

## Anthropology – 2018

## A84 Imaging Human Skeletal Remains: Ethical Considerations

David Errickson\*, Teesside University, Borough Road, Middlesbrough TS1 3BA, UNITED KINGDOM

The goal of this presentation is to engage with practitioners in forensic anthropology, particularly those who are using 3D imaging, highlighting the recent ethical considerations that have arisen with the implementation of newer 3D imaging technology. After attending this presentation, attendees will better understand the ethical issues and debates that surround imaging human remains and have an opportunity to contribute and implement good practice guidelines in their future work.

This presentation will impact the forensic science community by making practitioners aware of the ethical issues that have recently become prominent due to the use of new imaging technology. This presentation will suggest competent practices when using 3D imaging, while proposing guidelines for good practice for the forensic science community to put into action.

The analysis of human remains via internal and surface documentation has demonstrated valuable benefits that include the digitizing, exposing, comparing, reconstructing, materializing, and sharing of remains. These digitizing techniques include laser, computed tomography, structured light scanning, photogrammetry, and structure from motion. Similarly, standard recording procedures, such as photography, have also been utilized in the same way. Researchers have a responsibility to justify the decision-making process, whether it is a method of presenting an image or manipulating the dataset. In addition, researchers have an ethical responsibility when dealing with the remains of the dead.

Debates and guidelines on ethical considerations with regard to human skeletal remains have previously been discussed and adopted, though, due to newer imaging techniques, some issues have become unaccounted for. It could be argued that many of the newer imaging techniques are respectful of human remains as they are non-invasive, limit handling, and thus reduce further destruction to the individual's remains; however, a key consideration is whether to also treat this digital representation with as much dignity and respect as the body itself. One issue is that the terminology of digitally documenting human skeletal remains is yet to be standardized. Therefore, certain terminology (such as representation, reproduction, and replica) may impact the interpretation of digital human remains, consequently resulting in differential legal status. Thankfully, scientists are becoming more open to discussing these new ethical concerns and practices, but there is a call for more communication due to the varying practices across multiple disciplines. Currently, there are no standard practice guidelines that refer to this technological progression.

Another consideration is that living in a digital age enhances the availability of the internet and the use of social media. Boundaries are constantly being pushed and digital data is becoming increasingly accessible. Not only can academics access this technology, but so too can the public. The impact of this may result in an increase of unnecessary and unethical images that can be accessed and created with one click of a button; however, this "shared data" may not have initially sought the owners' or relatives' permission to do so.

This presentation notes that everyone has an ethical responsibility, but it is up to academics to discuss these responsibilities with the uninformed public. Therefore, this presentation proposes a number of key points to consider prior to publicly sharing images of human skeletal remains. Considerations include whether a form of consent should be gained with regard to display, documentation, and data storage, increasing multidisciplinary discussions on ethical standpoints in the form of workshops and open forums, a standardization of terminology, and that a valid reason should always be sought prior to the undertaking of skeletal documentation.

Skeletal Remains, Ethics, Imaging