

Astronomic-statistical Analysis of Circular Symbols on Golden Hats (Bronze Age)

ANDREAS FULS¹

¹Technische Universität Berlin, Institut für Geodäsie und Geoinformationstechnik,
Straße des 17. Juni 135, D-10623 Berlin, Germany
fuls@igg.tu-berlin.de

The interpretation of astronomical and calendarical symbols is often criticized as incidentally. The fortuity depends on the number of possible combinations as well as the expected tolerance of the astronomical period. In this paper, the astronomical interpretation of iconographic symbols on golden hats from the Bronze Age will be analysed to check its statistical significance.

The four golden hats (Schifferstadt, Avanton, Ezelsdorf, and Berlin) have 10 to 20 zones with a different number of symbols. The number of circles of each symbol and the number of symbols from one or more zones are multiplied in a first step. The total amount is interpreted as a number of days. In a second step the number of days is compared to mean astronomical cycles like the synodic month or the tropical year (Menghin 2000, Fuls 2004), but the results are often criticized as incidentally.

Do the circular symbols on the golden hats represent sophisticated astronomical knowledge during the Bronze Age? Or is it just artistic decoration?

Literature

Fuls, Andreas (2004): Archäoastronomische Anmerkungen zu bronzezeitlichen Goldhüten und ostfriesischen Kultbauten. In: Huber, Florian and Rottländer, Rolf C. A. (ed.): *ORDO ET MENSURA VIII*, Scripta Mercaturae Verlag, St. Katharinen (2004), p. 39–57.

Menghin, Wilfried (2000): Der Berliner Goldhut und die goldenen Kalendarien der alteuropäischen Bronzezeit. In: *Acta Praehistorica et Archaeologica* Vol. 32, Staatliche Museen zu Berlin.