Forensic Archaeology/Anthropology and Bioarchaeology

REFS:

Edward Ashby (2013) Forensic archaeology in New Zealand: Review and future directions, Australian Journal of Forensic Sciences, 45:1, 25-35, DOI:10.1080/00450618.2012.729610

Anna Davenport & Karl Harrison (2011) Swinging the blue lamp: The forensic archaeology of contemporary child and animal burial in the UK, Mortality, 16:2, 176-190, DOI:10.1080/13576275.2011.560706

TERMINOLOGY

“Forensic archaeology refers to the application of archaeological principals and techniques within a medico-legal or humanitarian context, generally crime or mass disaster scenes, and typically involves buried evidence including clandestine graves.” Forensic anthropology similarly refers to the application of osteological principles and techniques within a medico-legal or humanitarian context. It typically involves the analysis of human remains. Bioarchaeology (as used in the American and UK sense) is the analysis of human biological materials and their context in archaeological settings. Primarily that involves the analysis of human remains but there are increasing calls for a recognition of mortuary context sometimes termed an integrated bioarchaeology.

SHARED BETWEEN THE DISCIPLINES

The link between these disciplines comes from the application of classic archaeological and osteological methods to the work of forensics. In broad terms that means a focus upon context, stratigraphy and interpretation within a population basis. In other words the methods used are to extract data from the environment and then to interpret it.

More recently methods developed in forensics have been increasingly applied in archaeological/osteological contexts so that there is a cross fertilisation between the two fields e.g. aDNA work, stable isotope work, facial reconstruction etc.

BUT THE PURPOSE DIFFERS:

In archaeology and bioarchaeology the focus of the analysis is on why? After answering the how i.e. interpreting what has happened then further inference is focussed upon why. In contrast in forensic work the focus Is upon how and who. In other words forensic work is not exploratory but constrained.

This difference in focus has a real effect in that forensic work explicitly avoids why questions which are often speculative. In contrast archaeology is often about proposing scenarios that can then be tested by other means.

This makes for a difference also in what is accepted as evidence. Forensic data requires a solid base of evidence especially from a body of experiment or observation. Archaeological data can also rely upon the logic of the argument and may not be so worried (although it should be) about the level of statistical proof for an inference. One needs to be aware of anecdotalism (that the observation of any set of behaviours resulting in a recognisable pattern of

archaeological data can only demonstrate a possible set of formative processes) and its limitations. Furthermore methods must be replicable and standardised so that evidence is not lost or misinterpreted.

THE ADVANTAGE OF FORENSIC ARCHAEOLOGY/ANTHROPOLOGY

Ashby and Hudson point out that the application of a methods only or of a recipie book approach to forensic cases is problematic. A key difference is the distinction between exhumation and excavation. In the former the remains are the focus and the context which can be informative about what has happened is lost. A classic example is gridding a site but then not locating finds to a point within a grid.

They point out that there are practical consequences: the mismanagement of historic skeletal remains (especially in New Zealand where 1900 is the dividing line in jurisdictions);

Inexpert recovery; and loss of evidence

Furthermore as pointed out in the “Blue Lamp” paper anthropological training should make one aware of the value of reflexivity and one’s own cultural biases which may impact upon how work is undertaken, organised and interpreted.

Often forensic work is narrowed down to the immediate setting and the broader context is forgotten about. In this instance the authors of the Blue Lamp point to the importance of animal bones in allowing for an understanding of context and how, having paid attention to ALL bone on site, this is often indicative to the court of the care and thoroughness of the work being undertaken. So the wider lens of archaeology/anthropology is of value in a forensic setting.

CHARACTERISTICS OF FORENSIC ARCHAEOLOGY

Forensic work is characterised by team work and multiple disciplines. This means that archaeologists/anthropologists are directed and assigned work by the team leader and that work may be quite comparmentalised depending upon how the job is sorted out and who is present on site.

Forensic work requires attention to the chain of custody in relation to evidence. This needs to be more formalised than is common in many archaeological and anthropological situations.

It is often not sufficient to use a method simply because of custom, one needs to understand why a particular method is used and be clear about its limitations. This is also the basis of good practice for archaeology and anthropology but often attention is not given to methods until post excavation.

LESSONS FROM FORENSIC WORK FOR ARCHAEOLOGY/ANTHROPOLOGY

The chain of custody and the careful handling of evidence.

New methods and applications.

The importance of clear decisions around method and the assessment of accuracy and the limitations of particular methods.

The broadening of teams to include more diverse specialists.

Exposure to a wider range of contexts which potentially have relevance for examing past sites e.g. the value of mass disaster work in interpreting past battlefield sites, the value of trauma studies.

NOTES FOR BEST PRACTICE

Be aware of the legislation surrounding human remains in the current jurisdiction.

Be aware of the value of incorporating other disciplines and their findings into your work i.e. the value of good teamwork.

Understand why and how particular methods are chosen at particular times, be aware of their limitations and the level of associated accuracy, precision and relevance. Know where they originate from and for what circumstances.

Retain a sense of the broader context and use that as data. Do not automatically exclude finds (e.g. animal bones) which may prove to be of relevance.

Be aware and reflexive of your own and others’ cultural biases and think about how that may be affecting the methods used, what is assumed to be evidence and interpretation.

Be aware of the nature of interpretation – the movement from observation, to identification of process (Middle Range Theory) to interpretation. On what basis are those generalising steps made – what is the nature of the evidence? This was particularly apparent in Week 3 – the shortcomings of accepted rules of thumb. Keep an eye on the range of possibilities.

Make sure that you don’t make the ecological fallacy – infer an individual’s characteristics from a population measure or observation.