THE CUTTING EDGE

An innovative online resource for artefact researchers and use-wear analysts

http://research.ncl.ac.uk/thecuttingedge/

The project seeks to create a new online resource that will support teaching and research into the analysis of use-wear patterns on ancient and historical artefacts with cutting edges. The collection includes over 1000 stone and metal objects from various periods in human history, but focuses in particular on prehistoric and ethnographic artefacts made from stone and copper alloys. The collection is mainly held within Newcastle University's Great North Museum: Hancock, but also includes artefacts from wider collections within Tyne & Wear Archives and Museums (UK).
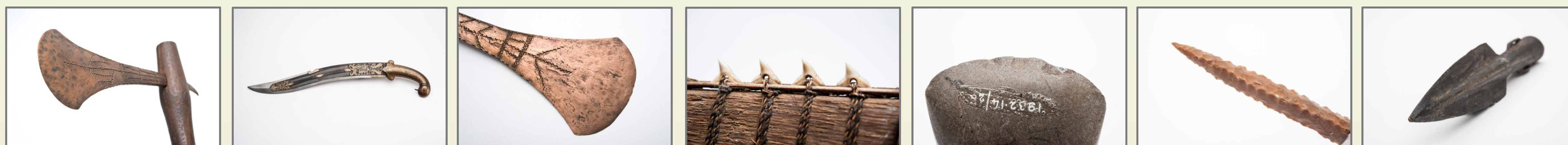
PROJECT AIMS AND USERS

Use-wear and micro-wear analysis have long been applied to lithic and osseous materials and, more recently, to prehistoric copper-alloy tools and weapons (Dolfini 2011; Roberts & Ottaway 2003). A growing number of scholars has also developed an interest in the *chaîne opératoire* of artefacts including their manufacturing methods, post-manufacturing changes, use-life, and post-depositional history (Hurcombe 2007; Schlanger 2005; Uckelmann & Mödlinger 2011). These studies can yield tremendous insights into the life-histories and social biographies of material culture.

However, artefact research is seriously hindered by a shortage of online metadata archives which should minimally include, along with traditional archaeological data, high-resolution pictures of the objects, their hafting areas, and their cutting edges. This is especially important for metalwork, where surface corrosion may seriously hinder any possibility of detecting manufacturing and use traces. The aim of the project is precisely to respond to the growing demand for such metadata archives and to make them accessible to students, practitioners, and researchers worldwide.


THE METADATA ARCHIVE

The archive consists of separate systems for accessing, aggregating, and presenting the metadata. The user interface offers different contexts in which to view collections. These include a geo-locational view that can plot artefact find locations onto different map styles and incorporate different third party datasets, and also a timeline view allowing the user to see where an artefact sits in human history. By using industry standards and open data protocols we are able to keep the three systems of the archive (metadata access, aggregation and presentation) separate. This allows the available information (metadata and aggregated metadata) to be reused for other purposes such as a mobile website or third-party use of our metadata.
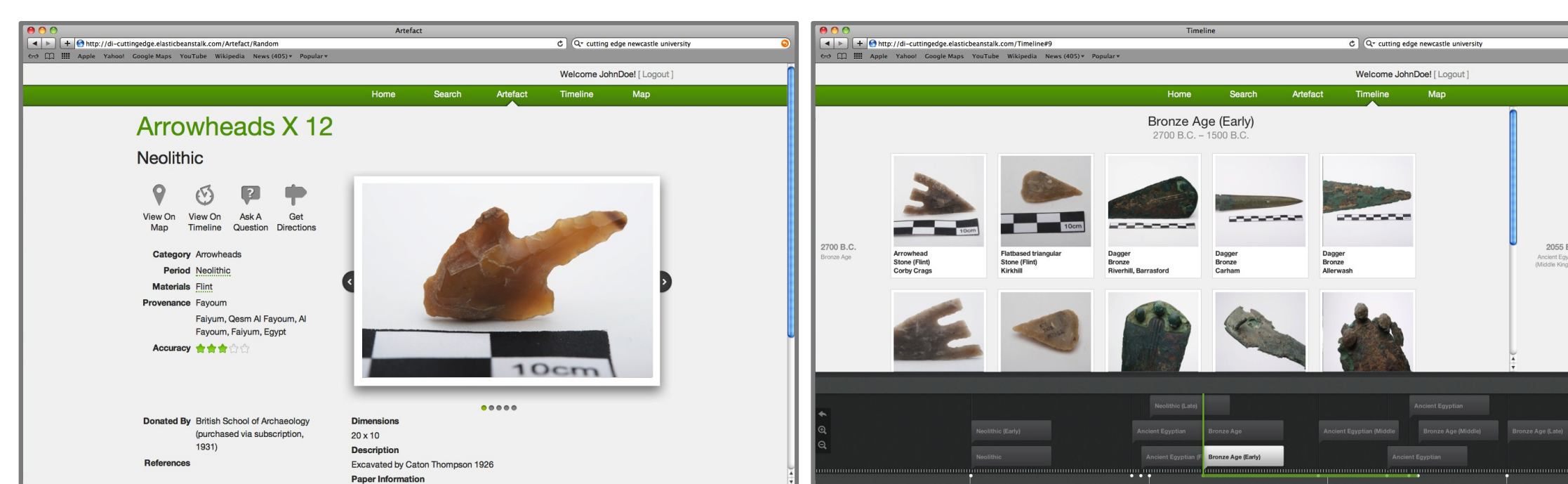
PROJECT SCHEDULE

The project is close to completion. We have photographed all artefacts in the collections, and are now running the last tests to the IT system and user interface before we start uploading all data. Electronic and paper museum archives are also being checked and updated, and case-studies involving the use-wear analysis of 10 objects are being undertaken; these will be made available to the public as a part of the project. We are confident that the resource will be fully operational by the end of the year.

References

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