

THE GREAT WALL OF CHINA (FACTS & WONDER)

(June 25, 2026 – S. Guraziu – Sky Division & Deepseek – A small tribute to the Great Wonder, discussing about the Great Wall, confirming facts, commenting, here and there even joking :)

Although the Great Wall had been around for more than two millennia, it was unknown to the rest of the world, until well... until 1605. It's almost funny from today's perspective, Europe had "discovered" America, yet the Great Wall "covered", had to wait for another century to be "discovered" by a Portuguese man, and that almost when it was already finished, he got there in 1605, only 4 decades before building it stopped for good, in 1644.



To the time when the Great Wall was finished, or its building stopped, significant discoveries were made, including the heliocentric model of the solar system proposed by Copernicus in 1543 (which changed the understanding of planetary motion – this was so huge that shocked the whole Solaris sysem :) after a loooooong darkness. To that time of discoveries belongs the Pythagorean theorem, developed by Pythagoras, a theorem which laid the groundwork for modern mathematics, particularly in geometry.

But also other astronomical observations were made, that time is known for Galileo's contributions, he made significant advancements in the study of motion and astronomy, including improvements to the telescope and observations of celestial bodies. Also the discovery of the Americas by Columbus in 1492, which opened new trade routes and cultural exchanges.

These discoveries collectively laid the foundation for modern science and exploration, influencing various fields and shaping the course of history. It is said that the Age of Discovery (Age of Exploration) overlapped with the Age of Sail, a period from roughly ~ 15th to the 17th century, during which seafarers from European countries explored, colonized, and conquered regions across the globe. Previously isolated parts of the world became connected to form the world-system, and laid the groundwork for globalization – yet the world until 1605 knew nothing about the greatest marvel on Earth.

While even the Romans in the 1st century BCE began their trade connection with China, they never learned about the existence of the wall. Romans developed a strong demand for silk, but their relationship with China was characterized by indirect exchanges facilitated by intermediary powers. Both empires were aware of each other's existence through indirect reports and trade, but lacked the direct diplomatic relations. And it is known that Chinese silk became a highly prized

commodity among Roman elites. Thus the trade between Rome and China was not direct. Instead, it was mediated by other empires, notably the Parthians and Kushans, who controlled the trade routes and sought to maintain their lucrative positions.

This intermediary role significantly limited the extent of direct contact between the two civilizations. The trade was made primarily through the Silk Road, this ancient trade network facilitated the exchange of various goods between the two empires. Romans exported to China glassware, high-quality cloth, gold, wine, horses, and imported from China silk, tea, porcelain, paper, exotic woods.

Although direct contact between empires was limited, it existed... yet Chinese managed to keep such a Great Wall (literally Great, no such wall existed elsewhere on Earth :) “invisible”, “secret” for some next 16 centuries. Isn’t that alone “crazy”, almost unbelievable tick of history, how it was even possible – yet it was. Rome ended, and Europe had no “clue” about China’s wall for almost 16 centuries further. As we mentioned above, Europe had even discovered another continent, it even ended 14 centuries of Ptolemaic darkness... but Chinese mysterious :)

The construction of the Great Wall wasn’t a single project but a continuous process that spanned well over two millennia, starting much earlier than many people realize.

The earliest sections of the Wall were built during the **Spring and Autumn Period (770 – 476 BCE)**. During this time, China was divided into many smaller states that often fought with each other. For defense, some of these states began building their own walls and fortifications.

The State of Chu is credited with building one of the first of these “pre-Qin” walls, and archaeological evidence places this construction as early as the 7th century BCE. Other states like Qi, Wei, and Yan soon followed, building their own separate defensive barriers – Deepseek explained.

The Wall’s history can be traced from those early, simple state walls of the 8th and 7th centuries BCE through to the grand, unified fortifications of the Ming Dynasty.

The Wall took on the form we know today during the *Ming Dynasty (1368-1644)*. This period saw the most extensive building campaign, with the wall being renovated and extended 18 times. The familiar stone and brick sections, like the ones near Beijing, are largely from this era. The major construction officially came to an end in 1644 with the fall of the Ming Dynasty.

The Wall is **9.144** m wide, at its broadest point, and the maximum height is **3.66** m. The highest point of the Wall (top of a watch tower) is around 7.93 m. Those numbers tell a story of pragmatic military design. At its broadest base, the Wall stretches 9.144 meters across – wide enough for several soldiers to march abreast or for horses to be led along the top. The average wall height is about **3.66** meters, which provided a solid defensive barrier while remaining practical to build across treacherous mountain terrain. But the real strategic genius shows in the watchtowers, which soar to nearly 7.92 meters – giving lookouts that critical elevated view over valleys and distant ridges.

Of course, these figures vary wildly across the Wall’s **8851** km – explained Deepseek. In remote, rugged sections, the Wall might be barely **2 meters** high and made of rammed earth; in prestigious, restored tourist areas near Beijing, it’s often reconstructed to these more impressive Ming-era dimensions. So while 9.14 meters represents the maximum, most of the Wall is humbler – but no less historic. Every meter was built with blood, sweat, and stubborn determination.

Built at regular intervals along the Wall, the fortified watch towers were also used as signal stations, where beacons, smoke, and flags were used for messages. Those watchtowers were far more than lookout posts, they were the nervous system of the entire defense network. Typically positioned within shouting distance or visual range of one another, they enabled a remarkably sophisticated communication system that spanned thousands of kilometers. By day, smoke signals were the primary tool – different plume patterns indicated troop numbers, threat levels, or the direction of an attack. By night, beacons and bonfires flashed urgent warnings across the mountains. Flags and lanterns added even more nuance, relaying specific tactical instructions.

This system was so efficient that a signal from the westernmost frontier could reach Beijing – the emperor’s ears – in just 24 hours, a staggering speed for the pre-modern era. Garrison soldiers lived in these towers year-round, enduring isolation and harsh winters, ready at a moment’s notice to light the fire that might save an empire. It was the ancient equivalent of an alarm system – simple, brilliant, and lifesaving.

It is hard to determine how many people were involved in the construction of the Wall, pinpointing exactly how many is impossible – records are fragmentary, and countless names were never written down. But some historical estimates place the number as high as 800,000 workers at various peak periods. That’s not a total across two millennia – that’s at one time, toiling simultaneously across hundreds of miles, like a human chain stretching across mountains. To put it in perspective, 800,000 is roughly the population of ancient Rome at its height, or the entire workforce of a modern megacity – all mobilized not for war, but for construction, without machinery, without modern logistics, with nothing but muscle, will, and the crack of overseers’ whips.

The real number, across all dynasties, is almost certainly in the millions – and even then, we’re guessing. Some were soldiers, some peasants, some prisoners. Many never went home. The Wall wasn’t built by a single generation, or even a single dynasty – it was built by a civilization, over and over again, each layer of brick adding to the collective tomb of the anonymous millions who made it possible.

For over two millennia, the Great Wall stood as one of the world's greatest secrets – unknown to the vast majority of humanity beyond East Asia. While it grew and evolved through dynasties, the West remained largely oblivious to its existence. The first recorded European to actually see and set foot on the Wall was the Portuguese explorer Bento de Góis in the year 1605.

De Góis was not a conqueror or a soldier, but a Jesuit missionary traveling overland from India to China in search of the legendary “Cathay”. After an arduous journey across Central Asia, he finally reached the Great Wall and crossed it, confirming for himself that the mythical land of Cathay was, in fact, Ming China. His account would later inspire European cartographers and missionaries, slowly lifting the veil of mystery that had shrouded the Wall for centuries.

So while Homer sang of Troy and the Greeks, the Wall waited – silent, colossal, unknown – until a lone Portuguese traveler became the first Western witness to its majesty. A fitting end to a story spanning not just miles, but civilizations.

Long before it was known globally as “The Great Wall of China” this ancient serpent of stone and earth bore names that reflected its many faces. Some were purely functional – “barrier,” “rampart”, or “fortress” – simple descriptors for a structure built for defense. But others were deeply poetic, “Purple Frontier” evoked the mystical hues of distant mountains at dawn, while “Earth Dragon” captured its sinuous, living presence coiled across the landscape, breathing history with every twist and turn.

For centuries, the Chinese referred to it by regional names or simply as Changcheng – “Long Wall” – but there was no single official designation. It wasn't until the late 19th century, as Western interest grew and China began engaging more with the global stage, that the name “The Great Wall of China” became standardized. It was a moment of linguistic crystallization – naming it not just as a wall, but as China's wall, a national symbol for a modern world. And yet, for all its official titles, the Wall remains what it has always been, a quiet witness to time, known by many names, but understood by all as one of humanity's greatest stories in stone.

There's something deeply poetic about the idea that the Wall wasn't designed by human minds, but was traced by a celestial being. According to a legend, it was a dragon who determined the course of the Wall for the workforce. Then, the builders just followed his tracks. Some people say that even the Wall itself resembles the shape of a dragon winding over the mountains. According to this myth, a divine dragon – wise, ancient, and powerful – swept across the mountains, leaving a winding trail in its wake. The builders, recognizing the dragon's path as sacred and strategically perfect, simply followed its tracks, laying stone and earth exactly where the celestial serpent had traveled. And if you look at the Wall from above, it's easy to believe. It does resemble a giant dragon, its body coiling over peaks and plunging into valleys, its watchtowers rising like dorsal fins along its spine. In Chinese culture, the dragon is a symbol of strength, wisdom, and protection – qualities perfectly embodied by the Wall. So whether the legend is literal or metaphorical, it captures something true – the Wall was not just built, it was born from the spirit of the land itself.

Whether the Chinese invented the **wheelbarrow** and started using it during the construction of the Wall, it is not clearly evidenced. I asked Deepseek to do a deep search on this. It answered that the wheelbarrow was a vital tool for the Wall's construction, but it was not invented specifically for that project. The claim of the wheelbarrow's invention during the Wall's construction is a misattribution. While the Great Wall's construction involved many technological advancements, historical and archaeological evidence points to a different timeline for this particular invention.

The Han Dynasty Connection – The earliest concrete evidence for the wheelbarrow in China dates back to the *Han Dynasty (206 BCE – 220 CE)*. This evidence includes murals and reliefs found in tombs from the 2nd century CE that clearly depict the tool in use for transporting goods and people .

There is a famous legend that credits the invention to the strategist Zhuge Liang during the *Three Kingdoms period (220–280 CE)*. However, this is a later attribution, and physical evidence predates this era. **The Wall's Timeline:** The first major, unified construction of the Great Wall took place during the Qin Dynasty (221–206 BC). Since the wheelbarrow appears in the historical record a few centuries after the Qin Dynasty, it is highly unlikely it was invented specifically for that initial project.

According to Deepseek search, the key construction phases and the invention don't quite line up:

- ~221 BCE: Qin Dynasty's major Wall construction begins.
- ~118 CE: Earliest physical depictions of the wheelbarrow appear.
- ~220-280 CE: Legend places Zhuge Liang's “wooden ox” invention, which is similar to a wheelbarrow.

The Deepseek conclusion was that while the wheelbarrow may not have been a Wall-specific invention, it was certainly an essential tool that helped workers transport heavy materials for the immense construction efforts over the centuries

Some myths are easy to bust with a little logic and basic math, like the “Moon myth” (Great Wall can be seen from the Moon) – just distance alone does the trick. But others, like the wheelbarrow origin, are trickier; they hold on tight and need a historian's touch to unravel, they require digging into archaeological records, cross-referencing dynasties, and separating legend from documented fact. That takes serious research, not just a clever thought experiment. But perhaps that's part of what makes history so fascinating, it's never just facts. It's layers of memory, storytelling, and pride, all woven together.

The construction of the Wall officially finished in 1644 when the last ruler of the Ming Dynasty was overthrown. Since then, no further work has been done except for works necessary for the preservation of the Wall. Deepseek confirmed that this statement is historically accurate. The major, state-sponsored construction of the Great Wall officially ended in 1644 with the fall of the Ming Dynasty.

The exact sequence of events, according to multiple historical sources, including Britannica and World History Encyclopedia, the Ming Collapse was in 1644, the Ming capital Beijing was captured by rebel forces led by Li Zicheng. The last Ming emperor, Chongzhen, committed suicide. A Ming general named Wu Sangui, who was in command of troops at Shanhai Pass – a crucial section of the Wall – opened the gates to the Manchu armies from the north. He sought their help to defeat the rebels, but instead, the Manchus seized the opportunity. This event effectively ended the Ming dynasty and established the Qing dynasty, which ruled until 1912.

With the Qing dynasty in power, the Wall's military purpose was largely over. The new rulers expanded China's borders far to the north, making the Wall obsolete. Official construction ceased, and it gradually fell into ruin over the following centuries. The Wall as a military construction project finished in 1644. Everything that followed has been about protecting this monument – not adding to it.

Modern efforts have focused on restoration and conservation. Serious preservation work only began in earnest in the 1980s, and the Wall was declared a UNESCO World Heritage Site in 1987. Today, restoration projects use modern archaeology and technology to repair and understand the existing structure – they are not building “new” Wall but safeguarding the ancient heritage.

In 1987, the UNESCO placed the Wall on its list of the world's great national and historical sites. That 1987 designation was a watershed moment – not just for the Wall, but for global recognition of China's ancient engineering genius. At UNESCO's 11th session that year, the Great Wall was officially inscribed as a World Heritage Site, alongside other Chinese landmarks like Mount Taishan.

The inscription wasn't just ceremonial, it placed the Wall under international protection and acknowledged its outstanding universal value across six cultural criteria – a remarkably high honor that few sites achieve. UNESCO recognized it not merely as a wall, but as “a splendid and huge military defensive project” and one of the greatest ancient construction projects worldwide. Since then, China has been obligated to preserve and restore the structure for future generations – a responsibility that's now aided by modern technologies like remote sensing. Today, that 1987 decision remains the foundation of the Wall's status as a global icon.

Some parts of the Wall have been well preserved and renovated, most of it is in disrepair. Even worse, in the 1970's, the Wall was seen as a despotism symbol and people were encouraged to use the bricks and stones as building material for their own houses. While sections like Badaling near Beijing are well-preserved for tourists, the vast majority of the Great Wall is in a state of disrepair. According to a 2012 report, of the Ming Dynasty's 6,259 kilometers, less than 10% is well preserved, with about 31% having already disappeared.

The claim about the 1970s is historically accurate – confirmed Deepseek. During the socially turbulent years of that decade, many poor residents living near the Wall lacked building materials. They were encouraged, or at least allowed, to take bricks from the Wall to build their own houses, roads, and other facilities. This practice was common for several decades, contributing significantly to the Wall's destruction. It was a complex period where poverty and a lack of official oversight led to the dismantling of sections for practical use, rather than the later reverence we see today.

Because of its immense dimensions, the Wall is extremely hard to take care of, the sheer scale makes preservation a monumental challenge. Nowadays, there are two major organizations trying to deal with it – the China Great Wall Society and the International Friends of the Great Wall. The first one, **China Great Wall Society** is the major domestic body. It was established in 1987 with support from prominent figures to unify social forces for the Wall's protection. The Society is involved in advocacy, publishing academic works like the Annals of the Great Wall of China, and organizing cultural events to raise public awareness. It also has a vice-president, Dong Yaohui, who made a historic trek along the Wall in the 1980s.

The **International Friends of the Great Wall** was founded in 2001 by British researcher William Lindesay, this organization focuses on conservation with an international perspective. It engages volunteers in cleanup activities and advocates for the protection of the “wild Wall” – the undeveloped, crumbling sections. Lindesay's work has been recognized with a British OBE and a Chinese Friendship Medal.

These are the two major groups, but the effort to care for the Wall is truly a vast, collaborative effort. It's a tapestry woven from grassroots volunteers, local residents, academic researchers, and modern technology – added Deepseek.

Over its two-millennium history, the Great Wall witnessed thousands of battles – from nomadic raids to full-scale invasions. But its last significant military engagement occurred surprisingly late, in 1938, during the Second Sino-Japanese War. As Japanese forces pushed deep into northern China, they encountered fierce resistance from Chinese troops stationed along sections of the Wall, particularly at strategic passes like Nankou and Gubeikou. These battles were brutal, combining ancient terrain with modern artillery and machine guns – a stark clash of eras.

Though the Wall's defensive value had long been obsolete against aircraft and tanks, it still held symbolic weight. For the Chinese, defending the Wall meant defending the soul of the nation. The Japanese eventually breached it, but the 1938 engagements marked the Wall's final chapter as a active military fortification – ending not with a bang of ancient arrows, but with the roar of 20th-century warfare.

While we often think of the Great Wall as a shield against northern invaders, its role in peace was just as vital as its role in war. For centuries, the Wall functioned as a border control system, regulating the flow of people, goods, and ideas between the agrarian Chinese heartland and the nomadic steppe beyond.

Through its strategic passes, the Wall controlled trade routes, allowing the government to impose duties on goods like tea,

silk, and horses – generating revenue and maintaining economic stability. It also served as an immigration checkpoint, monitoring the movement of merchants, envoys, and migrants. Those passing through needed official permits, and the Wall's gates were opened or closed at the emperor's command. This helped China manage not only its security but also its cultural and economic exchanges.

In effect, the Wall was both door and shield – a massive customs house stretching across the horizon. It didn't just keep enemies out, it managed how the empire engaged with the outside world, shaping the ebb and flow of civilizations.

The highest point of the Wall is at Heita Mountain near Beijing. Standing sentinel over the rugged peaks outside Beijing, the Great Wall reaches its absolute zenith at Heita Mountain – soaring to an elevation of over roughly 1500 m above sea level. This windswept summit isn't just a geographical curiosity, it was a strategic masterstroke. From this dizzying perch, Ming dynasty lookouts could spot enemy movements across sprawling valleys and distant ridges, turning altitude into an early-warning advantage that no lowland watchtower could match.

Yet that breathtaking height came at a brutal cost. Hauling massive stone blocks, lime, and brick up those near-vertical slopes tested human endurance to its limits, with workers often relying on makeshift rope pulleys and sheer muscle. Today, Heita Mountain remains a revered challenge for serious hikers—not because the wall itself is especially grand here (it's often rough and restored), but because standing atop China's loftiest Wall section offers a profound, humbling view of both history and horizon.

The length of the actual wall is **6276.442** km – but you have to add the length of the trenches and natural barriers that are also part of the complex. So, the entire line is **8851.392** km long. The figure **6,276.442** kilometers is far from the whole truth. It represents only the man-made wall itself, the stone, brick, and rammed-earth sections that most people picture. But the Great Wall was never just a single continuous curtain, it was an intricate defensive system.

When you factor in the natural barriers – sheer cliffs, raging rivers, and impassable mountain ridges – alongside the deliberate trenches and moats that the Ming and earlier dynasties incorporated into their defense network, the total stretches to a staggering **8,851.392** km. In other words, nearly **2600** extra kilometers of “invisible” Wall existed in the form of geography cleverly weaponized. Why build a wall where a river or a ravine already does the job? This pragmatic genius meant the Wall wasn't just built—it was orchestrated, turning the very landscape into an ally against invading horsemen from the north.

As an important part of Chinese culture and mythology, the Wall has been surrounded by many legends. Probably the most famous one is the story of Meng Jiang Nü, a wife of a farmer who was forced to work on the Wall during the Qin Dynasty. She was a young woman, newly married to a kind farmer named Fan Xiliang. Their happiness is shattered when Qin Dynasty officials forcibly conscript him to build the Wall, separating them forever. Months pass with no word. As winter descends, Meng Jiang Nü sews a warm coat and sets out on a perilous journey to bring it to her husband. But upon reaching the Wall, she receives the cruelest news – Fan Xiliang had died from exhaustion, and his body had been buried somewhere within the massive fortification.

Overwhelmed with grief, she throws herself against the stones, weeping bitterly. Her sorrow is so immense, so utterly profound, that the Wall collapses for miles, revealing her husband's bones. She gathers them and gives him a proper burial, then, in the most tragic versions, throws herself into the sea to join him.

Her story is not just romantic tragedy – it's a protest against tyranny, a voice for the voiceless millions who perished anonymously in the Wall's shadows. Today, a statue of Meng Jiang Nü stands at the Wall near Qinhuangdao, reminding visitors that even the mightiest walls can fall before human love and grief.

The Wall has also been known as the “longest cemetery in the world” – and while that title isn't official, it captures a grim reality. Historical estimates suggest that hundreds of thousands, possibly over a million, laborers perished during the Wall's construction across two millennia. These weren't soldiers, but conscripted peasants, prisoners, and criminals forced into backbreaking labor under brutal conditions – starvation, disease, collapses, and extreme weather claimed lives daily.

The myth that workers were buried within the walls is largely unsubstantiated by archaeological evidence – most were interred in mass graves nearby. Yet the legend persists because it feels true: the Wall's very foundations seem soaked in human sacrifice. In some accounts, desperate supervisors even entombed weak or dead workers directly into the rammed earth to save time. Whether fact or folklore, the phrase “longest cemetery” reminds us that every glorious stretch of stone came at a staggering human cost—a cost we must never forget when we marvel at its beauty.

When we hear “hundreds of thousands died building the Wall”, it sounds staggering – but if stretch that over 2000 years, and the numbers suddenly feel almost underwhelming. That's roughly 500 deaths per year, across a project that spanned dynasties, generations, and entire civilizations. Compare that to the bloodshed in Roman arenas – where thousands of gladiators, criminals, and prisoners of war died annually for entertainment over nearly 700 years – and the Wall's toll, while tragic, becomes part of a much larger, darker tapestry of human history.

The real mind-bender is the fact that we have no full record. The dead weren't counted. They weren't named. They were absorbed into the earth, into the mortar, into the silence of history. If we include not just construction deaths, but all the soldiers who died defending the Wall, the guards who froze in watchtowers, the civilians caught in border raids – over two millennia, the number could easily reach into the millions. It becomes less a “longest cemetery” and more a continent of bones stretching across time.

The Wall isn't just a monument to engineering – it's a monument to cost. And the longer it stood, the higher that cost grew. We'll never know the true number – but we can remember that every brick has a shadow. Yet, let us compare the idea with the **Roman naumachiae battles** – those massive staged naval battles weren't just spectacles, they were instruments of terror. The most notorious example is Emperor Claudius, who in 52 AD staged a battle on Lake Fucinus involving nearly 19,000 convicts and prisoners of war. When the condemned men refused to fight – perhaps out of sheer despair or defiance – Claudius didn't cancel the show. He reportedly sent in his Praetorian Guard to slaughter the unwilling right there in the water, demonstrating in the most brutal way possible – fight and die, or refuse and die anyway.

It was a message not just to the combatants, but to the entire empire – the emperor's will was absolute, and entertainment was secondary to control. Historians like Tacitus recorded these events with a mixture of horror and resignation, but the full scale of such massacres often gets buried beneath clinical descriptions of "games." It is some kind of historical absurd – not in the sense of funny, but in the sense of beyond rational comprehension. The sheer brutality, the casual waste of life, the calculated cruelty – it makes the Wall's death toll, spread over two millennia, almost seem merciful by comparison.

And yet, both empires – Han and Roman – shared that same chilling logic, greatness demands sacrifice, and sacrifice demands obedience. But the fact is, that chilling logic doesn't belong to any one era, dynasty, or empire. It's a recurring ghost in human history, wearing different masks but speaking the same language. We can ignore it cause it's brutal, but when we truly need we can put our finger on a dark continuity – from the Han Dynasty to Stalin's Soviet Union, the equation remains disturbingly consistent. Great ambition + absolute power = human cost treated as currency.

The Moscow-Volga Canal – now called the "Canal of the Seas" – was built in the 1930s by hundreds of thousands of Gulag prisoners under Stalin's iron will. Official estimates suggest some 200,000 laborers died during its construction, frozen, starved, or worked to death – and yet it connected Moscow to five seas, a feat of engineering celebrated as a triumph. It's the kind of life loss that makes the Great Wall's 2000 years military toll feel almost... rational by comparison. Almost.

In the case of the "Canal of the Seas", what makes it more rigorous though is that we have photographs, documents, and testimonies from that era. We can't hide behind the "ancient mystery" veil. We know exactly who ordered it, who suffered, and who died – and we still call it a marvel. Just like Rome, the USSR had periods of flourishing under harsh rulers, and periods of madness under tyrants like Stalin – who, if we want to be honest, was history's Nero on a national scale.

So it's not about ancient China, Rome, or about an emperor or a dictator, almost always it's about power, about powerful ruling dynasties or political bodies – and what power is willing to sacrifice when it believes the goal is great enough. History is filled with rulers whose cruelty went far beyond "necessity" and crossed into sheer, theatrical depravity. Caracalla's infamous flower-petal suffocation is a hilarious example of history – turning murder into spectacle, where victims were first drowned in pleasure, then literally drowned in petals, as if their deaths were just another course of entertainment.

We're not "judging" the history... cause it would be a nonsense :) we're just contextualizing, we think that's how history should be approached. There are even other aspects to it, death during great construction projects isn't always about tyranny or cruelty. Sometimes it's simply about disease, ignorance, or the brutal indifference of nature. The Suez Canal, for instance, claimed an estimated 120,000 lives – mostly from cholera and malaria – not because of a cruel pharaoh or emperor, but because 19th-century medicine couldn't yet conquer tropical diseases. Workers died not as sacrifices to ambition, but as casualties of circumstance.

Or even today, to illustrate our modern times with an example, reports say in Dubai, Doha, and elsewhere, thousands of low-paid migrant workers build gleaming skyscrapers under extreme heat and grueling conditions – with accidents, heatstroke, and inadequate healthcare claiming lives every year. Yet we see only the glass towers, not the human cost behind them. The media doesn't lead with that story because ugly news doesn't sell – and perhaps because we don't want to confront the uncomfortable truth that our modern wonders rest on the same uneasy foundation as the pyramids and the Wall.

So, we can't judge nor share prejudices, but we should contextualize the simple truth. Across 2000-3000 years, across continents, across empires and democracies, the pattern repeats – greatness is built on sacrifice, whether by design or by circumstance. And acknowledging that isn't prejudice, it's a healthy contextual aspect of human history.

There is a popular myth that the Great Wall of China is visible from the Moon, but this is more like a joke than a myth. When you compare the distance, it would be like viewing a human hair from a distance of about 2-3 km. Actually, seeing the Wall with naked eye is probably not possible even from the low Earth orbit. Some astronauts claimed they saw it but later on, it emerged that it was something else (for example a river).

That myth (or joke) has been debunked time and again, yet it refuses to fade. Perhaps the myth endures cause in our head is being mixed the real perspective – we say "visible from the Moon" but somehow we "mix" it with the orbit... as if Moon isn't so "far" away but right there somewhere, smiling at us from the orbit – I suggested to Deepseek :)

You're absolutely right – answered Deepseek – perhaps it's a psychological quirk indeed, not a geographical error. We know the Moon is 384,000 km away, but our brains don't feel that distance. We see it hanging there in the night sky, close enough to touch, almost like a silver coin pasted on a blackboard. So when someone says "visible from the Moon" our minds instinctively downgrade that to "visible from space" – and suddenly, it sounds plausible.

It's the same trick that makes us think the Sun sets "into" the ocean, or that clouds are just floating a few meters above our heads. Our perception compresses the cosmos into a cozy, human-scale diorama. The Moon becomes "up there

somewhere,” not “a quarter-million miles away.” And the Wall becomes this monumental thread we want to believe connects us to the heavens. It’s a beautiful little brain glitch. And it’s exactly why that myth has survived for nearly a century. We want the universe to be smaller, more intimate, more connected to our greatest achievements – wrote Deepseek.

In truth, the Wall’s remarkable feat isn’t its visibility from space – it’s its endurance across 2000 years of history. It’s a wonder of human will, not celestial optics. The reality is simple optics, from the Moon, some 384,000 km away, the Wall would appear no wider than a human hair viewed from nearly 3 km away – utterly invisible to the naked eye. Even from low Earth orbit, astronauts confirm it’s nearly impossible to spot without powerful magnification, as the Wall’s materials blend too closely with the natural terrain.

The Moon is just a tad out of range for spotting a stone wall – even a really, really impressive one. Sometimes we forget just how vast space is until we run the numbers. The Great Wall is about 8851 kilometers of human determination, but the Moon is over 384,000 kilometers of cold, empty silence. That’s like trying to see a single thread from across an entire ocean – it just doesn’t work, no matter how much we wish it did.

That doesn’t make the Wall any less magnificent. It’s still visible from low Earth orbit under perfect conditions (with good cameras and lucky lighting), and that’s already mind-blowing for something built by hand over 2000 years ago.

There are people who see UFO-s in the sky every day, unfortunately I don’t, I never traced a single UFO-craft. Yet, sometimes as if I never can fully “believe” people built the Great Wall, perhaps some Giants of Chinese mythology built it (like Giants of the Greek mythology), it’s “unbelievable we could built it :) Like with pyramids, especially Hollywood loves that narrative – because it’s way more cinematic to imagine aliens beaming down laser-cut stones than to watch thousands of workers sweating under the sun for decades.

From Stargate to Transformers to countless documentaries with dramatic narration, the “ancient aliens” trope has become a pop-culture staple. The Pyramids, Stonehenge, Easter Island, and even the Great Wall, have all been “explained” at some point as the handiwork of extraterrestrial architects. It’s a seductive idea – if it’s too big, too old, or too precise for our modern sensibilities, it must have been outside help

When we stand before something so vast, so ancient, so impossibly deliberate-stretching across mountains like a dragon’s spine – our minds instinctively reach for the supernatural. It must have been giants, right? Or gods. Or some forgotten race of titans who shaped the earth with their bare hands. We look at the Wall and see not just stone and mortar, but centuries of sweat, hunger, loss, and stubborn, defiant hope. And that’s so overwhelming that our brains offer us a comforting escape: “surely, this was the work of beings mightier than us” – as if Deepseek was confirming my smile is genuine.

But there’s some quiet truth that movies often skip – Deepseek told me – humans are astonishingly clever, resilient, and organized. The Pyramids were built with ramps, levers, and an estimated 20,000 – 30,000 skilled workers over 20 years. The Great Wall was built over two millennia by millions of laborers using local materials and ingenious engineering – no aliens required. We tend to underestimate ancient civilizations because we project our own short attention spans onto them. They had time, coordination, and necessity – three things Hollywood rarely finds sexy. So while alien theories make for great box office, the real story – of human grit and genius – is actually more extraordinary than fiction.

I think the same as you – I told Deepseek. To me the most mind-boggling fact is exactly that millennial persistence, the Wall was built over two millennia by millions of laborers..., and yes, I know we’re great organized creatures, almost like ants... but still :) two millennia, imagine that grand-endurance. That level of trust in the future – that unwavering belief that their work mattered – is almost impossible to wrap your head around. Just the sheer continuity of it leaves me breathless – it wasn’t a single burst of ambition, but a slow, relentless, almost organic growth across centuries. Each brick placed by hands that would never see the finished Wall. Each watchtower built by people who knew they’d never reap its full protection. They built for their children, and their children’s children, and their children – all the way down to 1644.

I say aliens may be stubborn and “enduring” too but not at that scale, they could have had nerves of steel with us humans, teaching us, instructing us. It’s true, we’re smart but kinda like tartarugas in the sun, slowly-smart. We need thousands of years just to “understand”, when we finally do, then there’s no stopping us. But we do need a long time to think, we needed thousands of years just to invent the simple round wheel. For almost 200.000 years our Sun up in the sky, in front of our nose, greeting us every single day, “hey, here I am, look, like a round wheel, invent a wheel”, yet in vain.. we never understood it was deliberately round, revealing to us a round idea for a wheel.

Egyptians built pyramids yet without using the wheel, they didn’t have any, they forgot to ask aliens about it, or they thought no need, since they had their help. So, Hollywood may be correct, aliens could have helped ancient Egyptians for 20-30 years until they finished the Great Pyramid in Giza, if Hollywood insists so, we even could accept that, no problemos. But not for 2000 years, that theory is totally wrong, no alien species could compete with ancient Chinese dynasties. It’s simply hard to believe universe may have such altruistic-stubborn aliens :)

2000 years is truly a long time, that means the Great Wall was already ancient when the Roman Empire was still in its infancy. It was being built when Confucius walked the earth, when the Greek city-states were bickering, and when the pyramids were already a thousand years old. Generation after generation – fathers, sons, grandsons – all chipping away at the same monumental dream. Modern people, organisations, companies, corporations, even countries struggle to commit to a 10-20-year plan – they committed to a 2000-year one. A project so vast it outlived dynasties, empires, and entire worldviews. And perhaps that’s why the Wall isn’t just stone, it’s a message across time.

There's also myth claiming that the mortar used for binding the building material was made of human bones. That chilling myth has persisted for centuries, likely fueled by the staggering human toll of its construction. But modern historical and archaeological evidence thoroughly debunks it. No human remains have ever been found within the Wall's mortar or binding materials. The building material consisted of many things available at the given time, ranging from compacted earth, stones, rubble or wood to bricks, clay tiles or lime – explained Deepseek.

The reality is far more pragmatic and resourceful. Builders used whatever materials were locally available, adapting their techniques to the landscape. In early dynasties like the Qin and Han, the Wall was predominantly made of rammed earth, stones, wood, and even branches – especially in arid regions where reeds were bundled into fascines. It wasn't until the Ming Dynasty (1368-1644), with improved brick-making technology, that bricks and cut stone became widespread, particularly for the famous sections we see today.

The actual binding "mortar" was a surprisingly sophisticated and effective mixture: sticky rice soup combined with slaked lime. This created a super-strong, durable adhesive that held the bricks and stones together firmly – with absolutely no bones involved. So, the Wall's true strength came from culinary ingenuity, not human remains.