

discovering new sites through the use of previously known patterns, is widely applied within archaeology. However, these methods are sparsely known, and hardly used, within the police and judicial contexts. This paper presents a pioneering study of modern clandestine burials in the Netherlands between the period 1960 and 2016. The dataset comes from known clandestine burial sites and integrates spatiotemporal patterns, offender and victim characteristics and Bayes' theorem to predict where, given a certain forensic scenario, an unknown clandestine burial site could be found. The study demonstrates that modern clandestine grave locations are patterned and quantifiable and that geospatial analysis and predictive modelling can be used to help locate missing and presumably clandestinely buried individuals.

Forensic Archaeometry: Introducing Forensic Methods on Archaeological Materials

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Archeometry was first to show how, and to what extent, scientific methods can solve archaeological problems. Furthermore, the use of forensic methods in archaeometry often provides unexpected data, which give a new dimension to the examined archeological case. Discovering hidden details, such as a trace of red pigment on the lesion of a 5000 years old skull, traces of tiny dust particles on a fragment of a

deceased's shirt fabric, tiny fragments of degraded skin from a destroyed grave, tiny fragments of burnt bones or buckshot traces embedded into bones, indicate the justification for tighter connection between forensics and archeometry. The results of the analysis of these cases, as well as the analytical methods used (XRF, Raman Spectroscopy, SEM-EDX, histological methods) are presented in detail. Forensic research methods are also spreading swiftly to other archeological materials, thereby setting new standards in archeology and approaching it partly to the exact sciences.

Bone traumas: a comparative analysis between an experimental study on pork bones and 19 subjects from the Merovingian funerary site of Ensisheim-Réguisheimerfeld (Alsace, France)

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The first aim of this research was to work on bone traumas, by analysing and trying to understand their mechanisms in order to recognize and classify them. For that reason we first made an experimental analysis on pork long bones. We then compared the results with the altomedieval archaeological remains from Ensisheim-Réguisheimerfeld (France) in order to validate or not the diagnostic criterias and intend to make hypothesis on bone marks.

This project enabled the confrontation between two scientific fields which have the same studies subject even if issues are different.