

Climate, Environment, and the Development of Complex Societies in the Ancient Near East

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Chronology (all dates BCE, Middle Chronology for 3rd and 2nd millennia BCE)

- c. 13,000–10,000: Natufian* (Levant & Syria)
- c. 10,000–8800: Pre-Pottery Neolithic A* (Levant, Northern Mesopotamia)
- c. 8800–6500: Pre-Pottery Neolithic B* (Levant, Northern Mesopotamia, Southeastern Anatolia, Western Iran)
- c. 6500–4500: Pottery Neolithic*; includes Pre-Pottery Neolithic C (Levant, Arabia); Halaf (Eastern Syria, Northern Iraq, Southeastern Anatolia); Hassuna (Northern Mesopotamia); Samarra (Central Mesopotamia); Ubaid (first Southern then also Northern Mesopotamia and Arabia); Transitional Chalcolithic (Iran); Arabian Neolithic then Ubaid (Arabia)
- c. 4500–3500: Chalcolithic*; includes Chalcolithic (Levant); Late Chalcolithic 1–5 (Northern Mesopotamia); Late Ubaid and Uruk (first Southern Mesopotamia, then also Western Iran, Northern Mesopotamia, and Arabia); Chalcolithic (Iran)
- c. 3500–2000: Early Bronze Age*; includes Early Bronze I–IV (Levant); Early Jezirah 0–V (Northern Mesopotamia); Late Uruk/Jemdet Nasr, Early Dynastic I–III, Akkad, [Gutian], and Ur III (Southern Mesopotamia); Early Syrian (Western Syria = EB IV); Proto-Elamite (Iran); Arabian Gulf Bronze (Arabia)
- c. 2000–1550: Middle Bronze Age*; includes Middle Bronze I–III (Levant); Old Hittite (Anatolia); Old Syrian (Western Syria); Amorite / Isin-Larsa and Old Babylonian (Syria and Mesopotamia); Old Elamite (Iran); Wadi Suq (Arabia)
- c. 1550–1150: Late Bronze Age*; includes Late Bronze I–II (Levant); Middle and Imperial Hittite (Anatolia); Late Syrian (Western Syria); Mittani and Middle Assyrian (Northern Mesopotamia); Kassite / Middle Babylonian (Southern Mesopotamia); Transitional and Middle Elamite I–III (Iran); Late Bronze and early Iron I (Arabia)
- c. 1150–550: Iron Age*; includes Iron I–III (Levant); Phrygia, Lydia, Urartu (Anatolia); Neo-Assyrian (Northern Mesopotamia); Neo-Babylonian (Southern Mesopotamia); Neo-Elamite I–III and Media (Iran); Late Iron I and Iron II (Arabia)
- c. 550–300: Achaemenid Empire*

Key Terms and Concepts

Desert Kites: Long dry-stone wall constructions found in the deserts of Jordan, the Negev, and the Sinai.

Gravity-Flow Irrigation: Irrigation systems, small or large, relying on gravity and slope (natural or artificial) in order to conduct water to the fields (as opposed to systems relying on water-lifting devices)

Holocene Humid Period (HHP) or Holocene Climatic Optimum (HCO): warm and moist period that spanned the early to mid-Holocene (c. 9750–4000), with considerable chronological and temporal variation over the Middle East.

Hydraulic Hypothesis: Theory, proposed by K. A. Wittfogel in *Oriental Despotism: A Comparative Study of Total Power* (1957), according to which the needs for large-scale irrigation was the primary factor leading to the emergence of centralized authority and administrative bureaucracies, resulting in greater political integration.

Mustatils (“Rectangles”): Large prehistoric rectangular monuments made of sandstone walls, found in Northwest Arabia.

Qanat: Subterranean irrigation system bringing water from an aquifer to surface fields.

Rapid Climate Change (RCC) events: abrupt changes in the global or regional climate that develop over one or a few human generations, which have been suggested as triggers for social development or collapse. Notable examples

are the Younger Dryas (see below), the 8.2ka event (6200), the 4.2ka event (2200), the 3.2ka event (1200), and the 9th-7th c. “Assyrian megapluvial and megadrought.”

Younger Dryas (c. 11,000–9750): final stage of the Pleistocene Epoch; brief return to glacial conditions, temporarily reversing the gradual climatic warming started around 18,000.

Zone of Marginal Cultivation: The region, in Northern Syria and Northern Iraq, characterized by annual rainfall between 200 and 300 mm/y, that lies at the transition between the Zone of Secured Dry-Farming to the North-East (the Taurus and Zagros ranges and their piedmonts) and the Arid Zone to the South-West (Jordan, South-Eastern Syria, Central and Southern Iraq) where agriculture is entirely dependent on irrigation.

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