

## World Kidney Day: Raising Awareness for Renal Health

Observed annually on the second Thursday of March, World Kidney Day highlights the importance of kidney health and the growing burden of kidney-related diseases worldwide. The day aims to spread awareness about preventive care, early diagnosis and equitable access to treatment. Kidneys play a vital role in filtering waste, balancing fluids and regulating blood pressure, yet chronic kidney disease often progresses silently. Health experts stress regular screenings, especially for people with diabetes, hypertension or a family history of kidney disorders. Promoting hydration, balanced nutrition and active lifestyles remains central to protecting long-term renal health.

### #CLEPSYDRA

## Your Alarm Clock Is Egyptian Technology

As water slowly filled the vessel, the rising level triggered the mechanism. At the precise moment, the pebbles dropped onto a copper plate, creating a sharp metallic sound



Every morning, when an alarm jolts us awake, we rarely think about its origins. We credit modern engineering, electricity, and digital precision. Yet, the true ancestor of the alarm clock was invented over 3,400 years ago, in Ancient Egypt, long before batteries, gears, or power grids existed.

#### Time Could Not Wait for the Sun

By 1400 BC, timekeeping had become essential in Egypt. Priests were required to perform rituals at exact hours, day and night. Royal ceremonies, including marriages and religious observances, could not simply wait for sunrise. Precision mattered, not just spiritually but politically. To solve this, Egyptian engineers turned to the most reliable forces they knew: gravity, water, and balance.

#### The Water Clock That Woke a Queen

The Egyptians developed a device known today as a clepsydra, or water clock. At first glance, it was simple: a stone bowl with a tiny hole at its base. Water dripped at a carefully calculated, constant rate. But the brilliance lay in what followed.

Inside the system, pebbles were balanced on a lever. As water slowly filled the vessel, the rising level triggered the mechanism. At the precise moment, the pebbles dropped onto a copper plate, creating a sharp metallic sound, loud enough to wake a sleeping royal.

No electricity. No gears. No moving parts beyond gravity and balance. And just like that, the Egyptian queen awoke, ready to wake her king and begin the day's sacred duties.

#### Engineering Without Power

What makes this invention extraordinary is not just its age, but its accuracy. The drip



rate had to remain consistent. The vessel's shape mattered. Seasonal temperature changes were even considered in later designs.

This was engineering in its purest form, observation of nature turned into precision technology. An alarm clock powered entirely by physics, built to serve a civilization that understood time as divine order.

#### Borrowed Brilliance

Centuries later, the Greeks encountered Egyptian water clocks. They studied them, refined them, and documented them extensively. Over time, history credited Greek thinkers with advancing time-keeping technology.

But the foundation, the idea of measuring hours mechanically and waking humans at a predetermined time, belonged to Egypt. As with many ancient innovations, the originators were forgotten, while later adopters received the recognition.

#### Egypt Did It First

The modern alarm clock on your bedside table is part of a long lineage. Its earliest ancestor stood in a stone chamber along the Nile, counting time drop by drop.

Ancient Egypt didn't just build pyramids. It engineered daily life itself.

And every time your alarm rings, it echoes an idea born thousands of years ago, when water, stone, and copper ensured that even kings woke up on time.



### • Kshema Jatuhkarna

In the 1880s, she walked into European archives looking for documents everyone else had ignored, and discovered an entire lost civilization's history that scholars said didn't exist.

Zelia Nuttall grew up hearing two languages, two histories, two ways of understanding the world. Born in San Francisco in 1857 to an Irish-American father and Mexican mother, she spent her childhood between California and Europe, absorbing her mother's stories about Mexico's indigenous past while receiving the formal education available to wealthy girls of her era.

Most young women in the 1870s learned music, French, and how to manage a household. Zelia learned those things too, then taught herself archaeology, linguistics, and pre-Columbian history.

At twenty-three, she married Alphonse Pinart, a French explorer and anthropologist. The marriage gave her access to academic circles that would have otherwise remained closed to a woman. But it also revealed something: her husband's colleagues knew remarkably little about Mesoamerican civilizations.

European scholars in the 1880s viewed Aztec and Mixtec cultures as 'primitive,' interesting curiosities, perhaps, but nothing approaching

the sophistication of Greek, Roman, or Egyptian civilizations. Pre-Columbian history was considered a niche subject barely worth serious study.

Zelia suspected that they were catastrophically wrong. After divorcing Pinart in 1888, a scandalous decision that cost her socially but freed her intellectually, she embarked on a mission: she would prove that Mesoamerican civilizations possessed scientific knowledge, complex political systems, and cultural achievements rivaling any in human history.

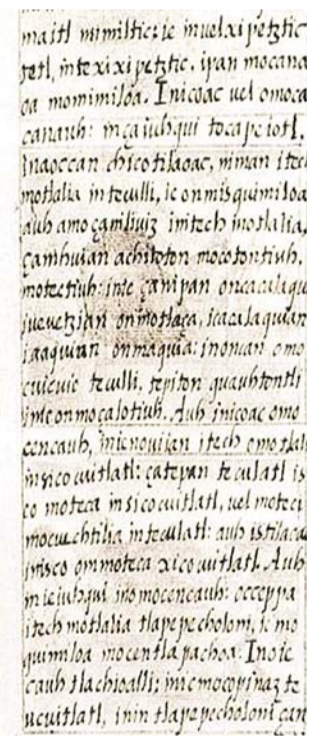
#### How she proceeded to reveal the truth

While male archaeologists focused on dramatic excavations and treasure hunting, Zelia understood that the real discoveries were gathering dust in European libraries. When Spanish conquistadors destroyed Aztec and Mixtec civilizations in the 16th century, they'd also collected manuscripts, codices, and documents, then shipped them to Spain, Italy, France, and England, where they were catalogued, misunderstood, and forgotten. Zelia began traveling to European archives, requesting to see documents related to 'New Spain' and pre-Columbian Mexico. Librarians, surprised by a woman requesting such materials, often didn't know what they actually had in their collections.

# Her Weapon? Archives

They couldn't dismiss her research, it was too thorough, too well-documented. But they also wouldn't give her the positions her male colleagues would have automatically received. Harvard's Peabody Museum made her an unpaid research associate, giving her legitimacy and access to collections but no salary or office. Mexico's National Museum of Anthropology named her honorary professor, a title without teaching responsibilities or institutional power.

### #THE CODEX NUTTALL



Perfect. In the early 1880s, at a Dominican convent library in England, Zelia found what would become her breakthrough: a 47-foot-long folding manuscript covered in intricate pictographs depicting royal genealogies, conquests, marriages, and political alliances.

It was a Mixtec codex, one of the few surviving pre-Columbian manuscripts that hadn't been destroyed by Spanish authorities or deteriorated over centuries.

But it had been sitting in that library for generations, completely unstudied. Nobody understood what it said. Zelia spent months decoding it, learning to read pictographic writing systems, cross-referencing with other surviving fragments, and reconstructing the political history of the Mixtec kingdoms.

When she published her analysis in 1886, the archaeological world was stunned. This wasn't primitive art, it was sophisticated historical

documentation, recording centuries of political succession, territorial conflicts, and diplomatic marriages with the precision of any European chronicle.

The codex today bears her name: the Codex Nuttall, housed in the British Museum.

But Zelia was just getting started.

She turned her attention to the Florentine Codex, a massive 16th-century work created by Spanish friar Bernardino de Sahagún with indigenous Nahuatl scribes. It contained Aztec history, mythology, astronomy, medicine, and daily life, recorded in both Nahuatl and Spanish.

While others had looked at it, Zelia studied it differently. She focused on what it revealed about Aztec scientific knowledge, particularly astronomy and calendrical systems.

European scholars assumed the Aztecs had crude timekeeping methods. Zelia proved they had multiple

interlocking calendar systems of extraordinary mathematical sophistication.

She documented the xiuhpohualli, a 365-day solar calendar cycle, and how it interlocked with the tonalpohualli, a 260-day ritual calendar. These two cycles synchronized every 52 years in what Aztecs called the 'Calendar Round,' a system requiring complex astronomical observation and mathematical calculation.

The Aztecs could predict solar eclipses. They tracked Venus's movements with precision matching modern calculations. Their agricultural planning depended on calendrical accuracy that European farmers didn't achieve until centuries later.

Zelia's research demolished the narrative that indigenous Mesoamerican people were scientifically unsophisticated.

She also studied Aztec metallurgy, demonstrating their advanced techniques in working copper, gold,



MERILEE GRINDLE



## IN THE SHADOW OF QUETZALCOATI

Zelia Nuttall & the Search for Mexico's Ancient Civilizations



and alloys. She analyzed terracotta artifacts, showing artistic sophistication that European scholars had dismissed as 'primitive decoration.'

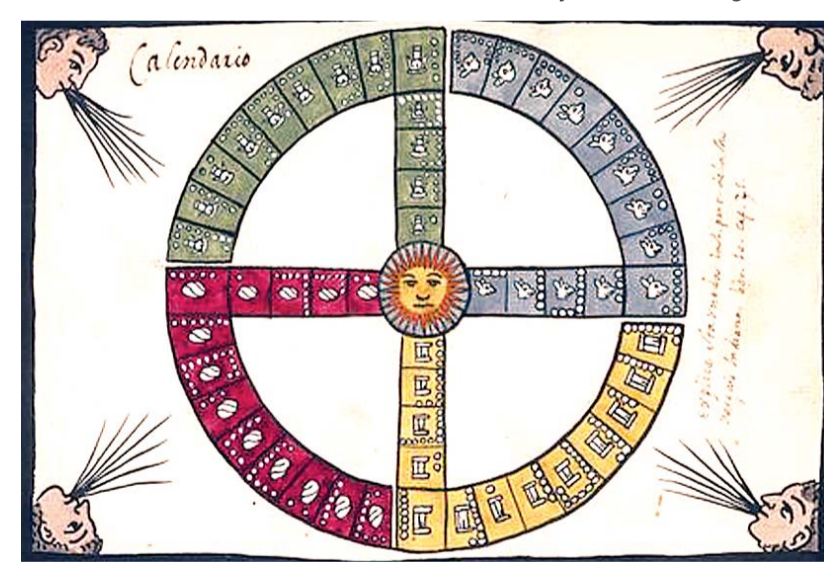
Every publication challenged the same racist assumption: that European civilization represented the pinnacle of human achievement while indigenous American cultures were evolutionary dead ends.

The academic establishment responded...awkwardly. They couldn't dismiss her research, it was too thorough, too well-documented. But they also wouldn't give her the positions her male colleagues would have automatically received.

Harvard's Peabody Museum made her an unpaid research associate, giving her legitimacy and access to collections but no salary or office. Mexico's National Museum of Anthropology named her honorary professor, a title without teaching responsibilities or institutional power.

She published extensively but always as an independent scholar, never tenured faculty. She influenced archaeological interpretation across two continents but was excluded from academic conferences that didn't accept women.

The irony wasn't lost on Zelia: she was proving that a supposedly 'primitive' civilization had possessed sophisticated knowledge while battling a supposedly 'advanced' society that couldn't conceive of women as serious scholars.



### #INDEPENDENCE

# Travancore and the Question of Sovereignty

The Diwan of Travancore, Sir C. P. Ramaswami Iyer, argued that the state was economically viable as an independent nation

At the time of Indian independence in 1947, the princely state of Travancore, located in present-day southern Kerala, stood at the center of a significant political controversy. Ruled by the Maharaja of Travancore but administered largely by his powerful Diwan, the state sought to remain independent and sovereign, rather than accede to either India or Pakistan. This decision was shaped by Travancore's economic strength, strategic location, and the ambitions of its leadership, but it ultimately failed in the face of political resistance and national integration efforts.

Travancore was one of the most prosperous princely states in British India. It enjoyed substantial revenues, a well-developed administrative system, and control over monazite-rich coastal areas, which were of strategic importance due to their thorium reserves. These factors led the Diwan of Travancore, Sir C. P. Ramaswami Iyer, to argue that the state was economically viable as an independent nation. In June 1947, shortly before independence, he publicly declared that Travancore would not join the Indian Union and would instead function as a sovereign state, maintaining treaty relations with Britain and other countries.

This declaration provoked widespread opposition within



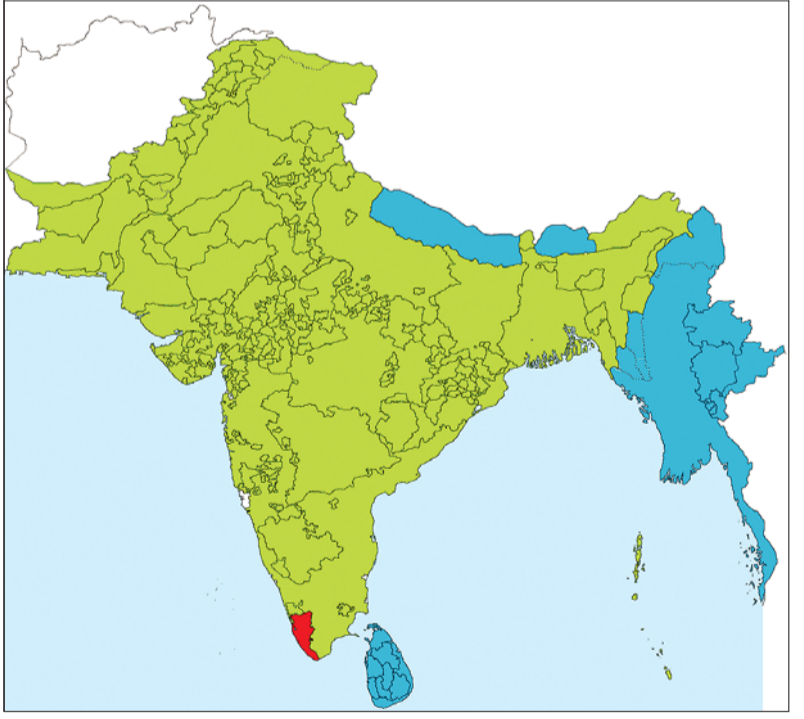
Travancore. Political groups, including the State Congress and left-wing movements, viewed independence as a tactic to preserve autocratic rule and suppress democratic reforms. Public unrest grew rapidly, marked by strikes, protests, and civil disobedience. The idea of a sovereign Travancore also alarmed Indian leaders, especially Sardar Vallabhbhai Patel, who was overseeing the integration of princely states into India.

Tensions reached a climax on 25 July 1947, when Sir C. P. Ramaswami Iyer was attacked and stabbed by a young dis-

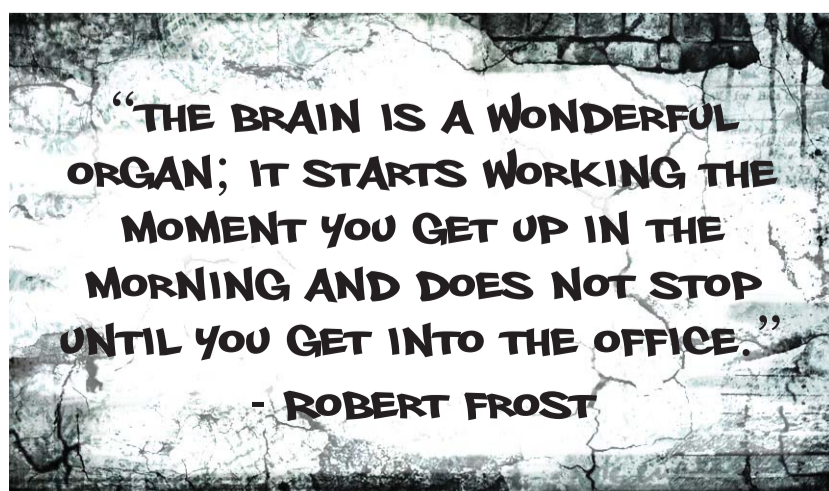
sender, K. C. Mani, during a concert in Thiruvananthapuram. Although the Diwan survived, the assassination attempt had a profound political impact. It exposed the depth of popular resentment against his policies and shattered the confidence of the Travancore administration. Shortly after the attack, Sir C. P. resigned and left the state.

With the Diwan's departure, the Maharaja of Travancore reassessed his position. Recognizing the political instability and the inevitability of national integration, the ruler reversed course. On 12 August 1947, Travancore signed the Instrument of Accession, agreeing to join the Indian Union. Through this legal document, the state ceded control over defense, foreign affairs, and communications to the Government of India, while retaining internal autonomy for the time being.

Travancore's accession marked a crucial step in the peaceful consolidation of India. In 1949, Travancore was merged with Cochin to form the state of Travancore-Cochin, which later became part of Kerala in 1956 following linguistic reorganization. In Travancore's brief bid for sovereignty highlights the complex negotiations, political anxieties, and popular struggles that accompanied Indian independence. It stands as a reminder that the making of modern India involved not only freedom from colonial rule, but also the delicate task of unifying diverse and powerful regional entities into a single nation.



### THE WALL



### BABY BLUES



By Rick Kirkman & Jerry Scott

### ZITS



By Jerry Scott & Jim Borgman

