

Occurrences of Cupstone

Cupstones (Schalensteine) are slabs of rock with artificial cavities, so called „Schalen“ (cups / bowls), in various forms, depths, numbers and sizes. They can be found in the whole Alps region and northern Europe. On some rocks petroglyphs are located next to cups (e.g. in Val Camonica), where the cups are most likely older than the glyphs.

The Pfitscher Saddle (also Pfitscher Jöchel) in the Texel group near Merano is one of the biggest agglomerations of Cupstones in the Alps.

Origin and meaning of the cups

The origin of the cups is not fully clear. Several alternatives are being discussed:

- Natural origin due to weather beaten
- Pastime of bored shepherds
- Creation by drilling, scraping, hammering

A lot is suggesting an artificial origin of the cups, a significant age and a cultic purpose. Consequently, the question regarding their meaning needs to be asked. Possible alternatives are e.g.:

- Markings for ways and borders
- Calendars or displays of stellar constellations
- Cultic productions of stone dust
- The cups serve as light carriers

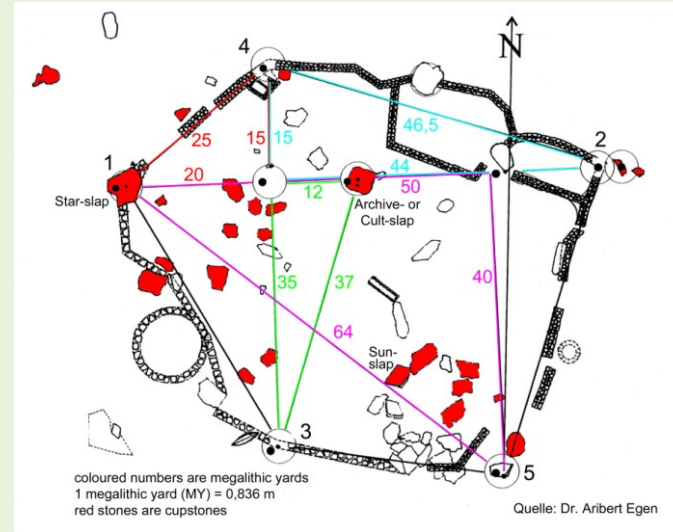
Some of the cups seem to hint at astronomical meanings. However, this does not exclude additional intentions for other cups.

The enclosing wall

The approximately 25 Cupstones at the Pfitscher Sattel are mostly enveloped by an enclosing wall made of layered slabs of mica schist. They form an asymmetric pentagon, which can be constructed from a number of Pythagorean triangles (rectangular triangles with integer sides), if the dimensions are given in megalithic cubits. This is a standard unit (0,836m) used during the Stone Age all over middle Europe. The construction of the complex suggests a megalithic culture with the main axis directed towards the East.

In the North-East corner are two chambers separated by a large chipped (?) rock.

Some consider the walls to be modern cattle compounds and former shepherds' huts. However, this opinion – if correct – does not contradict a much earlier construction of the enclosing wall.



The surrounding area contains indications of a very early presence of people around the saddle: A middle stone age resting place for hunters near the “Oberkaser“ (ca. 5th millenium BC), a place for burnt offering next to the “archive slab” around 1200 BC and the discovery of a bronze age spearhead on the Rötelspitze (ca.1100 BC) have been documented archaeologically, so far.

The Cupstone

Within the walls ca 25 slabs of rock show cups. Three especially striking slabs have been given (modern) names according to current interpretation:

The „**Archive or Cult slab**“ is a ca. 2 x 2 m big plain slab of rock with many round or half-moon shaped cups, partially connected by grooves. The distance between one cup and a striking T-shaped marking is exactly two megalithic cubits (length reference)



The „**Sun-slab**“ is a polished rock with more than 100 cups in an ellipsoid formation of other Cupstones. Noteworthy are the concentric circles often attributed to the sun in early cultures.



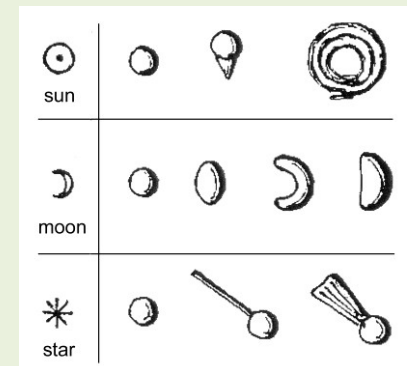
The „**Star-slab**“ in the West has numerous cups and meandering lines. According to current knowledge it is the most important Cupstone of this cultic site. Some of the cups can be interpreted as sight lines for sun, moon and star risings and as displays of stellar constellations.



Astronomical bearings and age

In prehistory sun observatories – e.g. Goseck in Sachsen-Anhalt or Stonehenge in South England – a constructional orientation towards summer / winter solstice was attempted. At the Pfitscher Saddle some special cups and engravings on the Star-slab indicate respective bearings towards the eastern horizon. Hence, they act as markers for the rising positions of sun, moon or certain stars, comparable to landmarks on panoramic boards on look-outs.

While for sun and moon the bearings on the horizon during solstices are only subject to minor changes over the millennia, this is not the case for stars due to the earth's precession. Hence, the stars' bearings are only exactly valid for one point in time. Examinations of the risings of 18 bright stars in various epochs indicate as most likely time for the observations and, hence, origin of the respective cups on the slabs about 2450 BC.



Cup symbols for Sun, moon and stars

The significance of this cult site

The Cupstones at the Pfitscher-Saddle are „the most impressive stone monuments of South Tyrol“ (Menara) and contain a wealth of astronomical information and knowledge of the people in early age (Egen). Therefore they are of more than regional significance and require an increased protection against change and destruction. Hence, the Cupstones should not be stepped on, painted or their position changed.

Please protect this extraordinary cult site!

Literature

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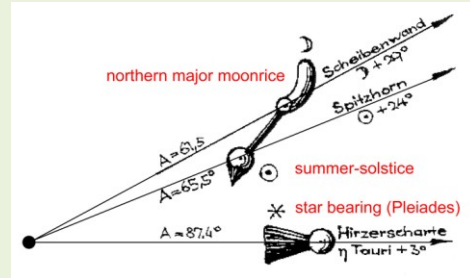
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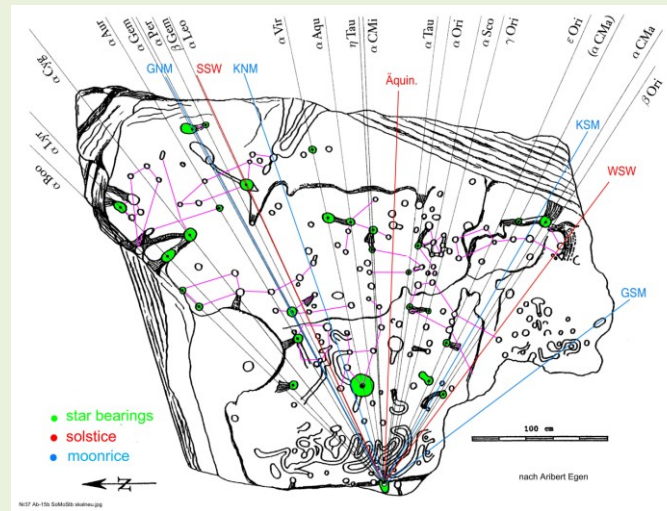
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Hesiod: Werke und Tage, Reclam Nr. 9445 (Hesiod lebte etwa zwischen 740 und 670 v. Chr.)



Example for a moon, sun and star bearing



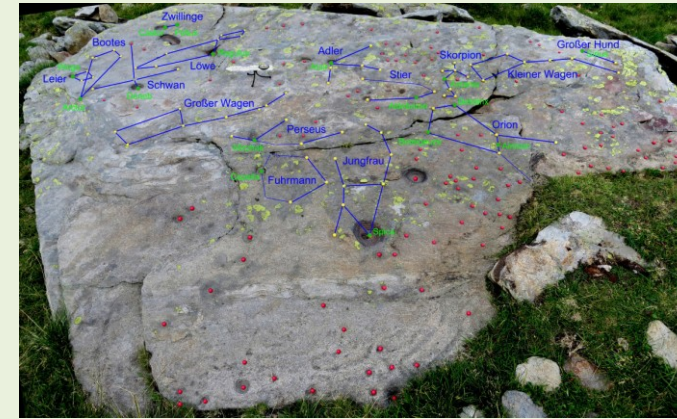
Bearings on the star slab

With the star bearings it was possible for the first time to fix an exact date for a part of the Cupstones, but we do not know why the early people decided to observe the risings of sun, moon and stars from this remote location. Presumably the knowledge was part of an agricultural calendar (see Hesiod, Works and Days) and the observations probably also served a cultic purpose. Maybe the priest astronomers were the “masters of time” for the people in the valley.

According to current knowledge the early documentation of the star risings on the Pfitscher Saddle is unique. It is probably one of the oldest observatories in the world.

Constellations on the rocks

The 19 proven star bearings need to be marked for identification. The early observers solved this issue by forming the respective constellations for the marked star. They are most likely the oldest display of constellations world-wide. Especially these correlations are a clear indication for the correctness of the presented thesis. The orientation of the constellations on the slab mirrors their appearance on the horizon, meaning the slab does not show us a direct display of the starry sky.



A peculiarity on the star slab are the Big and Little Dipper. Supposedly this documents the observation of the unmoving celestial pole, which was considered especially holy in many ancient cultures' mythologies as it was encircled by all other stars. The permanently visible circumpolar stars have been used for chronometry and determination of the seasons since the earliest times.

On other Cupstones more astronomical references and constellations have been found. These and other findings are the aim of future research.

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Cupstones at the Pfitscher-Saddle

Sanctuary in the mountain and astronomical observation in the copper age