

THE BEE-RIDDLED CARCASS,

Conrad Bérubé. *Griffith Journal of the Griffith Observatory*, July 1991 Observer:

For many centuries scholars have puzzled over the riddle of Samson: "Out of the eater came something to eat, out of the strong came something sweet" .(1) If you don't remember your Bible lore and can't figure out the riddle, don't be too frustrated, the Philistines couldn't figure it out either and had to resort to collusion with Samson's wife to discover the answer: that Samson had found and eaten honeycomb in the carcass of a lion,

"...he turned aside to see the carcass of the lion: and, behold, there was a swarm of bees in the carcass of the lion and honey. He scraped it out into his hands, and went on eating as he went."(2)

This story bears a certain similarity to a Greek myth which has come down to us via the Latin poets Vergil and Ovid (the latter's version given here):

"Aristaeus wept because he saw his bees killed, root and branch, and the unfinished hives abandoned. Scarce could his azure mother soothe his grief, when to her speech she these last words subjoined. 'Stay, boy, thy tears! Thy losses Proteus will retrieve and will show thee how to make good all that is gone. But lest he elude thee by shifting his shape, see that strong bonds do shackle both his hands.' The stripling made his way to the sea, and bound fast the arms, wizard changed his real figure for a semblance false; but soon by the cords mastered, to his true form returned. Then lifting up his dripping face and azure beard, 'Dost ask,' said he, 'in what way thou mayest repair the loss of they bees? Kill a heifer and bury its carcass in the earth. The buried heifer will give the thing thou seekest of me.' The shepherd did his bidding: swarms of bees hive out of the putrid beef: one life snuffed out brought to birth a thousand."(3)



GENERATING

A

SOLUTION

The earliest mention of bees from bulls comes from Antigonos of Karystos dated at around 250 B.C.(4) The ancient Hebrews could very well have originated the story of bees generated from a carcass centuries earlier with the Samson tale.

Both of these stories seem to carry, more or less the same inference, that bees were spontaneously generated from the carcasses of dead animals. This concept of spontaneous generation, that one type of creature might be spawned from the decaying flesh of another was very widespread from ancient times up until the last century. Barnacles begetting geese; rags and wheat consorting to develop into mice; decaying bulls burgeoning into bees are but a few examples of the disparate progeny "observed" to be generated from vastly different parent species.

It has been theorized by others that stories of bees being generated from dead animals might be based on the observation of bees setting up shop in the sun-cured leather husks of large mammal carcasses.(5) In dry regions, lacking more appropriate nesting sites, perhaps this did happen on occasion. However, it seems unlikely that this would have

been observed often enough to account for the near universality of this motif-- for the notion of obtaining bees from a bull (or ox) carcass is one that exists in the literature from ancient Egypt to Elizabethan England(6). Perhaps, then there was occurring a confusion of several different species.

A SPECIALLY CONFUSING INTERPRETATION.

The very concept of a species is a relatively modern one. As any student of biology could tell you a species is a group of plants or animals which are reproductively incompatible with other groups-- that is, a horse and a burrow might breed to produce a mule but since the mule is incapable of reproduction we conclude that horses and burrows are not the same species, though close relatives. A wonderful variety may exist amongst a species, as attested to, in examples we are all quite familiar with, by the great diversity of traits amongst our own human races, or by that found amongst the domestic dog. The dissimilarity of appearance between a great dane and a chihuahua, again, members of the same species, would make it a forgivable offence were they confused as different animals. Conversely, it seems easy to imagine that those lacking the benefit of the work of Linnaeus and succeeding taxonomists might not distinguish between, say, honeybees and yellow jackets.

Honeybees and yellow jackets, though they share quite similar appearance have life-styles that are very distinct from one another. It is conceivable that confusion between bees, wasps and flies might account for these inferences of spontaneous generation.

Insects will take advantage of available resources quite quickly. Fly maggots will appear, as if out of thin air, very soon after garbage or carrion is left to their disposal, or rather to that of the parent flies, who do, of course, arrive at the scene out of thin air-- albeit by the grace of wings and not through spontaneous generation. Some carnivorous insects, such as *Vespula vulgaris*, the common yellow jacket wasp might quite logically be seen "swarming" over a carcass (actually they would be foraging) and be mistaken as bees.

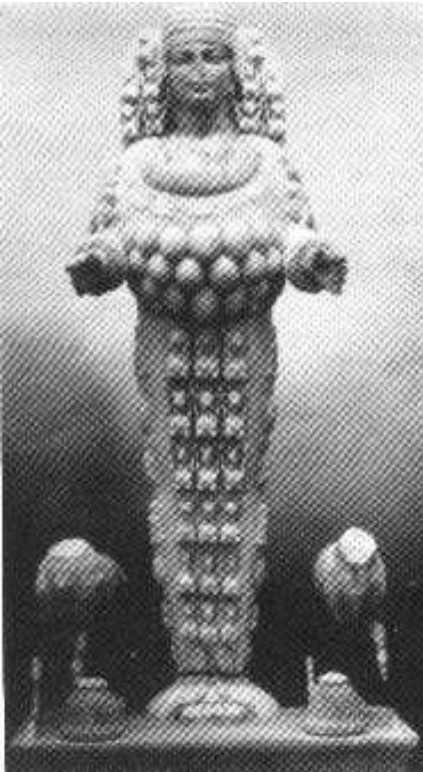


A blow fly, a syrphid fly, a honey bee and a yellow jacket

The drone fly, *Eristalis tenax*, strongly resembles honey bees in shape and coloration and has been implicated as involved in the Samson myth but it breeds in shallow water(7). The yellow jacket rears its young in papery nests usually underground.(8) Thus, neither beastie could have produced grubs in a carcass that would contribute to the impression of a hive existing there. However, the maggots of flesh flies (families Calliphoridae and Sarcophagidae), riddling the rotting flesh might easily be mistaken for the larvae of these "bees". If the stories of bees arising from the bodies of lion or bull are based on any actual biological associations then these result from misidentification of wasps and flies feeding on carrion.

Of course in this scenario we're left with the conundrum that honey would not have been produced in the carcass of the lion.

INTO THE MYSTIC.



Perhaps a less literal interpretation of these stories is in order. It could well be that the association of bulls and lions with bees was of a symbological nature. Symbols are often used in myths to express abstract ideas. The lion and bull were both symbols of fertility and virility in the ancient world and generally associated with those characteristics deemed ideally male. But, as virility is meaningless without fecundity, these male symbols are linked with that of female prolificacy and industry-- the bee. In the ancient Mediterranean world (including Classical Greece from whence the Aristaeus myth originates) the powers of fertility, both male and female (and their symbols), were under the auspices of a single androgynous goddess such as the famed Ephesian Artemis (whose temple and statue in Ephesus were one of the seven wonders of the ancient world). Images of the Ephesian Artemis were festooned with the images of bees, bulls, lions and other animals (and, according to some, her many-tiered "breasts" were actually the testes of bulls). Thus, the dichotomy of the sexes, as typified in so many sexually segregated daily social functions of the ancient world, was synthesized on a spiritual plane by such myths as of the lion and bull

spawned bees.

...AND LASTLY, ASTRALLY .

My favorite interpretation (since it is my own, original theory) is that these stories reflect an association not between bees and bulls or bees and lions, but rather between bees and a particular Bull and a particular Lion.

The production of honey is a seasonal occurrence. And the seasons of the year were demarcated by the appearance of certain constellations which have come down to us as the signs of the zodiac. Virgil makes explicit mention of the fact that bees are most likely to prosper during the sign of Taurus , when winter had receded and spring renewed the land and nectar was plentiful.(9) Taurus is, of course, the sign of The Bull. I believe that the story of Aristaeus' bees was a mythic device to link the calendric relationship of the constellations with Almost everyone has heard the epithet "April showers bring May flowers", and there is, similarly, an old bit of folk doggerel familiar to most beekeepers:

*A swarm in May is worth a load of hay,
A swarm in June is worth a silver spoon,
A swarm in July isn't worth a fly."*

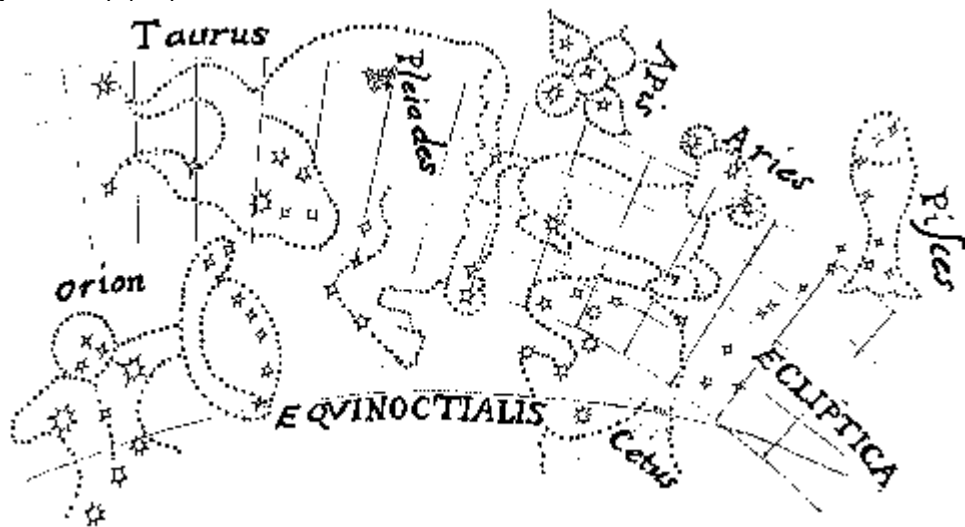
(indicating that the later in the season that a swarm is captured the less honey it will be able to store)

This might be rephrased to suit the ancients' calendar as:

With the rise of Taurus, there's bees a-plenty for us.

The myth of Aristaeus' bees could very well be an elaboration on the sentiment expressed in this little snippet of verse.

This idea might be bolstered by the fact that very close to Taurus can be seen a group of stars once identified as Apis, the Bee. Later it was called Vespa, the Wasp, becoming finally Musca (Borealis), the (Northern) Fly-- again evincing that some folks don't differentiate between the different types of insects. This constellation is no longer officially recognized and the stars that comprised it have been incorporated into the constellation Aries, which adjoins Taurus.(10)) The oldest reference to this constellation that I was able to encounter is from a star map by Petrus Plancius dated 1613(11), but the constellation could have come down through folk tradition from the ages of Ptolemy (the Orphic Greek cult envisioned the love-god Phanes, or Ericapaius ('feeder upon the heather'), as a "loudly buzzing celestial bee" but whether this referred to an actual constellation is unclear(12)). (The illustration below is from Christoph Cellarius' map of 1705 in which the figures are more simply drawn).(13)



star map showing the constellation Apis above that of Taurus (redrawn from Cellarius)

However, by a tantalizing coincidence the name by which the Egyptians referred to the Bull-god, represented by the constellation we now call Taurus, was Apis (or Hapis)(14). A few scholars have theorized that there is even a causal relation between his name and the Latin word for bee (again, apis)(15), although this is not a widely accepted etymology (it being more generally believed that apis is derived from opus, originally meaning "worker"(16) or perhaps apes meaning "without feet" an allusion to the fact that bees pass through a phase as legless larvae(17)). Nonetheless, it is more likely that Plancius' star map included a bee figure near Taurus through a mistranslation. A reference that Plancius cited in preparing his map was Ptolemy's star catalog, the *Almagest*, written in Greek during the second century A.D. Ptolemy, however, lived in a Greek colony of Egypt and would certainly have made comments concerning that country's constellations. Plancius could easily have confused a reference to the Egyptian Bull constellation (Apis), in the Greek text, with the Latin word for 'bee' (apis). (Moreover, the Greek word for bee is melissa and the Egyptian is afa-bat and I could find reference to neither in the *Almagest*(18)). We might expect a scholar of Plancius' day to be better acquainted with the Greek and Latin tongues than with the ancient Egyptian pantheon. But, the Greeks, Ptolemy and Antigonos, and the Latin poets, Ovid and Vergil, would not have been misled in such a linguistic labyrinth-- so we cannot account for the Aristaeus myth and the association of bees with bulls by this mistranslation. Neither, after all that, can I honestly claim that Plancius' bee constellation supports my theory (regardless of the many frustrating, though interesting, hours I spent trying to find where he came up with the constellation).



Lion with bee in mouth amidst seven stars and mystic symbols (from a red jasper cameo associated with a cult of Mithras redrawn from Ransome)

It is noteworthy that Aristaeus' formula produced only bees. Because Taurus is a spring sign no honey would be forthcoming until later in the season.

As Taurus marked the beginning of the beekeepers' season so the appearance of Leo, the Lion (or an analog), heralds its culmination in the honey harvest at the end of summer. That the Samson story, at least, has some astronomical overtones is fairly certain since most scholars agree that the Samson cycle is a grouping of older myths connected with sun worship (compare "Samson" to the Babylonian sun-god "Shamash"(19)). It is also certain that the Semitic peoples of Old Testament times (the setting for the Samson story is the early half of the tenth century B.C.(20)) were profoundly influenced by their contemporaries of Babylonia and Egypt, as well as the earlier Sumerians, whose domains surrounded the traditional "land of milk and honey". All recognized the figure of a lion (as well as that of a bull) in the heavenly menagerie which eventually became the Classical zodiac.(21) The Semites would have had as much need as their neighbors for astronomical references (and their associated myths) to mark seasonal cycles. However, because of Yahweh's injunction against other gods, the Semites might have felt a need to disguise their explicitly astronomical lore so as not to offend canonical law.



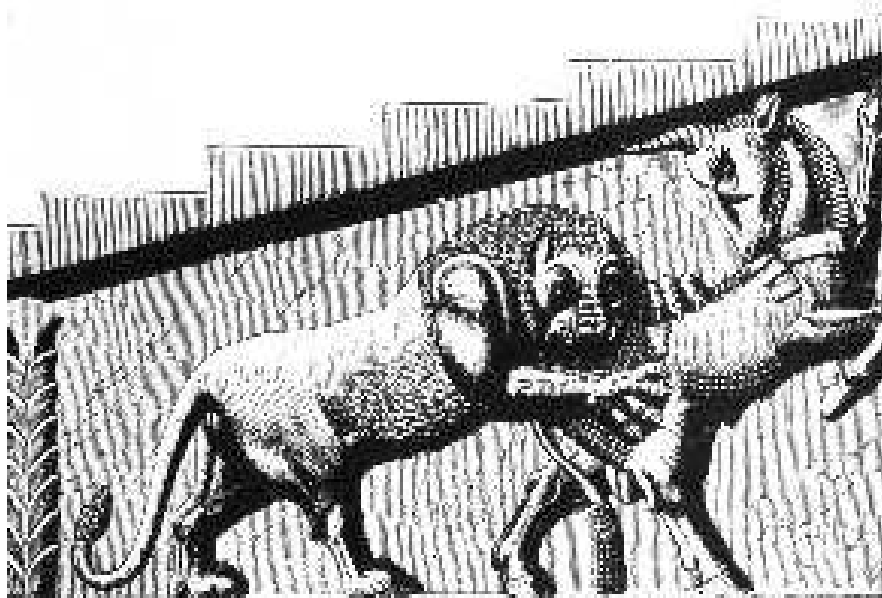
Lioness and bee (from an Etruscan gem-- redrawn from Ransome)--

Constellations were used throughout the world, including the Middle East and Greece, to regulate seasonal activities and ritual. The appearance of the Bull in the eastern sky might very well have been the signal to start preparing hives to catch the wild swarms that would soon appear 'out of nowhere', being cast off by established colonies after the winter's inactivity.

Several months later, when the Lion had, in its turn, appeared on the horizon, hives would be ready to harvest. Myths were very often created to link the cyclic appearance of figures perceived in the heavens with their analogues on earth. The Samson and Aristaeus myths very likely were narratives derived from these celestial heralds.



The Lion and Bull constellations were probably known in ancient Mesopotamia as early as the fourth millennium B.C. for Sumerian names for these figures of stars continued in use until much later. The Sumerians called Taurus "the bull of heaven" and also identified the familiar B-shaped Hyades as "the Bull's jaw". Willy Hartner, a German historian of science, believed the tradition of a celestial lion and bull is far older still and perhaps originated as early as 4000 B.C. Even then, he thought, people in the seasonal change. In particular, representations of combat between a lion and bull appear to symbolize the springtime "death" of the Bull in the "fire" of the setting sun, killed by the Lion which rules the sky high overhead on the meridian as the Bull sinks in the west. The lion-bull combat shown above was inscribed on a Sumerian shell goblet from 3000 B.C. The starry rosette in the horns of the bull may confirm its celestial identity (from Mesopotamian Archeology, P. Handcock; G.P. Putnam's Sons, 1912)



Of course, myths can work on many levels. The fact that a particular story may be neatly related to some occurrence or incident does not exclude its significance in relation to an entirely different phenomenon as well-- more than likely all of the above "explanations" of Samson's honey and the ox-born bee have contributed to its mystique. If the puzzle of the bee-riddled carcass cannot be said to be solved, the dimensions of the conundrum have at least been expanded to encompass the stars.



NOTES

The sun was in Taurus at the vernal equinox, that is the point when spring `officially' starts, for about two thousand years starting around 4,000 B.C. Likewise, Leo marked the summer solstice for about the same period.(22) The original Samson and Aristaetus myths probably have their roots in this period. It was not until a few thousand years later that the months corresponding to signs of the zodiac were `standardized'. By this time, because of the slight wobbling of the earth's axis of rotation that drives what is called the "precession of the equinoxes", the equinox and solstice had precessed into Aries and Cancer respectively. Astrology buffs still speak of someone born between March 21 and April 21 as being born under the sign of Aries, even though further precession makes the currently reigning constellation during this month Pisces-- and the last hurrah of that constellation at that. Within a few centuries the vernal equinox will move into the constellation adjoining Pisces and so will begin "the age of Aquarius".(23)

Petroglyphs found in atal Hu"yu"k, Turkey, which date from around 7000 B.C. seem to be day-tallies which mark the period from the vernal equinox to the date when bees would begin to swarm and, a few weeks later, when barley began to ripen(24). (Barley was the principal crop of the atal Hu"yu"k culture and honey would also have been an important food-- and the only sweetener available at the time.) The glyphs are composed of individual cells arranged in vertical rows and placed side-by-side to form a matrix roughly resembling a stylized honeycomb. It is convincingly argued that symbols contained within the cells of the "comb" denote lunar phases, festival dates, and important points in the life cycle of the developing barley crop and the metamorphosis of bee larvae. When counted from bottom to top and from left to right, the matrix can be used as a calendar which marks the period (48 days) from the first day of spring to the date when bees could be expected to start swarming (and by which time bee-havers should have prepared their trap-hives to catch this windfall). The final date of the matrix is a fortnight later (62 days after the vernal equinox) when the ear begins to form on barley. These honeycomb calendars, if that is what they are, were found beneath the sculpted heads of three bulls (an analog of Taurus

representing the three months of spring?) which are followed by the head of a ram (Aries?) which may denote the date for harvest to begin (when the brightest star in Aries, rose for its first annual reappearance in the night sky-- 76 days after the vernal equinox, barley ripens in an average of about 81 days at this latitude).

Very close to the area of the sky where Apis was envisioned is where the Pleiades are found. They are a very distinct cluster of six stars located near the ecliptic, the sun's path through the sky. Because of this, the rising and setting of the Pleiades were used by many cultures around the world to mark the passage of the seasons.(25) The Pleiades, interestingly enough, were perceived by the Chiriguana indians of South America as a swarm of bees, and their appearance was an important calendar mark (which indicated among other things that honey harvesting time was at hand).(26) The myth that explains this seems rather ribald and filled with innuendo but the gist of it is that two old-maid sisters dupe a pair of animal spirits into marrying them. Each sister gives birth the following day: the older sister bears a pair of birds of prey and the younger sister a swarm of bees-- which promptly flies off to the heavens to become the Pleiades.(27)

Other constellations representing bees, Apis Australis and Apis Indica were first charted in the southern skies by the Dutchmen Pietr Dirkz Keyser and Frederic de Houtman between the years 1595-1597. Apis Australis ('the Southern Bee') is now known as Musca (the Fly), and Apis Indica has become Apus, represented as something similar to a bird of paradise(28) (probably because someone, somewhere along the line confused Apis Indica, 'the Indian Bee' with Avis indica, 'the Indian Bird').(28) The star cluster of Praesaepe is also known as 'the Beehive' (apparently because of its resemblance to a swarm of bees or a skep) although this appears to be a relatively recent moniker and there are no myths (that I could find) connecting it with bees.

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