

More theories of the emergence of civilization

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- **The “managerial benefits” theory** (Elman Service)
 - this theory assumes a slightly stratified, “chiefdom-level” society as its starting point
 - as does Webster's “war finance” theory
 - that is, certain individuals and their relatives are important in their societies
 - and that their roles become institutionalized
 - that is, the role of “chief” exists apart from a particular person, and may be filled by a new person when the previous one vacates it
 - and those roles are usually hereditary.
 - What causes this first step is not central to the theory
 - The idea is that this is a common process that we don't have to explain here
 - This is reasonable, based on the many cases of this kind of organization known from ethnography, history, and archaeology
 - While it would be interesting to explain how and why chiefdom organization arises, Service takes it as a starting point and focuses on the additional steps towards complex social organization
 - He argues that in some cases of simple chiefdoms, this early, minimal form of centralized leadership proves to be advantageous to the group.
 - This may occur only in certain unusual circumstances
 - Service suggests that one possible set of circumstances that would make centralized leadership advantageous would involve
 - competition between groups
 - in a circumscribed environment
 - with an ecological setting that caused managed actions to pay off
 - for example, a setting in which large canals would be beneficial
 - or a setting in which capturing land, water sources, mineral resources, etc. by force was particularly useful
 - there could be many different circumstances in which managed actions could be beneficial
 - while other kinds of circumstances might not encourage this process
 - for example, in a setting with plenty of evenly-distributed resources, that was easy to irrigate, without threat of warfare, etc., there would be little to gain from projects that require management.
 - The leaders undertake schemes of redistribution of goods, military organization, and public works in order to perpetuate their social dominance *by providing benefits* to their followers.
 - The leaders want to exercise, maintain, and advance their high status
 - They do this by using their leadership role to do whatever the circumstances call for that is advantageous for the general populace
 - obviously, if the circumstances are not such that managed activities are beneficial, this can't happen
 - hence the requirement of special circumstances to make this all possible

- That is, through organizing, redistributing, leading the military, or whatever, they provide benefits to the general populace
 - or at least an important subset of the populace that supports them
 - the leaders intend to “do well by doing good”
- These benefits to the general populace and the associated organization grow more complex, more useful, and ultimately indispensable
 - for example
 - if a small irrigation system proves beneficial, a later chief may expand it
 - if an informally-organized bunch of soldiers successfully defend the chiefdom, the response might be to organize defense more formally, establish more permanent military leaders, etc.
 - the populace likes the benefits and, as they grow more elaborate, eventually depends on them
 - so the populace supports the special status of leaders and their organization that provide the benefits
 - this makes the social organization relatively secure from internal problems
- and, because the benefits are real, they assure the continued maintenance and defense of the society
 - in competition with other societies, the society with the better irrigation system, stronger military, or whatever, will survive and grow more than others
 - this makes the society relatively secure from external problems
- The successful leaders and institutions keep doing more of the same
 - so the bureaucratic organization continues to grow.
 - eventually it becomes complex enough to call it a “state” or “civilization”.
- You might note the positive spin in this theory; it might be true, but it is also exactly what leaders would *want* you to believe... that their being in power benefits you, and for that reason you should support them...
- Possible archaeological evidence for the “managerial benefits” theory
 - the process should start with evidence of an incipient chiefdom
 - with circumstances that allow us to imagine some way in which managed activities might benefit the group
 - evidence of some kind of “managed” activities (building large canals, defensive walls, shared storage facilities, etc.)
 - evidence that some managed activities *did* benefit the populace
 - rising hierarchy or stratification
 - there should be evidence that these activities were connected to the emerging elite
 - written or artistic attempts to associate leaders with beneficial works in the minds of the people (the king opening irrigation canals, etc.)
- **The “economics of population growth” theory** (Allen Johnson and Timothy Earle)
 - Human populations tend to rise
 - Johnson and Earle don’t feel that it is necessary to explain this
 - There is a lot of debate over whether it is sensible to simply assume population growth.
 - The alternative is to look for an explanation for why population grew in a given case.

- As population rises in a finite environment (that is, any real place), there are fewer resources to go around
- the response is to produce more food (and other goods) using the same resources
- this process is called “intensification of production”
 - in agriculture, it means getting more food per acre
 - typically by expending more labor per acre to irrigate, weed, fertilize, etc.
- Intensifying production has four general *results* according to Johnson and Earle. Each of these results in turn prompts *responses* to cope with them. The key is that each of these responses (alone or in combination with the others) tends to push society in the same direction: towards greater complexity or “civilization”
 - Result 1. Increased risk of insufficient production
 - with greater population and more intensive farming to support it, the population is closer to the limits of what the productive system can support, so there is more risk of a food shortfall in bad years.
 - Responses:
 - People adopt risk-minimizing strategies like pooling stored food, redistribution, etc.
 - Effect on society:
 - These strategies create opportunities for management, leadership, and class differences to develop.
 - Result 2. Increased competition
 - Because intensified production requires scarce resources such as good farmland, and because the land has to be improved by clearing, planting, irrigation works, etc., there is more to be gained by taking a neighbor’s property. The potential benefits of violent conflict increase.
 - Responses:
 - groups form alliances, organize for defense, build walls, etc.
 - Effect on society:
 - These strategies create opportunities for management, leadership, and class differences to develop.
 - Result 3. Increased demand for capital investments (public works, etc.)
 - Intensified production typically requires capital investments, such as the construction of canals, which are beyond the means of small groups.
 - Responses:
 - groups consolidate and submit to leadership to build these projects
 - Effect on society:
 - These strategies create opportunities for management, leadership, and class differences to develop.
 - 4. Increased trade
 - Intensification requires increasingly specialized tools and materials in order to produce food more efficiently
 - this may lead to trade for goods and/or materials not available locally; a few examples include
 - special stone materials or metals for better axes, hoes, sickle blades, etc.
 - fertilizers such as bird guano

- Responses:
 - Organization of long-distance trade
 - which requires concentration of capital or exchangeable goods
 - knowledgeable, trusted traders and/or organizers who can make decisions that are binding on others
- Effect on society:
 - These strategies create opportunities for management, leadership, and class differences to develop.
 - And for increasing wealth differences to accumulate
- The responses to these results of intensification interact in complex ways
 - one way of thinking about this is the “cybernetic” approach (described below)
- The cumulative effect leads to more complex economic and political organization and social stratification, eventually resulting in a “state” or a “civilization”.
- This theory does not require that all four processes occur; the point is that any one of them, or any combination of them, all tend to push a society towards “civilization”
- Possible evidence for various parts of the “economics of population growth” theory include
 - evidence of the process of intensification, shared by all parts of the theory:
 - population growth
 - scarcity of resources
 - intensification of production
 - evidence specific to certain “results” of intensification
 - increased production risk
 - storage or other means of coping with risk
 - competition between groups
 - increased militarism, defense, etc.
 - capital investment projects such as big canals
 - increasing trade in materials related to intensifying agricultural production
 - rising complexity associated with one or more of these
- **The “resource-deficient core” theory** (William Rathje)
 - This theory was developed for the lowland Maya, but might also apply to other cases.
 - it depends on the relationship between a core area where civilization first emerges, and a periphery where civilization arises later
 - Rathje claims that the tropical forest of the lowland Maya core area lacks key resources necessary for survival
 - salt
 - hard stone suitable for *metates* (grinding stones necessary for processing corn)
 - obsidian used to make sharp cutting tools
 - potentially other resources, too
 - So they need to get these resources from relatively distant areas outside the Maya core
 - There are two usual ways to get things from far away, but the Maya core is unusually ill-equipped to take advantage of either method
 - 1. Pass them hand-to-hand from the source to the destination in a series of short-distance exchanges between neighbors

- The people involved in this sort of trade may not even know where the goods ultimately come from
- the goods tend to get traded towards the area that has less of them (where there is higher demand), so they migrate in that direction without any conscious overall plan by anyone
- Unfortunately, Rathje claims, the resources that the lowland core does have are distributed very uniformly, making internal trade in local goods unnecessary
 - That is, if a neighboring town has the same resources as your town, you have no particular reason to trade with them
 - Since exchange networks are not well developed, goods from distant sources rarely reach the core area by passing from hand to hand through a series of short-distance exchanges.
- 2. Organize long-distance trading expeditions to go and get the goods directly
 - Unfortunately, Rathje argues, the lowland core has no resources not also found in the surrounding areas, so it has no raw materials to trade for the needed goods
- So the people in the core have to undertake long-distance trade, but they have to take unusual steps to succeed
 - They organize in order to produce labor-intensive goods such as textiles and decorated ceramics for exchange
 - essentially, the only thing they have to trade is their labor, encapsulated in goods like textiles, featherwork, highly decorated ceramics, stone carvings, etc. that take a lot of effort to make
 - They also organize to pool the goods, mount exchange expeditions to distant places, and distribute the imports on their return
 - The argument is that for relatively impoverished core dwellers to pull off long-distance exchange, they have to be much more organized, directed, and efficient than would a group that had more natural resources to trade
 - These activities train organizational specialists and eventually lead to hierarchical social stratification
 - by creating opportunities (and necessities) for leadership and control
 - and opportunities for differences in wealth and status to arise
- These emerging leaders maintain the social stratification that allows them to have higher status by encouraging beliefs that make the emerging hierarchy (their wealthier, more powerful positions) seem natural and appropriate
 - specifically, they do whatever they can to promote supernatural beliefs that justify the social hierarchy
 - like a hierarchy of gods; certain people being specially close to the gods or having power to influence them; etc.
 - this involves putting on ceremonies and assembling the associated paraphernalia that make the beliefs seem impressive and appropriate
 - ceramics, stonework, buildings, and textiles decorated with themes that reinforce the ideology of hierarchy
 - rituals that emphasize the importance of high-ranking people, for example as guarantors of fertility or protection against natural disasters
- in effect, they develop services and products that legitimize the hierarchical social order

- These organizational skills and the beliefs, rituals, and ceremonial products become specialties of the core area, and are literally exported and exchanged for needed resources
 - goods such as ceramics and textiles required for rituals or decorated with ceremonial motifs may be exchanged for other goods
 - specialist services (“consulting”) related to ritual, sacred architecture, trade, and politics may be exchanged for goods
 - the principal market for these goods and services would be the emerging elites of the periphery, who see that they would be useful in advancing their own status
- This process of exporting ideology, ritual, and organization has two effects
 - it strengthens the hierarchy and its associated ideology in the core
 - it spreads the beliefs and hierarchical practices of the core to surrounding regions.
- In other words, it leads to the rise of complex organization, statehood, or civilization in the core *and* its expansion into neighboring regions.
- Possible evidence for the “resource-deficient core” theory
 - lack of resources in core
 - even distribution of resources in core
 - long-distance trade
 - craft goods exchanged out
 - ideologically-charged goods exchanged out
 - use of these goods for status legitimation by peripheral leaders
 - core leadership associated with long-distance trade and exported iconography
- **The “individual and class strategy” approach** (Elizabeth Brumfiel and others)
 - this is more an approach to making up theories, rather than a specific theory itself
 - it is not really testable
 - so don't use this one in a paper
 - Background:
 - People formulate goals and strategies based on the opportunities available to them
 - these may be affected by
 - ecological circumstances
 - social circumstances
 - their current social position, gender, class, etc.
 - When a person has the opportunity to advance his or her economic or political standing, he or she will often devise and carry out strategies to do so
 - the details will depend on the circumstances
 - One of an infinite number of possible examples:
 - small-scale local chiefs might want to make their precarious positions more secure.
 - to do so, they might choose to ally with each other, forming a larger political unit
 - the farmers in these chiefdoms might prefer to retain more local independence
 - but they might find the costs of opposing the chiefs were greater than the benefits, so they go along with it
 - Brumfiel's point is that to understand what happened, you have to understand the goals of the chiefs and the farmers, and the costs/benefit decisions they make to advance those goals

- The example given in the reading shows how Brumfiel looks at the specific motivations of each player (or class of players) in a specific situation
 - this is only one of many different scenarios that you could invent using this approach
 - this approach tells us what factors to consider in creating a hypothesis (the factors are individual and group motivations and strategies in particular circumstances)
 - but it does NOT tell you what the hypothesis specifically is
 - it is a way of looking at things, rather than a testable hypothesis in itself
- Brumfiel suggests that states (or, for our purposes, civilizations) emerge as the cumulative effect of *certain kinds* of strategies used by leaders to maintain and extend their power.
 - For example, imagine the strategies that would make sense in social and ecological circumstances where the leader is frequently in danger of losing power.
 - These might involve creating mechanisms to strengthen the leaders' position, building towards state organization.
 - In different circumstances, in which the leader is not frequently at risk of losing power, leaders may use different strategies that do not lead to the development of states.
- So, explaining the emergence of states requires understanding the motivations for, and results of, the strategies of leaders and other members of the society in every particular case.
 - this is an “actor-centered” approach
 - or one involving the “agency” of individuals
 - this is a current trend in anthropology
- Possible evidence for the “individual and class strategy” approach
 - testing this view would involve
 - specifying the motivations and strategies of many members or classes of a society
 - seeing if you could use that insight to come up with a specific model of how “civilization” came about
 - and then seeing if that specific model fit the evidence
 - this would probably take a lot more information than we have discussed in this class
 - this is more an approach to building theories, or a way of thinking about social change, than a testable theory in itself
- **The “cybernetic” or “systems analysis” approach** (Kent Flannery)
 - again, this is more an approach to making up theories, rather than a specific theory itself
 - it is not really testable
 - so don't use this one in a paper
 - Many different factors (including most of the ones used in the previous theories) are involved in the emergence of civilization
 - they interact with each other in complex ways
 - These complex interactions are best represented by box-and-arrow charts
 - these charts specify how each factor affects one or more others
 - they typically use the ideas of positive and negative feedback loops
 - explaining the emergence of civilization becomes a matter of identifying the important factors and the processes by which they interact.
 - For some simple examples of this type of chart (not really up to Flannery's standards of rigor), see Wenke pg. 306

- Possible evidence for the “cybernetic” or “systems analysis” approach
 - Like the “individual and class strategy” approach, this is more a framework or set of tools for developing a particular theory than a theory in itself
 - testing it would involve developing a specific model and then testing that to see if it fit the evidence or suggested useful insights
 - this approach is good if it produces good models for specific cases
 - if, after honest attempts, people don't find it useful for generating workable theories, then it is not a good approach
- **The “evolutionary convergence” theory** (Ronald Cohen)
 - this is an interesting idea, rather than a specific theory itself
 - it is not really testable
 - so don't use this one in a paper
 - States are similar to each other, but they start in different ways
 - Cohen does not concern himself with the initial “kick” that starts the process of centralizing authority
 - Like Service, he thinks that societies often reach this starting point of initial complexity (conceived of as a simple chieftdom organization), for a variety of reasons, and that explaining this is a separate problem
 - Yet these possibly disparate starts give rise to relatively similar societies, all recognizable as “states”
 - How can we explain this?
 - Once a society begins to evolve more centralized and more permanent authority structures, the political realm itself becomes an increasingly powerful determinant of change in the economy, society, and culture of the system.
 - That is, actions taken in a hierarchical society are influenced and constrained by that hierarchy
 - Organized society becomes part of the environment that affects what people do and how the society evolves
 - Once there is some centralized control, the hierarchical structure itself encourages sociocultural features that fit the hierarchical scheme and discourages those that do not
 - a hierarchical society supports changes that lead to further complexity and restricts changes that reduce complexity
 - This process involves complex feedbacks between different factors
 - Thus hierarchy as a form of organization is itself a selective force that has sent many societies along a converging path towards a similar end--the state
 - This notion of inevitability should remind you of the “success in competition” theory
 - Possible evidence for the “evolutionary convergence” theory
 - if you could show how a specific hierarchy tended to maintain and extend itself, that would support the theory; showing that this occurred in many cases would help even more
 - But this would be extremely difficult to test