Ceramics, Cultivation and Community: How Agriculture Spread in the Old World

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* Please see image credits on last slide.
Archaeology – complex integration at multiple scales

- Environmental
  - Nature, Ecology, and Environmental Change

- Geographic
  - Geology and Social Geography

- Economic

- Social

- Political
  - Sociocultural dynamics

- Technic

- Domestic
  - Technologies, household organization

- Individual
  - People as independent agents
Individual
Now... On to the Agricultural Revolution
Classical Model of the Agricultural Revolution in the Old World

• Plants and animals were domesticated in the Near East

• With domestication, industries like ceramics could begin

• At 9,000 BP, this agricultural revolution began to spread across Europe with the diffusion of pottery and domesticated plants and animals

• This provided the economic basis for the world as we know it today.
Agriculture spread across Europe as a package of domesticates and ceramics.
From Hunting and Gathering to Agriculture

**Mesolithic**
- Hunting and foraging
- Seasonal settlements (?)
- Flaked stone tools
- No evidence of trade
- Extended family groups
- Upland caves and coastal shell middens

**Neolithic**
- Domesticated wheat/barley and sheep/goats
- Year round villages
- Flaked tools, pottery, ground stone
- Regional trade in exotics
- Tribal level society
- Coastal sites and upland caves. Eventually lowland villages
Migration, Exchange Networks and the spread of agriculture

- Migration, or ‘demic diffusion’ of village agriculturalists displacing hunting and gathering bands. (Ammerman and Cavalli-Sforza)

- Adoption of new economies and technologies by affluent foragers (Hayden) through ‘down the line’ exchange (Renfrew).
Why use ceramics to study the spread of agriculture?

- They persist
- Their production locations can be discovered, so we know if and where they moved
- They can be used for storage and cooking
- They are easily decorated, and so can carry personal, social, and political messages
- They have a technological style, so reflect manufacturing traditions
The Early Neolithic in the Western Mediterranean: Hunters and Gatherers adopting ceramics?

Trans-Regional Exchange

Regional Exchange

Local
Fig. 3 Schematic representation of a regular network resulting from a down-the-line model and b of a small-world network with shortcuts. The *thick black line* indicates the path followed by agents with obsidian when moving from one extremity of the network to the other, the regular network resulting in a higher path length (higher number of nodes/cells crossed) than with a small-world network.

The Pre-Pottery agriculture in the Middle East: Complexity without pottery
The Silk Road
New Model of the Agricultural Revolution in the Old World

• Hunters and Gatherers invented ceramics during the last ice age

• Plants and animals were domesticated in the Near East, supporting complex societies

• Through exchange networks, ceramic containers arrived to the Near East, sparking the agricultural revolution across Europe and other areas

• This provided the economic basis for the world as we know it today.
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