

Archaeology the information revolution, an introduction to crystal gazing

“They are aiming at throwing light on some portion of man’s past by the careful piecing together of evidence, much of it apparently insignificant in itself.” (Kenyon 1964:9).

Archaeology is the study of the past. More accurately, archaeologists study the incomplete record of events preserved in the archaeological record and interpret them within their own social, political and chronological framework. Every event in the archaeological record from the dropping of a stone tool to the burial of an Egyptian queen contains information from which archaeologists formulate questions and interpretations. A fundamental problem that archaeologists face is how to interpret this information accurately. The positivist approach to archaeology suggests that the more information an archaeologist gains about an event, the more accurate and free from bias their interpretation (Chang 1978:15). However, if archaeologists could gather all the information surrounding a specific event, not only would there be so much data that they would throw their hands up in despair, but it is quite probable that they would still not be able to understand the data, because it is inextricably tied up within the socio-cultural constructs of the society that created it. The archaeological record is not complete and this attribute requires an archaeologist to extricate the maximum amount of understandable information from the events they study, if not to give a ‘true’ picture of the event then at least to be able to explain that event to members of their own society. Towards what ends an archaeologist pursues a particular interpretation is not the issue here. Rather the issue is that to create archaeology data is required (Chang 1978:22). The base data for all archaeology is the information contained within the specific events portrayed in the archaeological record, and that information comes in many forms.

This thesis is aimed at a specific field of archaeological information retrieval called “residue analysis.” Residue analysis is comprised of many different techniques and rather than give a general overview of these, an effort has been made to examine a single technique, ‘haemoglobin crystallisation’ to determine its validity as a method of archaeological information retrieval and its applicability to Australian archaeological material. This focus emphasises an important issue surrounding new forms of information retrieval in archaeology. If the application of a technique (residue or otherwise) is found to have archaeological validity then the information it grants becomes part of the archaeological record. The

information is not the be all and end all of archaeological interpretation; rather it is part of the specific event information and is free to be interpreted in whatever manner is deemed necessary by the archaeologist. Thus, criticisms against those using such techniques must be specifically aimed at their interpretation of techniques rather than the information the technique produces. It is hoped that this thesis will more fully develop these ideas in conjunction with the investigation of the methods and techniques for the use of "haemoglobin crystallisation" on archaeological material.