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The So-Called Royal Stars of Persia

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And to thy most beauteous body do we make our deep acknowledgements, O Ahura Mazda,—to those stars which are thy body.

Gatha Haptanghaiti, 6*

In the year 1771 Anquetil-Duperron, the great French Orientalist, published the first translation of the sacred books of the Persians ever made into a European language (*Zend-Avesta, ouvrage de Zoroastre*). As will appear in the following discussion, this work contained the names of certain stars, constellations, and lunar mansions, and although he did not attempt to identify or translate the names of any of the lunar mansions and zodiacal constellations, he did attempt to identify two of the four prominently mentioned "stars," and these identifications were correct.

It was, of course, natural that some of his countrymen should have been among the first to further translate and interpret those sacred writings, and it was also natural that several French astronomers should have attempted to discuss the meaning of those passages which referred to the stars. First attempts, however, are seldom completely satisfactory, and the applications of the four names, noted by Anquetil, to the stars were something to conjure with. Instead of following the course indicated by him, these writers decided to chart courses of their own, and the confusion resulting therefrom has existed in the minds of writers on astronomy to the present time.

Only four years after the appearance of the *Zend-Avesta*, Jean Sylvain Bailly, an exceedingly interesting, if not always accurate, writer on astronomy, and whose throat became too intimately connected with the blade of the guillotine in 1793, published his *Histoire de l'Astronomie Ancienne* (Paris, 1775). He attempted to prove that the astronomy of the Persians began about 3209 B.C., and that, as Aldebaran, Antares, Regulus, and Fomalhaut marked approximately the equinoxes and solstices at that time, they must have been the four "great stars" mentioned by the Persians as "Taschter, who guards the east, Satevis, who guards the west, Venant, the south, and Haftorang, the north" (these are the names as transliterated by Anquetil, who believed cor-

*In this word, as well as in numerous other places in this paper, some of the vowels are marked as long. We are unable at present to secure the type forms to represent these diacritical markings. With the author's permission we are proceeding without them, thus failing to indicate this refinement in the manuscript.—EDITOR.

POPULAR ASTRONOMY

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rectly that Taschter was Sirius and Haftorang, Ursa Major). Bailly goes on to say that "Taschter is so indisputably Aldebaran that it is among the Persians the genius who presides over the rain," and he comes to this conclusion solely on the analogy of the rainy character of the Hyades among the Greeks, conveniently forgetting that we know nothing about the Greeks of 3209 B.C. (Cf. the passages on pages 13, 130, 480, and 481).

Bailly was followed by the prolific French writer Charles François Dupuis, who had some further views of his own regarding these "stars." He states that about 2500 B.C. "four beautiful stars seem to have been placed by nature so as to fix the limits of the seasons. All four were of the first magnitude, and two of the stars were red and two were white. The two red stars, Aldebaran and Antares, were in the signs of the equinoxes; the two others, Regulus and Fomalhaut, corresponded to the signs of the solstices . . . These stars received the pompous denomination of royal stars" (*Origine de tous les cultes*, I. 257-259, Paris, 1822, first published in 1794). This is the first reference that I have been able to find to the phrase "royal stars," and Dupuis says that they were the four stars placed by Ormusd at the four corners of the sky (*Ibid.*, 529-530). He also repeats the same names as Anquetil, but contradicts himself on several occasions when referring to Taschter and Haftorang, saying that "Sirius has been established as the sentinel or advance guard of the stars," and "Haftorang is an angel who takes his name from the stars of the Bear" (*Ibid.*, I. 513, II. 69; see also VI. 293, 307, 331).

Then followed François Arago, who continued the tradition of the royal stars in his popular books on astronomy. "Aldebaran of the Bull, Antares of the Scorpion, Regulus of the Lion, and Fomalhaut of the Southern Fish divide the sky into four almost equal parts. These four stars, very brilliant and very remarkable, called therefore (*aussi*) royal stars, were, without doubt, the four guardians of the heavens of the Persians in the year 3000 B.C." (*Astronomie Populaire*, I. 342, Oeuvre posthume, Paris and Leipzig, 1861).

Camille Flammarion, finally, continued to write about the royal stars, and repeated, almost word for word, the remarks of the preceding French writers (*Histoire du Ciel*, 142-143, Nouvelle Édition, Paris, 1872).

The thesis of these French writers may be fairly summed up as follows: Aldebaran, Antares, Regulus, and Fomalhaut marked the equinoxes and solstices in the year 3000 B.C.; *therefore*, these four stars were the ones mentioned by "Zoroaster" in the sacred books of the Persians; *therefore*, they were the four "royal stars"; and, *therefore*, Persian astronomy existed at least as far back as 3000 B.C. It was as simple as that. Or was it? We shall see.

It is needless to say that the idea of "royal stars" was an attractive one and appealed immensely to the imagination of astronomers, both

professional and amateur; and it was not long before reports of them began to appear in English and American works on the constellations. Garrett P. Serviss, for example, in a beautiful passage describing Regulus, and in keeping with the spirit of the tradition, says that "Cyrus, in his conquering marches, may have looked to that star for help and inspiration, for it was the heavenly guardian of the Persian monarchs" (*Round the Year with the Stars*, 36, New York and London, 1910). See also the many references in Richard Hinkley Allen, *Star-Names and Their Meanings*, 59, 66, 67, 100, 122, 181, 256, 346, 366, 369, 370, 385, 432, New York, London, etc. 1899. The passages in William Tyler Olcott's *Star Lore of All Ages* may also be consulted; see, for example, pages 7, 8, 15, 40, 234, 236, 327, 329, 341, New York and London, 1911. A careful comparison of the passages referred to above, one with another, will show how confused the subject was in the minds of these two authors, because many of the secondhand authorities consulted by them were entirely unreliable.

Practically all writers on the constellations since 1900 have followed Allen without asking any questions or examining the original records: the line of least resistance always invites error to follow error. The tradition has been so widely accepted that even the professional astronomer will, on occasion, mention the "Royal Stars" before learned societies (*Publications of the Astronomical Society of the Pacific*, 55, 177, 1943). The latest reference to these "stars" will be found in *Sky and Telescope*, Vol. III, No. 6, page 5, 1944.

Without going into further detail, I can safely say that the present form of the tradition is substantially set forth in the following statement: "Aldebaran, Antares, Regulus, and Fomalhaut were the four Royal Stars of Persia about the year 3000 B.C."

How did this idea of the "Royal Stars of Persia" originate, and is it based on any historical evidence? What are the "ancient Persian records" referred to by so many writers? The whole matter, of course, can be traced back very easily to several passages in the *Bundahish*, a work which, unfortunately, seems to have been consulted by very few astronomical writers. This name, which means "Creation of the Beginning" or "Original Creation," is applied by the Parsees to a Pahlavi work which appears to be a collection of fragments relating to the cosmogony, mythology, and legendary history of the ancient Persians and the worship of Ahura Mazda; and although the work, as we have it, could not have been completed until after the Muhammadan conquest of Persia in 651 A.D., it is possible that some of the myths and legends contained in it are older than Zarathushtra himself. Many passages have the appearance of being translations of an Avestan original, possibly the lost *Damdad Nask*, one of the twenty-one books into which the whole of the Zoroastrian scriptures are said to have been divided before the time of Darius (*Sacred Books of the East*, hereafter referred as to *SBE*, V. xxii, xxiv, xlii, Oxford, 1880. The translation which

follows is by E. W. West, the great English Pahlavi scholar).

After Auaharmazd created the twelve constellations of the zodiac (*Akhtar*) and the twenty-eight lunar mansions (*Khurdak-i hamarikan*, literally, "fragments of the calculators"), the narrative continues as follows:

"4. And all his original creations residing in the world are committed to them (the constellations); so that when the destroyer (Aharman) arrives, they overcome the adversary and their own persecution, and the creatures are saved from those adversities.

"5. As a specimen of a warlike army, which is destined for battle, they have ordained every single constellation of those 6480 thousand small stars as assistants; and among those constellations four *chieftains*, appointed on the four sides, are *leaders*.

"6. On the recommendation of those *chieftains* the many unnumbered stars are specially assigned to the various quarters and various places, as the united strength and appointed power of those constellations.

"7. As it is said that Tishtar is the chieftain of the east, Sataves the chieftain of the south, Vanand the chieftain of the west, and Haptokring the chieftain of the north.

"8. The great one which they call a Gah, which they say is the great one of the middle of the sky, till just before the destroyer came, was the midday one of the five, that is, the Rapitvin (*Bundahish*, II. 4-8).

I have given a full translation of the relevant passages to enable the reader to have the complete story before him. The italics in Sections 5 and 6 are my own and will be referred to later.

In the study of Pahlavi and Pazand works it is always desirable to discover, if possible, the original Avestan forms. Sometimes this is exceedingly difficult, but in the present case the task is a simple one, for the Avestan names of the four chieftains are well known. They are Tishtrya, Satavaesa, Vanant, and Haptoiringa. But before discussing these names individually, it is necessary to consider the statement in the tradition which carries us back to the year 3000 B.C.

A very pertinent question arises at this point: "What do we *actually* know about Persia and the Persians of 3000 B.C.?" The answer is "Nothing." I am not interested here in inferences to be drawn from the Vedas or works of other Aryan nations: I am interested only in historical records (too long strangers to writers on the constellations) which refer to the people we have come to know as the Persians. Let me summarize the facts very briefly.

The first voice that we hear is that of Zarathushtra speaking through the Gathas. For my present purpose it is unnecessary to discuss the question as to whether Zarathushtra was a Persian or a Magus. Most Avestan scholars are agreed, however, that he was an Aryan and that

the Magi, the "Levites of the Zoroastrians," took over and adopted those parts of his religion which best suited their purposes after the death of the Prophet. This, in turn, brings up the period during which Zarathushtra lived. According to the mediaeval Persian tradition he was born in 660 and died in 583 B.C. (See A. V. Williams Jackson, *Zoroaster, the Prophet of Ancient Iran*, 15, 16, London, 1899, and the authorities quoted by him, and the table of Zoroastrian chronology compiled by West in *SBE*, XLVII. xxviii-xxx). It is well recognized by Persian scholars, however, that 660 B.C. should be regarded as a minimum antiquity, for an earlier date seems to be required to bring the Gathas nearer the *Rig-Veda*, to allow for the interval between the earliest Gathas and the *Gatha Haptanghaiti*, and, finally, to allow for the considerable development which must have taken place between the Yasnas and the later Yashts, which probably appeared sometime before the cuneiform inscriptions of Darius (James Hope Moulton, *Early Zoroastrianism*, 19-22, London, 1913; L. H. Mills in *SBE*, XXXI. xxxii-xxxv and 282; P. M. Sykes, *A History of Persia*, I. 109, London, 1915). Professor Moulton and others, therefore, plead eloquently for a much earlier date ("Nothing later than the tenth century B.C. can be admitted," Moulton, *The Treasure of the Magi*, 6, 13, Oxford University Press, 1917). Let us, consequently, push back Zarathushtra's birth 300 years to 960 B.C. Will this help the cause of the tradition? Obviously not, for the Gathas do not contain a single reference to any individual star or constellation; in fact, nearly all myths are dropped, and even the old Aryan gods, who appear in the later Yasnas, *Vendidad*, and Yashts, are, with one exception, wholly absent. And Persia, as a nation, cannot, by any stretch of the imagination, be said to have stepped upon the stage of history until the accession of Achaemenes about 650 B.C. (P. M. Sykes, *Ibid.*, I. 151, 152). There is, therefore, no historical basis whatsoever for speaking of the stars and constellations which were known to the Persians in the year 3000 B.C. Apropos of early dates, I recall a statement of Max Müller regarding the age of the *Rig-Veda*: "What should we gain if we could date the Veda back to 6000 or 4000 B.C.? Beyond 2000 B.C. all is *tohu va bohu*, emptiness and darkness, mere vanity and vexation of spirit, without a ray of light from anywhere" (*Contributions to the Science of Mythology*, II. 430, London, New York and Bombay, 1897). If this is true of the *Rig-Veda*, *a fortiori* it is true of the *Avesta*.

Now let us consider the four chieftains. Tishtrya is the great Rain-star of the ancient Persians, "who from the shining east moves along the path made by the gods, along the way appointed for him," and is the name of Sirius, "whom Ahura Mazda has established as a lord and overseer above all stars . . . I, O Spitama Zarathushtra, have created that star Tishtrya as worthy of sacrifice, as worthy of prayer, as worthy of propitiation, as worthy of glorification as myself, Ahura Mazda!" He is also a Yazata, "adored one," and assists in guiding the forces

of nature, especially with regard to the refreshing rains, giving the fields "their share of the waters." We find a beautiful description of Tishtrya where he is mentioned as "the bright and glorious star, that gives happy dwelling and good dwelling; the white, shining, seen afar, and piercing . . . piercing from afar with its shining undefiled rays (*Tir Yasht*, 35, 44, 50, 1, 2). His victory over Apaosha, the Daeva of drought, as told in his Yasht, is a vivid and picturesque account, hardly equalled elsewhere in Persian literature. Tishtrya, being the brightest star in the sky, and "the first star," needs no other stars for companions, and, as we shall see, he is the only *star* among the four chieftains. And be it noted that Sirius is *not* mentioned in the tradition as one of the "royal" stars.

I do not believe that I have ever seen a translation of the word Tishtrya. There appear to me, however, to be two possible derivations. The Sanskrit word Tishya, which appears twice in the *Rig-Veda* (V. 54. 13 and X. 64. 8), is one of the names of the 6th Hindu Nakshatra, or lunar mansion, which consisted of Praesepe and γ , δ , η , and θ Cancri; the equivalent Persian lunar mansion was called in Pazand, very appropriately, Avra or Avrak, from the Avestan Awra, "the little cloud," whose heliacal rising was said to coincide with that of Tishtar. Tishya means "fortunate, auspicious, happy, prosperous," etc. On the reasonable assumption that both Tishya and Tishtrya developed from the same original Indo-Iranian or Indo-European form, at a time when the Aryans of both India and Persia shared a common religion and a common culture, the meaning of Tishtrya would be "the lucky or prosperous (star)," that is, for the Aryan nations. The other possibility is this: Tashtar is a modern Persian word meaning "cloud" and "the angel who has charge of rain and plants" (F. Steingass, *Persian-English Dictionary*, 302, London, 1892). If this meaning was carried over from the Pahlavi Tishtar, and it, in turn, preserved that meaning from the Avestan Tishtrya, then we may properly call Sirius "the cloud (star)," signifying, of course, one filled with rain. Both meanings would be appropriate, but I am inclined to favor the former. In this connection I should like to refer to a passage in the *Dina-i Mainog-i Khirad*, hereafter referred to as *DMK*, XLIX. 4-6: "The spirit of wisdom answered thus: 'Of the stars which are in the sky the first star is Tishtar. . . . And prosperity of every kind and the fertility of the world are in the path of Tishtar.'" And to the same effect regarding Tishya, see *The Institutes of Vishnu*, LXXVIII. 13: "By performing a Shraddha under the Nakshatra Tishya he procures prosperity," and also *Apas-tamba*, II. 8. 20. 3: "He who desires prosperity shall fast in the half of the year when the sun goes to the north under the constellation Tishya." The Hindu name Tishya can still be recognized in the modern Buddhist Tissa, but, because of precession, it is no longer the name of the 6th Nakshatra. For the rather peculiar connection between Tishtar and the constellation Kalachang, the modern Persian Kharchang,

i.e., Cancer, see *Bundahish*, VII. 1. 2 and *Zad Sparam*, VI. 1. Satevaesa, meaning "one hundred dwellings or habitations," is the name of the constellation Aquarius, including Fomalhaut (Kavasji Edalji Kanga, *A Dictionary of the Avesta, Gujerati, and English Languages*, 465, Bombay, 1900). I do not wish to anticipate future discussions any more than is necessary, but it is interesting to compare this name with that of the 23rd Hindu Nakshatra, Shatabhishaj, "one hundred physicians" (Sir Monier Monier-Williams, *A Sanskrit-English Dictionary*, 1049, Oxford, 1899; *Taittiriya Sanhita*, IV. 4. 10. 1-3; *Sankhayana-Grihya-Sutra*, I. 26. 23; *The Institutes of Vishnu*, LXXVIII. 30). As the title "one hundred" of anything, be they stars, dwellings, or physicians, would not ordinarily refer to a single star (in fact, one of the names of the Hindu Nakshatra is "one hundred stars," Shatatarā), and as the Hindu, and the equivalent Persian, lunar mansions refer to a number of stars in Aquarius, it is obvious that we are dealing here with a constellation and not with one individual star. For the importance of Aquarius among the Sumerians and Babylonians, from whom the Persians admittedly received the zodiacal constellations, see *Popular Astronomy*, LII, 11, 1944. And the fact that Varuna, "the All-enveloping sky," who is thought by many to have been the supreme deity of the Indo-Iranians, is the presiding divinity of the Hindu mansion, is probably evidence of its great importance in early Indian astronomy (A. A. Macdonell, *Vedic Mythology*, 20-24, Strassburg, 1897).

We read of the "powerful Satevaesa, made by Mazda, who pushes waters forward," and that he "makes those waters flow down to the seven Karshvares (regions, the modern Persian Kishwar) of the earth, and when he has arrived down there, he stands, beautiful, spreading ease and joy on the fertile countries, thinking to himself: 'How shall the countries of the Aryas grow fertile?'" (*Tir Yasht*, 0, 9). We are also told that "Satavaesa comes down and flows between the earth and the sky, he to whom the waters belong, who listens to appeals and makes the waters and the plants grow up, fair, radiant, and full of light, to nourish animals and men, to nourish the Aryan nations, to nourish the five kinds of animals, and to help the faithful" (*Farvardin Yasht*, 44). From the above references it has been contended that "Satavaesa was the rain-star before Tishtrya was raised to that dignity" (Mehrijibhai Noshervanji Kuka, "The Stars Mentioned in the Avesta and the Tale They Tell" in *Zartoshti*, II. 15, Bombay, 1904. And for a sincere, but illogical and impossible, argument which seeks to identify Satavaesa with Canopus, see "The Identity of Some Heavenly Bodies Mentioned in the old Iranian Writings" by Muncherji Pestonji Khareghat in *Sir Jamsetjee Jejeebhoy Madressa Jubilee Volume*, 133-142, Bombay, 1914). Satavaesa, therefore, was the constellation Aquarius, as known to the Persians, which included Fomalhaut and probably several stars in its immediate vicinity. It will be remembered that Ptolemy, in his

Almagest, included Fomalhaut among the stars of Aquarius as well as among those of Piscis Austrinus. Rigel, Alpheratz, and Elnath were treated in a similar way (see *Ptolemy's Catalogue of Stars* by Peters and Knobel, 42, 50, 44, 34, 32, 36, The Carnegie Institution of Washington, 1915). The fact that there are 106 naked-eye stars in Aquarius, and in Piscis Austrinus east of R.A. XXII^a (1950.0), may or may not be of any significance in this connection.

Vanant, like Tishtrya, has a Yasht of his own, where we read of his being "made by Mazda, the holy and master of holiness. . . . Strong, invoked by his own name, healing, in order to withstand the accursed and most foul Khrafstras (evil creatures which are destroyed by the rain) of the most abominable Angra Mainyu" (*Vanant Yasht*, 0, 1). The people sacrificed "unto Vanant . . . to obtain the well-shapen strength, to obtain the Victory, made by Ahura, for the crushing Ascendant, for the destruction of what distresses us, for the destruction of what persecutes us" (*Tir Yasht*, 12).

The word Vanant means "smiter, stinger, seizer, conqueror, victorious one," and the play on words in the above quotation is obvious (Kanga, *Ibid.*, 520 and Darmesteter's note in *SBE*, XXIII. 97). The modern Persian equivalent would seem to be Awan of the same meaning. The Pazand Varant is the name of the 20th Persian lunar mansion which consisted of the stars in the tail of Scorpius. Here, however, we are dealing with the entire constellation as one of the four chieftains, with the "red" Antares as its principal star.

In the later Pahlavi writings it is said that "the constellation Vanand is intrusted with the passes and gates of Alburzh; so that the demons and witches and fiends may turn from those gates and passes, that it may not be possible for them to cut off and break up the road and passage of the sun and moon and stars" (*DMK*, XLIX. 12-14; and see also *Shayast La-Shayast*, XI. 4 for the part of the sacrifice which was dedicated to Vanand). According to Persian cosmology the heavenly bodies were supposed to rise and set through openings or passes (*rogin*) in the mountain range of Alburzh, which encircled the world, a concept similar to that of the Homeric Oceanus (*Bundahish*, V. 5 and *Iliad*, XXI. 195). Compare this with the 33rd Chapter of the *Book of Enoch*: "And I saw how the stars of heaven come forth, and I counted the portals out of which they proceed, and wrote down all their outlets, of each individual star by itself, according to their number, their names, their courses and their positions, and their times and their months, as Uriel the holy angel who was with me showed me."

The last of the four chieftains is possibly the most interesting of all and serves as my strongest piece of evidence. It is admittedly the "Dipper" in our Ursa Major, "those stars that are seven in number, the Haptoiringa, made by Mazda, glorious and healing" (*Sirozah*, I. 13 and II. 13). And here again we find *no* reference in the tradition to this conspicuous constellation as one of the "royal stars." There has been

a great deal of uncertainty at times over the meaning of the name of this chieftain, but there should not have been. The modern Persian name, involving slight phonetic changes from the original Avestan, is Haft Aurang, "the seven thrones," metaphorically, "the seven heavens," a cosmological idea common to most ancient peoples in one form or another (see Francis Johnson, *A Dictionary, Persian, Arabic, and English*, 182, 1394, London, 1852, and F. Steingass, *Ibid.*, 119, 1502. Consult also *Rashn Yasht*, 28; *Farvardin Yasht*, 60; *Tir Yasht*, 12; and compare *Isaiah*, xiv. 13).

Many references could be given to show that the Persians regarded the north as the habitation of demons and all sorts of evil spirits. This idea is set forth and discussed briefly in two of the Yashts mentioned above, but it reaches its greatest articulation in a later Pahlavi work where it is said that "the constellation Haptok-ring, with 99,999 guardian spirits of the righteous (an expression meaning simply a very large number; compare the Homeric "loud as 9000 warriors or 10000 cry in battle," *Iliad*, V. 858 and XIV. 148) is intrusted with the gate and passage of hell, for the keeping back of those 99,999 demons and fiends, witches and wizards, who are in opposition to the celestial sphere and constellations of the zodiac. Its motion, also, is round about hell; and its special business is this, as it were it holds the twelve signs of the zodiac by the hand, in their proper going and coming. And those twelve constellations also proceed in like manner by the power and help of Haptok-ring; and every single constellation, when it comes in at Alburzh, provides support for Haptok-ring, and begs protection from Haptok-ring" (*DMK*, XLIX. 15-21).

In order to complete this picture of the chieftains or leaders, and in order to omit nothing which might have a bearing on the whole subject, I must refer to Section 8 of the first quotation from the *Bundahish*. There seems to be no doubt that "the great one of the middle of the sky," *Mas-i Miyan-i Asman*, refers to a constellation because, like the four chieftains, it is pitted against one of the planets (Saturn) in the great struggle between the constellations and the forces of evil. A *Gah*, however, is a certain period of the day for ceremonial purposes, and the Raptivin Gah (the Avestan Raptithwina) is the period of midday, from 10 A.M., to 3 P.M. Auharmazd, we are told, "performed the spiritual Yazhishn ceremony with the archangels (Ameshospendan, the Amesha Spentas of the *Avesta*, "the immortal holy ones") in the Raptivin Gah, and in the Yazhishn he supplied every means necessary for overcoming the adversary" (*Bundahish*, II. 9). This midday period, however, could be celebrated only during the seven months of summer, and the reference seems to be to some constellation that must have been in the daylight more than any other during that particular period. But, as the constellation is not given a proper name, as we do not know the date when this portion of the *Bundahish* was actually written, or the exact time to which it referred, and as the constellation is not men-

tioned in the *Avesta*, it is impossible to arrive at any definite or satisfactory conclusion about it. It must be remembered also that the "five" in the quotation does not refer to this constellation *and* the four chieftains, but to the five periods of the day. This is proved by the fact that the four chieftains are nowhere equated with the other four ceremonial periods.

Do we find any reference, directly or indirectly, to "royal stars" in the above quotations from the sacred writings of the Persians? The answer is, of course, "No." There were no royal stars in the astronomy of the Persians, nor, in fact, in the astronomy of any Aryan nation of antiquity. Regulus, "the petty king," and the various Greek royal titles of the star, are ultimately Sumerian in origin, as is also the Arabian al-Maliki (*Popular Astronomy*, LII, 21, 1944). The four "stars" were known as "Chieftains" or "Leaders." The reason for this designation is perfectly obvious when it is realized that the events described in this part of the *Bundahish* took place before the appearance of man on the earth, at a time when the stars and constellations were preparing for the cosmic battle with the planets which were sent against them by Angra Mainyu, "the enemy spirit" (*Bundahish*, V. 1 and *Sikand-Gumanik Vihar*, IV. 29 and VIII. 17. The title "guardians," used by so many writers, misses the point entirely). "Those seven planets (the 'brigand planets') pervert every creature and creation and deliver them up to death and every evil" (*DMK*, VIII. 20). Thus the Persians, in their view of the planets, differed from every other ancient nation, obviously on account of Magian influence, for the Magi "were strangers alike to Aryan and to Semite."

Let us now turn back to my statement of the tradition to see what there is left of it. In the first place, Aldebaran and Regulus cannot be found among the four leaders or chieftains, and Sirius and Ursa Major are not mentioned in the tradition at all. In the second place, the four "royal stars," instead of being merely guardians, turn out to be four chieftains preparing their forces for battle against Ahriman and his myrmidons of evil; and there is not the slightest evidence in either the sacred or secular literature that any king of Persia, either historical or legendary, ever claimed for himself, or had appropriated for him, any particular stars or constellations. Thirdly, we find only one *star* among the four leaders and three *constellations*. And, lastly, when we talk of the stars and constellations which were known to the Persians of 3000 B.C., we are dealing not only with vague and uncertain inferences, but also with an utterly unknown quantity, and such speculations have no historical value whatsoever in researches of this kind. Even if we date the Gathas, the Yashts, and the early parts of the *Bundahish* two thousand years before the ministry of Zoroaster, there is still no evidence of Royal Stars.

(NOTE: Under present conditions it was impossible to secure a copy of Anquetil's original work in French. I did, however, use an excellent