

BY JEFF WILSER

## \*\*\* CHALLENGE #1 \*\*\* WHICH BUILDER WAS MORE PROLIFIC?

ueen Hatshepsut had a problem. As a woman in 1500 BCE, she was allowed to serve as Regent while waiting for her stepson Thutmose III to come of age. But the gig was temporary. At the time, women couldn't be Pharaoh.

That didn't sit well with Hatshepsut. She didn't want to be a custodian of the throne; she wanted to reign supreme. With her

stepson nipping at her heels, she hatched a three-phase plan:

- 1) Look like a man. During her 20-year reign, her public image—as seen in hieroglyphics and statues—evolved from Miss to ambiguous to flat-out Mister, complete with a male body and fake beard.
- 2) Claim that God is her father. Specifically, Amun-Re, the sun god. (DNA tests were still a ways off.)

3) Communicate points 1 and 2 with a sprawling, border-to-border construction/PR project. If people saw her as a king, she hypothesized, then she'd be a king.

So Hatshepsut built. And built and built. With her architect, Senenmut, at the helm, she commissioned temples across Egypt, along with numerous statues and towering obelisks. But her crowning achievement was the mortuary temple at Dayr al-Bahri, a stunning structure built directly into a cliff and designed to blend into the surrounding rocks.

Amazingly, the scheme worked. Hatshepsut continued to rule well after Thutmose came of age, and by all accounts she was an excellent leader, bringing peace, prestige, and wealth to her land. Through hundreds of building projects, she chiseled her image, agenda, and narrative in stone, just the way a modern-day real-estate mogul might stamp his name on hotels, resorts, skyscrapers, books, reality TV shows, more books, and then more hotels. Beginning near the end of the 20th century, Donald Trump's name-branded empire spread to Manila, Panama City, Seoul, and Istanbul, accompanied by Trump Ice water and Trump vodka, served on Trump dining room tables, paired with Trump steaks.

But ambition and a knack for spin aren't the only similarities between the pair. Architecturally, the Trump Tower Chicago offers a modern-day take on Hatshepsut's Dayr al-Bahri. Completed in 2009, the 92-story building was designed to blend into the city skyline, with different tiers of the skyscraper matching the varying heights of nearby buildings. Further, both Trump and Hatshepsut took runs at power (though the Donald's brief bid for presidency didn't go quite as well). And they both scrawled their names across their empires, proving that architecture can be used for something even more important than beauty, form, or function: score-keeping. So who did it best? We say ...

#### \*\*\* WINNER \*\*\*

#### HATSHEPSUT

(SHE ACHIEVED POWER THE DONALD COULD ONLY DREAM OF: NO ONE QUESTIONED HER HAIR.)



★★★ CHALLENGE #2 ★★

# WHICH CIVILIZATION HAD THE BEST EARTHQUAKE-PROOFING?

n May 1950, an earthquake rumbled through the Peruvian city of Cusco, ravaging historic buildings such as the church of Santo Domingo. When the dust settled, the town discovered something fascinating: a structure beneath the rubble—parts of the Qorikancha temple. Built about 500 years earlier by the Inca, the stone structure had somehow survived intact. Incredibly, the phenomenon was no fluke: As modern Peruvian buildings crumbled, the ancient ones survived.

So, what made the Incan buildings so sturdy? The secret is their lack of mortar. The Inca picked irregularly shaped rocks, then cut the edges precisely, placing pieces together like a jigsaw puzzle. When a quake rolled in, these jigsaw walls rattled. But because the rocks weren't glued together, they'd shake independently, preserving the overall structure.

Of course, building these walls wasn't cheap or easy. And it's a mystery how the Inca cut such massive rocks so perfectly. Academics have plenty of theories: They used bronze tools; they ground and polished the rocks with quartz; they used focused sunlight to cut the pieces. There's even a "crack theory"— the belief that the Inca pushed increasingly large chips of wood into the rock's cracks, and then soaked

the wood with water so that the expanding wood could split the rock open.

Across the globe and a few centuries later, the Japanese use different building techniques but the same principle: Keep the pieces perfectly detached. After more than 5,500 people died in the 1995 Kobe earthquake, the government updated strict quake-proof building codes. Modern buildings incorporate shock absorbers to push force from side to side. Short buildings utilize thick, strong walls and foundations, while tall buildings are built for extra sway. The bag of tricks also includes "base isolation"—a clever concept where buildings can detach from their substructures to protect themselves from the whipsaw of tremors.

The new Tokyo Sky Tree, at 634 meters (almost twice as tall as the Chrysler Building), opens this year as perhaps the most earthquake-proofed building in history. The massive core staircase is structurally isolated from the building's frame. When the tower's exterior shakes, the stairs act as a counterweight by wavering in the opposite direction. Earthquake-proofing is such a priority in Japan that the country even has a name for its initiative. It's called the Dai-Dai-Toku Project, which means, roughly, "very, very special." We're betting the Inca would agree.

★★★ WINNER ★★★

#### MODERN-DAY JAPAN

(THE NATIONAL INITIATIVE TO QUAKEPROOF EVERY BUILDING SOLD US.)



**★★★** CHALLENGE #3 ★★★

### WHICH CITY HAS THE BEST COLISEUM?

he year 69 CE wasn't good for Rome. A few decades (and a few ineffectual emperors) after the long honeymoon under Augustus Caesar, the transition from Republic to Empire looked dicey: Rome had just gone through the bloody orgy of Caligula, fires throughout the city, an economic recession, and a Jewish uprising in Judea.

During "the year of the four emperors," management never stuck around for very long. The first emperor, Galba, was unceremoniously stabbed by goons. His successor, Otho, lasted on the throne for three months before taking his own life. And Emperor Vitellius's rule was cut short when he was killed and tossed into the Tiber River. So, when ruler No. 4, Vespasian, inherited this mess, he decided there was only one solution: distraction. And what better than building the greatest stadium known to man?

Originally called the Flavian Amphitheater, Vespasian's Coliseum was tricked out with trap doors, hoists, winches, and pulleys. There was even an elevator that could lift elephants to the arena floor. And because Vespasian had access to tens of thousands of prisoners, the Coliseum took less than 10 years to build. But most importantly, the

views were spectacular. The arena seated 50,000, with iron dividers separating the haves from the have-nots. Seventy-six gates led into the building, and the upper decks were partially shaded.

In other words ... it looked just like a modern stadium! Almost 2,000 years later, about the only thing we've added is a Jumbotron. The Los Angeles Memorial Coliseum, designed by British architect John Parkinson (whose other credits include L.A.'s City Hall and the city's first skyscraper), opened in 1923. And while sand has given way to grass, and the gladiators now play football, the two Coliseums share the same name, basic design, and use of vaulted arches to bear weight. The venues share something else, as well: As with many stadiums, they were both government funded, and built for one purpose—to entertain. Or, if you're cynical, to distract.

**★★★** WINNER ★★★

#### ROME

(IT'S TOUGH TO TOP ELEPHANT ELEVATORS.)

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AND A FEW OTHER WINNERS WHO DESERVE SHOUT-OUTS:



## Best Useless Icon

One of the most iconic structures ever constructed has the sole purpose of ... being an iconic structure.



### Best Symbol of Power VERSAILLES

With stables for thousands of horses, a Hall of Mirrors, and furniture made of silver, Louis XIV was probably a very, very difficult man to buy a gift for.



**★★★** CHALLENGE #4 ★★★

## WHICH CASTLE IS THE MOST FRIVOLOUS?

here was a time when castles had a purpose. Moats, 20foot-thick walls, tiny windows for archers—these weren't
just scenes from Tolkien. Thousands of castles dotted the
landscape of Europe, forming the backbone of Crusadesera defense. Then came gunpowder. By the 15th century,
guns and cannons could pancake castle walls, effectively
ending their military purpose. And by the 19th century, castles
were about as useful as lances and chariots in modern warfare.

That's what makes Neuschwanstein Castle so astonishing. Built on a Bavarian mountaintop by Mad King Ludwig, with construction starting in 1869, it's arguably the most famous castle in the world—at least judging by its 1.3 million annual visitors. It's even the template for Disney's Cinderella Castle ... but it has no useful purpose. None. It's one of architecture's greatest phonies.

At the age of 18, Ludwig was crowned King of Bavaria. He baffled his contemporaries by never marrying, and developing an intense infatuation with his buddy Wagner's operas—so much so that he made his friends put on costumes and reenact the stories with him.

And what's a reenactment without a set? Inspired by the operas, Ludwig built a fairy tale castle because he wanted a castle. He packed it with art, flushing toilets (a novelty at the time), and an indoor grotto complete with a waterfall (based on Wagner's "Tannhäuser"). The project ran over budget, drove the king towards bankruptcy, and even caused him to threaten suicide if his creditors would not lend him more money.

By 1886, year 18 of construction, the government was so frustrated

with the castle that they declared Ludwig insane and demanded he surrender the crown. Three days later they found him in Lake Starnberg, drowned in waist-high water. Floating next to him was his psychiatrist. To this day, historians debate whether it was a suicide or murder (and, if so, who killed whom?).

Another castle with an equally terrible chance of defending a siege is the Excalibur in Las Vegas. King Ludwig would be proud. Opened in 1990, with 4,000 rooms and a construction cost of nearly \$300 million, the Excalibur encapsulates the architectural principle of Vegas: Build pretty fake things that resemble pretty real things. Caesar's Palace. The Venetian. Paris. The Luxor. All this Vegas whimsy has amounted to something real—in 1972, these phantom landmarks helped inspire the postmodernist movement in architecture.

As for Excalibur's builder? You've probably never heard of Vegas mogul William Bennett, owner of the Circus Circus empire. His biographer, Jack Sheehan, has a theory why: "One reason Bennett has not gotten his due is because the last chapter of his life was so bleak. A range of health problems altered Bennett's behavior, which became erratic and paranoid until his death in 2002." Sound familiar? We'll chalk it up to the curse of King Ludwig.

\*\*\* WINNER \*\*\*

#### **NEUSCHWANSTEIN**

(TOTALLY FRIVOLOUS. IT WAS BUILT AS A ONE-MAN OPERA HOUSE!)



## Best Proportions THE PARTHENON

Encapsulating the Greek Golden Mean of balance, order, and logic, the Parthenon is to architecture what Plato is to philosophy.



## Best Frank Lloyd Wright FALLINGWATER

We can't help it. Any piece on architecture is legally required to mention Fallingwater, the epitome of Wright's blend-intothe-environment shtick.