

Digital Technologies & Archaeological Ethics

Dr Sarah Colley
Archaeology, University of Sydney
sarah.colley@sydney.edu.au

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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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Aboriginal rock shelter, Darling Mills Creek (Attenbrow 2002)

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

Key Stakeholder Groups in Australian Archaeology

Government Departments and Agencies (Commonwealth, State, Territory & Local)

Heritage Trusts & Historic Properties, Museums

Professional Associations (AAA, ASHA, AIMA, AACAI)

Universities & Research Institutes

Archaeological & Heritage Consultancy Companies

Indigenous Owners & Descendants

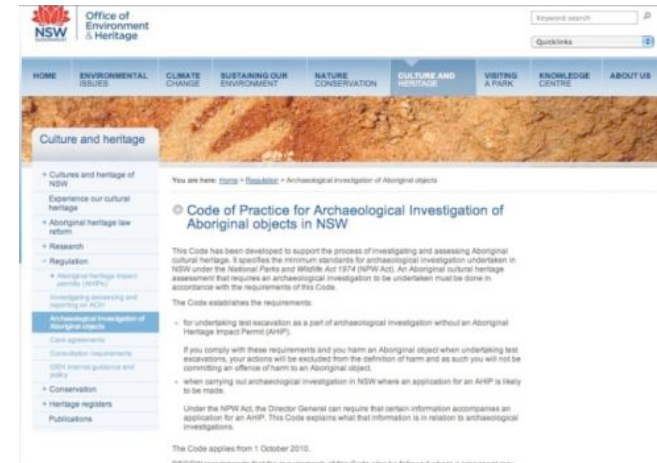
Non-Indigenous Descendants

Local History and Heritage Associations, Private Researchers

Tourism and Education Businesses

Media Production Companies & Publishers

Development and Resource Extraction Companies

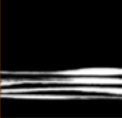


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Professional but not formally accredited



AACAI

AUSTRALIAN ASSOCIATION OF CONSULTING ARCHAEOLOGISTS



Welcome

The Australian Association of Consulting Archaeologists Inc. (AACAI) is an organisation for professionals working in all fields of contract and public archaeology. It aims to uphold and promote the discipline and to advance the welfare of members. AACAI has a Constitution, a Code of Ethics and a Consulting with Aboriginal Communities Policy Document. It is affiliated with the Australian Archaeological Association Inc and is a Foundation Member of the Council for the Humanities, Arts and Social Sciences.

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1 South East Archaeology Pty Ltd

Aboriginal Heritage Consultants

24 Bamford St Hughes ACT 2605 - [get directions](#)
ph: (02) 6260 4439
[website](#) [email](#) [send to mobile](#) [more info](#)

2 Archaeological & Heritage Management Solutions Pty Ltd

AHMS - Historic & Aboriginal Heritage Consultants

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3 Cultural Resources Management

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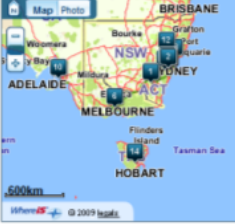
63 Hannah St Beecroft NSW 2119 - [get directions](#)
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AMAC Group

Assessment - Excavation - Survey

122c Percival Road, Stanmore NSW 2048
ph: (02) 9568 6093
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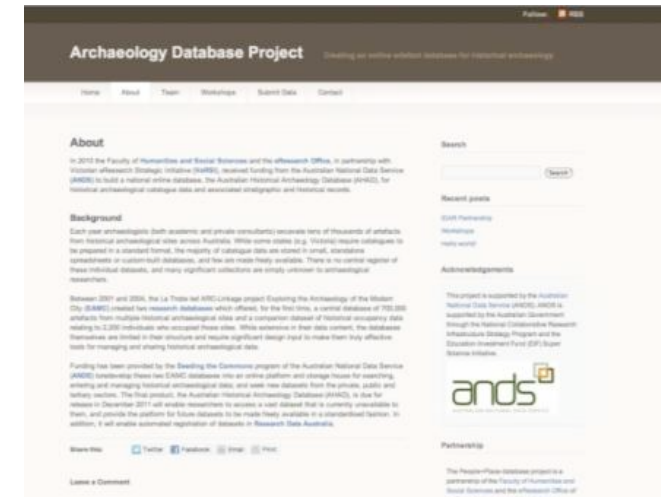
4 Godden Mackay Logan



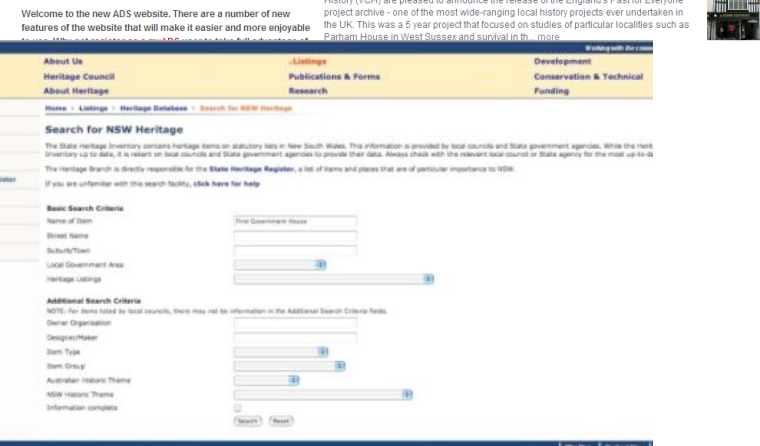
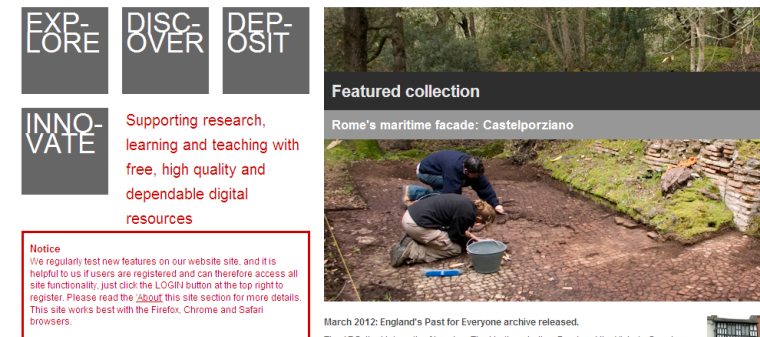
Archaeological Codes of Ethics

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



Digital technologies and digital media in archaeology



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

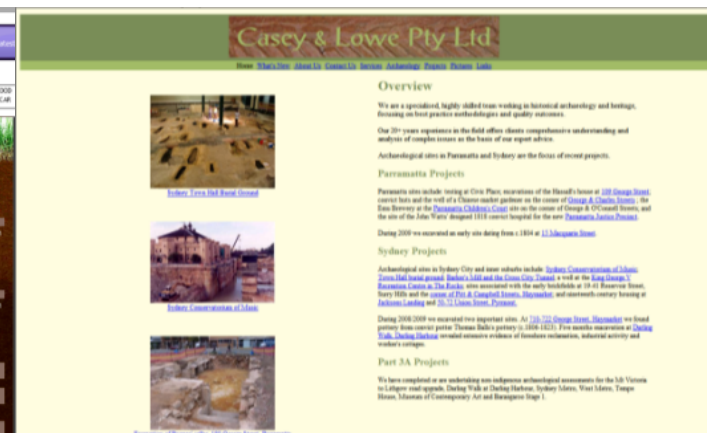
e.g. Which of these represents 'real' archaeology? (Why) does it matter?

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(Indiana Jones)

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[Archaeologist studying inscriptions on stone used to promote NeCTAR]



- 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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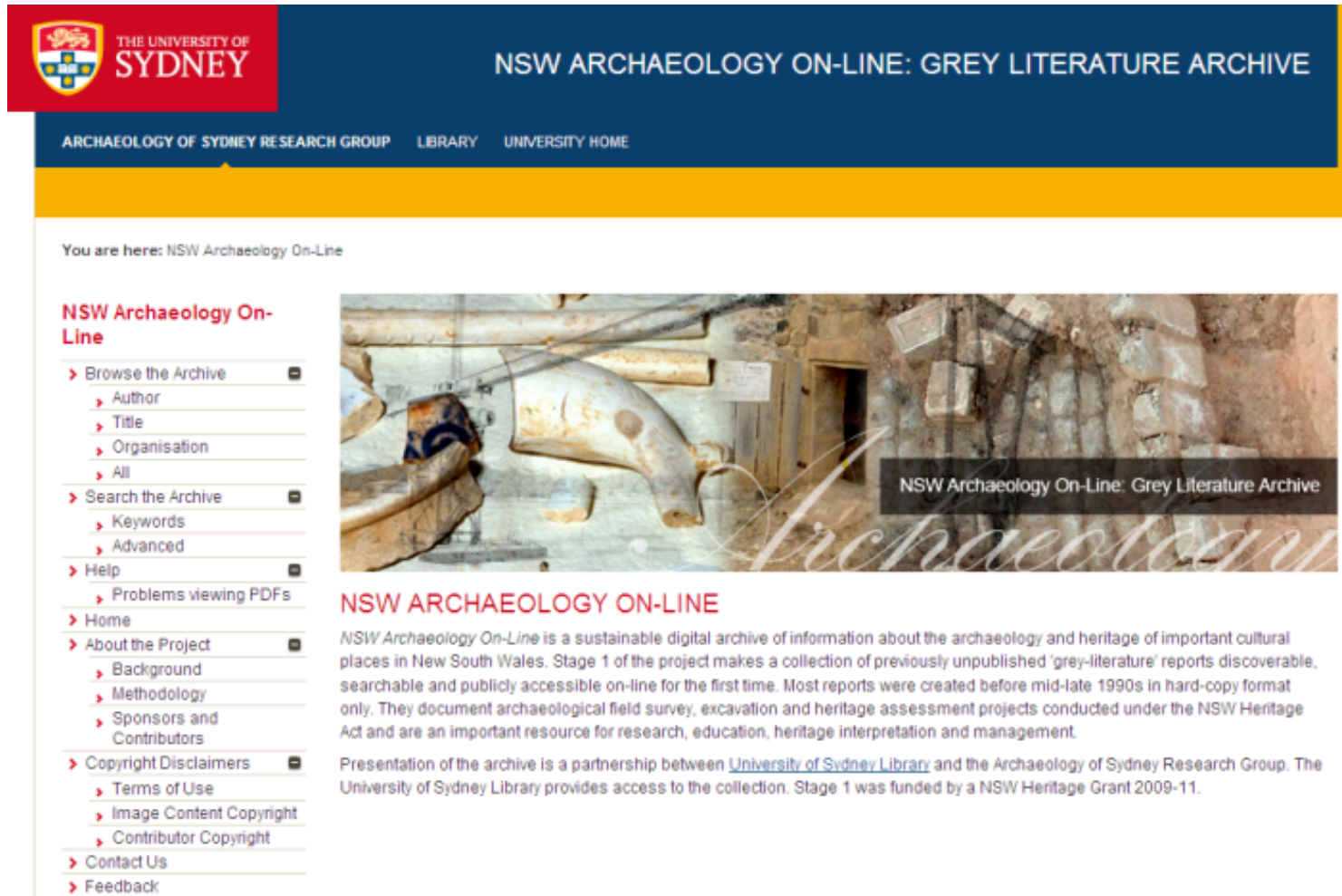
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NSW Archaeology Online Stages 1 & 2 (2009-2013)

Sustainable Digital Archive & Search and Presentation Tools



The screenshot displays the website's header with the University of Sydney logo and the title 'NSW ARCHAEOLOGY ON-LINE: GREY LITERATURE ARCHIVE'. A navigation bar includes links to 'ARCHAEOLOGY OF SYDNEY RESEARCH GROUP', 'LIBRARY', and 'UNIVERSITY HOME'. A breadcrumb trail indicates the user's location: 'You are here: NSW Archaeology On-Line'.

NSW Archaeology On-Line

- Browse the Archive
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 - Title
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 - All
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 - Keywords
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- Help
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- About the Project
 - Background
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NSW ARCHAEOLOGY ON-LINE

NSW Archaeology On-Line is a sustainable digital archive of information about the archaeology and heritage of important cultural places in New South Wales. Stage 1 of the project makes a collection of previously unpublished 'grey-literature' reports discoverable, searchable and publicly accessible on-line for the first time. Most reports were created before mid-late 1990s in hard-copy format only. They document archaeological field survey, excavation and heritage assessment projects conducted under the NSW Heritage Act and are an important resource for research, education, heritage interpretation and management.

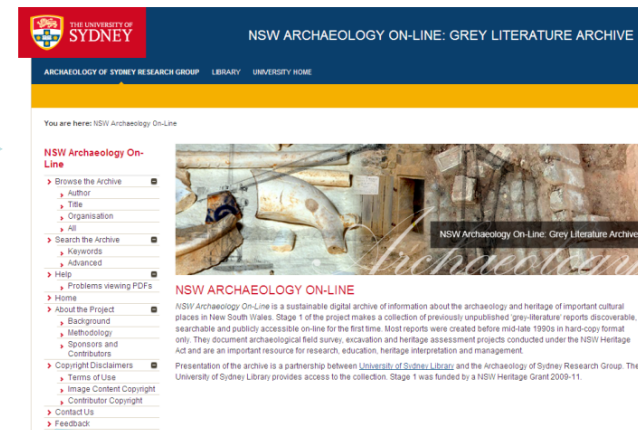
Presentation of the archive is a partnership between [University of Sydney Library](#) and the Archaeology of Sydney Research Group. The University of Sydney Library provides access to the collection. Stage 1 was funded by a NSW Heritage Grant 2009-11.

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 (?)

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User's computer (1)

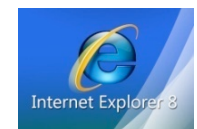
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User's Computer (2)

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User's Computer (3)

**Proprietary software
on users' computers**



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

‘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

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‘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?

Acknowledgments

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