

The Wheel of the Zodiac at the Ancient Synagogue

The Wheel of the Zodiac ('Galgal Ha'Mazalot' גלגל המזלות) appears on the mosaic floor of an ancient synagogue from the 5th century, found in Israel, in Kibbutz Beit Alpha.



The center of the wheel depicts Helios, the Sun-God in his chariot, drawn by four horses. Surrounded by the 12 signs of the zodiac and framed with four figures that represent the seasons.

NOTE that the images of the Four Seasons that surround the wheel are not placed next to the beginning of the zodiac signs that are normally associated with the seasons, i.e. Aries, Cancer, Libra and Capricorn, but next to the signs just before them.

It is quite possible that this depicts the cycle of the seasons in the Sidereal Zodiac!

The Sidereal Zodiac is based on the actual constellations and is unchanging, whereas the zodiac that is commonly used in astrology is the Tropical Zodiac, which follows the seasons, beginning with Aries at the Spring Equinox. Due to the phenomenon of the Precession, the Vernal (Spring) Equinox has shifted from the 'original' point of the Ram/Aries constellation into that of the Fishes/Pisces. In the 5th century the Vernal Point would have been in the latter part of the Fishes/Pisces constellation, and the other seasons would follow: The Summer Solstice/Cancer in the constellation of the Twins/Gemini, Autumnal Equinox in the Scales/Libra, and the Winter Solstice/Capricorn in the Archer/Sagittarius.

This might be the case of 'cultural memory' of the time when the Tropical and the Sidereal zodiacs matched (about 2000 BCE), or evidence of deeper knowledge of the sky, or simply artistic license... Information provided at the location explains that this was commissioned by a local artisan, so any assumption is fair game.

Another 'hidden knowledge' may be gleaned from the fact that the signs of Cancer and Leo are placed at the top of the wheel. Tropical Cancer is where the Sun reaches its highest elevation (declination) in the northern hemisphere, in the summer. Helios, the Sun-God in the center panel emphasizes the Sun as the 'maker' of the seasons of the year. In ancient astrological texts Cancer is also called 'The Sign of the World'. Another possible reason for the placement of Cancer and Leo on top might be the primacy of these two signs as the astrological 'homes' of the Sun and the Moon - the two Luminaries that were assigned to 'Rule by Day and by Night' (Genesis 1:14-16).

More information on the Discovery:





The ancient synagogue of Beit Alpha is located in the Beit She'an Valley, in the north-east of the country. The nearby ruins of *Khirbet Beit Ilfa* preserve the ancient name.

The mosaic floor of the synagogue was discovered in 1929, when members of *Kibbutz Beit Alpha* dug irrigation channels for their fields. Later findings determined that the synagogue had stood in a Jewish village of the Byzantine period (5th-6th centuries).

The mosaic floor of this synagogue is one of the finest uncovered in Israel. It is unique in both motifs and workmanship. The synagogue itself was small and simply built, but its mosaics represent a folk art that is striking, very colorful and rich in motifs. The synagogue was in use during the Byzantine and the Early Islamic periods (7th-8th centuries).

The synagogue is oriented southwards, towards Jerusalem. It measures 20 x 14 m. and consists of a courtyard, a vestibule and a prayer hall. The walls are of undressed stone, with plastered inner and outer faces.

The Mosaic Floor of the Prayer Hall

The entire prayer hall is paved in mosaic. Two dedicatory inscriptions, one in Aramaic and one in Greek, are situated just inside the main entrance to the prayer hall, flanked by a lion and a bull facing each other. The Aramaic inscription states that the mosaic floor was laid during the reign of Emperor Justin (probably Justin I, beginning of the 6th century) and that the cost was covered by donations from members of the community. The Greek inscription reads: May the craftsmen who carried out this work, Marianos and his son Hanina, be held in remembrance.

The colorful mosaic floor of the nave is divided into three distinct panels, all enclosed by a decorated band with a variety of motifs: geometric patterns, fruit, birds and animals. The panels depict, from north to south:

The binding of Isaac as described in Genesis 22:1-19. On the right is an altar with flames rising from it. Abraham stands next to it, one hand holding his son Isaac and the other a

long knife. The names of Abraham and Isaac are inscribed above the figures. A hand emerges from a cloud above Abraham and Isaac, symbolizing the angel of God. Nearby are the Hebrew words meaning "lay not your hand [upon the lad]". The ram and the two servants with the donkey are depicted behind Abraham.

The Zodiac appears in the central panel. These astrological signs, though condemned by the prophets, were widely used as decorative elements in both churches and synagogues of the Byzantine period. The twelve signs are arranged in a circle and accompanied by their Hebrew names. In the center of the zodiac, the sun god Helios is represented seated in a chariot drawn by four horses. The four seasons appear in the corners of the panel in the form of busts of winged women wearing jewels; they are inscribed with the Hebrew months initiating each season: Nisan (spring), Tamuz (summer), Tishri (autumn) and Tevet (winter). These astrological signs, though condemned by the prophets, were widely used as decorative elements in both churches and synagogues of the Byzantine period.

The excavations were directed by E.L. Sukenik assisted by N. Avigad on behalf of the Hebrew University of Jerusalem.