

## **The First Americans**

### Northeast Asia

- Spread of peoples through *temperate* and *tropical* areas of the old world.
  - Homo erectus & Homo sapiens
- People spread northward as ice sheets receded – to Siberia during U. Paleolithic.
- The Upper Paleolithic or Old Stone Age dates to between 40,000 and 8,500 years ago.
- Modern humans, who had begun migrating out of Africa during the Middle Paleolithic period, began to produce regionally distinctive cultures during the Upper Paleolithic period. The earliest remains of organized settlements in the form of campsites, some with storage pits, are encountered in the archaeological record. These were often located in narrow valley bottoms, possibly in order to make hunting passing herds of animals easier. Some sites may have been occupied year round though more generally they seem to have been used seasonally with peoples moving between them to exploit different food sources at different times of the year
- Technological advances included significant developments in flint tool manufacturing with industries based on fine blades rather than cruder flakes. Burins and scrapers attest to the working of bone, antler and hides.
- The reasons for these changes in human behavior have been attributed to the changes in climate during the period which encompasses a number of global temperature drops. These may have reduced the supply of usable timber and forced people to look at other materials whilst flint becomes brittle at low temperatures and may not have functioned as a tool.
- Site: Mal'ta – near Lake Baikal (Siberia), 25-13,000BP
  - Mammoth hunting
  - Semi-subterranean houses – large animal bones covered with hides.
  - Female and bird figurines.
- Site: Lake Ushki – 14-13,000BP
  - Large camp – hide or wood shelters
  - Burial pit – amber beads, pendants
- Site: Dyukhtai Cave – 15,000BP
  - Far NE Siberia
  - Mammoth and muskox hunting
  - Bifacial leaf shaped points
    - Similar to N. American points dated to 13,000BP
- Site: Beringia
  - The Bering land bridge, also known as Beringia, was a land bridge which

joined present-day Alaska and eastern Siberia at various times during the ice ages.

- During cycles of global cooling, such as the most recent ice age, enough sea water becomes concentrated in the ice caps that the consequent drop in sea levels exposes shallow sea floors.
- The Bering Land Bridge is significant for several reasons, not least because it enabled human migration to the Americas from Asia about 12,000 years ago. Land animals were able to migrate through Beringia as well.
- The rise and fall of global sea levels has exposed the land bridge in several periods of the Pleistocene.
  - 75-45,000BP – broad tundra plain
  - 40-25,000BP – narrow isthmus
  - 25-14,000BP – broad tundra plain
- NE Siberian hunter-gatherers would have migrated over several generations into Beringia following herds.
- Migration southward
  - Ice free corridor between Cordilleran and Laurentide ice sheets?
  - Migration along coastal NW N. America?
    - Little evidence, as rising sea levels would submerge sites.

### Early America

- Site: Old Crow, Yukon – thought to be 27,000BP
- Site: Bluefish Caves, Yukon – 15-12,000BP
  - Bifacial flakes, microblades
  - Mammoth, horse, bison, caribou
  - As extension of NE Siberian material
- Site: Dry Creek, Alaska – 11,200BP
  - Nenana complex
  - Flake, blade, bifacial knives, points, microblades
- Site: Meadowcroft rockshelter, PA – rd19,600BP
  - Prismatic flint blades, basketry, hearths.
- Site: Monte Verde, Chile – rd13,000BP, perhaps 33,000BP
  - Open air site, log foundations for huts.
  - Mastadons.
  - Human footprint.
- Early American ways of life

- Migratory hunting and gathering
- Big game hunting
- Huts with bones and hides
- Tundra like environment in N. American as ice sheets receded.

- Large flint-flaked stone axes
- Microliths
  - Small flint blades retouched and used in composite tools.
- Use of fire to clear forested areas to facilitate new wild growth of plants
  - Increases density of plant regrowth (gathering)
  - Attracts wild animals to new plants (hunting)

## **The First Australians**

- Earliest sure dates of Australian occupation date to ~35,000BP, but it could have been as early as 60,000BP
  - No continuous land bridge was available.
  - Used boats to cross gap?
  - No ice sheets.
- Ways of hunter gatherer life varied
  - Tropical in the north
  - Tundra, grassland in south during last glacial period.
- Site: Devil's Lair Cave, Perth – 32,500BP
- Site: Lake Mungo, New South Wales – 26,000BP
  - Stone artifacts, hearths, fish bones.
- Site: Koonalda Cave, Nullabar plain – 24,000BP
  - Stone quarry
  - 'Fluting' patterns on cave walls.
- Site: Malangangerr rockshelter, Darwin – 22,900BP
  - Ocher pencils with traces of wear.

## **European Mesolithic**

- The Mesolithic or the Middle Stone Age is the period between the Paleolithic and Neolithic periods. It began at the end of the Pleistocene epoch around 10,000 years ago and ended with the introduction of farming, the date of which varied in each geographical region.
- Remains from this period are few and far between, often limited to middens (rubbish heaps which grew over time). In forested areas of the world, the first signs of deforestation have been found, although this would only start in earnest during the Neolithic, when extra space for farming was needed.
- The Mesolithic is characterized by small composite flint tools (microliths and microburins) in most areas. Fishing tackle, stone adzes and wooden objects such as canoes and bows have been found preserved at some sites.
- Period after the ice age in Europe
  - Hunting and gathering
  - Before agriculture
  - Forested post-glacial environment
- Evidence of wheat, barley, cattle, sheep and pigs in NW parts of Europe – 3000BC.
- Stone technology

## **Early Mesolithic**

- Settlements concentrated along rivers, lakes and coastal areas.
  - Small settlements
    - 103 round oval huts
    - Occupied most of the year, but not all
- Site: Star Carr, NE England
  - Star Carr is a Mesolithic archaeological site, and was occupied around 7500 BC, for over 300 years.
  - Star Carr's main feature is a brushwood platform which stood on the edge of a former lake. The platform would have been laid down to consolidate the boggy water's edge. Hearths found further away from the water indicate temporary settlement. It was visited seasonally by Mesolithic hunters chasing deer, wild cattle, moose, and wild pigs. Analysis of the animal bone indicates that the site was occupied during spring and summer. The mud of the lake has preserved items dropped into it and the hunter's tools such as flint scrapers used to clean animal skins and worked bone and antler have been found.

## **Late Mesolithic**

- Increase in:
  - Population density
  - Use of shellfish
  - Sedentism – perhaps year round occupation of sites.
    - Ertebolle culture – South Scandinavia, Germany, Denmark
  - Trade and exchange networks.
- Decrease individual group territories.
  - 200-100 square km.
- Evidence of the beginnings of social complexity.
  - Indications of variability of social class
    - Indicated by grave goods found in burial sites.

## **Neolithic**

- The Neolithic, is traditionally the last part of the Stone Age. It followed Pleistocene and early Holocene Mesolithic cultures with the start of farming and ended when metal tools became widespread in the Copper Age, Bronze Age or Iron Age, depending on geographical region. Thus "Neolithic" does not describe a chronological term, but refers instead to the earliest phases of sedentary communities and farming in any given region.
- The name "Neolithic" is associated with a suite of specific behavioral and cultural characteristics including the growing of crops and the use of tame animals. From about 10000 to 8000 BC this was limited to simple crops (both wild and domestic) and the keeping of sheep and goats, but by about 7000 BC it included domestic cows, pigs, permanently or semi-permanently inhabited settlements and the use of pottery. Again, the uptake of these skills was not uniform and varied from region to region. Japanese societies used pottery in the Mesolithic for example.
- In Southwest Asia Neolithic cultures appear soon after 10000 BC, initially in the Levant, and from there spread eastwards and westwards. There are early Neolithic cultures in SE Anatolia, Syria and Iraq by 8,000 BC, and food-producing societies first appear in southeast Europe by 7,000 BC and Central Europe by 5500 BC.
- Neolithic peoples were skilled farmers, manufacturing a range of tools necessary for the tending, harvesting and processing of crops (such as sickle blades and grinding stones) and food production (e.g. pottery, bone implements). They were also skilled manufactures of a range of other types of stone tool and ornaments, including projectile points, beads, and statuettes. Neolithic peoples in the Levant, Anatolia, Syria, northern Mesopotamia and Central Asia were also great builders, utilizing mud-brick to construct houses and villages. Elaborate tombs for the dead were also built.
- Large communal graves – cemeteries
- Megaliths first appear ~4500BC
  - A Megalithic tomb is an above ground burial place for the dead, built from large stone slabs laid on edge which were then covered with earth or more, smaller stones. It is a type of chamber tomb and is used to describe the structures built across Atlantic Europe, the Mediterranean and neighboring regions, mostly during the Neolithic period.
  - Megalithic tombs appear to have been used by communities for the long-term

deposition of the remains of their dead and some seem to have undergone alteration and enlargement. The organization and effort required to erect these large stones mean that the societies concerned must have placed great emphasis on the proper treatment of their dead. The ritual significance of the tombs is supported by the presence of megalithic art carved into the stones at some sites. Hearths and deposits of pottery and animal bone found by archaeologists around some tombs also implies some form of burial feast or sacrificial rites took place there.

- Large stone monuments
  - Circular monuments: Stonehenge, Avebury, Woodhenge
  - Lines of stones – Carnac, France
- Purposes of megaliths
  - Boundary markers
  - Ritual centers
  - Astronomical observations
  - Burials to unite people after life
    - Barrow mounds emulating long houses

## ***Origins of Agriculture***

- What is agriculture?
  - Human efforts to modify the environment of plants and animals to increase their productivity.
  - Involves domestications
    - Plants or animals for symbiotic protection and dispersal relationships with humans.
    - Seems to be a long term process involving several generations of human interaction
    - Permitted the establishment of sedentary communities – living in the same area year round.
      - Permanent shelters
      - Social stratification
      - Variable access to wealth/power

## **Hypotheses of Agricultural Origins**

- V. Gordon Childe (1920)
  - Neolithic revolution – stone age farmers without metallurgy
  - Oasis hypothesis
    - Climate warmer and drier
    - Humans forced into closer proximity (Oases)

- Led to stress on human communities.
    - Animal and plant domestication
    - Started in SE Asia?
  - Climate changes had occurred several times prior to 10,000ya, why had domestication not happened yet?
- Natural Habitat Hypothesis – Peake and Fleure (1926)
  - Earliest agricultural communities would naturally arise in the upper reaches of the Euphrates River valley because this was the natural habitat of wild wheat and barley
  - Thus, it would be a natural thing for the people to try and domesticate the grain.
- Hilly Flanks Hypothesis – Braidwood (1950s) – Jarmo, N. Iraq – 6500BC
  - Mud walled huts
  - ~150 people
  - wild foods, domesticated goats, sheep, and wheat.
  - Grinding stones, sickle blades, storage pits
  - In between mountains and plains. This is where the grains were growing.
  - Permanent villages and houses
  - No public agriculture
  - Still some hunting and gathering happening.
- Edge Zone Hypothesis – Lewis Binford (1960s)
  - Population increase in some groups caused them to impinge on the territory of other groups.
    - New ways for productivity were needed
      - Control of wild resources
  - But, most initial agricultural groups in SW Asia tend to be in desert areas where contact between groups is likely to be minimal.
  - Domestication process was slow, initially supplying only 5% of food.
- Current thought – Combination of above.
  - Population increase, stress on wild resources – Mark Cohen
  - Climate change at the end of the ice age, stress on wild resources – Childe
  - Larger, more obvious wild species had been exhausted, led to exploitation of smaller, less desirable species.
    - Grasses
  - Led to symbiotic relationship

- Domestication of wheat, barley – Brian Hayden
- Grains change to have non-brittle rachises.

### Early Agriculture in SW Asia

- Fertile Crescent
  - Large herds of wild sheep, goat, cattle, pigs, wheat, and barley.
- Climate change
  - Warmer, drier
  - Increased storage of wild foods
- Levant
  - The Levant is an approximate historical geographical term referring to a large area in Southwest Asia south of the Taurus Mountains, bounded by the Mediterranean Sea in the west, and the north Arabian Desert and Mesopotamia to the east. The Levant does not include Anatolia, the Caucasus Mountains, or any part of the Arabian Peninsula proper. The Sinai Peninsula is sometimes included, though more considered an intermediate, peripheral or marginal area forming a land bridge between the Levant and northern Egypt.
  - Kebaran Culture (18-15kya)
    - Hunting large grazing animals
  - Geometric Kebaran (15-12,500BP)
    - Macroband aggregations, grinding tools
  - Increase in trade
  - Tool types associated with processing of grain
- Natufian Culture (12,500-10,200BP)
  - The Natufian culture existed in the Mediterranean region of the Levant. It was an Epipalaeolithic culture, but unusual in that it established permanent settlements even before the introduction of agriculture. The Natufians are likely to have been the ancestors of the builders of the first Neolithic settlements of the region, which may have been the earliest in the world. There is also evidence that the Natufians themselves had already begun deliberate cultivation of cereals. They were certainly making use of wild grasses.
  - A sedentary life may have been made possible by abundant resources due to a favorable climate at the time, with a culture living from hunting, fishing and gathering, including the use of wild cereals. Tools were available for making use of cereals: flint-bladed

- sickles for harvesting, and mortars, grinding stones, and storage pits.
- Large base camps, lived in for perhaps half the year.
- Fish hooks, net sinkers
- No evidence of pottery
- Trade
- Increased sense of ethnic identity.
- Social change from preexisting Kebaran.
- Earliest Evidence (SW Asia)
  - Ganj Dareh, W. Iran (7000BC)
    - Sheep, goats, cattle
  - Jericho, Levant
    - Domesticated grain, wheat, barley
  - 9-7000BC
    - transition from villages of circular to rectangular stone huts
    - change in social organization from hunting and gathering group to nuclear family group
  - Tell Bureybit, Upper Euphrates River (8200-8000BC)
    - Circular stone huts
    - Transition to sedentary communities based on intensive plant collection
    - Likely one of the earliest agricultural settlements.
  - Beidha, Jordan (from 7000BC)
    - Earliest phases
      - Semi-circular huts
      - Non-specialized activity areas (sleeping, tool making, food preparation & eating).
    - Later phases
      - Large rectangular buildings
      - Specialized activity areas

## ***Non-Complex (Hunter Gatherer) and Complex Societies***

### **Egalitarian Societies**

- Bands:
  - Older males have respect
    - Little coercive power
  - Lack of social differentiation
  - Small groups
    - 15-40 individuals
  - Migratory
    - Hunting and gathering
  - Division of labor along age and sex lines
  - No money

- Kinship exchanges between group members
- Functional redundancy
  - Everyone works
- Recent examples
  - Yanamamo, Kalahari
    - Bushmen
  - Australian Aboriginals
- Tribes
  - Nominal leader
    - Redistributes food.
    - Performs ceremonies
    - No privileged access to wealth or power
  - “Big Man”
  - Little social differentiation
  - Often subsistence farmers, but can also be hunter gatherers
  - Trade/exchange between group members
  - Generally larger
    - More territorial
  - More elaborate ceremonialism
  - Increased differentiation based on prestige
  - Examples
    - Pueblo Indian maize cultivators
    - New Guinea yam cultivators

### **Ranked Societies**

- Chiefdoms
  - Based on rank
    - Hereditary inequality
  - Centralized decision making hierarchy
  - Political coordination between several communities
  - Differences in prestige and wealth
  - Greater degree of occupational specialization
  - Usually agricultural based
  - Larger than tribes
    - ~1000 individuals
  - Examples
    - Pre-contact Hawaii
    - NW Coast B.C. fishing communities

### **Stratified Societies**

- States
  - Stratified
    - Socioeconomic classes
    - Political and religious elites
  - Larger than tribes
  - Full-time craftsman, artisans & other specialists
  - Integrated national economy
  - Redistribution of goods controlled by state
  - National laws

- Taxes
- Diversity in settlement sizes
- Different levels of decision making
  - Village head man
  - Provincial governor
  - National leader
- Early States
  - Mesopotamia
  - Egypt
  - Indus Valley
  - China
  - MesoAmerica
  - Peru

### **Archaeological features of complex societies**

- Architecture
  - Residential and public architecture
    - Palaces
    - Tombs
  - Increasingly on a massive scale
    - Monuments
  - Reflection of increasing economic productivity
  - Variability in residential architecture
    - Reflection of social differentiation.
- Burials
  - Variability
    - Reflection of social differentiation & religious significance
  - Reflection of ascribed status
    - i.e. juveniles buried with rich grave goods
- Functional Interdependence
  - Activity specialization
  - Variation in artifact types according to location, style and quantity.
- Settlement patterns
  - Variability in size and spatial distribution
  - Patterning of settlement size and distribution across landscape
  - Rise of urbanism

### **Early Complex Societies in SW Asia**

- Earliest were in the alluvial plains of Mesopotamia
  - Between the Tigris and Euphrates Rivers
- Swamps, wetlands
  - Usable wild plants
  - Good soils for agriculture
  - Reeds for basketry
  - Irrigation
- Early Neolithic
  - Many small villages
  - Agricultural
  - Little complexity

- Later Neolithic
  - Beginnings of complexity
- Catal Huyuk (6250-5400BC)
  - South central Turkey
  - Population 4-6000 people
  - Factor involved in increasing complexity
    - Control over access to obsidian
    - Control over trade
  - Exotic items
    - Mediterranean shell
    - Syrian flint
    - Trade for obsidian
  - Many Structures (158)
    - Rectangular rooms
    - Mud construction
    - Specialized activity areas
  - Shrines (~40)
    - Richly decorated
    - Profusion of cattle motifs
    - Kinship cult centers
  - Contrast with other sites of same time period
    - Jarmo, N. Iraq (6750-5000BC)
      - Not complex
      - Population ~200
      - ~20 houses
      - burials relatively simple
      - little diversity in artistic and technological artifacts
      - No control over obsidian

### **Ceramics**

- Usually appear at first agriculture
- Early pottery very simple in form
  - Very little decoration
- Regional styles in pottery decoration appear ~5500BC
  - Samarran and Halafian styles
- Widely distributed through SW Asia
- Expansion of art styles across wide area coincides with increasing cultural complexity.
- Indications of increasing complexity in SW Asia
  - Differentiation in property styles, extended over wide areas
  - Control over trade items
  - Advent of irrigation agriculture
  - Extension of agriculture to arid areas
  - Production of surpluses
  - Rise of elite class through control of trade items, surpluses, ceramic production.

### **Ubaid Period (6000-3700BC)**

- Small agricultural communities, community sizes 50-1000 people, minor irrigation.

- Economic surpluses
- Ceramics
  - Pottery wheel
  - 'Ubaid style widely distributed from central Turkey to highland Iran
- Temples
  - Existed in virtually all communities
- Ranked society

- Activity specialization
  - Functional interdependence
- State control of economy
- Local and long distance trade
  - Shell
  - Lapis lazuli
  - Silver, gold
  - Onyx, alabaster
  - Textiles
  - Food

### Uruk Period (3600-3000BC)

- Emergence of state level social organization
- Cities
  - Advanced art styles
  - Social hierarchy
  - Warfare (defensive walls)
- Emergence of city-states
- Population 10,000 (3800BC) to 50,000 (3000BC).
  - Trend towards increasing urbanism
  - Proportion of people living in urban centers increases
- Ceramic styles change over time
  - Mass government organized production of ceramics
- Construction of large-scale irrigations systems
- Multi-level government
  - Government intrusion and control over socioeconomic life
- First administrative documents appear (not writing)
  - Clay impressed with stamps and cylinders
  - Keeping track of production levels
- Temple architecture
  - Ziggurat style

- Social Organization
  - Occupational and social classes
  - Gradual change from kinship-based society to one based on divisions along social, economic and occupational lines.
    - Kin ties remain important
- Political Organization
  - Progressive centralization of power
    - Over time, one city-state ascend to central power
  - Professional armies by 2600BC
    - Warfare component of Sumerian life
      - Between city states
      - Nomads from Zagros mountains to the west and north
  - Public assemblies
    - Policy and laws formulated by consensus
- Writing
  - ~3000BC
    - Began developing a written language
    - Cuneiform
  - Written by impressing wet clay with the end of a reed
  - Began with picture representations of concepts (pictographs)
  - Stylization of pictographs gradually led to the loss of the representational quality
  - No alphabet
    - Signs symbolized vowels and syllables
    - Similar to modern day Chinese
  - First true alphabet appears ~1500BC in Palestine and northern Syria
  - Early writing plays mostly an economical role
    - Tallying production
    - Keeping track of state controlled buildings
    - Population
- Burials
  - Increase in the variability between graves
    - Indication of social differentiation

### Sumerian Civilization (Early Dynastic)

- 3000-2350BC
- Coalescence of cultural traditions
  - Amalgamation of 13 city-states into single state at the end of the early dynastic period
- Elements of complexity
  - State level social organization
  - Ziggurats
  - Brick platforms
  - Potter's wheel
  - Wheeled carts
  - Metal-working
  - Sailboats
  - Writing
- ~80% living in urban centre
- Total population ~500,000
- Economy
  - Irrigation systems used to control river floods
  - Wheat, barley, vegetables, dates, cattle, fishing

- Attendants buried with master
  - Death pit at Ur.
- After the Sumerians
  - Changes in supremacy of different city states.
    - Result of environmental factors
    - Disease
    - Political instability
    - External pastoral nomads
  - ~2350BC Sumerians lose control over their city states
  - Sargon of the city state of Akkad gains power over the region in 2350BC.