



E67 Forensic Facial Reconstruction in Identification vs. Archaeological Investigation: Science or Art?

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Learning Overview: After attending this presentation, attendees will have a better understanding of how 3D forensic facial reconstruction in plastilina clay is conducted, using anatomical knowledge to identify and follow markers on the skull for recreating a face. It has been argued that forensic art is a subjective rather than objective endeavor and employs artistic license more than science. While it is true that there are areas of subjective artistic interpretation involved, forensic facial reconstruction is capable of nearly 70% accuracy in the hands of a well-trained forensic artist and when executed within acknowledged scientific guidelines.¹ Healed bone from facial injuries or bone loss from dental problems contribute unique markers to identifiability. Attendees will come to understand how scientific guidelines and methods for “reading” a skull are based upon evidence of musculature, activity, and ethnicity that all contribute to craniofacial morphology. Measurements based upon data sets of specific populations and historical periods are used to attain as much accuracy as possible. Conversely, attendees will also learn where and when artistic license is necessary for those areas of the skull that do not provide information about facial features. Attendees will learn the difference in goals of forensic facial reconstruction in aiding identification versus that of forensic reconstructions applied toward archaeological investigations to bring images of past peoples to life.

Impact on the Forensic Science Community: This presentation will impact the forensic community by demonstrating and promoting the value of forensic facial reconstruction artists who are also forensic anthropologists or have access to them for interpretation of facial structures. Forensic anthropologists trained in forensic art are uncommon but not unheard of. Nuanced cues for musculature attachments to facial bones are easy to miss for the untrained eye, as well as the ability to differentiate bone trauma remodeling from trauma that contributed to death or incurred postmortem. Forensic facial reconstruction in conjunction with forensic anthropology creates specialty skills that go beyond artistic interpretation. It is a goal of this presentation to encourage greater understanding and appreciation for those skills and dispel the misunderstanding that forensic facial reconstruction is primarily “art” over science.

This presentation will demonstrate that forensic art benefits most from the artist who is also a forensic anthropologist. The value of this in-depth knowledge toward determining the proper approach to each facial reconstruction, whether in a purely forensic context or for historical and archaeological purposes, cannot be overstated. Misinformation about the deceased provided to forensic artists leads to inaccurate reconstructions. Forensic art in combination with anthropological knowledge can offer unique value toward reconstructing images that aid in identification and visual understanding of human beings past and present.

Reference(s):

¹. Wilkinson, C. 2010. Facial reconstruction—Anatomical art or artistic anatomy? *Journal of Anatomy*, 216 (2). Pp235-250.

Forensic Facial Reconstruction, Facial Anatomy, Archaeology