THE EIGHT STARS THAT NEVER WERE

G. L. LEWIS *

In his memoirs, Babur tells us that in the month of Shawwāl 906/ July-August 1501, he was at Sar-i-Pul outside Samarkand, facing his old enemy Shaybāq Khān, whose forces were superior. Babur, although he was in a strong defensive position and knew that reinforcements were on the way to him, nevertheless marched out, gave battle, and was defeated. This is how he explains his action (in Beveridge's version):

> The reason I was so eager to engage was that on the day of battle, the Eight stars were between the two armies; they would have been in the enemy's rear for 13 or 14 days if the fight had been deferred. I now understand that these considerations are worth nothing and that our haste was without reason. [1]

In a footnote to her translation at this point, Beveridge gives the words which she translates 'the Eight stars' as Sīkīz Yīldūz, whereas the facsimile text in fact reads *s-k-r yulduz*. [2] She also gives two references,to Stanley Lane-Poole's *Bābur* (Oxford 1899), p. 56, and to Chardin's *Voyages,* v. 136 and Table. Lane-Poole has nothing to contribute to a solution of the problem: he tells the story of the battle in his own words, including these, in which only the question-mark does him credit:

> It happened that the Eight Stars (of the Great Bear?) were exactly between the two armies.

What Chardin has to say on the subject, however, is worth reproducing in full and we shall come on to it presently. Meanwhile, here is Bac-

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[1] Annette Susannah Beveridge, *The Bābur-nāma in English* (London 1922, reprinted 1969), p. 139.

[2] Annette S. Beveridge, *The Babar-nama* (London 1903, reprinted 1971), folio 89*a*, lines 4-5. Bacqué-Grammont agrees with her, he calls the object 'les Huit-Etoiles' on p. 126 of his work cited in the next note.

qué-Grammont's note on the passage, from his translation of the memoirs of Babur:

> The Eight Stars. This constellation, which has never been precisely identified by the commentators, was reputed to be malefic, particularly if it were facing one on a day of battle. The Persians, in spite of their wealth of astronomical and astrological vocabulary, designate it by its Chaghatay name of *sekiz yulduz*.[3]

The term will be found in the Persian dictionaries; Steingass, for example, defines سکیز یلدیز *sakizīldīz* as "A constellation formed by eight stars and considered most unlucky by the Persians."[4]

So far as the writer is aware, there is no evidence that any commander other than Babur was ever influenced by this superstitious belief. On the details of the belief, however, there is no shortage of information. Folios 27*b*-30*a* of MS Yahuda 933 in the Princeton Unirversity Library[5] contain a short Arabic text and a diagram, dating from the tenth century of the Hijra. Here is a translation of the text:

> This is one of the astronomical peculiarities in which the Turkish sages believe and which they employ in such important matters as drawing up the battle-line, going out on expeditions, laying foundations and erecting buildings, tilling and planting and every important worldly matter. It is called among them *Shukur yulduzi;* they believe in it most firmly in connection with battles. They maintain that the *Shukur yulduzi* is in the shape of an excited Bactrian camel, opening its mouth and swallowing any who confront it, so they take care not to confront it but keep it behind them in all their enterprises. Particularly when meeting the enemy and when battle begins,they keep it to the rear of their ranks. They maintain that the army which has it behind them will be given victory and will conquer, while the army which has it facing them will be forsaken of God and routed.

[3] Jean-Louis Bacque-Grammont, *Le Livre de Babur* (Paris 1980) p. 438.

[4] F. Steingass, *A Comprehensive Persian-English Dictionary,* London 1892, p. 689.

[5] Rudolf Mach, *Catalogue of Arabic Manuscripts (Yahuda Section) in the Garrett Collection* (Princeton 1977), No. 5086.

When a meeting of the two armies occurs with it in front of them, they employ every conceivable device to bring it to their rear, then they will fight their enemy and conquer, by leave of God Most High. Similarly, when they wish to go out on an expedition, at the time they go out they put it behind them too. They will not ascend a mountain of any high place, nor besiege a fortress or erect a building, while it is in mid-heaven; nor will they descend into a valley or dig a foundation or a *qanāt* or a well, nor plant any plant, when it is beneath the earth.

On each day of the Turkish month it is in one horizontal direction or another. The beginning of the Turkish month is the morning of the conjunction *(ijtimāʿ)* occurring before sunrise, of the day of the conjunction occurring before midday. The beginnings of the Turkish months mostly correspond to the beginnings of the Arab months. The closest method for one who does not know is to add one day to the Arab month and enter it in the diagram. Sometimes it will correspond and sometimes it will differ by one day, for the beginnings of the Turkish months are according to the conjunction. If the moon lags in its journey, the Turkish month will be two days ahead of the Arab, while if the moon is swift in its journey it will be one day ahead, and God knows best.

The Turkish month, that is to say, begins in the dark of the moon, whereas the Arab month begins with the sight of the new moon. But that is the least of our worries.

The diagram which follows the text consists of a circle divided into eight segments marked with the compass points. Against each point are three ordinal numbers, indicating the three days of the month on which the *Shukur yulduzi* is in that position. South is at the top, but the numbering begins with East, as follows:

East	1st, 11th, 21st
South-east	2nd, 12th, 22nd
South	3rd, 13th, 23rd
South-west	4th, 14th, 24th
West	5th, 15th, 25th
North-west	6th, 16th, 26th
North	7th, 17th 27th
North-east	8th, 18th, 28th

Two quadrants in an inner circle complete the information:

Under the earth	9th, 19th, 29th
In mid-heaven	10th, 20th, 30th

The object therefore circles seven-eighths of the horizon in an eight-day orbit. It then changes course by ninety degrees to visit the underside of the earth and then the zenith in two days, before beginning its orbit again in the east. The only sort of astronomical object which behaves in this fashion is an imaginary one; the star or constellation is purely aetiological, to justify a schedule of lucky and unlucky directions. As to how a non-existent object may be said to resemble an excited camel, we shall see a possible answer later.

Another account appears in MS 402 of the Chester Beatty Library, in what is described as a Taqvīm ('Almanac') written in the time of Murad II (1421-51). Here Minorsky's catalogue entry:

> F. 17a: Instructions for finding the direction of some mysterious constellation called *Shükür-yulduz* [usually *Sekiz-yulduz* 'the Eight Stars'] to which, when starting on important business, one must turn one's back, arranged according to the days of the month.[6]

What did Minorsky mean by 'usually *Sekiz-yulduz*'? Since he cites no other occurrence of the term, we can assume that what he had in mind was the use of it in Persian, to which Bacqué-Grammont refers.

The diagram in the Chester Beatty manuscript is more ornate than the one in the Princeton manuscript, but the purport is the same. Above the diagram there is a brief introduction, of which this is a transcription:

> Hukemayı Hind ve hukemayı Hitā ve Hotan şükür adlu yulduz istihrac etmişlerdür. Zic-i suzkemend [?] ü tecribeleri iʿtibarınca tahkik etmişlerdür ki yedi yulduz vardur gökte kim anlar bir yerde devayir suretinde yaratmışdur Hakk Teala Celle ve Ala. Ve hem bu yıldızın seyri seriʿ ve maʿkūsdur şöyle ki: Bir ayda cemiʿ ʿālemi seyreder hem cihatından [*metinde aynen*] ve hem tahtından ve

[6] V. Minorsky, *A Catalogue of the Turkish Manuscripts and Miniatures* (Dublin 1958), pp. 3-6.

fevkından. Mühim bir iş düşse bu yulduzı hisab etmek gerekdür ki ol kişinün ardında kala. Mesela bir şahıs sefere gitmek ister veyahud cenk etmeğe varmak isteye gerekdür ki bu yulduz ardında kala ta ki mansur ola. Eğer bu yulduz gök ortasında iken nerdubana ve yüce yerlere çıkmayalar ta ki kazadan emin ola. Eğer bu yulduz yer altında iken hayavanat sudan geçürmeyeler ta aksamaya. Baki hacetleri bu resme kıyas etmek gerek ve Allahü aʿlam.

Which translates:

The sages of India, Cathay and Khotan have elucidated the constellation named Şükür. On the basis of their (...) astronomical tables and their experience they have established that in the sky there are seven stars which God Most High, Glorious and Extolled, has created in one place, in the shape of circles. Its motion is rapid and retrograde, such that in one month it traverses the whole world, both on its various quarters and below and above. If any important matter should arise, it is necessary to take this constellation into account, so that it be behind the person involved. If, for example, anyone should wish to go on campaign or go out give battle, this constellation must remain behind him for him to be victorious. When it is in mid-heaven they should not ascend stairs of high places, that they may be safe from accident. When it is beneath the earth they should not drive animals through water, that they may not go lame. Other activities must be dealt with analogously. And God knows best.

There is no mention of any resemblance to a camel. We are now in a position to say that Babur must have been following a divergent version of the superstition; the object could not have been 'in the enemy's rear for 13 or 14 days, since in that time its baneful influence would have gone full circle and more.

Now for Chardin's testimony.[7] In the course of describing the contents of an almanac he had seen for the year 1077/1666-7, he mentions:

A table purporting to show the fanciful movement of eight stars unknown to our world and to the modern Persian astronomers. It

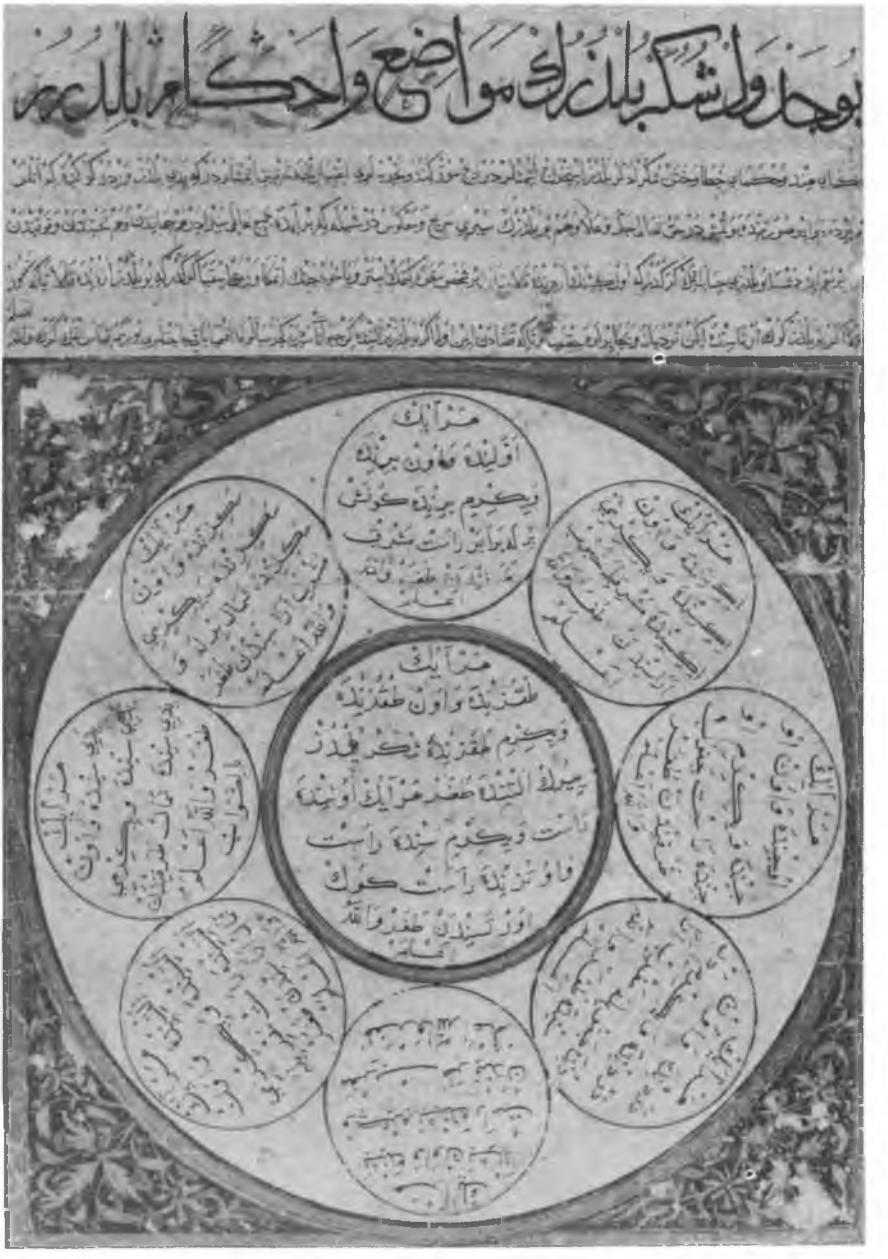
[7] Beveridge's reference took a while to track down, as she does not specify the edition. The present writer used the tenvolume edition of Jean Chardin, *Voyages en Perse et autres lieux d'Orient* (Paris 1811) which has the text on iv, 428-9, the 'Table' or diagram on iv, 572-3.

came to them from the Tartars. Learned people in Persia have told me that the Tartars of Cathay were the first to draw up a table of these eight stars, with which they then infected the minds of the other Tartars bordering on Persia. Whether this feat of imagination comes from the Chinese, to whom they are such close neighbours, or whether they invented them themselves, the names of these eight stars are: *Zouel, Katrib, Aatit, Aanim, Sermouch, Kelab, Zouzenab, Keid, Lehioni.* They are collectively termed *Sekis yeldous,* Turkish words signifying 'the eight stars.' They are said to wander and to be seen very rarely and by chance. The Tartars compare their track to the leaping and bounding of a camel in heat, which grazes here and there without keeping to a route. The path ascribed to them by the table shows the absurdity of the theory, as it against nature that heavenly bodies should do in three months what the table makes these stars do in one day.

The table is preceded by these words:

The Turks teach that there are eight stars, which they call *Sekis Yeldous,* which are invisible and wandering, yet with a certain rule. They say that they are unlucky and maleficent stars, inflicting various evils on those who turn their face to the parts of the sky where they are, and who go to meet them. Therefore their astrologers recommend that when one begins a journey or takes the road or goes to war, one should be wary at the moment of departure not to have them in front or to one side, but to have them behind one's back. So too when they are in the zenith one should be wary not to be on high mountains nor to climb to lofty places, because they pour down a baneful influence. Equally when they are beneath the earth one should be wary not to sow or plant or cultivate, nor to lay the foundations of a bulding. In order to know where these stars are each day,one has simply to consult this table, which it is well to do whenever one is beginning any enterprise. And God knows best.

Then comes the Table, which differs from those previously discussed. Whereas the object has so far been described as moving steadily round the sky in eight days, before diving below the earth and then climbing into mid-heaven, the Table given by Chardin has it going from east to north-east, south, north-west, west, south-west, north, then south-east, before doing its dive.



بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِيمِ

اَلْحَمْدُ لِلّٰهِ رَبِّ الْعَالَمِينَ، وَالصَّلٰوةُ وَالسَّلَامُ

عَلٰى سَيِّدِنَا مُحَمَّدٍ وَآلِهِ وَصَحْبِهِ اَجْمَعِينَ اَمَّا بَعْدُ

فَهٰذِهِ مِنَ الْخَوَاصِّ الْفَلَكِيَّةِ الَّتِي يَعْتَقِدُ حُكَمَاءُ

التُّرْكِ وَيَسْتَعْمِلُونَهُ فِي الْاُمُورِ الْمُهِمَّةِ كَالْمَصَافِّ

فِي الْحُرُوبِ، وَالْخُرُوجِ اِلَى الْاَسْفَارِ، وَوَضْعِ الْاَسَاسِ

وَارْتِفَاعِ الْبِنَاءِ، وَالْحَرْثِ وَالْغَرْسِ، وَكُلِّ اَمْرٍ

دنوة

دُنيَوِيّ بِهِمْ وَهُوَ المُسَمّى عِنْدَهُمْ شُكُرْبِلْدُزِي

وَأَكْثَرُ اعْتِمَادِهِمْ عَلَيْهِ فِي أَمْرِ الحُرُوبِ وَزَعَمُوا

أَنَّ شُكُرْبِلْدُزِي عَلَى صُورَةِ الجَمَلِ البُخْتِيِّ الهَائِجِ

فَاتِحًا فَاهُ يَلْتَقِمُ كُلَّ مَنْ قَابَلَهُ وَهُمْ يَحْتَرِزُونَ

مِنْ مُقَابَلَتِهِ وَيَجْعَلُونَهُ فِي أَقْفِيَتِهِمْ فِي جَمِيعِ

أُمُورِهِمْ وَخُصُوصًا عِنْدَ مُلَاقَاةِ العَدُوِّ وَوُقُوعِ

القِتَالِ فَيَجْعَلُونَهُ وَرَاءَ صُفُوفِهِمْ وَيَزْعُمُونَ

اَنَّ الْجَيْشَ الَّذِي يَكُوْنُ هٰذَا وَرَآءَهُمْ مُظَفَّرٌ مَنْصُوْرٌ

وَالْجَيْشُ الَّذِي يَكُوْنُ هٰذَا فِي وُجُوْهِهِمْ مَخْذُوْلٌ

مَهْزُوْمٌ وَاِذَا اتَّفَقَ اللِّقَآءُ بَيْنَ الْجَيْشَيْنِ وَهُوَ

فِي مُقَابَلَتِهِمْ فَيَتَحَيَّلُوْنَ بِكُلِّ مُمْكِنٍ اِلٰى اَنْ يَجْعَلُوْنَهُ

وَرَآءَهُمْ وَيُقَاتِلُوْنَ عَدُوَّهُمْ فَيَنْتَصِرُوْنَ بِاِذْنِ

اللّٰهِ تَعَالٰى وَكَذٰلِكَ اِذَا اَرَادُوا الْخُرُوْجَ اِلَى السَّفَرِ

فَحِيْنَ يَخْرُجُوْنَ يَجْعَلُوْنَهُ اَيْضًا وَرَآءَهُمْ وَلَا يَصْعَدُوْنَ

جَبَلًا وَلَا مَكَانًا عَالِيًا وَلَا يُحَاصِرُونَ قَلْعَةً وَلَا

يَرْفَعُونَ بُنْيَانًا وَهُوَ فِي وَسَطِ السَّمَاءِ وَلَا يَنْزِلُونَ

وَادِيًا وَلَا يَحْفِرُونَ أَسَاسًا وَلَا قَنَاةً وَلَا بِئْرًا وَ

لَا يَغْرِسُونَ غَرْسًا وَهُوَ تَحْتَ الْأَرْضِ وَهُوَ فِي كُلِّ

يَوْمٍ مِنْ أَيَّامِ الشَّهْرِ التُّرْكِيِّ فِي جِهَةٍ مِنْ جِهَاتِ

الْأُفُقِ وَمَبْدَأُ الشَّهْرِ التُّرْكِيِّ صَبِيحَةُ الِاجْتِمَاعِ

الْكَائِنِ قَبْلَ الشُّرُوقِ وَيَوْمُ الِاجْتِمَاعِ الْكَائِنِ قَبْلَ

نِصْفِ النَّهَارِ وَأَوَائِلُ الشُّهُورِ التَّزْكِيَةِ غَالِبًا يُوَافِقُ

أَوَائِلَ الشُّهُورِ الْعَرَبِيَّةِ وَأَقْرَبُ الطُّرُقِ لِمَنْ لَا يَعْلَمُ

أَنْ يَزِيدَ عَلَى الشَّهْرِ الْعَرَبِيِّ يَوْمًا وَاحِدًا وَيَدْخُلُ بِهِ

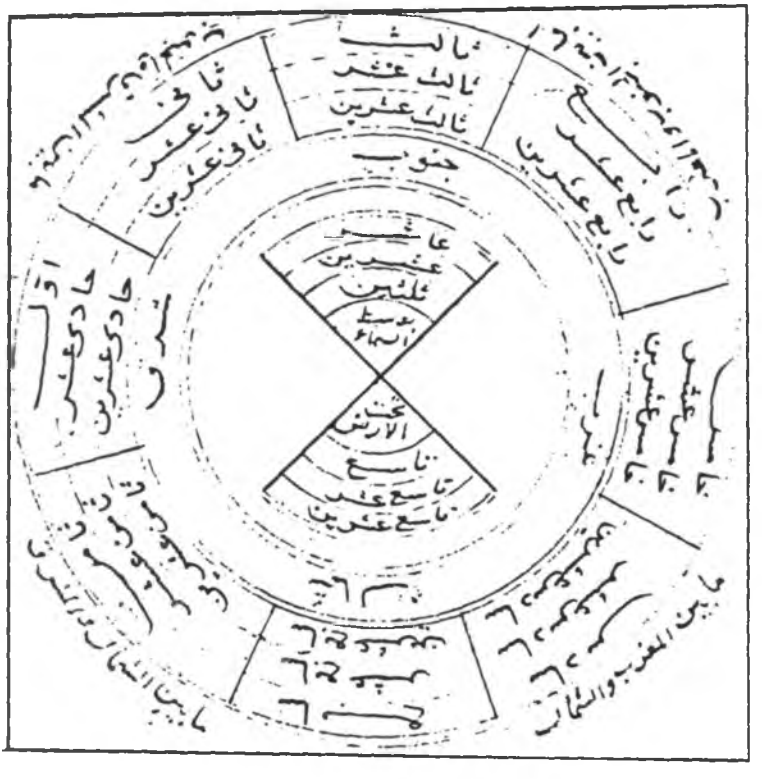
إِلَى الْجَدْوَلِ فَأَحْيَانًا يُوَافِقُ وَأَحْيَانًا يُخَالِفُ بِيَوْمٍ

لِأَنَّ مَدَاخِلَ الشُّهُورِ التَّزْكِيَةِ عَلَى الْاِجْتِمَاعِ فَإِذَا كَانَ

الْقَمَرُ بَطِيءَ السَّيْرِ فَيَتَقَدَّمُ التَّزْكِيَةُ عَلَى الْعَرَبِيِّ بِيَوْمَيْنِ

وَإِنْ كَانَ الْقَمَرُ سَرِيعَ السَّيْرِ بِيَوْمٍ وَاحِدٍ وَاللَّهُ أَعْلَمُ

وَهَذَا صُورَةُ الْجَدْوَلِ



In Chardin's statement that the eight stars are invisible, we have confirmation, if any be needed, of their imaginary nature. Nor is it given the lie by Chardin's own report that they are said to be seen only rarely and by chance: such would be an astrologer's obvious defence against awkward questions about their reality and the basis of his assertions about them.

Chardin's explanation that the object is likened to a camel in heat because of its erratic movements is plausible. It gains even more credibility if we accept his aberrant version of the diagram, but the weight of the evidence is against this, both the evidence already discussed, all of which is earlier than Chardin, and some yet to come. The movements described in the *textus receptus* of the diagram are odd enough without supposing that the object is in the nort-east one day, south the next and north-west the day after.

For seven of the nine names which Chardin surprisingly lists for the eight stars, the reader is referred to a paper by Willy Hartner, entitled 'Le Problème de la planète Kaïd.'[8] In brief, *Kaïd* (Chardin's 'Keid'; in origin the Sanskrit *Ketu)* was an invisible star of baleful influence, which was counted as an eighth planet by astrologers of medieval and Renascence times. It completed a retrograde circuit of the heavens in 144 years. Hartner gives the names of six other such imaginary evil stars, together with their meanings; here is the complete list, matched with the names from Chardin.

Chardin	Hartner	
Keid	Kaïd	
Aatit	Ghaṭît	death rattle
Aanim	Gharîm	adversary, creditor
Sermouch	Sar-i-mûsh	mouse's head
Kelab	Kalâb	hydrophobia
Zouzenab	Dhûdhuʾâba	flowing-haired
Lehioni	Lihyânî	bearded
Zouel		
Katrib		

[8] Willy Hartner, "Le Probleme de la planete Kaid," *University of Paris, Les Conferences du Palais de la Decouverte,* serie D, No.36, (1955), reprinted in the same author's *Oriens-Occi-*

Chardin's Zouel presumably represents another Arabic name beginning with *Dhū*, while Katrib may be for the Arabic *Qutrub*, a demon. It is unlikely that these Arabic names were due to 'the Tartars of Cathay'.

Osman Turan, in his *Oniki Hayvanlı Türk Takvimi*, speaks of a Persian manuscript in his possession, written in 897/1491-2 and entitled *Jadā wil al-Tālī*. Its contents include a note on *Ahkām-i Sekiz Yulduz* and a diagram to the same effect as the two alrelady described. Turan prints the Persian text, with a similar one from MS Rasadhane 196, written in 895/1489-90, together with a composite translation into Turkish. He also gives a facsimile of the accompanying diagram, which is rectilinear not circular, without specifying which of the two manuscripts is the source; the diagram is presumably the same in both. Both texts begin: *Qawl-i hukama-fi nujūm:* that from MS Rasadhane 196 says that the *kawkab* in guestion is called Sekiz Yulduz by the Turkish sages and that the months involved are the Turkish months. The other text does not mention the Turks or the Turkish months, but does give its source, Naṣīr al-Dīn Ṭūsī. Turan conjectures that it is from a lost work of Ṭūsī's entitled *Ahkām-i-Sāl-i-Turkān*. He goes on to say, "I am not in a position to offer any ideas about the astronomical basis."[9]

Our final testimony comes from a paper by W. F. Ryan, "Curious star names in Slavonic literature."[10] One of the names he discusses is Cigir, which occurs in several Church Slavonic manuscripts of the seventeenth and eighteenth centuries. In some it appears in an account of the origin of Solomon's Seal, as the name of a planet which Ryan judges to be Venus. In others it is our familiar imaginary star or stars. As well as Cigir, it is called Tsygr' and Cikhir and, in one instance, Kolo. There are similar Rumanian texts, in one of which (of the eighteenth century) the name appears as Citer. Here is a translation of what Ryan gives as a typical example of the Church Slavonic texts.[11]

dens (Hildesheim 1968), pp. 268-86. This pseudo-planet is also mentioned in Byzantine literature; see O. Neugebauer, "Notes on al-Kaid," *Journal of the American Oriental Society*, 77 (1957), 211-5. I owe the reference to Willy Hartner to the late Prof. Laurence Elwell-Sutton.

[9] Osman Turan, *Oniki Hayvanlı Türk Takvimi*, İstanbul 1941, pp. 17, 98, 117-8.

[10] *Russian Linguistics* 1 (1974), pp. 137-50.

[11] For help with the translation of this passage my thanks are due to Professor Sir Dimitri Obolensky.

> The story of the star Cikhir, how it stands. There is a star called Tsygr', which is the same. If someone needs to go on a journey and Cikhir stands opposed to him that day he should not go, but if Tsygr' stands in his rear or on one side he should go and he will be in good health and will obtain much good. But if Tsygr' stands underground or in the midst of the heavens se should not go anywhere, but if he goes he will not be in good health and some harm will occur either to him or to his property.

The movements of the star are then described, verbally in most cases but by means of a diagram in two manuscripts, and are exactly as shown in the Arabic and Turkish sources. Even without reading Ryan's specimen Church Slavonic text one could have hazarded a guess at what was being discussed, simply on the basis of his comment, "The meaning is fairly clear, if astronomically impossible."

Ryan's evidence, besides confirming the *textus receptus* of the diagram, against Chardin, helps in deciding on the correct form of the name.

Apart from the Persian use which probably underlies Minorsky's 'usually *Sekiz-yulduz'* we find 'eight' only in Turan's fifteenth-century manuscript and in Chardin. The Princeton and Chester Beatty manuscripts, both pointed, have شُكُر, which can be read (using the Turkish alphabet from now on) as *Şükür* or *Şügür.* The latter manuscript strikes an additional blow against 'eight' by explicitly stating that there are seven stars involved. The Hyderabad manuscript of the *Baburname* has سكر, that is, *s-k-r* or *s-g-r.* The Slavonic texts have *Çigir, Çihir* and *Tsıgr.* The Rumanian has *Çiter.*

We now have sufficient evidence to assert that the Eight Stars never existed, even as an imaginary constellation, and that the true Turkish name of the imaginary was something like *Şigir Yulduz* or *Sigir Yulduz.* The Sanskrit name of the planet Venus, *Sukra,* appears in Uygur as *Şükür.*[12]

[12] The name is given in *Drevnetyurskii Slovar* (Leningrad 1969), p. 525, with a citation from G. R. Rachmati, *Türkische Turfan-Texte* VII (Vienna 1936), Fragment 1: it occurs also in Fragments 4, 6, 13, 16, and 17. *Kitu,* referred to in note 8 above,occurs in Fragments 13, 15 and 16. Rachmeti, better known by his later surname Arat, in his translation of the *Baburname* rendered *s-k-r yulduz* as 'Zühre yıldızı', i. e. Venus. (Reşit Rahmeti Arat, *Gazi Zahirüddin Muhammed Babur. Vekayi. Babur'un Hatıratı* (Ankara 1943-46) i, 93). The inference is that the term *Şigir Yulduz* or *Sigir Yulduz* was not known to Arat, which is tantamount to saying that it does not occur in any extant Old Turkish text.

Confusion with this name would explain the form *Şükür* or *Sügür* in the Princeton and Chester Beatty manuscripts. The shift to *sekiz* can easily have occurred by popular etymology, especially because anyone with the slightest knowledge of astronomy would have realized that whatever this mysterious and invisible celestial object was, it could not be Venus. In the Church Slavonic texts, the confusion would seem to have worked in the opposite direction, producing *Çigir* as the name both of our star and of the planet Venus.

As to the origin of the superstition, Hartner suggests that the belief in *Ketu/Kaïd* was brought from India to China with Buddhism, and it may be that the belief in *Şigir Yulduz* took a similar path. It is significant that the Princeton Arabic text and Osman Turan's two Persian texts attribute the belief to the Turks, while the Chester Beatty Turkish text attributes it to the sages of India, Cathay and Khotan, and Chardin cites learned Persian opinion for an origin among the Tartars of Cathay.

The fact that there is nothing resembling *Şigir Yulduz* in *Dīwān Lughāt al-Turk* suggests that the belief was introduced into the Turkish world during the two centuries that divided Maḥmūd al-Kāshgharī from Naṣīr al-Dīn Ṭūsī.