

Digital Technologies & Archaeological Ethics

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Session: Digital Technologies and archaeological theory, method and practice

Archaeology

Study of material remains ⁽¹⁾ of the human past ⁽²⁾ using archaeological methods and theory ⁽³⁾ to explain long-term changes in human behaviour and culture, ⁽⁴⁾ to write histories ⁽⁴⁾ and/or as heritage practice ⁽⁴⁾

1. With documentary and other evidence
2. And the natural environment
3. Borrowed from other disciplines/practices, often contested
4. Depends on your perspective

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Excavating Parramatta (Courtesy Jillian Comber)

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'Who Owns Stonehenge?' & 'Prehistory to Politics' John Mulvaney' Book Covers

Aboriginal rock shelter, Darling Mills Creek (Allenbrow 2002)

Key Stakeholder Groups in Australian Archaeology
Government Departments and Agencies (Commonwealth, State, Territory & Local)
Heritage Trusts & Historic Properties, Museums
Professional Associations (AAA, ASHA, AIMA, AACA)
Universities & Research Institutes
Archaeological & Heritage Consultancy Companies
Indigenous Owners & Descendants
Non-Indigenous Descendants
Local History and Heritage Associations, Private Researchers
Tourism and Education Businesses
Media Production Companies & Publishers
Development and Resource Extraction Companies



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Professional but not formally accredited



Archaeological Codes of Ethics Common Themes

conservation & 'stewardship' of tangible/intangible heritage
rights of key stakeholders/traditional owners
minimum standards for fieldwork & analysis
acknowledge IP, share information, publish
the public 'right to know'
maintain client confidentiality
act legally



Challenges of Codes of Ethics

Contested & conflicting values

Unrealistic assumptions about standards

Professionalism vs. public involvement/rights

Digital media & technologies extend existing ethical issues and create new ones

e.g. Which of these represents 'real' archaeology? (Why) does it matter?



- Conservation of places/materials & records (hard copy, digital)
- Sustainable digital archives and/or eResearch tools and/or communication technologies?

- Competition vs. collaboration between practitioners
- Real costs of adhering to ethical and professional standards
- Disagreement about standards & data standardisation
- What is 'archaeological' information? Who owns it?
- Who takes responsibility for managing, maintaining, moderating etc

- Differing professional and/or community standards on Web 2.0
- Authorship, representation & affective digital storytelling
- Edutainment, advertorials, branding, PR, marketing archaeology online

- Equality of access to digital technologies & content – costs?
- Platform design to support ethical & professional standards?
- Digital & information literacy of contributors and users?

Archaeological collections and information 'at risk'

Many archaeological material collections not properly curated

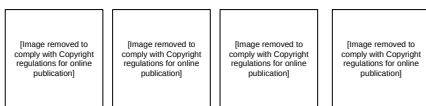
Unpublished consultancy reports (paper, few copies, restricted access)

Other paper-based archives (notes, plans, excavation recording sheets etc)

Photographs on film (negatives, prints, slides)

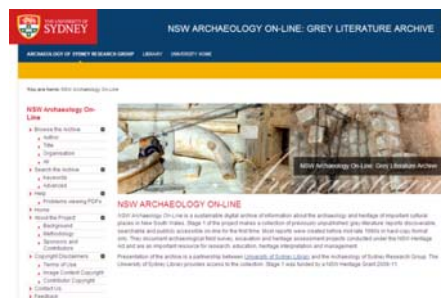
Content on tape (video, data?)

'Born digital content' (text, databases, spreadsheets, GIS shape files, CAD drawings, images, video, multimedia products, websites)



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NSW Archaeology Online Stages 1 & 2 (2009-2013) Sustainable Digital Archive & Search and Presentation Tools



Making unpublished archaeological information discoverable & publicly accessible online and sustainably archived via University of Sydney Library

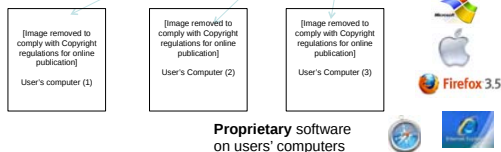
sustainable archive

University of Sydney
Library
eScholarship
Repository (DSpace)
**Sustainable digital
archive**
(TIF, PDF, metadata
in text formats)

Web interface (open source) and
University of Sydney branding.



not sustainable (?)



NSW Archaeology Online 'Grey-Literature' - Issues

- Quality of content very variable ("boiler plate" reports, plagiarism)
- "Name and shame" (poor quality work, not donating content)
- Plagiarism easily detected by users through OCR/text search
- Why should I donate my resources to assist my competitors?
- I've scanned my reports to PDF & have thrown the originals away. Can you put the PDFs onto NSW Archaeology Online for me?
- Why do we need to keep sites/artefacts if we can digitise and archive online?
- Who is responsible for current and future service provision? Future sustainability? Business models?

Archaeology, heritage discourses & emerging digital technologies Stage 1 (2009-2012) Pilot Study

Interview survey 2011. 30 archaeologists and heritage practitioners
Main workplace in Australia (some archaeology outside Australia)

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Work and organisational context?
Type, content and context of communications?
Experiences of working with media professionals?
Use of digital technologies to communicate about
archaeology and heritage?
Use of digital technologies to share information?
Benefits and challenges of using digital technologies?

computers & digital technologies 'Like'

save time, make work easier, quicker, efficient, effective
can store, access & share more information
instant communication, quick online publication
communication with the public, colleagues etc.
"Sexy as hell for presentations"
ease of data analysis,
supports new types of analysis
visualize spatial information

computers & digital technologies 'problems'

limited bandwidth, crashing, outdated hardware and software, need ICT support
poorly designed software (hard to use and remember how to use)
high costs of technology and software, high set-up costs
software and technology that are not interoperable
steep and continual learning curve, constant re-skilling

pressure to produce too much information
"dazzled by technology" that is not needed or useful or can be misleading
technologies are distracting, create expectation of 'instant replies' etc

working with people with different levels of digital literacy
digital technologies are a barrier to some kinds of communication
the web is not really 'democratic'

tangible and hard-copy is sometimes better than digital
sustainability, archiving, costs of metadata entry & data standardisation

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'social media' - benefits

Sharing research and influencing an inter-disciplinary research
community
Making professional contacts with a very wide range of people
Connecting with students and younger people
"Engaging students better than with Blackboard Learn"
"Flying under the media/marketing people's radar and circumventing
university branding guidelines"
"To communicate with the public"
Make useful professional contacts, advertise work, share information

'social media' – challenges

"Don't have much traffic". "Our company Facebook site was taken down as we didn't have any Friends and
it was a bit embarrassing"
"Very ephemeral. Rather put effort into more permanent medium"
"I'm too old for that", "Can't be bothered", "No I hate them"
"Concerned about things that go wrong with social media". "I don't want them to have my personal details"
"Can't access Facebook from work computers". "Don't think the format is suitable for a professional image"
"I'm addicted to Facebook games. You can waste a lot of time."
"You lose the sense in a truncated Twitter message".
"Don't have a mobile phone that supports Twitter"
"I don't want people to know what I am doing". "Not allowed to use them by government department"
"Don't have time (to blog)" "Few people contribute (to wikis)"
"Dealing with negative and derogatory comments". "People feel they can hide behind anonymity and say
things they wouldn't dare say to your face"

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Emerging themes of overall research

more positive than negative attitudes to technology & digital media
many complex challenges and problems

more negative than positive comments about social media
age seems to be significant in attitudes to e.g. Facebook

good ICT funding & support is important
variable levels of digital literacy *apparent* among respondents

scalability?
interoperability?
sustainability?
archiving?

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