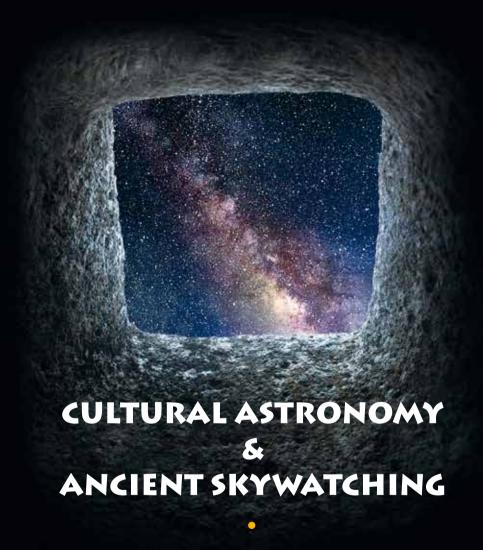
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# THE PERENNIAL CYCLES OF THE UNIVERSE AS SYMBOLIZED IN HITTITE YAZILIKAYA

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**Abstract:** In 2019 it was proposed that the rock sanctuary of Yazılıkaya, which is considered one of the holiest places in the Hittite kingdom, had a calendrical function (Zangger & Gautschy, 2019). The 64 preserved rock-cut reliefs of deities in Chamber A can be arranged in groups to mark the days, synodic months and solar years. This arrangement was made in order to keep track of synodic months and solar years and/or to display an accurate date during monthly and annually recurring festivals (Demirel 2017). Here we aim to elaborate on three questions not addressed at the outset: Firstly, why do the figures used for counting the days (Reliefs 13–41) differ in character, whereas those for counting months (Reliefs 1–12) and years (Relief 46a–63) are virtually identical with each other? Secondly, what is the meaning (technically or metaphorically) of the main panel (Reliefs 42–46)? Thirdly, how can the symbolism of Chamber B be interpreted?

**Keywords:** ancient calendars; archaeoastronomy; Bronze Age Anatolia; Hittite religion; lunisolar calendar; Yazılıkaya

### Introduction

In 2019 it was proposed that the rock sanctuary of Yazılıkaya, which is considered one of the holiest places in the Hittite kingdom, had a calendrical function (Zangger & Gautschy, 2019). The 64 preserved rock-cut reliefs of deities in Chamber A can be arranged in groups to mark the days, synodic months and solar years. This arrangement was made in order to keep track of synodic months and solar years and/or to display an accurate date during monthly and annually recurring festivals (Demirel 2017). Here we aim to elaborate on three questions not addressed at the outset: Firstly, why do the figures used for counting the days (Reliefs

13–41) differ in character, whereas those for counting months (Reliefs 1–12) and years (Relief 46a–63) are virtually identical with each other? Secondly, what is the meaning (technically or metaphorically) of the main panel (Reliefs 42–46)? Thirdly, how can the symbolism of Chamber B be interpreted?

# Indicating the days

The 30 relief figures that indicate the days of the month on the western wall of the sanctuary's Chamber A differ in attitude, attribute, and dress. In our model, winged (celestial) deities correspond to the days of the waxing moon, and mountain (terrestrial) gods with fountains flowing off from their robes are the waning days of the moon. We

interpret the centre of the sequence, clearly emphasised with the depiction of the bullmen (Reliefs 28-29), as the day of the full moon. The original model for the Yazılıkaya lunar month procession may have associated the days with different distinctive deities, each a personification of a day of the lunar month. A similar panel with 14 gods depicting the 14 days of the waxing moon is found in Egypt in the ceiling of the hypostyle hall of the Temple of Hathor at Dendera (Fig. 1). Although the ceiling relief is from the later Ptolemaic era, lists of days of the lunar month are well documented from earlier times, and most of those texts mention days from the waxing half of the month. The sequence at Dendera proceeds from left to right. The sequence at Yazılıkaya runs in the opposite direction, but the full-Moon day is highlighted in both instances. At Dendera, it is symbolised with a disk bearing the eye of Horus on a sickle-shaped support stand attended by the god Thoth; at Yazılıkaya, it is marked by two bull-men, who carry a similarly sickle-shaped vessel which represents the Luwian hieroglyphic sign for "sky".

## The main panel

The principal deities at Yazılıkaya are the Hurrian storm god Teššub; his wife, the Hurrian goddess Ḥebat; and their son Šarruma. Although the links between them are controversial, these gods were associated with the Storm God, the Sun Goddess of Arinna, and the Storm God of Zippalanda, respectively, in the Hittite pantheon. Their names were written with Luwian hieroglyphic signs but in the Hurrian language. Evidently, parts of the system were introduced from somewhere

else and overlaid upon local Anatolian belief systems thousands of years old. It is clear the Hittite state pantheon emerged from the most diverse local pantheons in Anatolian and Syrian cities.

central gods residing on chamber's north face rule over the entire pantheon, which is symbolised by the rest of the figures. This zone in the chamber, by its position to the north and at the focus of an assembly of celestial and cosmic gods, reasonably references the northern celestial realm, centred on the north celestial pole and hosting the circumpolar constellations. The north celestial pole is the unmoving spot around which the sky, and so the entire universe, seems to turn. In traditional cosmology, it stabilizes the cosmos and governs its behaviour. Chamber A as a whole can thus be viewed as symbolising everything existing on Earth plus the sky as hinted in the symbols above and below the two bull-men (Relief 28 and 29).

Chamber B was designed to reflect the reminder of the cosmos, the netherworld. The 3.4 m tall relief of Nergal (Relief 82), the sword god of the underworld, the additional twelve gods of the underworld (Reliefs 69-80), the narrow passageway covered with water. All these elements fall into the appropriate iconography. They symbolize the southern sky and the ocean and thus reflect a transient death – the dying of the sun at night, the time the sun spends in the south during the winter, the temporary vanishing of the Pleiades and other stars after their heliacal setting. It is a death that is overcome owing to the perennial celestial cycles.



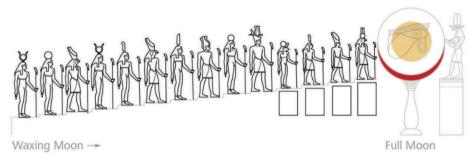


Fig. 1. Waxing days of the lunar month depicted and as Hittite deities in Yazılıkaya's Chamber A (above; Reliefs 28–41) and as Egyptian deities in the Temple of Hathor at Dendera (below). The more than 1000-year older version in Yazılıkaya reflects the movement of the Moon astronomically correct from right to left. In both cases the full Moon coincided with the sickle-shaped vessel highlighted in red.

All things considered, the rock sanctuary Yazılıkaya transmits images rooted in the earliest historical civilisation (Krupp, 2005). It depicts the whole habitable world extending around this centre – earth, heaven, underworld - the system created by the paradigmatic work of the gods when they organised space into the three cosmic levels. Yazılıkaya even permits the passage from one cosmic region to another – from heaven to earth and from earth to the underworld. The religious calendar commemorated in the space of a year all the cosmogonic phases and thereby repeated the act of the creation - and Yazılıkaya displays that the timing was kept accurate. The system works in perpetuity – and could be reactivated today.

### Acknowledgements

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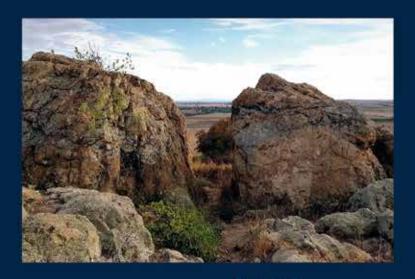
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Zaychi vruh (Kabyle), Yambol district. Artificially hewn out of the rock trenches, oriented East—West and North—South, used for observations of the Sun in *its extreme positions on the visible horizon* (solstices and equinoxes) and *culminations* of bright luminaries. An additionally leveled rock, located in the northeast, allows determination of the summer solstice. This device could be used for measuring time intervals longer or shorter than a day.