

China: Longshan Horizon and the Three Dynasties

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- Another of the complex cultures of the late Regional Neolithic and later: Liangzhu culture (Liang-chu) (3500 - 2200 BC)
 - South of Yangshao culture, on the coastal plain around the lower Yangtze river
 - another culture which developed some very elaborate burials
 - often spatially segregated from poorer burials in the same cemetery
 - example of a rich burial at Ssu-tun
 - a young adult male
 - 4 ceramic vessels, 14 stone and jade implements, 49 jade ornaments
 - 24 jade rings and 33 jade cong tubes (also written as “ts'ung”)
 - cong tubes are apparently ritual objects, usually jade, that are rectangular blocks with faces carved on the outside and a large round hole through the center
 - the rings are also probably ritual, votive, etc., not finger rings or personal ornaments
 - suggesting that this person was heavily involved in ritual activities, either as a ritual specialist himself or a patron of specialists
 - such fine workmanship in such a hard material implies a lot of wealth
 - another rich burial at Sidun was under a burial mound 20 meters high (65 feet!)
 - a young man
 - with over 100 jade artifacts
 - body and jades were partly burned
 - other burned burials around the mound are thought to be sacrifices
 - burials with “extra” crania at Chang-ling-shan
 - one burial with over 40 items plus three human crania
 - another with two “extra” crania and numerous “extra” limb bones
 - clearly a powerful, wealthy elite was emerging in this basically rural society
 - also developed a new style of pottery
 - black, highly polished, very finely made
 - very thin walls, often with bamboo-like ring or ridge designs, cutouts in ring bases
 - some made on a true, fast potter's wheel
 - suggests craft specialization
 - This style of black pottery went on to become popular over a wide area of China
 - indicating an increased amount of interaction and shared ideas over a large area
 - and serving as a convenient marker for a period of time called the “Longshan horizon”
- The Longshan horizon (Lung-shan), started around 3500 BC with Liangzhu culture, became widespread by 2500 BC; lasted until about 1500 BC
 - also written Longshan or Longshan
 - a “horizon” that spread across northern China
 - a “horizon” is the extension of a style (usually of pottery) over a very wide area
 - horizons make convenient time markers

- because sites that contain objects in the horizon style must be roughly contemporary with each other
- a horizon typically starts somewhere, and gets to its periphery a bit later
- a horizon style suggests that people probably shared not only the pottery style, but also ideas about religion, social organization, economics, politics...
- the Longshan horizon apparently started on the lower Yangtze river, in the Liangzhu culture, as early as 3500 BC
 - and for whatever reason, spread from there to the rest of an area of interacting cultures called the Neolithic “Chinese interaction sphere”
 - each culture within the region shifted to adopt Longshan horizon features
- markers of the Longshan horizon
 - wheel-made, thin-walled black ceramics
 - pedestal vases with cutouts in pedestal (tou)
 - tripod pots (ting)
 - certain axe types
 - jade cong tubes (square outside with faces; large round hole inside)
 - scapulamancy (oracle bones)
- this increasing cultural similarity was probably due to interaction, rather than conquest
 - because in each region there was a gradual local development towards the shared style
 - some items, like the cong tubes and oracle bones, probably reflect increasingly widespread, shared ideology or religious ideas
- subsistence continued as before, but probably more permanent and intensive agriculture
- craft specialization apparently increased
 - pottery making probably required specialists
 - was made on a fast potter's wheel
 - kilns were more advanced
 - minor use of bronze for small objects probably implies specialist metalworkers
- settlements grew larger and many were walled
 - house styles remained similar to those of the Yangshao culture, with storage pits, etc.
 - similar organization, with clusters of houses around a central “long house”
 - but many sites were larger than Yangshao villages
 - possibly more permanent (longer occupations)
 - suggests a gradual shift from swidden towards more intensive, permanent agriculture
 - but a new feature was added: some settlements had massive rammed-earth walls
 - these are the first major defensive works in Chinese prehistory
 - in fact, the first “public” works of any kind requiring significant labor to build
 - prior to this, only some special burials even approached this investment
 - rammed-earth is also called “tamped earth”, “stamped earth”, “hangtu”
 - made of 12-14 cm thick layers of soil
 - very uniform, selected clean soil with aggregate stones added
 - pounded into wide, shallow molds
 - each layer 3 cm narrower than the one below, forming a slight taper

- at Chengziyai (a town in the coastal Shantung area), the wall was 9 m (29 feet) thick, estimated to originally have been 6 m (20 feet) high
 - the face was like a wall, but it was as massive as a whole solid building
 - encloses an area of 450 X 390 m (about 1/4 mile on each side)
 - about 18 hectares
 - rough estimate of population within the wall: probably between 500 and 3600 people
 - that is, a medium to large town, but not really big enough to be a city
 - yet an enormous labor investment in the wall
 - implies control of a lot of workers, agricultural surplus, etc.
 - extracting a huge amount of labor from the villagers, or maybe also drawing upon people living outside the walls – implying power over a surrounding hinterland
- several known towns were around this size (averaging 17 hectares)
 - still pretty small for “cities” in the western sense
 - but maybe a lot of people lived outside the walled area?
- a smaller walled settlement: Pingliangtai (middle Yellow River area)
 - rectangular rammed-earth wall 185 m (600 feet) on a side all around the town
 - wall is 13 m (42 feet) wide at base, remains still stand 3 m (10 feet) tall over 4000 years later!
 - two entrances (north and south), one with gatehouses
 - underground drains made from ceramic pipes go under this gate
 - 3.4 hectares (comparable to Jericho)
 - inside are rectangular buildings of mud brick, up to several rooms, with storage pits
 - some on raised platforms, suggesting special status
 - craft production areas inside the wall (ceramic kilns and manufacture of stone artifacts)
- there were also much smaller walled compounds
 - some inside walled towns, some out on their own, in the countryside
 - these would be high-status houses, like fortified villas
 - a typical example is square, 6 m (18 feet) on a side
 - on a low rammed earth platform (30 cm high)
 - although they don't look like much to us, these platforms would represent a lot of labor and would have been recognized as a privilege of wealth
 - the platforms often contained sacrificial burials, and people would have known that
 - residences of powerful leaders of largely rural people?
- warfare and violence escalated dramatically
 - town walls suggest fear of attack
 - big increase in spear points and arrow points in the coastal Shantung area
 - the points make up a much higher percentage of all bone and stone artifacts than in earlier periods
 - since the people presumably were farming more than before and hunting less, the rise in points may be for weapons rather than hunting
- Site of Chien-kou (middle Yellow River area)
 - surrounded by a circular town wall
 - within a house, six human skulls with signs of blows and scalping

- presumably means that village residents were raiding others
- two water wells that were stuffed with five layers of human bodies
 - male and female, all ages
 - some decapitated, some without feet
 - presumably means that others raided and destroyed this village
- KC Chang sees this period as the beginning of “institutionalized violence”
 - external, between walled settlements: raids or warfare
 - internal, within settlements
 - human sacrifices in rammed earth walls and platforms, and in high-status burials, indicate ritual “peacetime” violence
 - carried out in situations controlled by high-status people
- ritual practices became more elaborate, specialized, and associated with the elite
 - oracle bones: “scapulamancy” became widespread
 - deer, ox, sheep scapulae
 - depressions carved into one side of the bone; a hot poker placed in the depression; cracks form that were apparently used to tell the future
 - but without any signs of writing yet
 - suggests rise of specialized shamans
 - animal “masks” or faces on pottery and jade artifacts probably had ritual significance
 - infant burials under house posts, under walls, or in walls
 - thought to be sacrifices for house-building rituals
 - some sites have rammed-earth house platforms that contain pits filled with layers of rammed earth and up to 7 burials between the layers
 - including both adults and children
 - thought to be ritual sacrifices associated with construction
 - sacrifice had shifted from animals to people
 - suggests increased power of elites, literally over life and death
- burials had even more drastic variation in grave wealth than seen before
 - at Chengziyai, burials clustered in three groups, each with a range from poor to rich
 - suggests “stratified lineage” structure of historical China
 - that is, three lineages, each with its own hierarchy
 - this seems to continue the emphasis on separate lineages that we saw in the Regional Neolithic, especially in Yangshao villages and cemeteries
 - huge cemetery of T’ao-ssu, over 1000 burials excavated, thousands more probably remain
 - a wide range of graves
 - 87% were small, shallow, with few goods
 - 11% had wooden coffins, numerous ceramics, axes, jade ornaments, cong tubes, etc.
 - 1% (9 total) were large (3x2.5m) pits with wood coffins and 100-200 items
 - all preserved skeletons in the large burials are male
 - five of the nine large graves had a “music set”:
 - wooden drum covered with crocodile skin
 - “musical stone” (chime)
 - pottery tubes thought to be drums

- this set of items symbolizes royalty in later Chinese texts
 - so these people may have been essentially early kings
- T'ao-ssu graves were arranged in at least two separate clusters, each with all three types
 - again, suggesting separate lineages with internal hierarchy
 - the medium graves in one cluster were shallow and wide, while those in the other were deep and narrow
 - suggesting that two different social groups used the two different cemetery areas?
- overall, the Longshan horizon saw
 - a drastic new stratification of wealth and power
 - implied by the huge, labor-intensive rammed-earth wall projects
 - indicated by variation in dwellings
 - on platforms or not
 - with sacrificed burials under them or in walls, or not
 - especially visible in burials
 - certain goods were restricted to the most elite burials (thin cup on high stem, pig mandible, “music set”) suggesting a top class with special privileges
 - continued division of cemeteries into groups, possibly by descent (clan membership), each with its own internal hierarchy of status
 - increasing use of jade, ivory, turtle shells in ritual associated with elites
 - implies that they got these exotic goods by long-distance exchange, probably controlling traders, surplus, craft production for exchange, etc.
 - elites had power to conduct human sacrifices during wall and platform construction
 - in a context of drastic rise in raids or warfare
 - and the wide spread of a suite of object styles and religious and political ideology
- was this civilization?
 - compared to the other cases, it has an interesting mix of characteristics
 - lots of social stratification, craft specialization, and warfare
 - but limited urbanism, and still no writing
 - little or no centralized storage, few or small irrigation projects, monumental architecture?
- The Three Dynasties (Hsia, Shang, Chou) 2100-770 BC
 - in the centuries after 2000 BC, the first evidence of
 - real cities (urbanism) - although with differences from those in other regions
 - states
 - writing
 - the Three Dynasties are known a little from later documents that describe them as history
 - Hsia and Shang dynasties were once thought to be mythical
 - now archaeology has proved that the written records refer to real places and societies
 - a few existing texts from the first millennium BC tell us about Shang and later dynasties
 - they describe a society that was already up to 1000 years in the past
 - presumably based on written documents no longer available to us
 - these historical documents imply that that:
 - Shang China was composed of *yi*, or walled towns

- the *yi* were organized hierarchically into *kuo*, or states
- the *kuo* were ruled by the head of a clan, whose clan in turn was ranked relative to others in the same *kuo*
 - dynasties were the families of rulers (clan heads) of unusually successful *kuo* (states)
- initially there were several hundred *kuo*
- constantly at war, conquering and losing control of each other
- this description sounds like the archaeologically-documented Longshan horizon
 - so the political organization of Longshan and Hsia societies might have been similar to what the documents describe for the Shang dynasty
- relationship of the three dynasties
 - these “dynasties” actually overlapped in time and space
 - the “dynasties” also refer to styles of ceramics and bronzes, probably really ethnic or regional groups as well as family lines of leaders
 - rather than a simple sequence of rulers, the dynasties represent geographical centers or competing lineages which gained political and military preeminence at different times
 - since the Shang dynasty was clearly “civilized”, we won't go on to the western Chou here
- Erlitou (Erh-li-t'ou) (site and culture) 2100-1800 BC (shown as Hsia area on the map)
 - debate about how to connect the archaeological evidence with the historical references
 - KC Chang: archaeological Erlitou = historical Hsia dyanasty?
 - Barnes: archaeological Erlitou = historical Early Shang?
 - The biggest Erlitou site, Erlitou itself, is huge, 1.5 x 2.5 km (375 hectares)
 - no city walls! (at least, not yet found)
 - this seems unusual for this period; why no defenses?
 - maybe the “elephant” defense: too big to attack, even without defenses?
 - or the walls just have not been found yet?
 - or there was a peaceful interlude?
 - two enormous rammed earth platforms for “palace” structures
 - containing burials, possibly sacrificed
 - platforms were 1-2 m thick, but set into pits, so they projected only 80 cm above ground
 - the larger one was 100 x 108 m (325 x 350 feet)
 - that is a square as wide as the two wings and courtyard of Stevenson Hall
 - with an additional 36 x 25 m low platform set on top of the “back” of the main platform
 - with postholes for a rectangular hall 11 x 30 m
 - wattle and daub, gabled roof?
 - surrounded by a narrow (50-110 cm) rammed-earth wall at the edge of the platform
 - forming a veranda facing inwards, indicated by rows of postholes
 - this layout, with the gate to south and the building to north, is typical of later buildings known to be palaces
 - pottery drainpipes
- wide variation in burials
 - some have nothing
 - all the way up to others that have evidence of lacquered coffins, even more elaborate than Longshan types

- bronze: decorated cups, weapons such as knives and halberds (dagger on a long shaft)
- jades, turquoise inlays, lacquered wood, other wealth items
- oracle bones continued
- Shang Dynasty 1700-1100 BC
 - According to later histories
 - the Shang dynasty was founded by T'ang, who conquered the last of the Hsia kings
 - and founded a royal capital at a place called Po
 - later Shang kings moved the capital to other cities several times
 - 29 kings followed T'ang in the Shang dynasty
 - Early or Middle Shang (roughly 1700 - 1400 BC)
 - also called the Zhengzhou (Cheng-chou) phase, or the Erligang (Ehr-li-kang) phase
 - exemplified by the site of Zhengzhou
 - May be the first Shang capital, the historical “Po”
 - But Barnes thinks Zhengzhou is one of the later Shang capitals
 - Zhengzhou was the largest site of this time, 3.5 square kilometers (350 hectares)
 - surrounded by a rammed-earth wall
 - wall seen as enclosing ritual space, rather than literally for defense?
 - palace structures on rammed-earth platforms
 - bronze hairpins found in palace structures suggest high-status people lived there (no surprise)
 - large bronze, bone, and pottery shops outside the walls
 - at the bronze workshops, they
 - cast bronze arrowheads and spearheads
 - forged knives for use and display
 - cast the elaborate bronze vessels for which the Shang period is famous
 - decorated with complex faces or “masks” of supernatural beings
 - at the ceramic workshops, they made
 - fine ceramics for use and display
 - also “proto-porcelain”, or ceramics of a specific composition, fired at a very high temperature that began to develop a glassy texture
 - at the bone workshops, they made
 - many ordinary bone implements, like combs
 - using bones from cattle
 - but at one bone workshop, there was a ditch that contained human crania, many with the tops sawn off
 - apparently to make bowls or cups that would be obviously from human remains...
 - indicates that the elite who supported or commissioned this work had an absolute control of life
 - and wanted to convey that message to people that they entertained
 - at least three other sites of this period also had walls, suggesting warfare
 - chariots in burials also suggest the importance of warfare
 - but this period (early to middle Shang) did NOT yet have other Shang traits:

- writing
- royal mausoleums (yet)
- Late Shang (the “Yin phase”): Anyang, the Shang capital in the last 200-300 years of the dynasty (roughly 1400 - 1100 BC)
 - excavations at Anyang, starting in 1928, proved that the Shang dynasty was not legend, but history
 - we can identify this site as the historical Anyang because oracle bones were found there that describe the names and travels of a series of eleven kings
 - the sequence of kings on these oracle bones matches historical lists of Shang kings
 - Anyang was a huge city
 - 24 square kilometers (2,400 hectares)
 - but not walled (as far as we know)
 - widely scattered sectors with distinct functions
 - not a single dense urban core
 - sectors of the site now have names of the different modern villages near them
 - this suggests how loose the “city’s” plan was
 - and how different it was from the western or Mesopotamian concept of a city
 - Central “palace” sector with 53 buildings on rammed-earth platforms
 - divided into a residential area, a royal temple area, and a ceremonial area
 - lots of human sacrifices associated with construction of platforms
 - wattle-and-daub walls, stone bases for probably wooden pillars, gabled roofs
 - underground drainage channels under foundations
 - high-status goods found in this area, like fancy cast bronze vessels
 - lots of oracle bones in the palace sector, confirming that oracle bones were clearly associated with royalty
 - high-status burials nearby, some with chariots and their horses
 - indicating that warfare and weaponry were associated with the palace and royalty
 - although the royal burials themselves were in a separate cemetery
 - round semi-subterranean houses surrounded the palaces, presumably for servants
 - other sectors with housing, workshops, tombs
 - workshops included
 - pottery kilns
 - two bone working areas
 - two large bronze foundries
 - clay molds for casting bronze vessels and bone-working materials were found in one of the palaces
 - what was production material doing at the palace?
 - they suggest that the palace had a direct connection to craftspeople who made bone and bronze goods
 - presumably supporting and directing them
 - that is, they were attached specialists
 - not surprising, since some of the bone artifacts were made from people -- which requires a lot of power to enforce

- and since bronze was closely associated with royalty in written accounts, residential debris, and burials
- a huge cemetery, with royal tombs, burials of nobles, and hundreds of sacrificial victims
 - 11 large tombs, presumably of the 11 historical rulers of Anyang
 - all looted long ago
 - over 1000 small graves
 - large graves
 - at least 7000 person-days just to dig each pit
 - cross-shaped, with ramps
 - wooden chamber built in the center
 - human sacrifices all around
 - some in coffins - presumably higher status
 - some decapitated - presumably not so high status
 - some just heads or other parts
 - lots of bronze, jade, shell, bone, pottery, etc.
 - Tomb Number 5, of Fu Hao, consort to King Wu Ting
 - much smaller than the 11 kings' burials
 - never looted – probably because it was located in the palace sector, not the royal cemetery, for unknown reasons
 - over 1,600 items in total, plus 7,000 cowry shells
 - over 440 bronzes, over 590 jades, over 560 bone objects, over 70 stone objects
 - Anyang was clearly home to fabulously wealthy royalty – and we don't even have the contents of the really big tombs to judge by
- Origins and context of writing in China
 - earliest evidence of Chinese writing dates to the later Shang dynasty, around 1400 BC; well established by 1200 BC
 - many of the characters can be read, since modern Chinese can be traced directly back through earlier historical forms to the writing from Anyang
 - written on oracle bones and bronze vessels
 - the early examples, especially on bronzes, are generally just one or two characters, probably the name of the person who had the piece made
 - according to an early surviving text (but long after Shang dynasty), a lot was written on bamboo strips and silk – which would not survive in the ground
 - also, the character that looks like and refers to bound “books” of bamboo strips is found in late Shang inscriptions on bronzes and oracle bones,
 - so these bamboo strip books were probably already in use in Shang times
 - unfortunately, the founding emperor of the Ch'in Dynasty, around 100 BC, had all old books except those on medicine, divination, and agriculture burned
 - fortunately, a handful of books escaped
 - so there may have been a lot of early development of writing that has just not survived
- The major early use of writing *that we know of* was scapulamancy (cattle scapulae) and plastronomy (on turtle plastron (shell))
 - continuation of the scapulamancy tradition of the Longshan horizon
 - the bones were cracked by applying heat to the back of a hollow bored in the piece

- the cracks were numbered, then read in unknown manner
- In Shang times, they began to write the question and the answer next to each crack
- turtle shells were added in late Shang times
- content
 - they record prophesies relating to the royal court, so they provide a lot of history
 - writing was later used for political activities, gifts, mortuary activities, edicts...
 - oracle bones are labeled with the question; prophesy; verification
 - often the king made the prophesy
 - surprisingly, the verification almost always shows him to have been correct...
 - Shang oracle bone c. 1200 - 1180 BC (from Keightley, in Senner 1989)
 - “Crack-making on chia-shen (day 21), Ch’ueh divined:” Charge: “Fu Hao’s childbearing will be good.” Prognostication: “The king, reading the cracks, said: ‘If it be a *ting* day childbearing, it will be good. If it be a *keng* day childbearing, it will be extremely auspicious.’”
 - *ting* and *keng* are analogous to days of the week (Tuesday, Wednesday)
 - Verification: “On the 31st day, she gave birth. It was not good. It was a girl.”
 - The baby was born on a *chia* day, thus the prophesy was correct.
 - Note: Fu Hao is the name of the “consort” in the unlooted large tomb at Anyang; the dates are right for this to refer to the same person!
 - other royal divinations involved military and economic tasks
- bureaucratic approach to scapulamancy
 - regular placement of holes
 - cracks numbered
 - divinations paired in positive and negative forms
 - divinations were dated and followed up with a verification later
 - certain bones and shells were reserved for repeated use on the same subject, up to 170 days apart, suggesting a filing system of some sort
 - bones are often found in neat stacks, as if they had been archived in tied bundles or resting on shelves
 - implying specialist recordkeepers and some bureaucracy
- NOT associated with business or record-keeping (at least what is preserved is not)
- nature of the Chinese writing system
 - mostly logographic: one character means a whole word
 - similar sounding words could be indicated by the same symbol
 - ambiguities were resolved by adding determinatives, that is, marks that provided clues to which of several possible words was meant
 - the earliest oracle bones already have half their symbols marked with a determinative
 - this suggests that the system was already well developed by that time
 - so we really may be missing the early part of the development sequence
- generalizations about the Three Dynasties
 - subsistence
 - all were primarily millet farmers

- based on textual evidence, Shang and Chou also used soybeans, wheat, some rice
- all used dogs, pigs, cattle, sheep
- NO notable change in technology from the Longshan horizon
 - no major irrigation projects known, no plows
- bronze: an exception, or not?
 - used primarily for ritual (vessels) and war (weapons, chariot parts, etc.)
 - bronze was generally not used for tools for agriculture or other purposes
 - sophisticated bronze casting was mostly for ritual vessels
 - these vessels were highly decorated versions of otherwise identical ceramic forms
 - mostly used for holding, heating, and serving alcoholic drinks
- capitals
 - not dense urban settlements, but rather networks of high and low status residential areas, administrative and ritual areas, workshop areas, cemeteries, etc.
 - rammed earth walls at some sites, maybe not at others
 - high-status wooden buildings on raised rammed-earth platforms
 - low-status housing was semi-subterranean, wattle-and-daub
- warfare
 - Earlier Shang capital of Zhengzhou was walled, but Anyang was apparently not
 - a fair number of bronze weapons
 - chariots in Shang and Chou
 - written evidence of warring *kuo*
- continuity of clan organization from Longshan horizon and earlier
 - based on inscriptions, layout of cemeteries, emblems on vessels in graves that say who they were made for
 - i.e. rank was based on ancestry?
 - hierarchy with most direct relatives of ancestral leaders closest to the top
- burial practices: extreme stratification
- power of the elite
 - tremendous control of labor and resources
 - yet no obvious evidence of centralized storage or redistribution
 - although there must have been some sort of tribute or taxation to support the elite
 - and written accounts of warfare and statecraft suggest that tribute extraction was an important purpose of it
 - apparent control of life and death, as well
 - elites apparently had a monopoly on shaman's paraphernalia
 - jades with animal faces (like cong tubes) associated with shamanic powers
 - oracle bones (and turtle shells in Shang and Chou)
 - in historical documents, the power of rulers was attributed to their control of bronzes
 - necessary for weapons
 - but also for ritual
 - for a ruler in the Chou Dynasty to be legitimate, he had to possess “the nine bronze tripods”; maybe something similar was true in earlier Shang times?

- having a monopoly on fancy bronze vessels would have given the elite control of supernatural matters, and legitimacy as rulers
 - elites could have arisen from ritual specialists
 - or could have employed them

- When would you first call it “civilization”?
 - Regional Neolithic?
 - Longshan horizon?
 - Erlitou / Hsia?
 - Early Shang? Late Shang?

- In what ways was complex society in China similar to, and different from, other cases?

- In what ways might the processes that led to Shang civilization have been similar to the other cases we have look at, and in what ways different?
 - roles of urbanism; ritual; warfare
 - origin and nature of elites
 - nature and purposes of monumental structures
 - nature and role of clan (descent group) organization