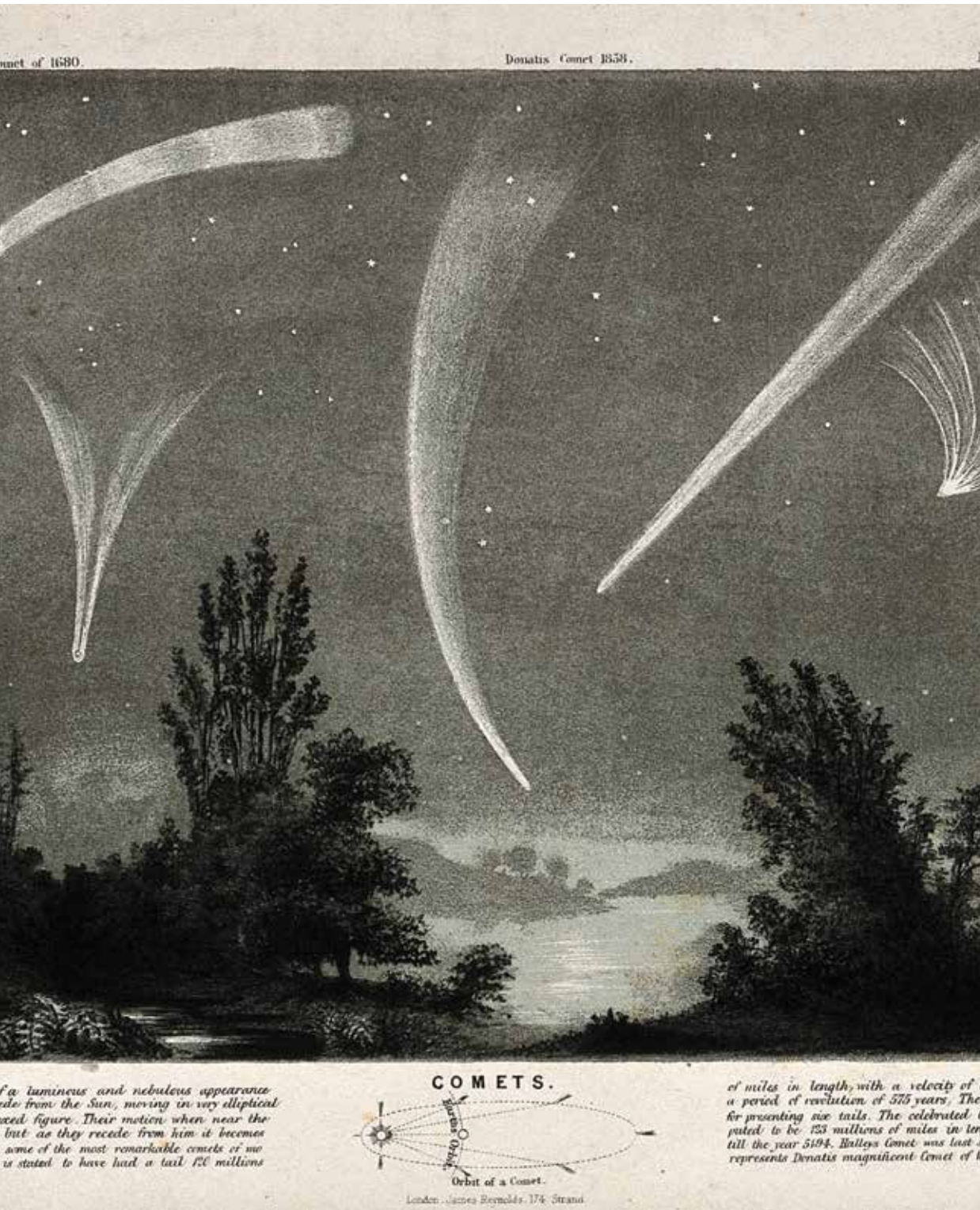




◀ Comets in a night sky. Engraving



Reality: A Tale of Artists, Merchants, Mathematicians, and Kings

Anonymous | Varied
Retold by Nartana Premachandra

Chaco Canyon, 1054

If there is no one to watch when a star tells its tale, is there a star at all?

Starlight flooded the night sky; purple waves of light, the last tendrils of the setting sun, laced the night sky with what seemed like sparkling webs of immortal spiders. Caught in the web, a prey of unbelievable brilliance pulsed bright silver; a star caught in the shimmering nexus of its death.

Down below, upon an ordinary world of water and rock, an artist watched, eyes wide open, and when the sun returned the next morning, crafted what he saw; a star spiked with ten dancing rays on a wall of rock. Next to that, a moon in the shape of a ram's horns, and above that, a print of his own hand.

As if to say to the star: *I am here. You did not die alone.*

Twelve years passed; perhaps by now the artist was married, with a child.

Or perhaps not.

Either way, something else in the sky now called him: a small speeding star-like being bearing a streaming glittering tail.

The artist discussed this with his fellow villagers. Perhaps he attended a meeting of the chief and elders of the pueblo, in a cliff dwelling punctuated with endless doorways, leading to rooms upon space-filled rooms: *What is the meaning of the small star racing through the heavens with a shimmering tail?*

Perhaps the elders decided it was a sign from the gods.

Perhaps not.

In either case, the artist returned to his rock wall of art. This time, upon the floor of the cliff, he carved the kachina—a spirit communicating to him from the heavens. A spiral sun for head, topping a body of jagged flame.

I was born to etch the stories of the sky into the earth, he thought; if I were not here, would the sky bother to speak at all?

Kent, England. 1070 or so

This is a tale told by a comet, and recorded by a human.

Nuns work silently, weaving wool, dying it with the indigo shades of woad and the pink reds of madder, so the vision they create upon sheets of linen will be brilliantly colored and detailed, satisfying the Archbishop of Canterbury, commissioner of the tapestry. The Archbishop will hang this in the newly renovated cathedral of Bayeux, France.

In the cool quiet of the abbey, enhanced only by birdsong in the courtyard, women secluded away from the world of men (gratefully? despairingly? angrily?) stitch into life soldiers, kings, towers, swords, castles, and death. They embroider six-hundred-and-twenty-six men. One-hundred-ninety horses. Five-hundred-and-forty-one other animals. One nun whispers to another: *We are creating one of the most beautiful bestiaries I've ever seen.*

In the simple room, furnished only with dozens of burning candles illuminating a statue of the Virgin with child, one sister begins sewing a female on one panel. On another section, another female. In the maelstrom of armed men depicted along the entire two-hundred-twenty-four feet of the tapestry, just three women are present, and perhaps one child.

Suddenly, a quiet footfall upon stone. A wooden door creaks open.

The abbess: *I've just heard from the archbishop. He tells us we must not forget to include the comet in the tapestry. After all, his half-brother is King William and the king considered the comet a sign from God that he would be victorious over our King Harold. We all saw the celestial being, if you recall. She sighs. Whether victor or loser, everyone sees the same sky.*

The abbess leaves. A nun picks up a spool of wool and begins to embroider the star with flowing hair that streamed through the sky the year everything changed in England. The star that stayed in the sky for months. And like that, the language of the heavens falls into the hands of women.

One sister tells another: *It is a blessing, to craft a marvel of heaven. Even if our side lost.*

Cairo, Egypt 1188 or so

The meaning of everything is found in nothing. And nothing is the origin of everything.

Saladin the great gazes down at the merchant before him.

The merchant is not so tall, but wiry. Not so handsome, but bears intelligence in his eyes.

This merchant is not Muslim but Jewish. He speaks steadily, colored with a tinge of nervousness. “Sultan,” he says, “It took some time to arrive here after your soldiers called me to come to your august presence. I am sorry for the delay; I had to unpack my donkey, keep the wares safe somewhere, and find a place for him in the stables before I could come see you.” He pauses, adds hastily, “For a merchant his pack animal and wares are his entire life. As I am sure you must know, your highness.”

Saladin nods; he is uninterested by ordinary details. He has something else on his mind.

“I have called you here because I want to know something.”

The merchant, a little surprised, replies, “I don’t know what it is that I can possibly know that your highness cannot, but I will do everything I can to assist you.”

Saladin nods, and asks, “Can you tell me, which of the three religions of Abraham is the true one? The religion of the Christ, the religion of Muhammed, or your belief?”

The merchant is stunned; he did not expect this and doesn’t know why a great ruler like Saladin would be interested in his opinion.

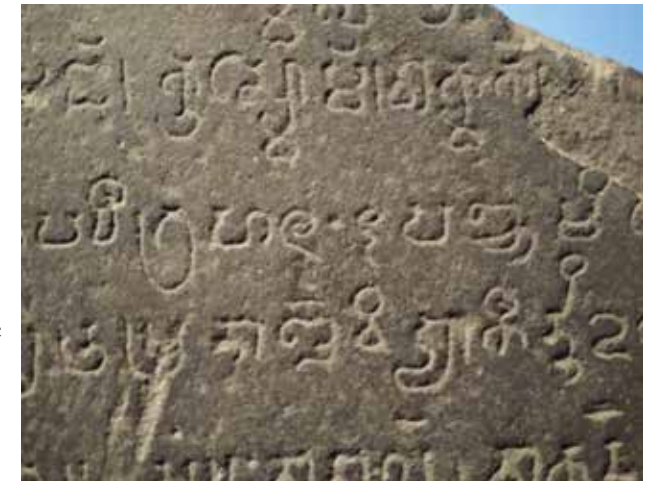
Saladin continues, as if he read the merchant’s mind, “I am asking you this because you are an ordinary man. I am surrounded by soldiers, slaves, sycophants. What does an ordinary man believe? An ordinary man like you who has traveled through many lands?”

The tradesman nods, looks at the ground, thinks quickly. He looks up, and despite his racing heart—thinking, *what kind of answer can I give to this question, a Muslim ruler who has defeated the Christians and occupies the Jerusalem of my ancestors?*—tries to speak steadily. “Sire, may I think properly on this question, to answer you truthfully? My mind has been occupied with affairs of commerce so much recently I have not thought deeply on...the divine.”

Saladin considers the seller of objects; he has brown curly hair, a face as pale as milk, eyes like almonds. He seems honest. The emperor says, “Yes, of course a merchant’s mind is usually on numbers, currency, orders, and inventory. You may reply to me within a year. But you must return within a year. If not we will find you and...” He leaves the sentence unfinished.

The merchant bows, relieved. “I will return within one year with my answer.”

“Go,” commands Saladin, “Give my soldiers your name and information. And I will see you in one year.”



First known graphic representation of zero, 682-683 A.D. On a broken door jamb, Kratie, Cambodia. National Museum of Cambodia. Photograph by Mx. Granger

The merchant retrieves his donkey and wares, and begins traveling, all the while thinking about how to answer Saladin the great.

He leaves Cairo, passes through Alexandria, reflecting, *I wish that great Library were still standing, I could page through books by the learned, books inspired by God himself, seeking an answer for the sultan.*

From Alexandria, he sails the Mediterranean and visits his beloved Jerusalem. The magnificent city on a hill, home to churches, a mosque, the destroyed and rebuilt temple, overlooking the olive groves where the Christ spent his last night in doubt....

The tradesman keeps traveling, onto the ancient city of Damascus, and then to Constantinople, all the while selling and buying clothing, jewelry, and pottery, all borne by his trusty donkey. Each morning follows each night of rest without stop, and during each day he keeps traveling, to the great acropolis of Athens, and then through the enchanted waterways of Venice. In every city he is captivated by the pageantry of life, as he keeps Saladin's question turning in his mind.

After Venice, he travels south, boards a ship to cross the Mediterranean, and finds himself in company with a young man from Pisa. The fellow traveler notices his goods, and tells him he needs a new hat to shelter him from the elements.

The merchant and young man keep speaking, leaning against the railing of the vessel. The wind soars above them, around them, through them. The Pisan tells him, "Like you, I too have been traveling. I work in the port city of Béjaïa with my father. I read all kinds of books which make their way through the ports. One of them fascinates me more than anything."

"What is that?" asks the merchant, thinking, *Perhaps this will answer Saladin's question.*

The young man replies, "A book on mathematics. But on a concept which fills me with wonder."

"What is that?" asks the merchant once more. He has to shout the question as the wind, in a volley of sensuous air steals the sound of his words from him.

"Nothing," cries the studious soul, gazing into the azure sea and sky.

"Nothing?" replies the merchant.

The young man nods. "In India, a mathematician has realized that the value of nothing is essential for calculations. Nothing is actually...something. Like...this insatiable wind around us!" he yells.

The merchant asks, "What is your name?"

The young man replies "Leonardo. Leonardo of Pisa!"

The merchant spends two days in Béjaïa before crossing the sea for Spain. After his visit there he will return to Saladin, hoping to have a proper answer to the king's question. He travels through the exquisite cities of Cordoba, Granada, and finally arrives in Toledo. There he finds that in a Christian city the language of learning is Arabic, and that the local ruler has built a School for Translators to translate the great books between Greek, Latin, Hebrew, and Arabic. *So that learning slips rapidly from one tongue to the next....*

And the merchant has his answer. On his return to Saladin's court, he stops in Venice, at a gold market. He takes a gold coin from deep within a hidden pocket

in his breeches, and gives it to a gold-buyer. He asks, "Can you find a goldsmith to make two copies of that coin for me?"

Saladin once more, from his throne, gazes into the quiet eyes of the Jewish merchant. "You have returned. I hope you have your answer for me."

The merchant nods, confidently. "I do Sire. I have traveled much and experienced much. And in answer to your question—out of the three religions of Abraham, which is the true one, I give you this."

He calls a minister of the court and hands him three gold coins. The minister takes them, and hands them to Saladin.

Saladin laughs. "What is the meaning of this?" he asks.

The Jewish merchant speaks clearly. "I have given deep thought to this matter. In your hand you have three gold coins. One of them was the first gold coin I earned as a young merchant, after I sold a chest of jewels to a noblewoman in Tyre. I was so thrilled that I decided to keep it forever. However, in the past year, thinking about your question, I decided that the only way I can properly answer you is like this: I stopped at a gold market in Venice, and had a goldsmith make two gold replicas of the first coin I ever earned. Sire," he said, a little nervously, but then more boldly, "Even I don't know anymore which of the three coins you hold in your esteemed hands is the original. They are all worth the same, and shine brilliantly in your palace. But beyond that, I don't know which is truly my first coin anymore."

Saladin slowly, carefully, nodded, and returned the coins to the merchant.

St. Louis, U.S.A., 2024

What is truer than this?

A writer who was in school when Halley's Comet last passed by the earth writes a piece on Reality for the journal *Parabola*, which was celebrating its first decade of existence when the celestial object with a nucleus of ice and a tail of gases lit up the night for humans in 1986.

On December 9th, 2023, the comet reached its farthest point from the sun—which lies beyond the orbit of Neptune—and turned around in its elliptical orbit to head back to earth and dazzle billions of human beings, whether in war-zones, or places of at least some peace, in 2061.

Whether an artist, merchant, or warrior, mathematician, prisoner, or the many varieties of king—from dictator to president—we share the same skies. ♦

Notes

- 1) The supernova in 1054 gave birth to the Crab Nebula and was also recorded in China, Japan, and the Islamic world.
- 2) Halley's Comet was widely observed in 1066 around the world.
- 3) It is not known who exactly crafted the Bayeux Tapestry but most scholars believe women did most of the work. Among them, some think nuns did the work, and others disagree.
- 4) This tale of Saladin and the merchant was inspired by *The Three Rings*, a tale found in Boccaccio's *Decameron*.
- 5) Leonardo of Pisa, better known as Fibonacci, was the first to introduce Western Europe to the concept of 0 in his book *Liber Abaci*, in 1202. Brahmagupta, a seventh-century mathematician in India, is said to have been the first to have recognized the value of zero in calculations.