

Ra-Pict prototyping bringing archaeology alive

November 3 2023



A copy of a Pictish carved stone created using photogrammetry and a 3D printer.
Credit: University of Aberdeen

3D scanners, 3D printers and even new smartphone technology is being used by University of Aberdeen archaeologists to enhance teaching and public engagement of the discipline.

Dr. James O'Driscoll explains, "We have a 3D laser scanner and a 3D

printer and we're using it to print all sorts of different things, everything from archaeological artifacts like spearheads, bone combs, swords, symbol stones, carved stones, and we're using that for teaching but also [public outreach](#) and engagement.

"One of my major bugbears with museums is you go in, you see all these cool objects and you just can't touch them! So this really gives you the opportunity to do that."

The [technology](#) also allows the team to make digital 3D models and physical copies of any artifacts they find before they need to do any testing, for [radiocarbon dating](#), etc., that might slightly damage the specimen.

In addition to photogrammetry and 3D printing, the team are taking advantage of the latest software installed as standard in some of the newer smart phones.

Dr. O'Driscoll adds, "Some of the newer iPhones have what's called a LiDAR scanner in the back of them, and we can use that to shoot [laser beams](#) at whatever objects we want to scan and it'll make a really detailed 3D model almost instantaneously.

"So, we've been using this technology at a variety of our excavations and also to make copies of carved stones and other artifacts that are now in museums. It gives us really detailed 3D models and a record of what we've excavated so it is really helping to speed up excavations and increase the accuracy of the data that we're able to collect on site."

Provided by University of Aberdeen

Citation: Ra-Pict prototyping bringing archaeology alive (2023, November 3) retrieved 28 April

2024 from <https://phys.org/news/2023-11-ra-pict-prototyping-archaeology-alive.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.