

## **BEAUTY IS ONLY SKIN DEEP: WHERE NDT CAN BE A COMPROMISE TOO FAR?**

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The value of an ancient artefact can be measured on several levels; from scholars of the past for whom it is primarily a repository of evidence about past behaviours and actions, to the collector for whom it is an object that's value can be counted not only in terms of beauty and history but also as a financial investment that will appreciate in monetary worth.

For many, these notional values can only be maintained by keeping the artefact in as perfect and unaltered condition as possible; this, many would argue, is the role of the Museum curator and Conservator; to curate the artefacts and preserve them for future generations.

But is there a point at which blind adherence to preserving an artefact perfect and unaltered can compromise the inherent value of an artefact to other 'stakeholders'?

The search for methods of scientific analysis that do not require the removal of a sample or that can provide useful data about an artefact without causing any damage has occupied scientists for at least the last four decades. The advent of x-ray fluorescence and similar instrumental methods as techniques that can measure the elemental composition of an artefact without so much as touching its surface was viewed as the panacea that satisfied the needs of the archaeological, curatorial and art markets together. However, subsequent research has demonstrated that the surfaces of ancient artefacts were often treated by their makers in ways that enhanced their appearance and which also changed the chemical composition making the surface non longer representative of the bulk.

This paper will look at some of the problems that blind and unquestioning use of NDT can cause to the study of ancient coins and how there are often situations where important historical and archaeological questions can still only be satisfactorily addressed by analytical approaches that are minimally destructive.