

Abstract

Throughout most of its history as a discipline, archaeology has been the province of the most affluent people and nations. This has resulted in the disenfranchisement of cultures the world over. In recent decades however, there has been a paradigm shift in the academic community toward development of native archaeology. This shift means that native descendants are increasingly empowered to explore and interpret their own cultures. This empowerment has concomitant issues though, poor communities may now possess the labor force and knowledge base necessary to collect and interpret the material remains of their own past, but find themselves ill-equipped to preserve, curate, or display these remains.

As an archaeologist and GIS specialist one of my areas of interest is the intersection of the past and technology's ability to make it accessible to the masses. With the advent of low cost, portable systems to detect, record, analyze, and display not only positional quantitative data but qualitative data, the economic barriers to this technology are becoming more porous. Given the recognized utility of 3D modeling software in archaeology, both on the site and artifact level, it must be asked whether a freeware option possesses suitable utility to be deployed where subscription based programs are economically unfeasible.

This is a limited analysis of which of the two programs tested is the most cost-effective on a limited budget. The metrics necessary for straight comparison of output were non-applicable due to hardware constraints and instructional errors. While one program has a more intuitive GUI, the other is unfettered by specific architecture constraints. While AliceVision's Meshroom offers the promise of democratizing 3D reconstructions, the out of the box usability of Agisoft's Metashape means it certainly cannot be dismissed despite its pricepoint.