The Dutch East Indian Company form a monopoly for spices and attempt to confine cloves to a single island in the Maluccas (Spice Islands). The English East India Company eventually breaks a 200 year Dutch monopoly.

Today the monopolies are long broken and the spices that once lured the great powers no longer have great importance in world trade, even though their mischief created in the era of spice colonialism is with us still in the form of political instability and underdevelopment. Still, spices claim their places the world over as silent partners to cooks and as essential luxuries even to jaded palates. In the United States, spices are increasing in importance as the once bland American diets, originally based on corn meal and salt pork, is becoming enriched and more cosmopolitan with the savory cuisine of our immigrant populations.

#### References

John W. Parry. 1969. Spices: The Story of Spices; The Spices Described. 2 vol. Chemical Publ. Co., New York (**Reading 26-1**)

Rosengarten, Frederic, Jr. 1973. The Book of Spices. A Jove Book, New York