Otto Lowe and his team use 3D technology to scan and even recreate ancient artefacts, preserving them for the future – and potentially offering answers to rows about restitution. This colossal task sees him abseiling down cliff faces in the Middle East and exploring remote African cave paintings. Meet an Indiana Jones for the digital age.
In Madrid, the 10-year-old Fernández had just ended his first season playing for the local football club. His team had just won a trophy, and he was elated. "It was the best moment of my life!" he thought to himself.

As the sun set over the city, Fernández and his teammates gathered outside the stadium. They were celebrating their victory with a group of fans who had come to support them. Among them was a young girl who was cheering them on with all her heart.

"You are the future of football," she said to Fernández. "Keep playing with passion and dedication. You can achieve great things." Fernández smiled and nodded in agreement.

Over the years, Fernández continued to play football and rose to fame. He became a national hero and a role model for many young people in Spain. Even though he faced challenges and setbacks along the way, he never gave up on his dreams.

"I owe everything to those who believed in me," Fernández said in an interview. "They gave me the opportunity to shine and fulfill my potential."

As Fernández looked back on his journey, he realized that it was not just his talent and hard work that had brought him to success. It was the support of the people around him that had made all the difference.

"You learn to know secret police when you see them"
Right: Otto Lowe says Factum Foundation is not interested in taking political positions. Below: controversial Parthenon sculptures on view at the British Museum in London

by side has highlighted what happened to each panel in the decades after they were separated, and how they have been treated by their respective custodians. The differences are arresting. The French replica is suspiciously vibrant and perfect; the Italian reveals much of the scarring and damage. Their colour palettes are entirely different.

‘Culturally, Italian restoration takes time as part of the story of the object,’ says Lowe. ‘If the object shows the effects of time, they leave it. The French approach is to take it back to how it was when it was created.’

The contrast is a reminder of how rapidly humans can damage ancient monuments beyond recovery, intentionally or not. The panels’ original colouration is lost for ever. ‘Even some restoration techniques of 20 years ago are now considered bad practice,’ says Lowe.

Another example of the value of facsimiles is the Tomb of Tutenkhamun, whose real curse might be overtourism (Factum has worked on a recreation). The tomb was uncovered by the British colonial archaeologist Howard Carter in 1922 after lying hidden for more than 3,000 years. Some wall paintings have recently been restored.

‘The biggest impact,’ says Lowe, ‘has been tourism... You have millions of people visiting each year. It’s hot, they sweat and they breathe. They change the local atmosphere...’

‘It lasted perfectly well for 3,000 years. Tombs were not meant to be opened. Since its discovery, it’s deteriorated very quickly.’ What, if anything, does Lowe think should be done? ‘Short of cutting people off from the site there’s nothing much you can do to stop that kind of thing,’ he says.

Will restrictions on tourism be inevitable in the future? ‘We never take a political stance,’ says Lowe. ‘Speaking as a private citizen, I don’t want to not be able to see these things. But since Covid, market forces have been doing the job for us. Flights are more expensive, people aren’t travelling so much. It’s given heritage a bit of breathing space. But I don’t think there’s any way you can prohibit people’s access to culture.’

The wider question of the restitution of objects and the role that facsimiles might play in that is, he says, fraught with complexity. ‘Culture is something people get very possessive about, so we always try to find a solution where someone doesn’t need to lose in order for someone to win.’

Current disputes include the fate of the 16th-century Benin Bronzes, exquisite artefacts looted and scattered across the globe after British troops sacked the west African kingdom in 1897. They are vital evidence of the Benin people’s spiritual beliefs before the introduction of Christianity, and many are in the British Museum.

Also heavily contested is another British Museum centrepiece, the Parthenon sculptures. ‘With the Parthenon, were we to be invited into that conversation, we would love to be a part of that, absolutely,’ says Lowe.

Ultra-detailed facsimiles – like Factum’s copy of the Bakor monolith in Virginia – could form part of a temporary solution to some restitution claims, perhaps via loans and (as highlighted last year, when a longstanding British Museum curator was sacked after stolen items were offered for sale on eBay; missing objects dated as far back as the 15th century BC).

‘Let’s imagine the Parthenon marbles are returned in the coming years,’ says Hicks. ‘What should the British Museum do? Should it make 3D prints and reproduce that space again? Or should it start to understand its vast array of objects from antiquity to tell new stories? Are we going to nostalgically copy what we’ve given back? Or are we going to do something else? Because we’re not going to run out of stuff’?

Lowe agrees. ‘Each case is different, and it’s not for us to make those decisions,’ he says. ‘Factum’s place is to create a dialogue and show options for where the debate might go next, as with the Bakor monoliths.’

In the meantime, Constantine has taken up his new position at the Musei Capitolini in Rome.

His body and clothes have been digitally reconstructed. The original Constantine is thought to have been a recarving of an existing statue of Jupiter, the Roman sky god. ‘The museum has all kinds of theories [about what the original looked like], so we asked them, “What would have been the language?”’ says Lowe. ‘We looked at others in collections and tried to recreate the same language, for example the cloak, and the orb he would have been carrying as a symbol of Roman divinity.’

In other words, Constantine is partly guesswork. But then, isn’t that what we are applying when we gaze at ancient ruins, or artefacts in museums and galleries, with their layers of residues, patinas and scars?

‘Objects have a biography, just like people,’ says Lowe. ‘And it’s not necessarily a good thing to try to stop that process. But we can record it, and that helps us imagine.’

‘Our goal is never to stop people seeing the original’

But copies are not always appropriate, says Professor Dan Hicks of the School of Archaeology at the University of Oxford, author of The British Museums, a book about the cultural restitution debate. The British Museum has been paralysed by the Parthenon issue. Were faithful facsimiles of the Parthenon sculptures to be installed in the Acropolis Museum in Athens, for example, it would miss the point.

‘It’s not a silver bullet,’ says Hicks. ‘Most museum-goers value not just patina. There is something about being present in the room with an object of such significance.’

In other words, an object’s aura is unrepeatable. And it is that intangible sense that is valuable when it comes to visitor numbers.

In any case, says Hicks, museums’ storage rooms are bursting with objects that are never displayed or catalogued temporary exhibitions. ‘Our goal is never to stop people seeing the original,’ says Lowe. ‘It’s partly to let them know what effect they are having. And to make people aware of what humans’ presence does over time.’