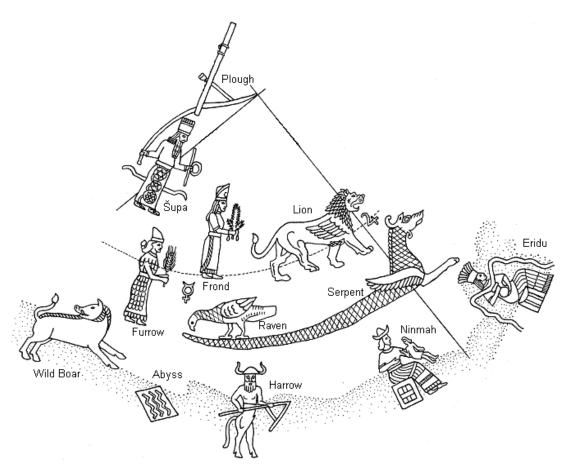
It is now well known that the constellations of the Zodiac originated in the ancient land of Babylonia (modern day Iraq). Yet, despite more than a century and a half of scholarship, very little information on this subject has been made accessible to the non-specialist. We are very grateful to Gavin White for allowing us to reproduce excerpts of his recently published <u>Babylonian Star-lore</u>. Over the forthcoming months these articles will help to address this deficiency by presenting the lore and symbolism of the twelve Babylonian Zodiac constellations.

The excerpts reproduced on this site are taken, with the author's permission, from the recently published book 'Babylonian Star-lore' by Gavin White.

THE PRE-AUTUMN EQUINOX PERIOD (Pages 32-3)

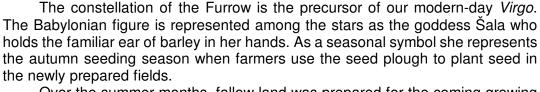
The coming of autumn heralds the start of the farming year and the welcome return of the rains. All manner of plants produce their fruits and as they fall to the earth and perish so do they set their seed within the earth. Farmers too, acting in accordance with nature's cycles, start to sow their newly prepared fields with the coming season's barley.



Fourth Sector – the constellations rising before the autumn equinox



The autumnal abundance of the earth is symbolised by the two-fold goddesses of the Frond and the Furrow, which respectively represent the two principle cultivated foodstuffs of Babylonia – dates and barley. Dates are especially valuable as they provide a rich source of nourishment that is easily preserved for future use. The constellation of the Frond, which depicts the goddess Erua with a branch of the date palm, makes its annual appearance in the heavens as the dates start to ripen on the frond.



Over the summer months, fallow land was prepared for the coming growing season. The fields were first cleared of natural vegetation before being levelled, and then they were ploughed and harrowed to break down the soil to a workable state.

What amounts to a 'rustic calendar' can be seen among the autumnal stars, where the constellation of the Harrow, which symbolises the preparation of the fields, rises at the start of month 6. This is then followed, at the end of the month, by the rising of the Furrow that inaugurates the seeding season.

Watching over the agricultural preparations from on high is the figure known as Šupa. He represents the high god Enlil, and his celestial image emphasises the two most prominent facets of the god's character. Firstly, he is the principle god of farmers and as such he holds aloft the constellation of the Plough; secondly, he is the leader of the Babylonian pantheon and to indicate his exalted rank he holds before him the symbol known as the 'rod and ring'.

The Wild Boar is the final symbol of the farmers. The boar's habit of churning up the earth in search for its food has led it to be called 'nature's own agriculturalist'. It is thus a fitting astral symbol for Ningirsu, the son of Enlil, who like his father, was one of the principle farming gods of ancient Babylonia.

The farming themes found in the autumnal skies all revolve around the symbolism of seeding. Although planting the seed effectively brings about its own 'death', it is only through this transformation that a new plant can come

forth. As a mythical metaphor, the dying seed bringing forth a new plant can be compared to the death and resurrection of the dying god, whose demise is but a prelude to his inevitable return from the underworld, bringing in his wake all of nature's bounty.

The final group of constellations found in the autumn skies symbolise the return of the rainy season. The Raven is sacred to Adad, the god of rain and storm; and its omens appropriately predict the nature of the coming rains. On the star-map the Raven is positioned sitting at the end of the Serpent's tail – in effect waiting for the summertime drought to come to an end.

The Star of Eridu is similarly concerned with the return of the rains. But unlike the Raven that symbolises the heaven sent rains, the Star of Eridu's overflowing vases emphasize the waters of springs and rivers returning to full strength after their summer subsidence.







60 Šala with her barley stalk, from one of the Uruk tablets

THE FURROW (Pages 115-8)

The origins of *Virgo* can be traced back to the Babylonian constellation called the Furrow. Like the familiar Greek image, the Furrow was portrayed as a goddess bearing an oversize ear of barley. She symbolised the barley fields in early autumn when they are about to be seeded, and as may be expected her star was used in astrology to predict the success or failure of the coming harvest: 'If the Furrow is dark: the barley will fall short of its predicted yield, a shortage of barley and straw will befall the land'.

It would actually be more accurate to regard the modern image of the *Virgin* as a combination of two independent Babylonian constellations – the Furrow and the Frond, which occupy the eastern and western sectors of *Virgo* respectively.

The Frond, which stands immediately behind the Lion, was depicted as a goddess holding a frond of the date palm – this attribute has, in fact, been retained in many images of *Virgo*, where she bears her barley stalk in one hand and a date palm frond in the other (*fig 61*).

We can speculate that when the ecliptic constellations were formulated into 12 zodiac signs the independent symbolism of the Furrow and Frond were combined into a single unified figure, which now represented two of the mainstays of the Babylonian diet – unleavened barley bread and dates. It is notable that the Babylonian foods have been retained in her imagery, all the more so, as Greek agriculture was dominated by wheat and olives.



62 The Arabic *Virgo* from the *Uranometry*

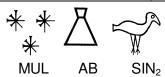
The end result of combining these two Babylonian constellations into the figure of *Virgo* is that she is now one of the largest constellations in the sky. She is positioned rather uncomfortably, lying prone along the ecliptic with her head ungraciously set below *Leo's* tail.

When Greek star-lore was transmitted to Arabia *Virgo's* constellation image was modified again. Her barley-stalk, a meaningless symbol to the desert- dwelling Arabs, was omitted altogether and she suffered the further indignity of having one arm cut off above the elbow and stuck onto her thigh (*left*) – such brutality being necessary to squeeze her oversize image onto the star-map.



61 The *Virgin* from the 19th century Aspin star atlas

The constellation of the Furrow is usually written 'Mul Ab-sin'



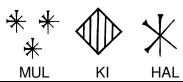
These signs are read as *šer'u* in Akkadian.

The Sumerian word **Ab-sin** signifies a seeded furrow. The **Ab-sign** may depict a temple mound. It usually signifies a 'shrine or precinct', but its meanings also include an 'opening or niche'.

The Sumerian word **Sin** means 'to sieve or sift'. The name may encapsulate some kind of allusion to the furrow being carefully seeded.

On a pictorial level, there may be further allusions to the fields being 'the precinct of the birds', as well as a possible reference to the star-map, where the figure of the Raven stands before the Furrow.

In some astrology texts the Furrow can also be written 'Mul Ki-hal'

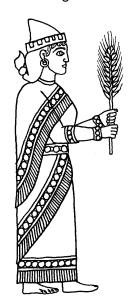


The **Ki-sign** probably depicts a plot of land. It is used to signify a whole range of ideas from 'ground or floor', to 'place or abode', to 'district or region' and even to 'the whole earth' as opposed to heaven.

The **Hal-sign** can be used to write the verb 'to divide'. So the likely meaning of these signs would be something like 'divided earth', ie a furrow.

During the summer months fallow land was prepared for the forthcoming growing season. The fields were first irrigated to soften up the soil, and then progressively worked with a variety of ploughs to break down the soil. The seeding-season commenced in month 7, shortly after the rising of the Furrow, and continued through months 8 and 9. In the *Menologies* a special *akitu*-festival to mark the seeding season was celebrated in month 8.

Rather than sow the fields by hand, which is rather haphazard and uneconomic, Mesopotamian farmers developed a special plough called the seed-plough to plant the seed directly into the furrow. As a general rule the furrows were spaced roughly ³/₄ of a metre apart – the spacing between the furrows facilitated irrigation, and allowed easy access for weeding and harvesting. To this day, very much the same methods are used in undeveloped areas of Turkey.



63 A modern rendition of the Furrow

The image of a barley sheaf actually appears in the cuneiform writing system as the sign known as Nidaba (*right*); it is occasionally used to write 'grain', but is more often used with a divine determinative to signify Nisaba, the ancient goddess of grain. Yet despite Nisaba's importance in Mesopotamian culture, all available star-lists record the regent of the Furrow as Šala, a little known goddess who originated in the Hurrian pantheon. Šala was best known as the wife of Adad, the fecund god of the storm, who was the regent of the nearby constellation of the Raven. Her barley



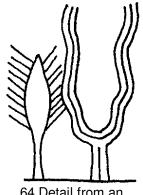
The Nidaba-sign

stalk and Adad's lightning bolt are sometimes depicted together on entitlement stones (*fig 64*). Their proximity on the star-map and their marriage symbolise the newly seeded fields made fertile by rain and flood.

As Sala and Adad are both Hurrian deities, they are unlikely to have been assimilated into the Mesopotamian pantheon any earlier than the last centuries of the 3rd millennium when the Hurrian peoples first appear on the historical horizon. Their incorporation into Babylonian star-lore can be best understood as an attempt to integrate the Hurrians

into the wider Mesopotamian world.

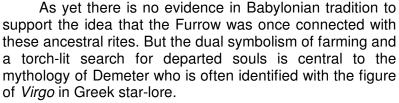
The symbolism of the Furrow and Raven clearly embody the autumnal themes of barley seeding and the start of the rainy season, which is wholly appropriate for a $3^{\rm rd}$ millennium context. However, way back in the $5^{\rm th}$ millennium, when I believe that many of the Babylonian constellations were originally created, these stars would have risen in the late summer and would therefore have embodied a rather different seasonal symbolism.



64 Detail from an entitlement stone

The cultic nature of late summer is dominated by the observances for the dead. The mourning rites of Dumuzi were celebrated in month 4, immediately following the summer solstice, and the ancestors were honoured in the great Brazier festival of month 5. In this ritual the ancestors were invited back to the world of the living for an annual feast in their ancestral homes. The most significant part of the ceremony involved lighting torches and braziers to guide the ghosts

of the ancestors back from the darkness of the underworld.



Demeter was typically portrayed as a goddess holding an oversize ear of wheat (the Greek equivalent to barley) and a flaming torch with which she searched the underworld for her lost daughter. Significantly, she is also occasionally depicted along with a bird, which several writers on early Greek religion have independently identified as a 'soul-bird' (fig 65).

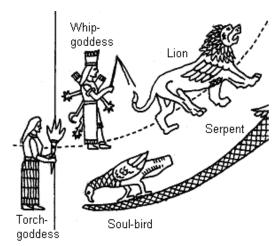


65 Demeter with her characteristic symbols from a Greek vase

In light of this, I believe that there is a distinct possibility that the symbolism of Demeter actually records the changing attributes of the Babylonian constellation from an archaic ancestral goddess holding a flaming torch who was originally associated with late summer to a farming goddess with an ear of barley associated with the autumn seeding season. In other words, the symbolic attributes of the goddess have ultimately been defined by the changing location of her constellation in the cultic calendar.

The archaic forms of the Furrow and the Raven can now be tentatively restored as a 'Torch-bearing goddess' and a 'Soul-bird', which represents an ancestral ghost returning from the realm of the dead (*right*).

See also: the Frond of Erua, the Harrow, the Raven, the Plough, Appendix 2 and 16, figs 67 & 161



66 Proposed reconstruction of the ancient summertime stars