The Archive Stone

Joy Persis Lupiya

The team of scientists sat in stunned silence as the recording they had just listened to came to an abrupt end, the brittle traces of the voices mingled with static still echoing in the air.

Ripley's whisper broke the silence, "What … did we just hear?"

Six months before this listening session, geophysicist Logan Stone and his wife, detail-oriented geochronologist, Ripley, began exploring a remote limestone cave system under a competitive scientific grant. Rounding out the team were Dr Jeff Washington, a sceptical palaeontologist; Dr Bella Mallard, a keen structural geologist; and Dr Avery Reed, a meticulous mineralogist. Accompanied by a pair of local guides, they entered uncharted tectonic fissures to explore the never-before-studied limestone caves.

In the cave, they collected and examined limestone blocks that had come loose after the recent earthquake. Logan wiped sweat off his brow as he emerged from the cave into the warm sunlight. The climb up from the site, although not very long, was a little taxing on his still-recovering body. Now in his late 50s, he didn't bounce back as quickly as he used to. And it didn't help that he had spent close to three months doing very little physical activity, recovering from a pretty bad fall. Notwithstanding, he was excited to be back in the field and to get a better look at the probably two- or three-kilogram

block of limestone cradled in his padded backpack. He sat on the ground and took it out carefully, then leaned in, keenly examining it. It was like nothing he had seen before. Certainly limestone, of course. But something was very odd about it. It wasn't just that it seemed to glow faintly back down in the cave, but it also sported some very interesting and unusual laminations. They almost looked like audio waveforms. The kind that appear on an oscilloscope or digital audio workstation during sound playback. He had no idea what to make of them. They couldn't possibly be acoustic, he thought to himself. Maybe seismic? Still, he had never seen anything like it before. By the end of the day, he had collected and carefully stored every limestone block he could find with the same eerie glow as the first block. He carried out a total of seven blocks and was eager to examine them very closely.

Over the next few months, the entire team put their heads together to solve the mystery of the glowing limestones. Ripley carefully extracted tiny mineral grains from the stones and used radiometric dating to determine their age. Bella studied the cracks and layers in the rock, using detailed photographs and microscope slides to understand how the stones had been shaped over time. Avery analysed the minerals in the limestones, running tests to establish what they were made of and what the source of their faint glow might be. Jeff scrutinised the blocks for any trace fossils; microscopic remnants of ancient plants or animals that might reveal clues about the environment when the stones had formed.

Meanwhile, Logan captured and catalogued the intricate waveforms using high-resolution digital imaging and surface scanning techniques, ensuring every detail of the stones' markings was preserved. He created a digital archive of the blocks' surface topology and planned to send the data to his friend, Dr Siddharth Iyer, a renowned expert in digital signal processing, for further analysis.

"Send me the data files. I'll run them through spectral decomposition and pattern recognition algorithms." Siddharth's voice was calm but intrigued. "It's complex work, especially since the 'recording' isn't conventional audio, but we can try reconstructing it."

"Thanks, Sid. Also, I'll need discretion on this one. It's very strange," Logan said.

"Of course. But first, let's see what secrets your limestone holds."

The findings perplexed them all.

"So, the dating results are in. The limestone blocks are only about six thousand years old. That's surprisingly young for rock like this," Ripley said as she held a mug of hot chocolate close to her face.

Bella nodded along, "It fits with what I found in the fractures. They're not just from slow shifts underground. Some cracks look like they formed suddenly … like the rock was blasted apart by intense water pressure."

"Strange as it is, the minerals back that up," Avery added. "The limestone's mostly calcite, but there are trace minerals that glow faintly under certain lights." He shook his head in exasperation. "I ran all the tests I could, but nothing directly explains the glow. It's like the stone's been soaked and pressed for a long time, like during a flood, followed by a slow drying process."

Jeff tapped his spoon on the lip of his mug after stirring it. "The trace fossils tell a similar story. Tiny shells and algae, all from shallow water creatures. They're well preserved but limited in variety, which suggests they were buried quickly in a turbulent, watery environment. No signs of long exposure between layers."

Logan leaned forward on the table, pushing his now-empty plate forward, crumbs of orange loaf still present on it, "I sent the waveform scans I captured to Siddharth for analysis. He's running some complex algorithms to see if we can make sense of the patterns as sound."

"So …" Ripley began gingerly, "we're looking at a massive flood event, maybe something like 30 to 40 days of heavy rain, followed by nearly a year for the land to dry out and settle."

Bella nodded again, "The sediment layers and fractures all point to that. But just that idea is wild in itself. Have you ever heard of such an event?" Bella looked at Ripley. She shrugged in response.

Logan looked at Avery, "And the glow?"

"No smoking gun. The minerals might explain part of it, but it's still a mystery."

"Maybe it's something subtle; chemical changes we haven't detected yet, or something about how the fossils and minerals interact," Jeff offered.

Logan took a deep breath in as he leaned back again in his chair, "Whatever the case, it's unlike anything we've seen before. Whatever this stone is, it's holding secrets we're only just starting to uncover."

A few days later, Logan's phone pinged. It was an email from Siddharth:

> *Sent the audio reconstructions. What the actual hell is this!?*

The small team of scientists gathered around Logan's desk as he cued up the clips.

"Moment of truth, everyone," he said with excitement, though the others looked more nervous than eager. He double-clicked the first of two clips. The conversation sounded like it was taking place in a lab, with a few voices interacting. The sound was faint and slightly distorted, but the fragmented voices were clear:

> *Voice 1: Have you seen the latest gene splice results on the smilodon muscle tissue? The myosin heavy chain isoforms are remarkably similar to those in the giant short-faced bear.*
>
> *Voice 2: Fascinating. That might explain their powerful ambush abilities in dense forests. If we isolate the gene regulating muscle fibre density, we could enhance strength in other species.*
>
> *Voice 3: Mammuthus samples show unexpected cold resistance. Could we splice those genes into equus lineages to improve high-altitude survival?*
>
> *Voice 1: Possibly. But remember, the smilodon's hunting strategy relies on stealth and power, not speed. If we mix in too many modern canid traits, we could disrupt the balance.*
>
> *Voice 2: True. Also, pack dynamics are crucial. Have you checked oxytocin receptor gene variants tied to social behaviour?*

The clip ended.

Jeff stared at the speakers in stunned silence, his brow furrowed deeply. "That … can't be real," he finally said, voice tight with disbelief. Quiet confusion echoed his sentiment.

"They're talking about gene splicing smilodon and mammuthus like it's happening now. But those creatures died out thousands of years ago. There were no scientists back then—at least not as we understand them today, no labs, forget gene editing! It's impossible!"

Bella exchanged a glance with Avery. "It's just a recording," she said cautiously. "Maybe it's from some modern lab, or even a simulation. The waveforms don't tell us when or where it was made."

"A *modern* lab?" Jeff questioned, almost mockingly.

Avery nodded, "The patterns could be a playback of something recent, encoded somehow in the stone. The content is strange, but we can't assume it's ancient just because it's on the rock."

Jeff shook his head, "And I suppose it's in this modern lab that they're talking about splicing smilodon with mammuthus genes, right?"

Logan leaned forward, eyes fixed on the screen. "Look, the fact that it's preserved on rock at all is baffling. Whoever made this … whenever it was … they left something extraordinary behind."

Jeff shook his head, still unsettled. "No. Hearing a conversation like that … it's like stepping into a world that shouldn't exist. It raises more questions than answers."

Ripley chimed in, "We need to keep an open mind. The dating shows the stone is young, but maybe the recording was embedded later, or the stone somehow captured a message from a different time or place."

Jeff looked around the room, eyes wide. "Guys! There's a recording of a conversation on some limestone! Isn't that insane in itself?!" The others just stared at him in silence. "And if it's even true that this conversation could have been embedded later, then this isn't just geology or palaeontology we're dealing with anymore. It's something else entirely."

Silence.

Broken by Logan, "Look, guys, there's one more clip. Shouldn't we

at least listen to it and then have a discussion?" The others nodded, and Logan double-clicked on the second clip.

> *Voice 1: The water's rising faster than predicted! The valley's completely flooded! This torrential water … It's a catastrophe!*
>
> *Voice 2: Don't just stand there! Grab the hard drives! Save the splice data before the lab floods! This could end everything!*
>
> *Voice 3: Never seen a river swell like this. I've never seen water fall from the sky either.*
>
> *Voice 1: Mountain streams overflowing … how many days has it been? Ten? Twelve?*
>
> *Voice 2: It's the reckoning. Some things are better left alone. Noah warned us.*
>
> *Voice 3: Soils saturated; the valley acts like a basin. This water has nowhere to go but up. Evacuate; take essentials. Power will fail soon; tunnels may collapse. This may be the end.*
>
> *Voice 1: The mountains weren't safe after all … Can anything outside that floating ark of his survive this deluge?*
>
> *Voice 2: Forget the drives! Get out! If we stay, we drown. This flood … We should have listened--*

Clip abruptly cuts.

Logan's hand hovered over the keyboard as the last echoes faded. No one moved. The only sound was the faint hum of the computer.

Ripley broke the silence, her voice barely above a whisper, "What … did we just hear?"