

Laos' Plain of Jars recreated in virtual reality

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The Plain of Jars, in Laos' central Xieng Khouang province, is scattered with thousands of stone vessels but scientists have yet to discover their original purpose

Australian archaeologists announced plans Wednesday to recreate Laos' mysterious Plain of Jars as a three-dimensional virtual reality experience, that could one day see museum visitors walk through remote dig sites.

The Plain of Jars, in Laos' central Xieng Khouang province, is scattered

with thousands of stone vessels but scientists have yet to discover their original purpose.

Archaeologists have struggled to access the jar sites, many of which have yet to be cleared of unexploded mines and bombs dropped on the country during the Vietnam War.

But Australian researchers now say that their use of drones which capture 3D images every 10 centimetres (3.9 inches) would allow them to explore sites like these that cannot be assessed in traditional ways.

"The potential especially for places like Laos where there's a serious UXO (Unexploded Ordnance) problem is that using remote technology to explore and map archaeological sites is incredibly useful," Dougald O'Reilly from the Australian National University's (ANU) school of archaeology told AFP.

"It decreases the danger of working in these places."

Besides deploying drones to capture 3D images, O'Reilly said archaeologists were looking at using multispectral cameras which can capture light from invisible frequencies such as infrared radiation, and airborne laser scanning technology known as lidar to create centimetre-accurate maps.



Ancient human remains and various burial practices at the Plain of Jars in Laos' central Xieng Khouang province

The data collected by researchers from ANU and Melbourne's Monash University will feed into the virtual visualisation of the Plain of Jars landscape, allowing [archaeologists](#) to virtually revisit the site as well as re-excavate it.

Such maps could also be used to monitor changes in heritage sites over time.

The technology could ultimately be used for museums, allowing visitors to wear a headset and walk around the site, or even be adapted for smartphones so anyone can visit a 3D map of a dig site from anywhere.

"For museum applications, this is an amazing tool especially remote


museums that are not at the site. So you can create this environment where people feel they are walking among the monuments in that three-dimensional context," O'Reilly said.

Laos: Plain of Jars

Thousands of mysterious ancient stone vessels lie in an intensely bombed region, yet to be cleared of 50-year-old unexploded bombs and mines

What are the jars?

- ▶ Sandstone and granite containers in various sizes, very small to about 3.5 m high
- ▶ Thought to be more than 2,000 years old
- ▶ Original purpose unknown



Plain of Jars
Xieng Khouang

- ▶ Researchers in early 2016 uncovered ancient human remains and various burial practices at the jar sites

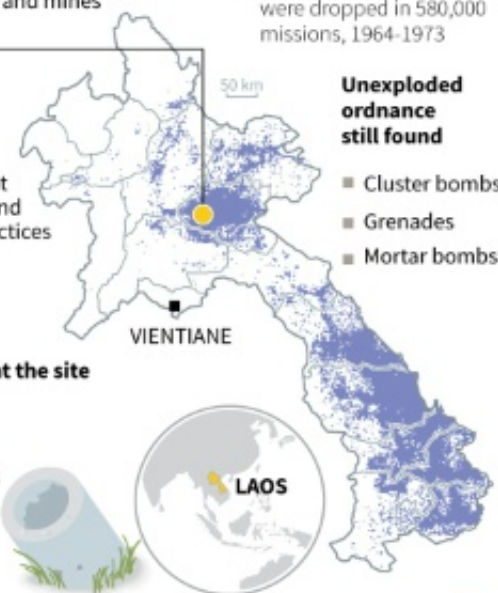
Other discoveries at the site

- Grave markers
- Burial jars
- Bone fragments
- Stone tools

Unexploded ordnance still found

- Cluster bombs
- Grenades
- Mortar bombs

■ Areas where US bombs were dropped in 580,000 missions, 1964-1973



VIENTIANE

LAOS

Source : Unesco/Visit-laos.com/NRA for UXO/Mine in Lao PDR/UXOlaos.org

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Laos: Plain of Jars

"It's pretty amazing in that regard. When you are in the facility... it's absolutely breathtaking actually. The experience is quite overwhelming."

Researchers from ANU and Monash University earlier this year uncovered ancient human remains and various burial practices at the Plain of Jars as part of the first major effort since the 1930s to try to understand the purpose of the vessels and who created them.

About 90 sites make up the intriguing area in the Southeast Asian nation,

with the carved jars ranging in size from one to three metres tall (three to 10 feet).



Archaeologists have struggled to access the Plain of Jars in Laos, many areas of which have yet to be cleared of unexploded mines and bombs dropped on the country during the Vietnam War

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