

Chalcolithic Period in the Near East

Topic 5

Uruk Period: Tributary economies, specialization, and the growth of dependent labor

Uruk period: time of urbanization (Adams)

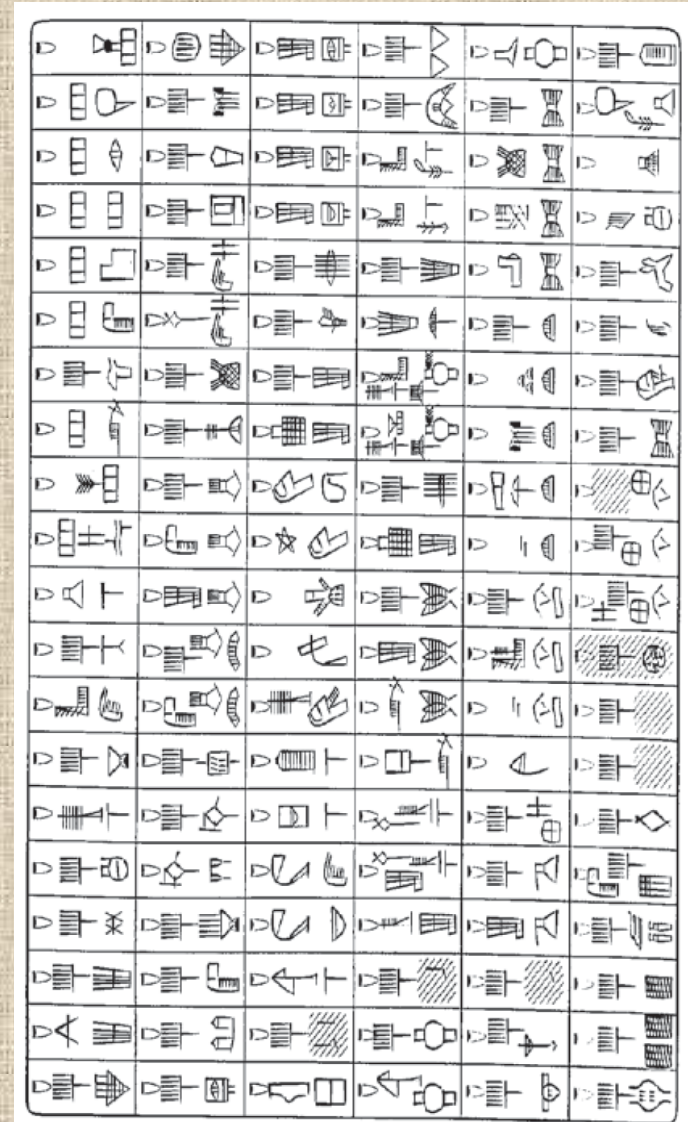
- Childe and the “Urban Revolution”
 - urban centers have greater population size and density
 - emergence of full-time craft specialists
- Adams focuses instead on *process* of urbanization and *relationship* between urban centers and their rural hinterlands
 - interdependence of urban and rural dwellers
- Crucial importance of irrigation water for farming
 - Other areas well suited for grazing animals
- Pastoralism/nomadism and farming/sedentism as complementary strategies
- Exchange of specialized products between farmers and herders
- Towns as nodal points:
 - facilitated exchange
 - storage of surplus
 - defense
 - religious ceremonies
 - organized long-distance trade

Uruk period: time of state emergence (Wright, Johnson)

- States as administrative systems
 - internally and externally specialized
 - managers to deal with overload of information
- Functional hierarchy of sites: 3-tiered hierarchy
- Differential distribution of seals and sealings
 - seals with elaborate figurative motifs and simple seals at Susa
 - only simple seals at the small village of Sharafabad
 - mostly 'commodity' sealings at Sharafabad, information-bearing items (bullae, tablets) sealed at Susa
- Pottery production restricted to large sites in the Susiana Plain
 - in contrast to the Ubaid pattern of pottery production at almost all sites
 - pottery made by specialists
- Administrators living in towns controlled production and exchange
 - control over corvée labor

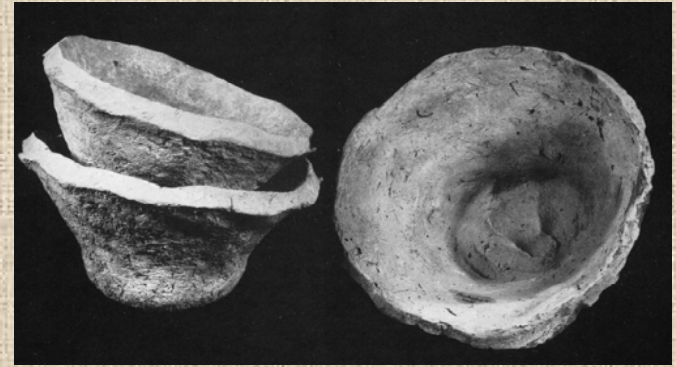
Specialization of production

- Hans Nissen argues that production of pottery and seals were divisible into multiple parts
 - These parts could have been carried out by different people
 - Greater and more specialized division of labor improved efficiency
 - Also allowed more effective use of semi- or unskilled labor
- Standard Professions List – among the earliest proto-cuneiform tablets
 - Lists approximately 100 different professions, in apparent hierarchical order
 - Including gardeners, bakers, cooks, jewelers, smiths, potters, etc.



Control of labor

- Labor important issue in agrarian societies
 - Having more labor means being able to produce more
 - More production allows more consumption, exchange
 - But why do people produce more than they need?



- Examining labor archaeologically
 - In the Uruk period, argued to be possible – indirectly – due to the use of beveled rim bowls
 - Found in the thousands at many Uruk-period sites (mass-produced)
 - Often found unbroken
 - Not very attractive!
 - In (more or less) standard sizes



Rations and Tribute

- Beveled rim bowls (BRBs) as ration containers
 - to distribute set amounts of food to workers during labor service
- Tribute – obligations in the form of services (labor) or goods
 - If beveled rim bowls delivered rations to laborers performing tribute, then the quantity of bowls is an indication of amount of tribute labor
- In Early Uruk, BRBs found mostly in larger settlements
 - in Middle and Late Uruk, they increase vastly in quantities and are found in sites of all sizes
- Would imply that demand for tribute labor initially affected people living in larger communities primarily, but later fell on people everywhere

Tribute labor: what for?

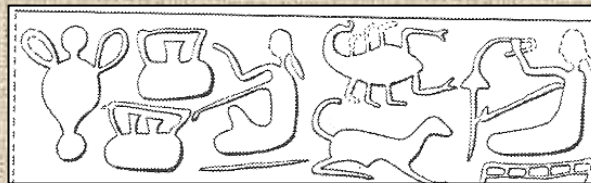
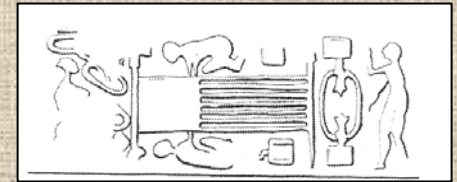
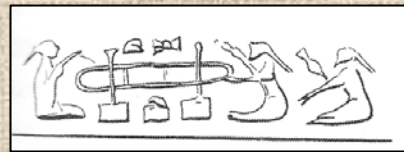
- Building projects
 - Labor to construct temples, city walls, and other public buildings
- Military expeditions
- Supplying goods for exchange
- Agricultural activities
 - Preparing the land, sowing, and especially harvesting
 - Processing crops
 - Digging and maintaining irrigation canals
- Textile production

Tribute and food

- Supplying larger settlements with adequate food
 - Presumably the larger a settlement, the larger the population
 - At some point there is not enough land in easy reach of a settlement to meet the food needs of residents
- Usually suggested that farmers do not travel further than 5 km from their homes to their fields on a daily basis
 - Based on estimates of population size and land requirements to feed a person, we can then estimate whether larger sites could sustain themselves
 - Population: 100-200 people/ha
 - Land needed: 2 ha/person
- Result: at least some of the larger Uruk sites could not be self-sustaining
 - Would therefore have been dependent on tribute exactions

Textile production

- From later (3rd millennium BCE) texts, we know that woolen textiles were major element of Mesopotamian economy
- Indications that textile production was also important in Uruk period
 - Vast increase in proportions of faunal remains from sheep/goat
 - Depictions of spinning and weaving on seals



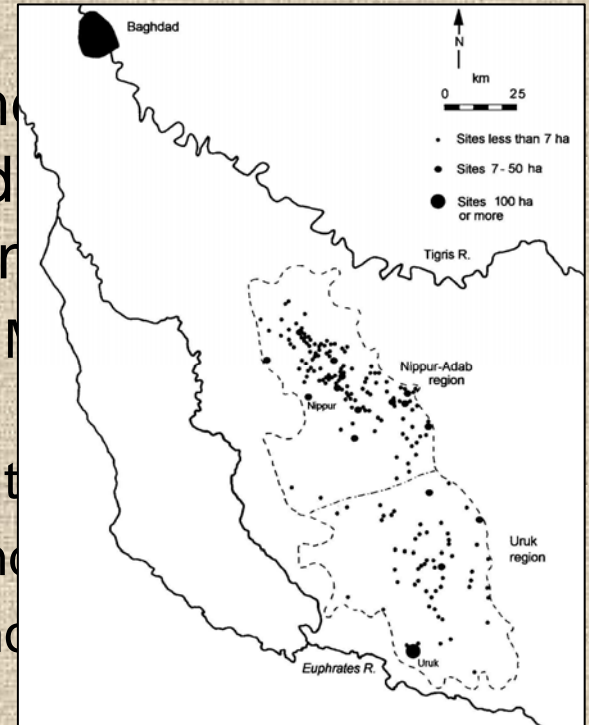
- Much of the work in the textile industry seems to have been done by women

Beer production

- Also seems to have been a major industry
 - Proto-cuneiform texts mention up to 9 different kinds of beer and amounts up to 135,000 liters
- Barley was the main ingredient
 - grows better than wheat in southern Mesopotamia, especially because of somewhat greater salt tolerance
- Chemical analyses of pottery residues, for example from Godin Tepe in Iran, have revealed traces of beer

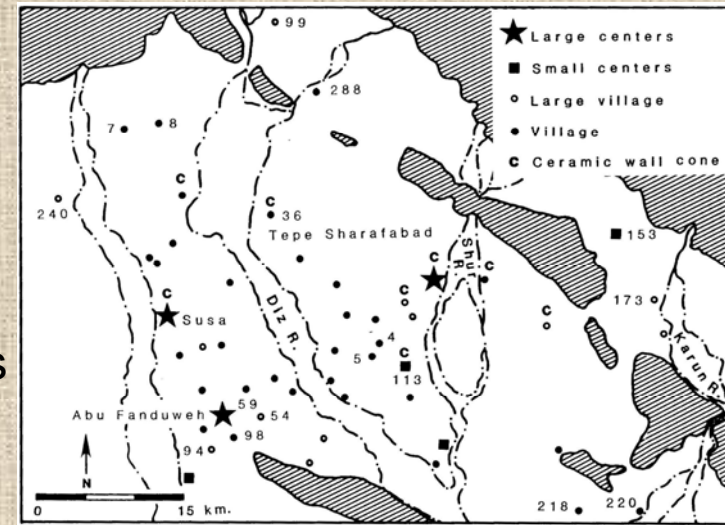
Specialized production

- Wright and Johnson, using data from the 1930s, argued that essential kinds of craft production, such as pottery, were specialized, centralized and controlled by a few sites
 - Pottery made at a few sites (Susa, Chogha Mambur, Fanduweh)
 - Users of pottery had to obtain vessels from these sites
 - Allowed centralized control of production and distribution
 - Affected settlement patterns, interaction among sites



- Adams

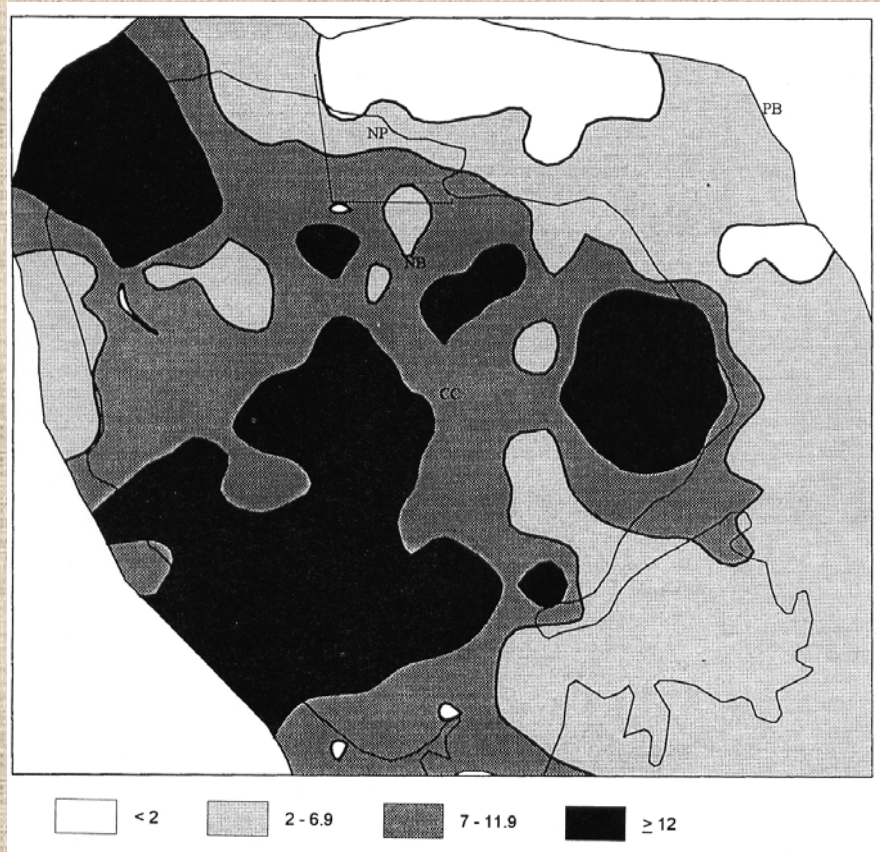
- Working in southern Mesopotamia
- Specialization mainly function of ecology
- Production in towns similar to villages
 - Plus some additional things: luxury goods



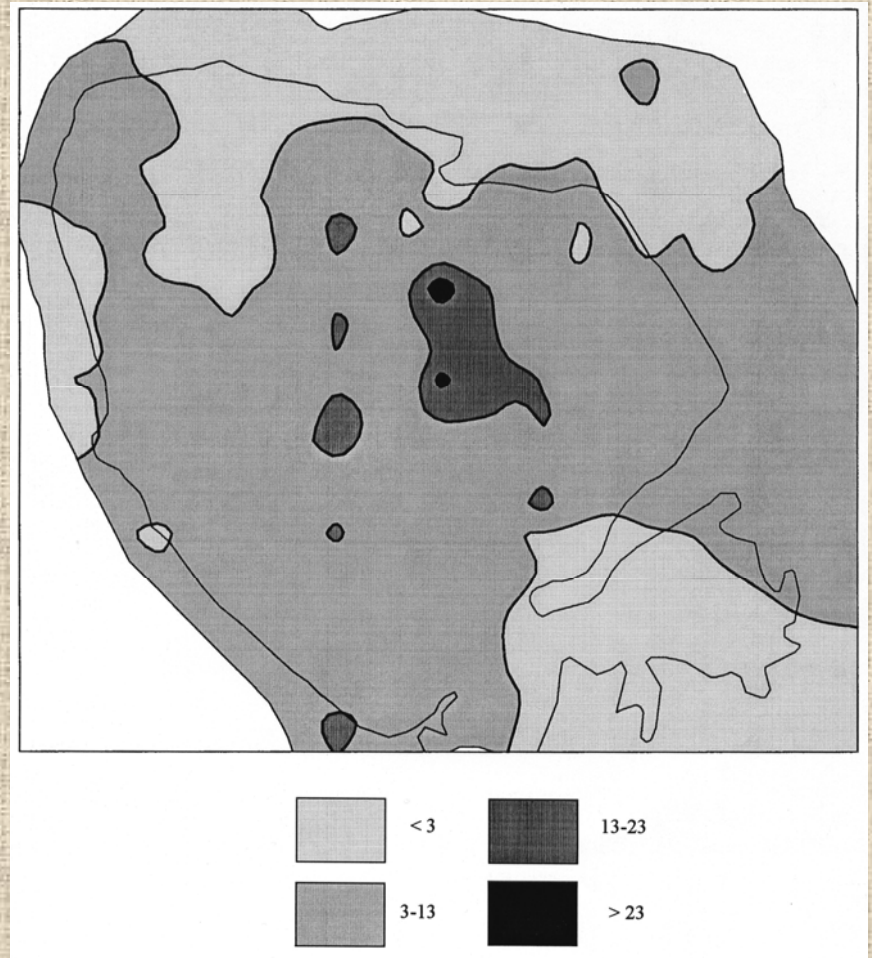
Examining the evidence

- Reanalysis of Adams' survey data
 - To consider evidence for use of clay sickles, production and use of chipped stone tools, firing of ceramics
- Tend to be found at most sites, regardless of size
 - Usually same amounts or more at larger sites
 - Implies greater participation in these productive activities by residents of larger sites
 - Opposite of what Wright and Johnson suggest
- Abu Salabikh, Uruk Mound
 - Surface distributions of artifacts indicative of production and use
 - Ceramic wasters; chipped stone debitage; chipped stone tools; spindle whorls; etc.
 - Overall, differential degrees of participation, but little evidence of centralization
- Important differences between Susiana and southern Mesopotamia

Abu Salabikh, Uruk Mound



Pottery wasters



Chipped stone tools

Labor-saving and labor-intensive activities

- Growing tribute demands may have encouraged labor-saving forms of production
 - Wheel-thrown and mould-made pottery
 - Use of chaff temper: pottery dries more quickly
 - Bow drills to cut some seals
- But other elements of production more labor-intensive
 - Wheel-thrown pottery requires more carefully prepared clay
 - Making multiple different vessel forms
 - Constructing monumental buildings
 - Some of these, such as monumental constructions, might have been 'make work' projects, to train and discipline a labor force

Tributary economy

- One based on mobilization of tribute, in the form of goods and labor
 - From producers to elite
 - Elite members of society often produce little or no of their material needs
- Growing dependencies
 - Due to specialization
 - Dependence on tribute and sanctions (real or threatened) for not meeting tribute obligations
- Changing conditions of labor
 - For many people labor took place increasingly in contexts of alienated labor
 - rather than in predominantly kin-based context
- “Voting with the feet”