

AUTHENTICATION

IN ART

AiA Art News-service

APOLLO
THE INTERNATIONAL ART MAGAZINE

The pyramids at Giza looked very different when they were first built

Garry Shaw

30 JANUARY 2019



In February, a large block of the Great Pyramid of Giza's original casing will go on display at the National Museum of Scotland in Edinburgh, for the first time since it was brought from Egypt in 1872 by the Astronomer Royal of Scotland, Charles Piazzi Smyth. This block is the only casing stone from the Great Pyramid, built by King Khufu in around 2550 BC, to be displayed to the public outside of Egypt (earlier this month it was reported that the Egyptian government is contesting the Scottish museum's rights to the stone – the museum asserts that it has the appropriate permissions and documents).

It's important to remember that when you visit the Great Pyramid today, you aren't seeing the monument as it originally appeared; the pyramid may look unchanged by time, but it was once even more striking. When it was first built, its ascending layers of huge limestone blocks – which today give it a somewhat jagged appearance – were hidden by a smooth layer of fine white limestone. This layer concealed the pyramid's core and gave its surface a perfect, sloping smooth finish, gleaming white in the sunlight: a rampway to heaven, rather than a stairway.

The Egyptians quarried the limestone for the Great Pyramid's core on site at Giza, just south of the pyramid itself. Despite often repeated claims of the pyramid's unparalleled perfection, these blocks come in a variety of sizes and some are quite rough, with the gaps between them filled with gypsum mortar. Exploratory drilling has also revealed sand-filled cavities. Khufu wanted quality, but he wasn't averse to cutting corners to save time, particularly in places where no one would see it.



Daniel Potter, assistant curator at National Museum of Scotland, with a casing stone from the Great Pyramid of Giza. Photo: National Museums Scotland

Unlike the core, the outer casing had to be perfect. This demanded a higher quality of fine limestone. The Egyptians sourced this from the Tura quarries, south-east of Giza on the opposite side of the Nile. Scholars estimate that 67,390 cubic metres of fine Tura limestone was quarried for the Great Pyramid alone. Once they were cut from the hills, the Egyptians transported these roughly hewn blocks across the Nile to Giza and hauled them into position; only afterwards did the workmen smooth the blocks, probably from the top of the pyramid down.

Herodotus, who visited Giza in the 5th century BC, and Diodorus Siculus in the 1st century BC – both Greek historians – describe an inscription cut into the casing stones. This, they were told somewhat implausibly, recorded that the Egyptians spent 1,600 silver talents providing the workers with radishes, onions and garlic. Fast forward to the 12th century AD, and the Arab scholar Abd al-Latif also saw inscriptions covering the pyramid. Unfortunately, because none of these writers could read the casing stones' inscriptions, we can't be sure what they truly said. Most probably, the inscriptions immortalised ancient restoration work, or recorded offerings to the deceased king. They might even have been graffiti left by ancient tourists.

When Abd al-Latif visited the Great Pyramid, much of its outer casing remained in place, he writes, though other pyramids were being quarried for Cairo's constructions. This process continued in the centuries after, until eventually the Great Pyramid succumbed too. Nonetheless, if you look at the peak of the Pyramid of Khafre, just beside the Great Pyramid, you can still see some of its original fine white limestone. Dulled by time, its smooth and sloping surface remains intact – a small hint at how the whole once appeared.

It's interesting to think that when you are exploring medieval Cairo, or the villages surrounding Giza, that the odd piece of fine limestone you see paving the floor, or decorating a wall, or forming the lintel of a doorway, may once have been part of the Great Pyramid. Now you can see a piece of it in Scotland too.

The Ancient Egypt Rediscovered gallery at the [National Museum of Scotland](#), Edinburgh opens on 8 February.