

## Khima

In the Tractate Brakhot of the *Babylonian Talmud* it is said that the Deluge was caused by two stars that fell from Khima toward the earth. The statement reads:

When the Holy One . . . wanted to bring a flood upon the world, He took two stars from *Khima* and brought a flood upon the world. (1)

I have already mentioned that Rashi, the medieval exegete whose authority is unsurpassed among the rabbis, says that in the quoted sentence Khima means a star with a tail, or a comet. This explanation found its way into the works of several gentile theologians. Should it be understood so that two large meteorites fell from a comet and falling on Earth caused tidal waves? Instances when meteorites fell while a comet was glowing in the sky are known, and the classic case is found in Aristotle. Should a meteorite equal in mass to the one which by its impact formed the Arizona crater fall into the ocean, tidal waves of a wide spread would result, possibly circling the globe. Then are we to understand the Deluge as a huge tidal wave rushing across the continents? This picture differs widely from the story in Genesis, according to which water was falling for a long period from the sky and the waters of the depths rose, covering the surface of the earth.

The Tractate Brakhot so explicitly points to the cause of the Deluge that before classifying the narrative in Genesis in its entirety as folkloristic imagery (which in part it most certainly is), and also before following Rashi's idea any further, we ought to inquire: Which celestial body is Khima? Is it correctly explained as a comet?

In the Old Testament Khima is mentioned in several instances. In Job, Chapter 9, the Lord is He who "removes the mountains . . . and overturns them . . . and shakes the earth out of her place . . . which commands the sun and it rises not . . . which alone spreads the heaven . . . which makes Aish and Kesil, and Khima, and the chambers of the south . . . ." In the King James Version these names are translated as Arcturus, Orion, and Pleiades. Chambers of the South are usually explained as constellations of the south.

Khima and Kesil are also named in Job, chapter 38, here again in a text that deals with the violent acts to which the Earth was once subjected: "... Who shut up the sea with doors [barriers], when it brake forth, as if it had issued out of the womb? ... [Who] might take hold of the ends of the earth, that the wicked might be shaken out of it? ..." The Lord asks Job: "Canst thou bind the chains [fetters] of Khima and loosen the reins of Kesil? Canst thou lead forth the Mazzaroth in its season? ..." Davidson and Lanchester wonder at the meaning of this passage: like the King James Version they translate Pleiades for Khima and Orion for Kesil. (4) Mazzaroth is left untranslated.

In Amos, chapter 5, once more, Khima and Kesil are mentioned in a verse that reveals the great acts of the Lord who "makes Khima and Kesil, and turns the shadow of death into morning, and makes the day dark with night: that calls for the waters of the sea, and pours them upon the face of the earth. . . ."

Hieronymus, also known as St. Jerome, the fourth century author of the *Vulgate*, the Latin version of the Old Testament, translates Khima as Arcturus

in one instance (Amos 5), as Pleiades in another (Job 38), and as Hyades in the third (Job 9):

	KHIMA	KESIL	AISH
Job 9:9	Hyades	Orion	Arcturus
Job 38:31	Pleiades	Arcturus	
Amos 5:8	Arcturus	Orion	

Similarly Kesil was translated by the *Septuagint*, the Greek version of the Old Testament that dates back to third century before the present era, as Hesperus, or the Evening Star, and in another instance as Orion. Aish, translated as Arcturus in the Vulgate, is rendered as Pleiades by the Septuagint:

	KHIMA	KESIL	AISH
Job 9:9	Arcturus	Hesperus	Pleiades
Job 38:31	Pleiades	Orion	
Amos 5:8	not given	not given	

Obviously the true meaning of these names was lost, because one and the same authority in various instances used different star constellations or planets for each of them: Kesil, Khima, Mazzaroth, Aish. Later interpreters groped in the dark; so Calmet, the eminent French commentator and exegete of the early eighteenth century translated Khima as Great Bear. (5) Others rendered it as Sirius (Canis Major).

The interpreters were especially intrigued by the description in Job 38. The Lord asks Job whether he can bind the chains of Khima or loosen the reins of Kesil. "The word in the second clause is from a root always meaning to draw . . ." (6) Which star is in chains? And which star is drawn by reins, as if by horses?

The identities of Khima and Kesil, Aish and Mazzaroth, were of lesser importance when it amounted to finding their meaning for their own sake in the poetical sentences of Amos and Job. But such identification, especially of Khima, grows in importance if the quoted sentence from the Tractate Brakhot may contribute to an understanding of the etiology of the Deluge, as the ancients knew or thought to know it.

In *Worlds in Collision* I have already explained that Mazzaroth signifies the Morning (Evening) star; the Vulgate has Lucifer for Mazzaroth and the Septuagint reads: "Canst thou bring forth Mazzaroth in his season and guide the Evening Star by his long hair?" I have already shown why the Morning-Evening star was described as having hair or coma, and why Venus did not appear in its seasons.

Apparently the other members of the group were planets, too. And actually we could have started by the disclosure that in the rabbinical literature Khima is referred to as Mazal Khima. In Hebrew *mazal* means "planet." Then which planet is Khima? If we can find out which of the planets is Khima, then we may know also to which planet the Talmud assigned the physical cause of the world inundation. As we have seen, the Biblical texts by themselves do not contain the means to determine which of the planets Khima and Kesil are.

"Were it not for the heat of Kesil the world could not endure the cold of Khima; and were it not for the cold of Khima, the world could not endure the heat of Kesil." This sentence is found, too, in the *Babylonian Talmud*, in the Tractate Brakhot. (8)

Kesil means in Hebrew "fool." From the biblical texts it is not apparent why one of the planets received this adverse name, or, why, more probably, the word "fool" was derived from the name of the planet. (9)

In the *Iliad* Ares-Mars is called "fool." Pallas Athena said to him: "Fool, not even yet hast thou learned how much mightier than thou I avow me to be, that thou matchest thy strength with mine." (10) These words explain also why Mars was called fool: it clashed repeatedly with the planet-comet Venus, much more massive and stronger than itself. To the peoples of the world this prolonged combat must have appeared either as a very valiant action on the part of Mars, not resting but coming up again and again to attack the stupendous Venus, or it must have appeared as a foolish action of going again and again against the stronger planet. Homer described the celestial battles as actions of foolishness on the part of Mars. Thus Kesil, or "fool," among the planets named in the Old Testament, is most probably Mars.

In Pliny we find a sentence which reads: "The star Mars has a fiery glow . . . owing to its excessive heat and Saturn's frost, Jupiter being situated between them combines the influence of each and renders it healthy." [11] The heating effect ascribed in the Talmud to Kesil is ascribed by Pliny to Mars, and the cooling effect of Khima to Saturn. By this sentence of Pliny we are strengthened in our identification of Kesil as the planet Mars; it corroborates the conclusion we just made with the help of the *Iliad*. But what is even more important, Pliny helps to identify the "planet Khima": it is Saturn.

Cicero also wrote that "Saturn has a cooling influence," whereas Mars "imparts heat." (12) Porphyry, an author of the third century, wrote similarly with Pliny and Cicero: "The power of Kronos [Saturn] they perceive to be sluggish and slow and cold. The power of Ares [Mars] they perceive to be fiery." (13)

Porphyry's contemporary Plotinus wrote: "When the cold planet [Saturn] is in opposition to the warm planet [Mars], both become harmful." (14) Other statements to the same effect are found in Vitruvius, (15) and Proclus. (16) In these sentences, as in those of Pliny and of the Talmud, Mars is regarded as being a fiery planet, (17) Saturn as being a cold planet. (18)

The passage in the Book of Job (38:31) can now be read: "Canst thou bind the bonds of Saturn and loosen the reins of Mars?" The bonds of Saturn can be seen even today with a small telescope. The reins of Kesil I discussed in *Worlds in Collision*, section "The Steeds of Mars." The two small moons of Mars, Phobos and Deimos, were known to Homer<sup>(19)</sup> and are mentioned by Vergil. (20) They were regarded by the peoples of antiquity as steeds yoked to Mars' chariot.

The passage in the Talmud that makes the planet Khima responsible for the Deluge means: "Two stars erupted from the planet Saturn and caused the Deluge."

## References

- 1. Tractate Brakhot (Seder Zerafim) chapter IX, Fol. 59a, transl. by Maurice Simon, ed. by I. Epstein (London, 1948).
- 2. Cf. for instance J. B. Wiedeburg, Astronomische Bedenken ueber die Frage ob der vorstehende Untergang der Welt natuerlicher Weise entstehen, inbesondere durch Annaeherung eines Cometen zur Erde werde befoerdert werden. (Jena, 1744), pp. 80, 157.
- 3. The meteorite fell at Aegospotami, near the Bosphorus. See Spyridon Marinatos, *Two Interplanetary Phenomena of 468 B.C.* (Athens, 1963).

- 4. A. B. Davidson suppl. by H. C. Lanchester, to Job 38:31 in *The Cambridge Bible* (Cambridge, 1926).
- 5. Augustin Calmet, Commentaire litteral sur tous les livres de l'ancien et du nouveau Testament, "Les XII petits prophets" (Paris, 1715).
- 6. The Cambrdige Bible.
- 7. Jacob Levy, *Woerterbuch ueber die Talmudim und Midrashim* 2nd ed. (Berlin, Vienna, 1924): entry "Khima."
- 8. Op. cit., Fol. 58b.
- 9. S. R. Driver to Amos 5:8 in *The Cambridge Bible* (Cambridge, 1918).
- 10. *Iliad*, Book XXI, line 400.
- 11. Pliny, Natural History II. 34: "Saturni sidus gelidae ac rigentis esse naturae . . . tertium Martis ignei, ardentis a solis vicinitate . . . hujus ardore nimio et rigore Saturni, interjectum duobus ex utroque temperari Jovem salutarmque fieri. . ."
- 12. De Natura Deorum II. 46.
- 13. L. Thorndike, *A History of Magic and Experimental Science* Vol. I (New York, 1920), p. 43.
- 14. Plotinus, *Is Astrology of Value?* transl. by K. Guthrie (London, 1918). [Similarly wrote the astrologer Dorotheus—see J. Haeg in *Hermes* XLV (1910), pp. 315-319. In Babylonian astrology the conjunction of the two planets was deemed favorable (J. Oppert, *Fragments mythologiques* (Paris, 1882), p. 37.]
- 15. De Architectura IX. 1, par. 16: "Martis stella, itaque fervens ab ardore solis efficitur. Saturni autem . . . vehementer est frigida. Ex eo Iovis cum inter utriusque circumitiones habeat cursum, a refrigeratione caloreque earum medio convenientes temperatissimoque habere videtur effectus."
- 16. Proclus Diadochus, *In Timaeo* Vol. IV, p. 92: "The Stars" iii.1.: "Saturn and Mars are the extremes and in opposition to one another . . . one being the principle of cooling, the other of heating . . . Jupiter holds the center and brings to a happy mix the creative activities of the other two." [Cf. also Proclus' summary of the system of Philolaos in his *In Euclide* I. 402. 21: "Cronos in fact sustains all humid and cold substances, and Ares all the nature of fire."]
- 17. The other name for Mars in rabbinical Hebrew—Maadim—signifies "red" or "reddening." Mars has a reddish color.
- 18. [These astrological qualities of the two planets are described at length in Ptolemy's *Tetrabiblos* II.9. Cf. R. Klibansky, E. Panofsky, and F. Saxl, *Saturn and Melancholy* (London, 1964); also D. Cardona, "The Mystery of the Pleiades," *KRONOS* Vol. 3 no. 4 (1978), pp. 24-44.]
- 19. Iliad XV. 119-120.
- 20. Georgica III. 91: "Martis equi biiuges."

