

Ghiyas al-Din Abul Fath Umar ibn Ibrahim Khayyam Nishapuri ^{Written by} Iraj Bashiri

Khayyam's dates of birth and death are reported differently by various authorities. The dates for his birth range from 1021 to 1048 and for his death from 1122 to 1131. Son of a tent maker, Khayyam was a mathematician, astronomer, philosopher, and poet. He was also skilled in medicine and music. His corpus of works, consisting of two works in physics, four in mathematics, five in philosophy, and one each in geography, astronomy, history, and music reflects his wide range of interest in the sciences and the arts. He knew Arabic and Persian. Of the works mentioned above eight are in Arabic and two in Perso-Tajik.

Khayyam completed his elementary education in Balkh under Muhammad Mansur. By the age of seventeen he was well-versed in the sciences of his time. He spent the next nine years in Samarqand and Bukhara becoming acquainted with the philosophy of the masha'is, especially with the works of Ibn-i Sina. Two of his early works on mathematics--"Mushkilat al-Hisab," dealing with the general rules governing the positive roots of numbers and "Sharh-i Mushkil min Kitab al-Musiqi," dealing with music from a mathematical standpoint--are mentioned in his later work "Risala fi al-Barahin ala Masa'il al-Jabr wa al-Muqabila." This work, which was written in the 1070's at the court of the Qara Khanid king Shams al-Muluk (1068-1079), established Khayyam's fame outside of Bukhara and Khurasan. In fact, it brought him in the purview of the Saljuq court of Isfahan.

In 1079, Khayyam was asked by Abu Ali Hassan ibn-i Ali (Nizam al-Mulk), on behalf of the Saljuq sultan Jalal al-Din Malikshah to revise the Iranian calendar which had been in use since the time of the last Sassanian monarch, Yazdagird III. Heading a committee of five, including Abu Hatim Muzaffar Isfazari, Abul Abbasi Lukari, Abu al-Rahman Khazeni, and Maymun ibn-i Najib Busti, Khayyam completed the mission in five years. The revised calendar, called the "Jalali Calendar," went into operation in 1079. In addition, Khayyam also completed the "Zij-i Malikshahi," containing the results of the group's research at the Isfahan observatory, between 1074 and 1079. This work has not reached us, nevertheless, a comparison of the solar (shamsi) and lunar (qamari) calendars that were made available for agricultural and religious purposes, respectively, is indicative of the high degree of accuracy that was achieved at that time. Even after the completion of the calendar, Malikshah continued to give Khayyam assignments and kept him at the court in Isphahan.

The nearly twenty-year stay at the court of the Saljuqs allowed Khayyam to write some of his most enlightening works. For instance, in 1077, he completed "Risala fi Sharh Ma Ashkala Min Musadarat Kitab al-Uqlidas." This work includes resolutions for a number of difficult mathematical problems; resolutions which remained unresolved for the European mathematicians until the 16th and 17th centuries.

As mentioned, Khayyam has five works on philosophy. In them, especially in the 1047 "Risala fi Kulliyat al-Wujud," he follows the teaching of the masha' philosophers, particularly his own "teacher," Ibn-i Sina. In "Al-Javab al-Salasa

Masa'il Zaruratu Tazad fi al-Alam Wa al-Jabr wa al-Baqa," he becomes more original as he explains cause and effect as aspects of determinism. Khayyam's major contributions to philosophy are the 1080 "Risalat al-Kawn wa al-Taklif," which was written in response to the many questions of Abunasr Muhammad ibn-i Abdulrahim Nasavi, to Ibn-i Sina's student, and the 1097 "Risala fi Kulliyat al-Wujud."

These works did not emerge from a vacuum and their contents, which had been discussed widely, were extremely controversial. Khayyam, however, protected by the court, expressed his opinions openly. Then, in the early 1090s both his supporters, Nizam al-Mulk and Malikshah passed away. Sultan Sanjar, who succeeded Malikshah, closed the Isfahan observatory and summoned Khayyam to the new capital of Merv. Khayyam stayed in Merv a short while and traveled to Nishapur to stay there. But, in 1095, Nishapur erupted with religious strife, persecuting those who espoused masha'i ideas. Khayyam, a prime target, recognized the danger and left Nishapur for Mecca. He did not return until the unrest had subsided. He lived in Nishapur until his death. It was not until 1934 that a mausoleum was erected on his grave.

After Khayyam's death, it was revealed that the mathematician and philosopher had also been a poet and that, like Ibn-i Sina, he had versified his thoughts in an even more compelling language and tone than he normally had used in his discussions of philosophy. Furthermore, the masaha'i philosophy emerged from the "Quatrains" clearly, leaving the burden of scholastic philosophy to the dingy corners of the library. Synthesizing the thoughts of Plato, Aristotle, the neo-Platonian al-Farabi, and al-Farabi's student, Ibn-i Sina, Khayyam reiterated the masha'i's belief in "sudur," "sababiyat," "gidam," "madda" and "surat," and "nafs" and "tan," and by so doing, he put the struggle between the rationalists and orthodox Muslims in perspective. "Sudur" accepted that God had created the world but explained that the act of creation had been a necessity for God and, therefore, inevitable. The stages leading to the creation of matter followed each other as night follows day: Thus, "aql-i kull" leads to "nafs-i kull," which, in turn, leads to "hayulal," and, eventually to "Alam-i maddi." This ascription of limits to the power of the Almighty is the most startling notion in Khayyam's Quatrains. It jolts the unwary reader out of the routine of orthodox thinking and places him or her in the uncomfortable position of the unwilling blasphermer. Yet, Khayyam's God is more real and approachable than the fearful Creator of the orthodoxy Who treats His creatures as willfully as He had willed their destiny before their existence. In fact, the next step in masha', Sababiya, formally rejects the Creator/creature relationship for a cause (sabab) and effect (natija) relationship. After Sababiya, God becomes the cause of a necessary creation. And thereby, He becomes responsible for the vagaries of a creation that develops of its own accord, and at its own pace. A number of Khayyam's quatrains concentrate on what religion teaches about the powers of the Almighty and what is revealed, in practice, of the limitations of that power.

Qidam rejects that the world began at a point of creation and that it ends at a point chosen by God. Rather, it views the existence of the world as an endless continuum. Cause and effect, qidam states, prevent the world from assuming either a beginning or an end; because, every end has to be followed by another beginning as every beginning follows an end. Time and Tide, on which many of Khayyam's quatrains draw, are based on "qidam." The relationship of "madda' and "surat" is the most revealing of Khayyam's intimate views of the Creator. Madda, the building block of existence, cannot be realized unless it is associated with surat, an association that God alone can make. The most poetic of images of Khayyam--the piece on the chessboard, the rose by the brook, the pot in the potter's shop, and the puppets of the puppeteer God--draw on this unique ability of the Creator to impart "life" to the already existing matter.

After madda assumes surat, then it enters the visible creation by receiving an appropriate nafs and tan. Plants, animals, and man each has a particular nafs and, thereby, a predetermined tan. Man's nafs, for instance, is distinct from the plants in that it enables the tan to move about. But, more important, it gives the tan the capacity to rationalize and the ability to verbalize thoughts. Like his God, Khayyam's man is very different from the man shaped by the orthodoxy--the petty creature on the sidelines of existence, waiting for undeserved glory beyond the grave.

The subjects that Khayyam includes in his Ruba'iyyat are diverse and intellectually provocative. In addition, Khayyam often combines philosophy with social, ethical, and aesthetical concerns, providing his quatrains with depth as well as a spectrum of areas of interest. The logical structure of the ruba'i: thesis, anti-thesis, synthesis makes it the most suitable vehicle for the expression of a philosophical dialog. In quatrain after quatrain Khayyam examines the futility of existence, the tyranny of time, the shortness of life, and the helplessness of man.

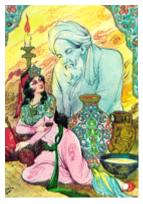
The masha' philosophy alone, however, does not bring out the full extent of Khayyam's personality. The "rind" in Khayyam is also partially responsible for the outbursts. A rind is that individual who calls a spade a spade and who, consequently, politely refuses to accept the unacceptable. His rejection is usually accompanied by an appropriate remark. There is, however, a limit to a rind's retorts. In matters of dogma, for instance, he would silently conform.

Khayyam, on the other hand, takes rindi to its limit and places dogma and its protectors on the spot. "Why should," he asks, "the individual who is destined to sin be punished for his act?" or "why should pleasures allowed in Heaven be denied on earth?" Perhaps his most difficult question is this: "Why after its creation should God continue to interefere in the daily affairs of man, a poor creature who is not informed even of the most basic concerns of his existence--the beginning and end of his days or his role and place in the larger scheme of things?"

Khayyam's frustration is as boundless as is his intellectual curiostiy. Although his masha' philosophy gives an answer, his rind personality remains dissatisfied. His Ruba'iyyat expects this frustration, which relates to man's inherent frustration at the hand of powers that be.

In search for the aethestic Khayyam, Sadeq Hedayat could identify only 13 quatrains attested to be Khayyam's. He finally concluded that Khayyam could have written as many as 143. Others who have undertaken a similar inquiry have arrived at different numbers: Hussein Shajareh gives 121; M. A. Forughi has 178, while Ali Dashti has only 81. The largest attested number is Arberry's 250. But there are others who include as many as 800 quatrains in their version of the Ruba'iyyat.

The major themes of Khayyam's Ruba'iyyat are:



هرچند که رنگ وروی زیباست مرا ، چون لاله رخ و چو سروبالاست مرا ، معلوم نشد که در طریخانهٔ خاك نقاش ازل بین چه آراست مرا ؛

- 1. The secret of creation
- 2. The agony of existence
- 3. Predestination (life planned by the maker)
- 4. Time and tide (life created by Time)
- 5. Rotating particles (life consisting of particles)
- 6. Acquiescence to the fortuitous (life happening as an accident)
- 7. Seizing the moment

Known only for his mathematical calculations since the 16th century, Khayyam gained overnight fame and increasing appeal when, in 1859, Edward FitzGeral published his translation of the Quatrains. Familiar with the personality of Khayyam and his masha' philosophy, FitzGerald versified those of Khayyam's quatrains that he felt his Western audiences would read and appreciate. As a result, many generations, including Iranians, have read and enjoyed his renditions of Khayyam's Rubaiyyat into English verse.

Samples of the Ruba'iyyat of Omar Khayyam

Written by Omar Khayyam (d. 1123) Translated by Edward FitzGerald

Wake! For the Sun who scatter'd into flight The Stars before him from the Field of Night, Drives Night along with them from Heav'n, and strikes The Sultan's Turret with a Shaft of Light.

Before the phantom of False morning died, Methought a Voice within the Tavern cried: 'When all the Temple is prepared within. Why nods the drowsy Worshipper outside?

And, as the Cock crew, those who stood before The Tavern shouted: 'Open then the Door! You know how little while we have to stay, And, once departed, may return no more.'

Now the New Year reviving old Desires, The thoughtful Soul to Solitude retires, Where the White Hand of Moses on the Bough Puts out, and Jesus from the Ground suspires.

Iram indeed is gone with all his Rose, And Jamshyd's Sev'n-ring'd Cup where no one knows; But still a Ruby kindles in the Vine, And many a Garden by the Water blows. And David's lips are lockt; but in divine High-piping Pehlevi, with 'Wine! Wine! Wine! Red Wine!' - the Nightingale cries to the Rose, That sallow cheek of her's to incarnadine.

Come, fill the Cup, and in the fire of Spring Your Winter-garment of Repentance fling: The Bird of Time has but a little way To flutter and the Bird is on the Wing.

Whether at Naishapur or Babylon, Whether the Cup with sweet or Bitter run, The Wine of Life keeps oozing drop by drop, The Leaves of Life keep falling one by one.

Each Morn a thousand Roses brings, you say: Yes, but where leaves the Rose of Yesterday? And this first Summer month that brings the Rose Shall take Jamshyd and Kaikobad away.

Well, let it take them! What have we to do With Kaikobad the Great, or Kaikhosru? Let Zal and Rustum bluster as they will, Or Hatim call to Supper--heed not you.

With me along the strip of Herbage strown That just divides the desert from the sown, Where name of Slave and Sultan is forgot--And Peace to Mahmud on his golden Throne!

A Book of Verses underneath the Bough, A Jug of Wine, a Loaf of Bread--and Thou Beside me singing in the Wilderness--Oh, Wilderness were Paradise enow!

Some for the Glories of This World; and some Sigh for the Prophet's Paradise to come; Ah, take the Cash, and let the Credit go, Nor heed the rumble of a distant Drum!

* * * * * *

Think, in this batter'd Caravanserai Whose Portals are alternate Night and Day, How Sultan after Sultan with his Pomp Abode his destin'd Hour, and went his way.

They say the Lion and the Lizard keep The Courts where Jamshyd gloried and drank deep: And Bahram, that great Hunter--the Wild Ass Stamps o'er his Head, but cannot break his Sleep. گر بر فلکم دست بدی چون یزدان . بر داشتمی من این فلك را ز میان ؛ از نو فلك دگـر چنان ساختمی . كازاده بكام دل رسيدی آمان .





I sometimes think that never blows so red The Rose where some buried Caesar bled; That every Hyacinth the Garden wears Dropt in her Lap from some once lovely Head.

And this reviving Herb whose tender Green Fledges the River-Lip on which we lean--Ah, lean upon it lightly! for who knows From what once lovely Lip it springs unseen!

Ah, my Beloved, fill the Cup that clears To-day of past Regret and future Fears: To-morrow! Why, To-morrow I may be Myself with Yesterday's Sev'n thousand Years.

For some we loved, the loveliest and the best That from his Vintage rolling Time hath prest, Have drunk their Cup a Round or two before, And one by one crept silently to rest.

And we, that now make merry in the Room They left, and Summer dresses in new bloom, Oursleves must we beneath the Couch of Earth Descend-ourselves to make a Couch-for whom?

Ah, make the most of what we yet may spend, Before we too into the Dust descend: Dust into Dust, and under Dust, to lie, Sans Wine, sans Song, sans Singer, and -sans End!

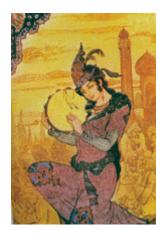
Alike for those who for To-DAY prepare, And those that after some To-MORROW stare, A Muezzin from the Tower of Darkness cries: 'Fools! your Reward is neither Here nor There.'

Why, all the Saints and Sages who discuss'd Of the Two Worlds so wisely-they are thrust Like foolish Prophets forth; their Words to Scorn Are scatter'd, and their Mouths are stopt with Dust.

Myself when young did eagerly frequent Doctor and Saint, and heard great argument About it and about: but evermore Came out by the same door where in I went.

With them the seed of Wisdom did I sow, And with mine own hand wrought to make it grow; And this was all the Harvest that I reap'd: 'I came like Water, and like Wind I go.' یکچند به کودکی به استاد شدیم : یکچند ز استادی خود شاد شدیم : پایان سخن شتو که ما را چه رمید: چون آب بر آمدیم و چون باد شدیم !





نیکی و بدی که در نیاد بشر است. شادی وغمی که در قمنا و قدر است. با چرخ مکن حواله کاندر ره عقل. چرخ از تو هزار بار بیچاره تر است. Into this Universe, and Why not knowing Nor Whence, like Water willy-nilly flowing; And out of its, as Wind along the Waste, I know not Whither, willy-nilly blowing.

What, without asking, hither hurried Whence? And, without asking, Whither hurried hence! Oh, many a Cup of this forbidden Wine Must drown the memory of that insolence!

Up from Earth's Centre through the Seventh Gate I rose, and on the Throne of Saturn sate, And many a Knot unravel'd by the Road; But not the Master-knot of Human Fate.

There was the Door to which I found no Key; There was the Veil through which I might not see: Some little talk awhile of ME and THEE There was-and then no more of THEE and ME.

Earth could not answer; nor the Seas that mourn In flowing Purple, of their Lord forlorn; Nor rolling Heaven, will all his Signs reveal'd And hidden by the sleeve of Night and Morn.

Then of the THEE IN ME who works behind The Veil, I lifted up my hands to find A Lamp amid the Darkness; and I heard, As from Without: 'THE ME WITHIN THEE BLIND!'

* * * * * *

Why, if the Soul can fling the Dust aside, And naked on the Air of Heaven ride, Wer't not a Shame-wer't not a Shame for him In this clay carcase crippled to abide?

'Tis but a Tent where takes his one day's rest A Sultan to the realm of Death addrest; The Sultan rises, and the dark Ferrash Strikes, and prepares it for another Guest.

And fear not lest Existence closing your Account, and mine, should know the like no more: The Eternal Saki from that Bowl has pour'd Millions of Bubbles like us, and will pour.

* * * * * *

The Revelations of Devout and Learn'd Who rose before us, and as Prophets burn'd,

هر سبزه که بر کنار جوئی رسته است ، گوئی ز لب فرشته خوئی رسته است ؛ پا بر س هر سبزه به خواری نئپی ، کان سبزه زخاك لاله روئی رسته است ،



ما لعبتگانیم و فلك لعبت باز . از روی حقیقتی نه از روی مجاز ؛ یکچند درین بساط بازی کردیم . رفتیم بصندوق عدم یك یك باز ؛ Are all but Stories, which, awoke from Sleep, They told their comrades, and to Sleep return'd.

I sent my Soul through the Invisible, Some letter of that After-life to spell: And by and by my Soul return'd to me, And answer'd: 'I Myself am Heav'n and Hell':

Heav'n but the Vision of fulfill'd Desire, And Hell the Shadow from a Soul on fire Cast on the Darkness into which Ourselves, So late emerg'd from, shall so soon expire.

We are no other than a moving row Of Magic Shadow-shapes that come and go Round with the Sun-illumin'd Lantern held In Midnight by the Master of the Show;

But helpless Pieces of the Game He plays Upon this Chequer-board of Nights and Days; Hither and thither moves, the checks, and slays, And one by one back in the Closet lays.

The Ball no question makes of Ayes and Noes, But Here or There as strikes the Player goes: And He that toss'd you down into the Field, He knows about it all-HE knows-HE knows!

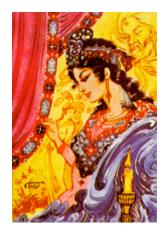
The Moving Finger writes; and, having writ, Moves on: nor all your Piety nor Wit Shall lure it back to cancel half a Line, Nor all your Tears wash out a Word of it.

And that inverted Bowl they call the Sky, Whereunder crawling coop'd we live and die, Lift not your hands to It for help-for It As impotently moves as you or I.

* * * * * *

O Thou, who didst with pitfall and with gin Beset the Road I was to wander in, Thou wilt not with Predestin'd Evil round Enmesh, and then impute my Fall to Sin! *****

Ah Love! could you and I with Him conspire To grasp this sorry Scheme of Things entire, Would not we shatter it to bits-and then Remould it nearer to the Heart's Desire! این قافلهٔ عمر عجب میگذرد ا دریاب دهی که با طرب میگذرد : ساقی، نمه فردای حریفان چه خوری . پیش آر پیاله را ، که شب میگذرد .





Selections from the Quatrains of Omar Khayyam

1 A Book of Verses underneath the Bough, A Jug of Wine, a Loaf of Bread--and Thou Beside me singing in the Wilderness--Oh, Wilderness were Paradise enow! 2 Ah, make the most of what we yet may spend, Before we too into the Dust descend: Dust into Dust, and under Dust, to lie, Sans Wine, sans Song, sans Singer, and -sans End! 3 Alike for those who for To-DAY prepare, And those that after some To-MORROW stare, A Muezzin from the Tower of Darkness cries: 'Fools! your Reward is neither Here nor There.' 4 Why, all the Saints and Sages who discuss'd Of the Two Worlds so wisely-they are thrust Like foolish Prophets forth; their Words to Scorn Are scatter'd, and their Mouths are stopt with Dust. Myself when young did eagerly frequent Doctor and Saint, and heard great argument About it and about: but evermore Came out by the same door where in I went. 6 With them the seed of Wisdom did I sow, And with mine own hand wrought to make it grow; And this was all the Harvest that I reap'd: 'I came like Water, and like Wind I go.' Into this Universe, and Why not knowing Nor Whence, like Water willy-nilly flowing; And out of its, as Wind along the Waste, I know not Whither, willy-nilly blowing. 8 What, without asking, hither hurried Whence? And, without asking, Whither hurried hence! Oh, many a Cup of this forbidden Wine Must drown the memory of that insolence! Up from Earth's Centre through the Seventh Gate I rose, and on the Throne of Saturn sate, And many a Knot unravel'd by the Road; But not the Master-knot of Human Fate.

There was the Door to which I found no Key; There was the Veil through which I might not see: Some little talk awhile of ME and THEE There was-and then no more of THEE and ME. 11 Then to the Lip of this poor earthen Urn

I lean'd, the Secret of my Life to learn: and Lip to Lip it murmur'd: 'While you live, Drink!--for, once dead, you never shall return.'

12

Earth could not answer; nor the Seas that mourn In flowing Purple, of their Lord forlorn; Nor rolling Heaven, will all his Signs reveal'd And hidden by the sleeve of Night and Morn.

13

Then of the THEE IN ME who works behind The Veil, I lifted up my hands to find A Lamp amid the Darkness; and I heard, As from Without: The ME WITHIN THEE BLIND!"

14

Why, be this Juice the growth of God, who dare Blaspheme the twisted tendril as a Snare? A Blessing, we should use it, should we not? And if a Curse-why, then, Who set it there?

15

Strange, is it not? that of the myriad who Before us pass'd the door of Darkness through, Not one returns to tell us of the Road, Which to discover we must travel too.

16

The Revelations of Devout and Learn'd Who rose before us, and as Prophets burn'd, Are all but Stories, which, awoke from Sleep, They told their comrades, and to Sleep return'd.

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I sent my Soul through the Invisible, Some letter of that After-life to spell: And by and by my Soul return'd to me, And answer'd: 'I Myself am Heav'n and Hell':

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Heav'n but the Vision of fulfill'd Desire, And Hell the Shadow from a Soul on fire Cast on the Darkness into which Ourselves, So late emerg'd from, shall so soon expire.

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The Ball no question makes of Ayes and Noes, But Here or There as strikes the Player goes: And He that toss'd you down into the Field, He knows about it all-HE knows-HE knows!

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The Moving Finger writes; and, having writ, Moves on: nor all your Piety nor Wit Shall lure it back to cancel half a Line, Nor all your Tears wash out a Word of it.

23

And that inverted Bowl they call the Sky, Whereunder crawling coop'd we live and die, Lift not your hands to It for help-for It As impotently moves as you or I.

24

What! from his helpless Creature be repaid Pure Gold for what he lent him dross-allay'd---Sue for a Debt we never did contract, And cannot answer-Oh, the sorry trade!

25

O Thou, who didst with pitfall and with gin Beset the Road I was to wander in, Thou wilt not with Predestin'd Evil round Enmesh, and then impute my Fall to Sin!

26

O Thou, who Man of baser Earth didst make, And ev'n with Paradise devise the Snake: For all the Sin wherewith the Face of Man Is blacken'd-Man's forgiveness give-and take! 27

Why, if the Soul can fling the Dust aside, And naked on the Air of Heaven ride, Wer't not a Shame-wer't not a Shame for him In this clay carcass crippled to abide?

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Ah Love! could you and I with Him conspire To grasp this sorry Scheme of Things entire, Would not we shatter it to bits-and then Remold it nearer to the Heart's Desire! Tamam: End