

### **LECTURE 3: Society and Technology: Bronze Age Technology in Egypt, Crete, and Greece**

#### **Human achievements up to 3500 BC?**

- Evolution of adaptable human body.
- Language and stable social traditions.
- Clan organization of communities.
- Discovery of religion (“We are different, in the image of God.”)
- Production of tools from various materials, assembly as composite tools.
- Alteration of materials and creation of new ones by use of fire.
- Architecture.
- Domestication of useful plants and animals.

“multiplier effect” (feedback reinforcement)

malachite and azurite = carbonate copper ores

Ziggurat, Mesopotamia.

Ulu Burun Wreck (1325); “prestige trade”, “gift” exchange

Copper working: annealing (hammering and heating), casting, smelting, alloying.

Copper + 10% tin or arsenic = bronze

Faience (glass paste); sand + natron (sodium carbonate) + copper compound.

Kamare Ware pottery (palace ware)

*Pithos/oi* (enormous storage jar)

Mesopotamia

Mycenaeans

Linear B syllabary (early Greek)

#### **“Fertile Crescent”**

Nile, Tigris, Euphrates river valleys have excellent soil, but flood pattern require central authority and control for high production. Elsewhere, good, light soil in steppes.

Proximity of sources of copper and tin.

Lack of stones in river valleys foster use of metal tools.

Flat river valley shores allow movement of people and ideas on foot, animals, wheels, also foster river and sea trade. Also observation of heavens and growth of astronomy. In steppes, grasslands allow movement and control.

**Palace at Knossos, Minoan culture of Crete, 1700-1400BC.**