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Citation details:

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Acknowledgements

Thanks to our conference sponsors, the Aboriginal and Torres Strait Islander Studies Unit and the School of Social Science at the University of Queensland, for support and the use of facilities. At Kondari Resort we thank Kym Bell and Larry Ray for accommodating our various requirements. We extend a special thanks to the session convenors for their enthusiasm and support for the conference: Bryce Barker, Chris Clarkson, Lara Lamb, Jo McDonald, Colin Pardoe, Jon Prangnell, Jill Reid, Annie Ross, Sean Ulm, Michael Westaway and Peter White. Members of the Australian Archaeological Association executive committee provided support throughout the year leading up to the conference, especially Huw Barton, Colin Pardoe, Richard Fullagar and Louis Warren. Thanks also to the Australian Association of Consulting Archaeologists Inc. for sponsoring prizes at the conference. For help with organising the fieldtrip we thank Top Tours, Kondari Resort and Ian McNiven.
Introduction

Welcome to the Australian Archaeological Association Annual Conference 2001 and Kondari Resort, Hervey Bay. If you are staying at Kondari Resort and/or taking advantage of the meals package offered by the Resort, please check in with the Resort as soon as possible. They will provide you with directions to your room, your key and vouchers for the meals that you have paid for. Please make sure that you settle all accounts with the Resort before you leave at the end of the conference.

A registration/conference information desk will be available on Wednesday 5 December 2:00-8:00pm at the Pool Side deck near the Kondari reception area. After Wednesday, a registration/conference information desk will be available adjacent to the Conference Room for a brief period each morning prior to the first session as well as during every morning tea, lunch and afternoon tea break.

Kondari Resort is centrally-located in Hervey Bay and is within walking distance of many shops and other attractions. The beach is located c.500m north of the resort while the Hervey Bay Botanical Gardens border the Resort’s southern margin. A shopping centre, including Woolworths and specialty shops, is located c.800m south of the resort. Brochures with details of the many attractions in the Hervey Bay/Fraser Island area are available in the Kondari reception area.

AAA2001 CONFERENCE ORGANISING COMMITTEE CONTACT DETAILS

AAA Conference 2001
Aboriginal and Torres Strait Islander Studies Unit
The University of Queensland
BRISBANE QLD 4072
AUSTRALIA

URL: www.ansoc.uq.edu.au/aaa
Email: aaa2001@mailbox.uq.edu.au

AAA2001 CONFERENCE VENUE CONTACT DETAILS

AAA Conference 2001
Kondari Resort
49-63 Elizabeth Street, Urangan
HERVEY BAY QLD 4655
AUSTRALIA

Email: larry.ray@kondari.com.au
Telephone: 1800 072 131 (toll free)
Facsimile: (07) 4125 3031
General Information

**CONFERENCE ORGANISING COMMITTEE**

**CONFERENCE CONVENORS**

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sean Ulm</td>
<td>Aboriginal &amp; Torres Strait Islander Studies Unit,</td>
<td><a href="mailto:s.ulm@mailbox.uq.edu.au">s.ulm@mailbox.uq.edu.au</a></td>
</tr>
<tr>
<td></td>
<td>University of Queensland</td>
<td></td>
</tr>
<tr>
<td>Catherine Westcott</td>
<td>Environmental Protection Agency, Queensland</td>
<td><a href="mailto:catherine.westcott@env.qld.gov.au">catherine.westcott@env.qld.gov.au</a></td>
</tr>
<tr>
<td>Annie Ross</td>
<td>School of Social Science &amp; School of Natural &amp; Rural Systems Management, University of Queensland</td>
<td><a href="mailto:annie.ross@mailbox.uq.edu.au">annie.ross@mailbox.uq.edu.au</a></td>
</tr>
<tr>
<td>Ian Lilley</td>
<td>Aboriginal &amp; Torres Strait Islander Studies Unit,</td>
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</tr>
<tr>
<td></td>
<td>University of Queensland</td>
<td></td>
</tr>
<tr>
<td>Jon Prangnell</td>
<td>School of Social Science, University of Queensland</td>
<td><a href="mailto:j.prangnell@mailbox.uq.edu.au">j.prangnell@mailbox.uq.edu.au</a></td>
</tr>
</tbody>
</table>

**POSTER SESSION CONVENOR**

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jill Reid</td>
<td>Aboriginal &amp; Torres Strait Islander Studies Unit,</td>
<td><a href="mailto:jillbyreid@hotmail.com">jillbyreid@hotmail.com</a></td>
</tr>
<tr>
<td></td>
<td>University of Queensland</td>
<td></td>
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</tbody>
</table>

**AUDIOVISUAL COORDINATOR**

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luke Kirkwood</td>
<td>Institute for Molecular Biosciences &amp; School of Social Science, University of Queensland</td>
<td><a href="mailto:l.kirkwood@imb.uq.edu.au">l.kirkwood@imb.uq.edu.au</a></td>
</tr>
</tbody>
</table>

**AIMS OF THE CONFERENCE**

The conference aims to provide a forum for the exploration of barriers, borders and boundaries in Australian archaeological methods and practice, frameworks of interpretation and epistemological structures. The theme of the conference will be of interest to academics, consultants, Indigenous people, students, cultural heritage managers and policy formulators.

**PAPERS**

If you are presenting a paper, please identify yourself to your Session Convenor as soon as possible after registration and make them aware of any special requirements you have for your presentation. They will also inform you of individual arrangements or last-minute changes for your session.

Papers will be 15 minutes long with 5 minutes allocated for question time immediately after each paper. This makes a total of 20 minutes per paper. **These time limits will be strictly adhered to by Session Convenors.**

Please see Luke Kirkwood (Audiovisual Coordinator) prior to the session in which your paper is scheduled to arrange loading of slides into carousels and loading of data projection files (e.g. Microsoft® PowerPoint®) onto the central conference computer. Note that paper presenters WILL NOT be permitted to use personal laptop computers for data projection purposes. Any other issues should be taken up directly with your Session Convenor.
POSTER SESSION

Please notify one of the Conference Convenors if you have a poster to be displayed in the Poster Session. Posters should be mounted on the display boards provided at the rear of the Conference Room as soon as possible after registration. All posters will be eligible for judging by a panel of referees in the formal Poster Session on Thursday evening. If you have a STUDENT poster (i.e. a poster solely authored by students) make sure that one of the Conference Convenors marks it appropriately so that it will be eligible for the student poster prizes. Poster presenters should organise to remove their poster during the Saturday lunch period to allow the room to be set for the Conference Dinner. Prizes will be awarded at the Conference Dinner on Saturday evening. If you have any questions please contact Jill Reid (Poster Session Convenor).

CONFERENCE PRIZES

Prizes Sponsored by the Australian Archaeological Association Inc.

1. The Australian Archaeological Association Annual Conference Best Overall Paper Prize $500
2. The Australian Archaeological Association Annual Conference Best Student Paper Prize $500

Note: If the Best Overall Paper Prize is a student, the Best Student Paper Prize will be awarded to the second place student paper.

Prizes Sponsored by the AAA2001 Conference Organising Committee

1. The Australian Archaeological Association Annual Conference Best Overall Poster Prize $500
2. The Australian Archaeological Association Annual Conference Best Student Poster Prize $500
3. The Australian Archaeological Association Annual Conference Runner-Up Student Poster Prize $250
4. The Australian Archaeological Association Annual Conference Runner-Up Student Poster Prize $250

Note: If the Best Overall Poster Prize is a student, the Best Student Poster Prize will be awarded to the second place student paper and third and fourth places will move up the order.

Prizes Sponsored by the Australian Association of Consulting Archaeologists Inc.

1. The Laila Haglund AACAI Prize for Consulting Archaeology $500

The Australian Association of Consulting Archaeologists Incorporated is the major body for the accreditation and promotion of consultants who work in the allied subdisciplines of Indigenous, historic, industrial and maritime archaeology throughout Australia. It actively seeks to maintain and further develop high standards of consultancy performance. Towards this end it has contributed a prize of $500 for the best contribution on consultancy archaeology to the Australian Archaeological Association Annual Conference.
PROCEEDINGS

The Anthropology Museum at the University of Queensland will publish the conference proceedings in the *Tempus* series. Publication of the volume will be sponsored by the AAA2001 Conference Organising Committee, Aboriginal and Torres Strait Islander Studies Unit and School of Social Science at the University of Queensland. The volume will be edited by members of the conference organising committee and all papers will be refereed. It is anticipated that the volume will be produced within 12 months of the conference. We invite all presenters (of sessions, papers and posters) to submit a paper for inclusion in the proceedings. A letter outlining requirements and deadlines will be sent out immediately after the Conference. Please contact Sean Ulm (co-ordinating editor) for further details.

ANNUAL GENERAL MEETING

The AGM will be held on Friday evening from 7:30-9:30pm in the Conference Room. If you have any items for the Agenda please see Colin Pardoe (President) or Louis Warren (Secretary). All are welcome to attend, but only financial members can vote. If you have not paid your Australian Archaeological Association Inc. Membership for 2001 please see Richard Fullagar (Membership Secretary).

ACCOMMODATION AND MEALS

If you have booked accommodation and/or meals through Kondari Resort (the conference venue) individual meal vouchers will be given to you at check-in for each meal that you have paid for. Note that these vouchers will be required to be presented at EACH MEAL. For those who have not selected a meals option, meals may be purchased at one of the Kondari Resort restaurants. Near the resort there are many take-away food vendors on the esplanade c.500m north of the resort or in the shopping complex c.800m south of the resort. Conference meal times at Kondari Resort are as follows:

<table>
<thead>
<tr>
<th>Meal</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>6:30-8:15am</td>
</tr>
<tr>
<td>Lunch</td>
<td>12:00-1:00pm</td>
</tr>
<tr>
<td>Dinner</td>
<td>6:00-7:00pm</td>
</tr>
</tbody>
</table>

CONFERENCE DINNER

The Conference Dinner will be held in the Conference Room between 7:00-9:00pm on Saturday evening. If you wish to attend and have not booked and/or paid for a place, please contact Kondari Resort as soon as possible. The cost is $30-00 for those who have not selected the full meal package option. This cost includes a three course meal. Poster and paper prizes will be presented during the dinner as well as the Big Man Award and Small Boy Awards. The evening will kick on with a band and dance. Two bars will be open at the dinner venue for the purchase of drinks.

BAR TIMES

Conference-dedicated and public bar facilities at the Resort cease trading at midnight. If you anticipate requiring additional refreshments after this time take-aways can be purchased at the bottle shop at the front of the Resort prior to 10:00pm.

CONFERENCE SOUVENIRS

Conference T-Shirts and Stubby Holders will be available for sale at the registration/conference information desk adjacent to the Conference Room during morning tea, lunch and afternoon tea breaks.
BOOKSELLERS

A secure room adjacent to the Conference Room has been reserved for a conference registration/conference information desk, booksellers and souvenirs area. We anticipate that this area will be staffed during morning tea, lunch and afternoon tea breaks.

FIELDTRIP

The Conference Organising Committee has organised an optional all-day fieldtrip to Fraser Island for conference delegates on Sunday 9 December which has been designed to highlight both cultural and natural heritage features of the Island. The fieldtrip will depart from and return to Kondari Resort. Researchers currently working on Fraser Island have offered to provide some commentary on the archaeology of the Island for the tour. The total cost for the day will be $72-00 (including lunch). If you wish to participate in the fieldtrip and have not booked and/or paid for a place, please let Kondari Resort know when you check-in. Space on the fieldtrip is strictly limited. The fieldtrip will depart Kondari Resort at 8:00am and return at 6:00pm.

CHILDREN

Childcare from qualified carers is available for children aged 4-12 years at the costs listed in the table below. Note that costs below are per child. Please multiply for more than one child. For children under 4 years old please contact Kondari Resort.

<table>
<thead>
<tr>
<th></th>
<th>Wed 5/12</th>
<th>Thurs 6/12</th>
<th>Fri 7/12</th>
<th>Sat 8/12</th>
<th>Sun 9/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day (8am-4:30pm) (inc. lunch)</td>
<td>$14</td>
<td>$14</td>
<td>$14</td>
<td>$14</td>
<td>$14</td>
</tr>
<tr>
<td>Night (6:30-9:30pm) (inc. dinner)</td>
<td>$6</td>
<td>$6</td>
<td>$6</td>
<td>$6</td>
<td>$6</td>
</tr>
</tbody>
</table>

NB: Accommodation for children 12 years of age and under is free if using existing bedding. Additional rollaway beds are available for $20/night for the Family Villa option only (limited numbers available).

STATE OF THE DISCIPLINE

Over the past 12 months concern has been expressed about the status and future of archaeology in Australia. Two sessions in the conference program (Wednesday 8:00-10:00pm and Friday 7:00-7:30pm) have been scheduled to provide forums for delegates to discuss the current state of the discipline.
Short Program

Wednesday 5 December 2001

2:00pm-8:00pm  Registration/Welcome Drinks
6:00pm-7:00pm  Dinner
8:00pm-10:00pm State of the Discipline Workshop Session I

Thursday 6 December 2001

6:30am-8:15am  Breakfast
8:15am-8:30am  Official Welcome
8:30am-10:00am Session 1: Regions & Boundaries
10:00am-10:40am Morning Tea
10:40am-12:00pm Session 1: Regions & Boundaries
12:00pm-1:00pm  Lunch
1:00pm-2:30pm  Session 2: Written in Stone
2:30pm-3:10pm  Afternoon Tea
3:10pm-4:30pm  Session 2: Written in Stone
5:00pm-6:00pm  AACAI Annual General Meeting
6:00pm-7:00pm  Dinner: International Soiree
7:00pm-8:00pm  Poster Session
8:00pm-12:00pm Australian Archaeology on Film Session

Friday 7 December 2001

6:30am-8:15am  Breakfast
8:25am-8:30am  House Keeping
8:30am-10:00am Session 3: The Archaeology of Isolation
10:00am-10:40am Morning Tea
10:40am-12:00pm Session 3: The Archaeology of Isolation
12:00pm-1:00pm  Lunch
1:00pm-2:30pm  Session 4: Boundaries of Archaeological Thinking
2:30pm-3:10pm  Afternoon Tea
3:10pm-4:30pm  Session 4: Boundaries of Archaeological Thinking
4:30pm-6:00pm  Cricket: Queensland vs President’s 11
6:00pm-7:00pm  Dinner: BBQ
7:00pm-7:30pm  State of the Discipline Workshop Session II
7:30pm-9:30pm  AAA Annual General Meeting
### Short Program

**Saturday 8 December 2001**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30am-8:15am</td>
<td>Breakfast</td>
</tr>
<tr>
<td>8:25am-8:30am</td>
<td>House Keeping</td>
</tr>
<tr>
<td>8:30am-10:00am</td>
<td>Session 5: <em>Frontier-Games: Rock Art Variability in the Arid Zone</em></td>
</tr>
<tr>
<td>10:00am-10:40am</td>
<td>Morning Tea</td>
</tr>
<tr>
<td>10:40am-12:00pm</td>
<td>Session 5: <em>Frontier-Games: Rock Art Variability in the Arid Zone</em></td>
</tr>
<tr>
<td>12:00pm-1:00pm</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00pm-2:30pm</td>
<td>Session 6: <em>The Reality of Barriers: The Evidence from Biological Anthropology</em></td>
</tr>
<tr>
<td>2:30pm-3:10pm</td>
<td>Afternoon Tea</td>
</tr>
<tr>
<td>3:10pm-4:30pm</td>
<td>Session 6: <em>The Reality of Barriers: The Evidence from Biological Anthropology</em></td>
</tr>
<tr>
<td>4:30pm-7:00pm</td>
<td>Wine &amp; Cheese</td>
</tr>
<tr>
<td>7:00pm-9:00pm</td>
<td>Dinner: Formal Conference Dinner</td>
</tr>
<tr>
<td>9:00pm-12:00am</td>
<td>Band/Dance</td>
</tr>
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</table>

**Sunday 9 December 2001**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30am-8:15am</td>
<td>Breakfast</td>
</tr>
<tr>
<td>8:00am-6:00pm</td>
<td>Optional Fieldtrip to Fraser Island</td>
</tr>
</tbody>
</table>
Detailed Program

**Wednesday 5 December 2001**

- 2:00pm-8:00pm  Registration/Welcome Drinks
- 6:00pm-7:00pm  Dinner
- 8:00pm-10:00pm State of the Discipline Workshop Session I

**Thursday 6 December 2001**

- 6:30am-8:15am  Breakfast
- 8:15am-8:30am  Official Welcome

**Session 1: Regions & Boundaries: Archaeological Explorations of Regionalism, Localisation and Boundedness**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30am-8:40am</td>
<td><strong>Session Introduction</strong>: Bryce Barker &amp; Sean Ulm (Convenors)</td>
<td></td>
</tr>
<tr>
<td>8:40am-9:00am</td>
<td><strong>Identifying a Site Signature of Gunditjmara Settlement in Southwest Victoria</strong></td>
<td>Heather Builth</td>
</tr>
<tr>
<td>9:00am-9:20am</td>
<td><strong>The Giru Dala Rock Art Project: Rock Art and the Socio-Demographic Dynamics of Territoriality in the Bowen/Burdekin Region, Queensland</strong></td>
<td>Bryce Barker</td>
</tr>
<tr>
<td>9:20am-9:40am</td>
<td><strong>What Happens Between the Desert and the Sea?: How Patterns of Pleistocene and Holocene Aboriginal Occupation of the Inland Pilbara Relate to those of the Northwest Coast and the Desert Interior</strong></td>
<td>Ben Marwick</td>
</tr>
<tr>
<td>9:40am-10:00am</td>
<td><strong>An Analysis of Exchange Networks for Stone Axes in the Lake Eyre Basin During the Mid- to Late Holocene</strong></td>
<td>Kevin Tibbett</td>
</tr>
<tr>
<td>10:00am-10:40am</td>
<td><strong>Morning Tea</strong></td>
<td></td>
</tr>
<tr>
<td>10:40am-11:00am</td>
<td><strong>Changing Patterns of Holocene Island Use: A Comparison Between Findings in Southern and Northern Australia</strong></td>
<td>Robin Sim</td>
</tr>
<tr>
<td>11:00am-11:20am</td>
<td><strong>Mounds as Metaphors? Shell Mounds and Short-Term Social Dynamics at Weipa, Cape York Peninsula</strong></td>
<td>Michael Morrison</td>
</tr>
<tr>
<td>11:20am-11:40am</td>
<td><strong>‘Ritual Engines’: Archaeological and Historical Evidence for an Outflow of Western Desert Culture into Southwest Western Australia</strong></td>
<td>Martin Gibbs &amp; Peter Veth</td>
</tr>
<tr>
<td>11:40am-12:00pm</td>
<td><strong>Regions &amp; Boundaries: Session Overview</strong></td>
<td>Harry Lourandos</td>
</tr>
<tr>
<td>12:00pm-1:00pm</td>
<td><strong>Lunch</strong></td>
<td></td>
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</tbody>
</table>
## Detailed Program

### Session 2: Written in Stone: Regional, Temporal and Technological Boundaries in Stone Artefact Assemblages

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00pm-1:10pm</td>
<td><strong>Session Introduction:</strong> Lara Lamb &amp; Chris Clarkson (Convenors)</td>
</tr>
<tr>
<td>1:10pm-1:30pm</td>
<td><strong>Four Forms of Ambiguity in Stone Artefact Classification</strong> Edward Clarke</td>
</tr>
<tr>
<td>1:30pm-1:50pm</td>
<td><strong>Boundless Possibilities: An Examination of the Non-Reality of Typological Boundaries at a ‘Classic’ Australian Site</strong> Peter Hiscock &amp; Val Attenbrow</td>
</tr>
<tr>
<td>1:50pm-2:10pm</td>
<td><strong>Site Function and Technological Change at Cuddie Springs</strong> Judith Field &amp; Richard Fullagar</td>
</tr>
<tr>
<td>2:10pm-2:30pm</td>
<td><strong>Girt by Sea: Holocene Patterns of Stone Procurement, Distribution and Use in the Whitsunday Islands</strong> Lara Lamb</td>
</tr>
<tr>
<td>2:30pm-3:10pm</td>
<td>Afternoon Tea</td>
</tr>
<tr>
<td>3:10pm-3:30pm</td>
<td><strong>Reduction Models and Spatio-Temporal Boundaries in Stone Artefact Production in Wardaman Country, Northern Territory</strong> Chris Clarkson</td>
</tr>
<tr>
<td>3:30pm-3:50pm</td>
<td><strong>Stone Technological Boundaries in Southeast Australia</strong> Dan C. Witter</td>
</tr>
<tr>
<td>3:50pm-4:10pm</td>
<td><strong>Across the Bondaian Boundary: Pre-Bondaian Stone Technology at Moffats Swamp and Galloping Swamp, Newcastle Bight, New South Wales</strong> Neville Baker</td>
</tr>
<tr>
<td>4:10pm-4:30pm</td>
<td>TBA</td>
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<tr>
<td>5:00pm-6:00pm</td>
<td>AACAI Annual General Meeting</td>
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<tr>
<td>6:00pm-7:00pm</td>
<td>Dinner: International Soiree</td>
</tr>
<tr>
<td>7:00pm-8:00pm</td>
<td><strong>Poster Session:</strong> Jill Reid (Convenor)</td>
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<tr>
<td>8:00pm-12:00am</td>
<td><strong>Australian Archaeology on Film Session:</strong> Peter White (Convenor)</td>
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### Detailed Program

**Friday 7 December 2001**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>6:30am-8:15am</td>
<td>Breakfast</td>
</tr>
<tr>
<td>8:25am-8:30am</td>
<td>House Keeping</td>
</tr>
<tr>
<td>8:30am-8:40am</td>
<td><strong>Session Introduction:</strong> Jon Prangnell (Convenor)</td>
</tr>
</tbody>
</table>
| 8:40am-9:00am | Pottery in Torres Strait and its Implications for Early Links with New Guinea: Bridge and Barrier Revisited  
Melissa Carter  |
| 9:00am-9:20am | ‘Crows’, Swimming Logs and Auditory Exostoses: A Reassessment of Isolation on the Keppel Islands and Broader Implications  
Mike Rowland  |
| 9:20am-9:40am | Marginal Isolation, Coasts of Continuity  
Keryn Walshe  |
| 9:40am-10:00am | Channel Country Observations, Only Hearth the Story  
Anthony Simmons  |
| 10:00am-10:40am | Morning Tea                                 |
| 10:40am-11:00am | Is the Lady of the House Home?: Historical Archaeology and Colonial Myths at Mrs Watson’s Cottage, Lizard Island  
Paddy Waterson & Annita Waghorn  |
| 11:00am-11:20am | Archaeology and the Curative Environment  
Susan Piddock  |
| 11:20am-11:40am | Exploring Isolation as a form of Control and a Cause of Resistance: Missions and Reserves in Queensland 1880-1980  
Mary-Jean Sutton  |
| 11:40am-12:00pm | Chinese Cooktown: Coping with Isolation, Loneliness and Poverty  
Kevin Rains  |
| 12:00pm-1:00pm | Lunch                                       |
### Session 4: Boundaries of Archaeological Thinking

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>1:00pm-1:10pm</td>
<td><strong>Session Introduction:</strong> Annie Ross (Convenor)</td>
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</tbody>
</table>
| 1:10pm-1:30pm | **Cultural Landscapes: Bridge or Barrier to Better Archaeological Thinking?**
|               | Lesley Head                                                              |
| 1:30pm-1:50pm | **Nature versus Culture in Cultural Heritage Management: Boundaries and Barriers**
|               | Melissa George                                                            |
| 1:50pm-2:10pm | **Cultural or Natural?**
|               | Nicky Horsfall                                                            |
| 2:10pm-2:30pm | **‘Ways of Seeing’: Indigenous and Non-Indigenous Perspectives on Sites, Song Cycles and Landscapes**
|               | Dee Gorring                                                              |
| 2:30pm-3:10pm | Afternoon Tea                                                             |
| 3:10pm-3:30pm | **Big Lake Boort: A Review of Recent Work and Interpretations**
|               | John Tunn & Rodney Carter                                                  |
| 3:30pm-3:50pm | **Joining the Dots: Managing the Land and Seascapes of Indigenous Australia**
|               | Claire Smith & Heather Burke                                              |
| 3:50pm-4:10pm | **Making Contact: Archaeological Perspectives on Post-Contact Cultural Landscapes in Native Title Claims**
|               | Libby Riches                                                              |
| 4:10pm-4:30pm | **Dating of Burial Practices in Central Queensland: Continuity and its Implications for Native Title**
|               | Luke Godwin, Scott L’Oste-Brown, Bob Ellis & Mike Morwood                |
| 4:30pm-6:00pm | Cricket: Queensland vs President’s 11                                     |
| 6:00pm-7:00pm | Dinner: BBQ                                                               |
| 7:00pm-7:30pm | State of the Discipline Workshop Session II                              |
| 7:30pm-9:30pm | AAA Annual General Meeting                                                |
## Detailed Program
### Saturday 8 December 2001

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>6:30am-8:15am</td>
<td>Breakfast</td>
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<tr>
<td>8:25am-8:30am</td>
<td>House Keeping</td>
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### Session 5: Frontier-Games: Rock Art Variability in the Arid Zone

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tr>
<td>8:30am-8:40am</td>
<td><strong>Session Introduction:</strong> Jo McDonald (Convenor)</td>
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<tr>
<td>8:40am-9:00am</td>
<td><strong>Variation and Variability in Arid Australian Rock Art</strong></td>
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<tr>
<td></td>
<td>John Clegg</td>
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<tr>
<td>9:00am-9:20am</td>
<td><strong>Our Land, Their Land: Preliminary Comparisons of the Rock Art in</strong></td>
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<td>Arrernte, Anangu and Luritja Lands</td>
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<td>Ben Gunn</td>
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<tr>
<td>9:20am-9:40am</td>
<td><strong>Rocking the Boundaries</strong></td>
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<td>June Ross</td>
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<tr>
<td>9:40am-10:00am</td>
<td><strong>Western Desert Rock Art: Aggregation Locales, Information Exchange and</strong></td>
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<td>Social Identity</td>
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<td></td>
<td>Jo McDonald &amp; Peter Veth</td>
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<tr>
<td>10:00am-10:40am</td>
<td>Morning Tea</td>
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<tr>
<td>10:40am-11:00am</td>
<td><strong>Portable Art: A Preliminary Look at Collections and Contemporary</strong></td>
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<td>Creations from Western Arnhem Land</td>
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<td>Sally K. May</td>
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<td>11:00am-11:20am</td>
<td><strong>Snake Sisters and their Imprint on the Landscape: Sacred Sites and the</strong></td>
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<td>Changing Pattern of Petroglyphs</td>
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<td>Ken Mulvaney</td>
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<tr>
<td>11:20am-11:40am</td>
<td><strong>Keep River Region Rock Art: Variability, Relationships and Temporal</strong></td>
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<td>Change</td>
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<td></td>
<td>Paul S.C. Taçon, Ken Mulvaney, Sven Ouzman &amp; Richard Fullagar</td>
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<tr>
<td>11:40am-12:00pm</td>
<td><strong>Population, Environment and Kimberley Rock Art</strong></td>
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<td>Mike Morwood &amp; Alan Watchman</td>
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<tr>
<td>12:00pm-1:00pm</td>
<td>Lunch</td>
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### Session 6: The Reality of Barriers: The Evidence from Biological Anthropology

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<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>1:00pm-1:10pm</td>
<td><strong>Session Introduction:</strong> Colin Pardoe &amp; Michael Westaway (Convenors)</td>
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<tr>
<td>1:10pm-1:30pm</td>
<td><strong>Archaeology on Flores: An Island of Transition</strong></td>
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<td></td>
<td>Mike Morwood &amp; R.P. Soejono</td>
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*Barriers, Borders, Boundaries*
# Detailed Program

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>1:30pm-1:50pm</td>
<td><strong>Toward an Understanding of the Taphonomic Histories at Ngandong</strong></td>
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<td></td>
<td>Michael Westaway</td>
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<tr>
<td>1:50pm-2:10pm</td>
<td><strong>Biological Borders and Boundaries: The Genetic Puzzle</strong></td>
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<td></td>
<td>Carney Matheson</td>
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<tr>
<td>2:10pm-2:30pm</td>
<td><strong>Population and Migration: The Predynastic and Early Dynastic Nile Valley Populations</strong></td>
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<td></td>
<td>Sonia Zakrzewski</td>
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<tr>
<td>2:30pm-3:10pm</td>
<td>Afternoon Tea</td>
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<tr>
<td>3:10pm-3:30pm</td>
<td><strong>Mortuary Archaeology and Sociopolitical Boundaries: An Examination of the Maya Burials at Copán, Honduras</strong></td>
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<td>Vanessa Krueger</td>
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<tr>
<td>3:30pm-3:50pm</td>
<td><strong>Patterns of Variation and Social Intercourse: A Case of Macassan and Aboriginal Contact in the Top End</strong></td>
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<td>Ken Mulvaney &amp; Roy Hammer</td>
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<tr>
<td>3:50pm-4:10pm</td>
<td>Sea-Change in the Keppels?</td>
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<td>Luisa Miceli, Daniel Rayner, Mike Rowland &amp; Michael Westaway</td>
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<tr>
<td>4:10pm-4:30pm</td>
<td><strong>Genetics and the Canidae Connection</strong></td>
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<td>Arlene Lahti, Frank Mallory, Scott Hamilton, Carney Matheson &amp; El Molto</td>
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<tr>
<td>4:30pm-7:00pm</td>
<td>Wine &amp; Cheese</td>
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<tr>
<td>7:00pm-9:00pm</td>
<td>Dinner: Formal Conference Dinner</td>
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<tr>
<td>9:00pm-12:00am</td>
<td>Band/Dance</td>
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**Sunday 9 December 2001**

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<th>Time</th>
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<tr>
<td>6:30am-8:15am</td>
<td>Breakfast</td>
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<tr>
<td>8:00am-6:00pm</td>
<td>Optional Fieldtrip to Fraser Island</td>
</tr>
</tbody>
</table>
Poster Session Program

Convenor: Jill Reid (University of Queensland)

- **Grinding Grooves and Water Diversion Channels at Rock Engraving Sites in Somersby, New South Wales**
  Huw Barton, Gavin Martin, Paul Taçon & Dave Pross

- **Applications of Capillary Electrophoresis Technology in the Field of Archaeology**
  Tamara Brown

- **Visitor Books at Rock Art Sites: A Useful Management Tool?**
  Alice Buhrich

- **Drawing the Line: The Rock Paintings of Cania Gorge, South Central Queensland**
  Val Chapman

- **Community-Based Archaeology at Laura**
  Noeline Cole in association with the Ang-gnarra Aboriginal Corporation

- **A Geoarchaeological Investigation of Rockshelters at Cania Gorge, Central Queensland**
  Maria Cotter, Tony Eales & Stephen Cotter

- **Pots, Plants and Pacific Prehistory**
  Alison Crowther

- **The Incredible Shrinking Shelter: The Site Structure of Grinding Groove Cave, Cania Gorge**
  Tony Eales

- **A Genetic View of London’s Population History**
  Justine Eckersley

- **The Burnett River Engravings**
  Joe Firinu

- **The Construction of an Artefact Residue Reference Collection**
  Victoria Francis

- **Identifying Domination and Resistance through the Spatial Organisation of Poonindie Mission, South Australia**
  Darren Griffin

- **Iron Oxide and Preservation in Buried Soils from the Middle Bronze Age**
  Ann-Maria Hart

- **An Historical Archaeological Study of Culture Change in an Isolated Semi-Urban Community in the Northeast United States**
  Cameron Harvey

- **Missing Persons: The Chinese in Townsville, 1864-1940**
  Thomas Harvey

- **Zea Mays-ing Maya: Integrating Microscopic Evidence for Corn Processing at Copán, Honduras**
  Michael Haslam
Program and Abstracts of the 2001 Australian Archaeological Association Annual Conference

Poster Session Program

**Morphological versus Molecular: New Technologies for Old Topics**
Luke Kirkwood

**Investigating Indigenous Cultural Heritage in the Boyne Valley**
Nikki Johnson, Anne-Marie Johnson, Trisha Coleman, Robyn Yow Yeh, Gabrielle Blackman & Tamara Blackman

**Unearthing Antiquarians: Reassessing Archaeological Practice in Rural Australia**
Daniel Leo

**Rockshelter Site Use in the Keep River Region, Northern Territory, following the Introduction and Expansion of the Pastoral Industry**
Fiona Leslie

**A New Relative Dating Technique and its Application to Bark Burial Coffins from the Central Queensland Highlands**
Penny McCardle

**Ring-a-Ring-a-Rosy: The Plague Revisited**
Anthony McKeough

**Faces in the Crowd: The Individuation of Commingled Burials**
Adrian Murphy

**An Application of Use-Wear and Residue Analyses to Wooden Digging Sticks**
Sue Nugent

**Beyond the Bricks and Under the Asphalt: Cultural Landscapes in the Townsville CBD**
Kimberley Owens

**University of Queensland Archaeological Services Unit’s Salvage of the North Brisbane Burial Ground**
Jon Prangnell, Tam Smith & Kevin Rains

**Conjoin Analyses from Grinding Groove Cave, South Central Queensland**
Jason Rice

**South Australian Indigenous Perspectives of Archaeology**
Amy Roberts

**Birds of A Feather Stick ...**
Gail Robertson

**A Technique for Obtaining Lightweight Casts of Archaeological Profiles**
Richard Robins

**Obsidian Use and Land-Use Strategy in West New Britain During the Period 5,900-3,600 BP**
Josh Symons

**Indian or Indigenous?: Tracing the Origin of the Carnelian Beads of Iron Age Southeast Asia**
Robert Theunissen
Poster Session Program

**Educating Ruddock: WA AACAI’s Proactive Approach to Educating Local and State Government about Western Australia’s (Aboriginal) Cultural Heritage**
Jo Thomson & Christine Martin

**Valve-Pairing and Stratigraphic Integrity in Coastal Midden Deposits**
Sean Ulm, Jill Reid & Nathan Woolford

**Mulling it Over …**
Deborah Vale

**Megafauna Mania**
Kim Vernon, Carney Matheson & Tom Loy

**Hawker Lagoon, Indigenous Archaeology Field School**
Keryn Walshe & Flinders Students

**A Preliminary Investigation of the Seven Mile Creek Mound**
Nathan Woolford
Australian Archaeology on Film Session

Convenor: Peter White (University of Sydney)

This session was proposed informally at the last AAA conference during a discussion between myself, Mike Rowland and some others. The original intention was to screen films of some lesser known but historic excavations (the original working title was ‘Old Farts on Film’). In the course of putting the session together, it has become clear that there is much more footage available than there will be time or patience to screen. This program represents my proposals as at the end of October. If there are changes I will present a final program at the conference.

As far as I am aware only Macintosh’s film contains photographs of ancestral remains, and none show pictures of sacred or secret material. Any that might do so will be screened only if appropriate permission has been obtained and this will be announced at the session.

Preliminary Program

Bob Edwards
Flint Miners of the Nullabor. Excavations at Koonalda Cave, 1967, with cameo appearances by Richard Wright, Alexander Gallus and Alan Thorne. 24mins. Video supplied by AIATSIS.

Mike Rowland
Life Between the Tides (Aborigines of the Keppel Islands), 1980-81. Excavations on North and South Keppel Islands 1978-80. Most of the players are now respectable citizens. Music by Brian Eno. 27mins.

David Frankel

Richard Fullagar
Caught Knapping, 1983. Flint knapping workshop led by Jeff Flenniken, featuring also Kim Akerman, Peter Bindon and Peter Hiscock. 10mins, no sound.

Lew Danielli and Graham Connah
Archaeological Training, 1975. Connah’s excavations at Stuart’s Point midden. Includes Connah, Adrian Piper, Penelope Emmerson and Iain Davidson. There is a short segment featuring a now deceased Aboriginal elder at Yarrowyck. 14mins, no sound but Connah’s notes can be read.

Also available:

Mortimer Wheeler
King Solomon’s Mines. From BBC ‘Buried Treasure’ series, late 1950s. Investigation of Zimbabwe ruins. 27mins, sound.

J.P. White
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<thead>
<tr>
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<th>Institution</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
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<td>Rachelle Boyle</td>
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## Delegates

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ABSTRACTS
(Session/Paper/Poster)
ACROSS THE BONDAIAN BOUNDARY: PRE-BONDAIAN STONE TECHNOLOGY AT MOFFATS SWAMP AND GALLOPING SWAMP, NEWCASTLE BIGHT, NEW SOUTH WALES

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Keywords: backed artefacts; Bondaian; Cumberland Plain; Galloping Swamp; Hunter Valley; Moffats Swamp; pre-Bondaian; stone artefacts; stone artefacts, analysis; technological analysis

Abstract

Stone artefact distributions in open contexts in the Cumberland Plain and Hunter Valley almost invariably contain backed artefacts and/or artefacts showing technological attributes associated with backed artefact manufacture. Archaeologists working in these areas are rarely equipped to recognise and assess a site with a ‘pre-Bondaian’ assemblage. This paper provides a case study stepping across the ‘Bondaian Boundary’. Sand mining next to inner barrier Pleistocene swamps (Moffats Swamp and Galloping Swamp) in the Newcastle Bight has revealed large subsurface deposits of many thousands of stone artefacts without a single backed artefact amongst them. Did the backed artefacts fall through the mine sieve, as one archaeological report claims for Galloping Swamp? Initial radiocarbon dating evidence from Moffats Swamp suggests late Pleistocene to early Holocene dates for the occupation with apparent abandonment during the course of sea-level rise. This paper will describe these sites and compare the technology of these sites with classic ‘Bondaian’ upper Hunter Valley sites and argue that a key variable of core/retouched flake ‘flaking pattern’ is important in distinguishing between technologies at different points in time. Such comparative technological analysis has demonstrated its usefulness in assessing whether an ‘implement-poor’ assemblage possesses technological characteristics enabling one to more reliably determine whether the ‘backed artefacts fell through the sieve’.
THE GIRU DALA ROCK ART PROJECT: ROCK ART AND THE SOCIO-DEMOGRAPHIC DYNAMICS OF TERRITORIALITY IN THE BOWEN/BURDEKIN REGION, QUEENSLAND

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Keywords: Bowen; Burdekin River; Giru Dala; Native Title; rock art; socio-demography; style; territoriality; Whitsunday Islands

Abstract

This paper outlines research carried out in the Bowen/Burdekin area which aims to establish spatial and temporal stylistic change in rock art within the region in an attempt to determine the presence and/or extent of territorial restructuring as an indication of specific socio-cultural ‘territoriality’. This is then linked to wider debates relating to the dynamics of change in Australian and hunter-gatherer societies generally. As well as testing the archaeological model for prehistoric late Holocene change posited for the adjacent Whitsunday Islands, it will contribute to clarifying contemporary boundary delineation in the context of contested landscapes and Native Title.
In many regions of Australia a dramatic increase in the number of archaeological sites in the Holocene is synchronous with changes in site content and structure suggesting qualitatively different strategies of occupation to those which obtained in earlier periods. These changes signal fundamental alterations in patterns of landscape use suggesting significant concomitant reorganisation of the social landscape. Such alterations in social geography have usefully been modelled as a clinal distribution between more ‘open’ and more ‘closed’ social systems, based on hypothesized fragmentation of large corporate social groups into smaller, more localised social entities and vice versa. Closure is seen to be accentuated where increased population densities place pressure on economic and social resources to maintain regulation, and involves the contraction of territories, and the development of systems of social exclusivity, regulation and control reflected in aspects of territoriality, social hierarchy and ritual activities. In short, the process leads to increased cultural differentiation and heterogeneity. In this session we seek to explore the linkages between regional patterns and trajectories identified from the archaeological record and the formation and maintenance of patterns of boundedness.
GRINDING GROOVES AND WATER DIVERSION CHANNELS AT ROCK ENGRAVING SITES IN SOMERSBY, NEW SOUTH WALES

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Keywords: Australian Museum Business Services; Darkinjung Local Aboriginal Land Council; engravings; grinding grooves; management; rock art; Somersby; Somersby Industrial Estate; water diversion channels

Abstract

Australian Museum Business Services (AMBS) is currently involved in preparing a Plan of Management for Aboriginal heritage in the Somersby Industrial Estate. Somersby Industrial Estate contains over 300ha of industrial zoned freehold land, of which approximately 100ha has been developed for industrial purposes. During the survey AMBS relocated a number of rock engraving sites on sandstone platforms. In addition to engraved motifs some sites contained large numbers of grinding grooves. Many grinding grooves surround natural potholes. In some locations pecked and abraded channels have been engraved into the sandstone surface. The channels collect the natural seepage of fresh water from the edges of the rock platforms, drawing water into the grooves and natural rock holes. At some sites channels draw water into a single pothole, at others the engraved channels link grinding grooves and potholes creating a water management system. The diversion channels may have functioned to assist the grinding process and to collect small stores of fresh drinking water. One site, a recently uncovered complex of grooves and channels, provides evidence that the grinding surface was prepared before grinding. The preparation process appears to have involved pecking and roughening the sandstone surface.
APPLICATIONS OF CAPILLARY ELECTROPHORESIS TECHNOLOGY IN THE FIELD OF ARCHAEOLOGY

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Keywords: capillary electrophoresis; DNA; isoelectric focussing; molecular archaeology; protein analysis

Abstract

Poster The ability to analyse the remains of flora and fauna quickly and efficiently is highly valuable in archaeological research as these remains can provide information on past subsistence patterns, environments, tool usage etc. To date, a number of techniques have been borrowed from the chemical and biological sciences in the attempt to do this. One of the most recent technologies to be turned to archaeological use is capillary electrophoresis (CE). Electrophoresis is a separation technique that relies on the physical properties of molecules, generally mass to charge ratio. Originally performed on paper or layers of gel this technique has been greatly enhanced by the use of narrow bore capillary tubing. This project investigates how CE can be optimised for archaeological use and determines what applications it would have for the analysis of macro- and micro-remains.
VISITOR BOOKS AT ROCK ART SITES: A USEFUL MANAGEMENT TOOL?

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Keywords: Cape York Peninsula; Laura; management; Queensland, north; rock art; Split Rock; visitor books; visitor management

Abstract

Visitor books are often assumed to be potential management tools at heritage sites. My research examined the visitor books at Split Rock, a rock art site at Laura, Cape York Peninsula, to address three main questions: (1) Can the visitor books be used to determine visitor numbers at the site?; (2) Are certain types of visitors more likely to sign the visitor books than others?; and, (3) What do visitor books reveal about the satisfaction of visitors to the site.

To answer the first question, the number of visitors as recorded through observation was correlated with the information from the visitor book for the same period. To answer the second question, visitor characteristics known through interviews (namely, where they were from) was compared with the information from the visitor book for the corresponding period of time. To evaluate the level of satisfaction of visitors at the site 2,905 entries were analysed, spanning a period of five months. Comments were classified into seven themes and recorded as positive or negative.

The results indicate that while visitor books can offer a wealth of information about certain visitor characteristics, they do not present an accurate representation of the overall visitor community. We could benefit from the formulation of a model for interpreting visitor books which could have applications to the management of heritage places across the board.
IDENTIFYING A SITE SIGNATURE OF GUNDITJMARA SETTLEMENT IN SOUTHWEST VICTORIA

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Keywords: Anguilla australis; eel traps; eels; gas chromatography; GIS; Gunditjmara; mass spectrometry; molecular archaeology; resource management; shortfin eel; surplus production; Victoria, southwest; weirs; wetlands

Abstract

Archaeological investigations, using GIS, of Aboriginal settlement patterns in a specific wetland environment in southwest Victoria, have revealed extensive remains associated with wetland exploitation. These include infrastructure designed for a culturally-intensive pattern of resource management and control. The evidence tells the story of large numbers of people taking optimum advantage of the ecological traits of the shortfin eel (Anguilla australis). Interpretation supports a model of dynamic socio-economic development not generally associated with Australian Aboriginal societies. Site signatures of the wetland adaptation include landscape modification that effectively produced perennial swamplands, thereby guaranteeing year round availability of wetland resources, in particular the shortfin eel. In addition to extensive remains of culturally modified and constructed channels featuring weirs and eel traps, facilities exist that I have hypothesised were used for smoking eels caught during their autumn migrations. Preservation of resources enables its storage and has socio-economic implications.

To test this theory Gas Chromatography and Mass Spectrometry (GC/MS) was used in an attempt to identify the presence of Anguilla australis in sediment obtained from these facilities. Detecting biomolecular markers in ancient materials can provide direct evidence of their origin, and hence, evidence for human activity in the past. Identification of structures and compositions of lipids and fatty acids has the potential to be an important archaeological ‘biomarker’. Lipids are the most commonly occurring class of medium-sized molecules produced by living organisms, and can frequently be recovered from archaeological materials. Matching present biomarkers to past materials is evidence of eel exploitation in antiquity. Identification of particular features of fatty acids or lipids from the Anguilla sp. would provide proof of their preservation and therefore storage potential.

Surplus production has obvious social implications. Increasing dependence upon anadromous or catadromous fish, such as salmon and eel, involves a gradual process of decreasing mobility associated with population growth thereby requiring a specific social and economic organisation. The southwest Victorian landscape and application of innovative archaeological methods has stimulated new conceptual, methodological and theoretical approaches to Australian Aboriginal economic endeavour. It offers the potential to investigate the issues of cultural complexity.
POTTERY IN TORRES STRAIT AND ITS IMPLICATIONS FOR EARLY LINKS WITH NEW GUINEA: BRIDGE AND BARRIER REVISITED

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Keywords: ceramics; Dauar; exchange; Mer; migration; Murray Islands; Papua New Guinea; pottery; Torres Strait; trade

Abstract

The early 1970s marked the start of long-term archaeological research in the Torres Strait islands, with subsequent theories for the natural and cultural history of the islands often synonymous with the terms ‘Bridge’ and ‘Barrier’. These opposing arguments were the outcome of the realisation that Torres Strait Islanders appeared to have an intriguing array of similarities and differences - in subsistence practices, linguistics, seafaring technologies and physical and cultural anthropology - with both their northern Papuan neighbours and Australian Aborigines to the south. The recovery of pottery from recent excavations on the Murray Islands, eastern Torres Strait, adds a new and important dimension to our knowledge of Torres Strait prehistory and occupation, and its connections with New Guinea. This paper will address the concept of isolation by re-visiting the ‘Bridge’ and ‘Barrier’ debate in the context of the Murray Islands pottery, and their emerging radiocarbon chronology.
Abstract

Seven art sites containing faded rock paintings were recorded within the traditional area of the Gooreng Gooreng people of south central Queensland by the interdisciplinary Gooreng Gooreng Cultural Heritage Project. A comparative analysis between these sites, located in the Cania Gorge area, and a number of art sites previously recorded in the adjacent Auburn Ranges, sought to establish whether there was continuity or discontinuity of styles across the two areas. This tested the proposition that the location of Cania Gorge close to the historically-documented western border of the Gooreng Gooreng language group is reflected in rock art conventions. Cultural remains in this area date from the late Pleistocene through to recent historical times.

The paintings in Cania Gorge feature simple figurative and non-figurative motifs, in particular representations of goannas and tridents. These were found to contrast with the predominantly stencilled art recorded in 34 of the sites in the Auburn Ranges known to lie closest to the Gorge. Abundant stencilled art is described elsewhere in central Queensland east of the Great Dividing Range. The distinctive artistic styles in the two areas suggest that the art in Cania Gorge might represent a boundary marker in an area occupied by people with different linguistic or totemic affiliations. Although the chronology has yet to be established, the spatial dissimilarity thus demonstrated lends support to theories of territorial demarcation, as expressed in rock art, both within the study area and as discussed elsewhere in the literature.
FOUR FORMS OF AMBIGUITY IN STONE ARTEFACT CLASSIFICATION
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Keywords: classification; Hunter Valley; stone artefacts; stone artefacts, analysis

Abstract

The practice of classification is ubiquitous so consequently we often classify without realising we are doing so. The discipline of archaeology is perhaps fortunate insofar as that, relatively recently, we have become aware of shortfalls within our systematics. However, this has not always been the case. The classifications used in Australian stone artefact analyses (as well as the prehistories developed from these classifications) have been prone to a variety of forms of ambiguity. The presence of ambiguity within classificatory systems can have a range of repercussions, some of which involve the possibility that syntheses and hypotheses developed may be based on data which are incompatible. While we cannot remove ambiguity entirely from our systematics, it is important to understand it explicitly. This paper suggests a four-fold scheme for understanding ambiguity as well as tabling ambiguity in reduction strategies. This paper illustrates the presence of ambiguity with a case study from eastern New South Wales. Furthermore, it tables some of the repercussions caused by classificatory ambiguity and highlights some areas where ambiguity can be combatted.
REDUCTION MODELS AND SPATIO-TEMPORAL BOUNDARIES IN STONE ARTEFACT PRODUCTION IN WARDAMAN COUNTRY, NORTHERN TERRITORY

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Keywords: mid-Holocene transition; Northern Territory; reduction sequences; retouched artefacts; Small Tool Tradition; stone artefacts; stone artefacts, analysis; technological analysis; typology; Wardaman

Abstract

Defining the spatio-temporal boundaries of retouched implement forms (such as ‘leiliras’ ‘points’, ‘tulas’, ‘burrens’ and ‘scrapers’) in Australia requires understanding the transformations and boundaries that exist within and between each of the reduction sequences employed in their manufacture. This paper describes the nature of reduction sequences for common retouched artefact forms found in Wardaman Country, southwest of Katherine in the Northern Territory, for the last c.10,000 years. By examining the relationship between morphological variability and retouch intensity, the transformational nature of artefact form is explored. This approach to assemblage variability allows critical examination of the reality of typological groups commonly employed in Australia. Moreover, investigating the changing frequency of each reduction sequence through time helps clarify the nature of the transition between earlier (pre-3,000 BP) and later phases of manufacturing technology in this region of northern Australia.
VARIATION AND VARIABILITY IN ARID AUSTRALIAN ROCK ART

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Keywords: arid zone; Gap Hills; rock art; rock art analysis; Sturt’s Meadows

Abstract

Variation in the rock art of arid Australia is most easily understood in relation to its variability - how it DOES vary in relation to how it CAN vary. For several years the ancient rock art of Sturt’s Meadows and Gap Hills has been stimulating research into such things as style (both meanings), manner or drawing, medium, and so on. This paper will attempt to bring the theory and results together to make a concise package which, after discussion, may be useful to other workers.
COMMUNITY-BASED ARCHAEOLOGY AT LAURA

Noelene Cole in association with the Ang-gnarra Aboriginal Corporation

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Keywords: Ang-gnarra Aboriginal Corporation; Cape York Peninsula; community archaeology; cultural heritage; cultural heritage management; cultural landscapes; Laura; oral history; Queensland, north; significance

Abstract

In 1999 I began an oral history project in association with the Ang-gnarra Aboriginal Corporation, to develop community history and resources for a community archive. It became evident that people preferred to relate history by returning to special places to which they feel personally connected. Many of these places turned out to be ‘sites’ which were previously ‘unrecorded’: cemeteries, derelict remains of homesteads, huts and stockman’s quarters, Police Stations, old settlements and gardens. All are special places and archaeological sites, connected in sometimes complex and surprising ways to present day people. A different type of cultural map emerged.

The project has made me think not only about relations between people and place and the value of oral history recording, but about how the world is articulated through personal connection. As the deeply felt significance of place is often more readily expressed in this way I am interested in incorporating these types of values into archaeological methods and heritage management.
A GEOARCHAEOLOGICAL INVESTIGATION OF ROCKSHELTERS AT CANIA GORGE, CENTRAL QUEENSLAND

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Keywords: Cania Gorge; geomorphology; Gooreng Gooreng Cultural Heritage Project; Grinding Groove Cave; rockshelters

Abstract

Situated within the Precipice Sandstone equivalent strata along Three Moon Creek and associated tributary streams of Cania Gorge, central Queensland are a number of rockshelters. These rockshelters occur between 5-30m in elevation above the contemporary stream channel and may, in the past, have been subjected to fluvial sedimentation and/or erosion. Archaeological excavations indicate Indigenous occupation since the Last Glacial Maxima (18ka), however the depth to culturally-sterile material at each site varies greatly. To resolve these discrepancies and assess for continuity of occupation within this Gorge system, a geoarchaeological investigation was initiated as part of the Gooreng Gooreng Cultural Heritage Project. This poster presents preliminary geoarchaeological results that, when coupled with geological mapping of the Three Moon Creek catchment and fluvial geomorphology of the creek terraces, provides a model for Indigenous occupation of the rockshelters. Stratigraphy, grain-size analysis, magnetic susceptibility, X-ray diffraction and thin section mineralogy of the excavated material from Grinding Groove Cave indicate repeated cycles of floodplain sedimentation and cultural occupation within the rockshelter. Floodplain sedimentation is characterised by fine-grained (slack water) laminations having a mineral assemblage consistent with the upstream igneous geology whereas occupation is characterised by: more chaotic stratigraphy and grain-size variations; peak magnetic properties associated with heating of sediments adjacent to hearths; and, a mineral assemblage consistent with a quartz-feldspar sandstone. This is in contrast to the other sites where roof fall from the overlying weathered sandstone units is the predominant source of the cave sediments. In this study the key to resolving anomalies in continuity of occupation has proven to be the application of a fine-resolution sedimentological analysis of rockshelter deposits and a wider survey of the fluvial geomorphology of Cania Gorge.
Identification of plant-processing in Pacific prehistory is problematic because direct evidence in the form of macrobotanical remains is rare, particularly for roots and tubers. Hypotheses for the exploitation of roots and tubers by the Lapita peoples have been formulated on the basis of comparative ethnography and historical linguistics. Indirect evidence has come from putative plant-processing artefacts, domestic animal remains (arguably associated with a horticultural production system), land-use patterns and other evidence in the archaeological record. Residue analysis of undecorated potsherds and sediment samples from the Early Lapita site, Kamgot, New Ireland, dating to c.3,300 BP, revealed the presence of starch and raphides. Species identification indicated that these remains originated from taro (*Colocasia esculenta*). This represents direct evidence that *Colocasia esculenta* was processed by the Lapita peoples.
THE INCREDIBLE SHRINKING SHELTER: THE SITE STRUCTURE OF GRINDING GROOVE CAVE, CANIA GORGE

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**Keywords:** Cania Gorge; Gooreng Gooreng Cultural Heritage Project; Grinding Groove Cave; Queensland, central; rockshelters; sedimentation rates

**Abstract**

Grinding Groove Cave has a deep deposit spanning 10,500 years of occupation and goes to a depth of 4.5m. Initial studies of deposition rates and chronology show variations in occupation periods and intensity throughout this period. The site displays excellent preservation of faunal remains as well as hearth structures. This high level of preservation is due to the deposition history unique in the Gorge system. Periodic flooding and settling out of fine sediments has sealed occupation layers along with intact hearths within a well-consolidated clay/silt matrix. This deposition regime stands in contrast to the other sandstone shelters in the Gorge where deposits are chiefly sands eroded from the roof of the shelters or aeolian in origin.

In this poster I compare the deposition regimes in three rockshelters, including Grinding Groove Cave, occupied since the early Holocene. I intend to show how the more widely spaced sequence of Grinding Groove Cave can inform our understanding of site structure and occupation history of rockshelters.
A GENETIC VIEW OF LONDON’S POPULATION HISTORY

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Keywords: DNA; London; mitochondrial DNA; molecular archaeology; population genetics; Roman Britain

Abstract

Poster Mitochondrial DNA variation in modern populations has become a commonly used source for recreating population histories. This allows archaeologists to address questions about population movements across the landscape in the past by analysing the modern spread of mitochondrial sequence variation. To create a more precise historical record it is necessary to utilise the variation of people within the archaeological record. Archaeological samples from four sites within the Greater London area were loaned from the Museum of London for genetic analysis. The sites span approximately 1,000 years of history from this cosmopolitan city, from Roman Britain to post-medieval times. The DNA was extracted from the bone and 200 nucleotides were sequenced from the mitochondrial control region, hypervariable region 1. Variation in the samples was analysed and compared with modern European samples to shed light on the population flow in and out of London.
SITE FUNCTION AND TECHNOLOGICAL CHANGE AT CUDDIE SPRINGS

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Keywords: Cuddie Springs; faunal analysis; Last Glacial Maximum; megafauna; stone artefacts; stone artefacts, analysis

Abstract

The archaeological site of Cuddie Springs has yielded a flaked stone assemblage in association with a range of megafaunal and extant faunal bones dating from approximately 36,000 years until present. The analysis of stone artefacts has demonstrated a distinctive range of manufacturing stages related to the activities that were undertaken during different lake phases. Both raw material and site function play a role in the composition of the stone assemblages. In Archaeological Level 1, stone comprises early to middle stages of manufacture with minimal flaking evident. In Archaeological Level 2, flaked stone is present from all stages of manufacture and grinding stones appear for the first time and are present until recent times. The stone assemblages are consistent with activities likely to have taken place with the prevailing environmental conditions. In the lowest Archaeological Level (AL1) scavenging/butchering activities may have been the primary focus of people around a waterhole. In Archaeological Level 2 (overlying AL1), a wide range of functions may be inferred from the tools which represent all stages of manufacture. The stone artefact assemblages are consistent with sequential occupation events at Cuddie Springs in the lead up to the Last Glacial Maximum. They represent distinctly different site functions through the period when people were co-existing with megafauna over 30,000 years ago.
THE BURNETT RIVER ENGRAVINGS

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Keywords: Burnett River Engravings; cultural heritage; cultural heritage management; engravings; Gooreng Gooreng Cultural Heritage Project; legislation; management; repatriation; rock art

Abstract

The Burnett River Engravings site is a large Aboriginal rock engravings assemblage located on an isolated outcrop of sandstone in the bed of the Burnett River just southwest of Bundaberg. The assemblage consists of thousands of separate motifs executed using a variety of techniques. It is the only engraving site of its type along the south Queensland coast. Many Aboriginal people from that area regard it as a site with great cultural significance.

In 1971/2, owing to a plan to construct an irrigation barrage, which would have flooded the engravings, the Archaeology Branch of the Department of Family Services and Aboriginal and Islander Affairs devised a strategy to select a sample of 92 engraved rocks for preservation and protection. After excavation the resulting pieces were then scattered to various places around Queensland, including the University of Queensland, Cherbourg Aboriginal Community, Griffith University, Queensland Museum, Bingara Sugar Mill, Irrigation and Water Supply Commission, Maryborough City Council, Bundaberg City Council, Bundaberg Historical Society, Gayndah Historical Society etc. This decision was made under the edicts of the Aboriginal Relics Preservation Act 1967.

The object of my research will be to define and disclose the culturally-constructed meanings and values placed upon the 92 pieces of engraved rock. Essentially, I will chart the transformation of meaning from immovable to movable cultural heritage. The central object of the study will be to document the shifting values placed on the engravings by various constituent groups. These values will include ownership, repatriation and conflict resolution.
THE CONSTRUCTION OF AN ARTEFACT RESIDUE REFERENCE COLLECTION

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Keywords: bone artefacts; microscopy; molecular archaeology; Platypus Rockshelter; reference collection; residue analysis; residue analysis, reference collection; use-wear analysis; use-wear analysis, reference collection

Abstract

Before any form of residue analysis is attempted, archaeologists must have at least some idea of what types of features they are searching for. They must also know how to recognise these features on an artefact’s surface. In order to facilitate this process, a reference collection and accompanying handbook is being set up in the Archaeological Sciences Laboratory at the University of Queensland. In the past decade, large numbers of undergraduate students have created and examined hundreds of artefacts with known residues, as well as archaeological residues which have been identified and recorded on stone, bone and wooden artefacts. The aim of this reference collection is to provide the basic information of the optimal methods for examining different artefact surfaces for residues and use-wear, how to recognise residues on different artefact surfaces as well as how to identify residues (or at least narrow down the possibilities). Also, a comprehensive collection of residues (both archaeological and non-archaeological) will be provided for direct comparison. I will demonstrate how this reference collection and handbook can be used to facilitate the identification of residues using the 20 bone artefacts from Platypus Rockshelter, southeast Queensland as an example.
Abstract

This paper will explore the concept of cultural landscapes and its potential to represent the meanings ascribed by Indigenous communities to physical and social spaces. While there is a broad consensus amongst archaeologists about what landscape archaeology is, many people involved in management regimes subsume cultural values under values that may be termed ‘natural’. A peopled landscape suddenly becomes ‘natural’ and this is reflected in the discourse of legislators, environmentalists and management agencies. This inevitably leads to a primitivist view of what constitutes legitimate cultural heritage and unsuccessfully conflates values such as historical and contemporary connection to land, with biodiversity indices and the ethos of the ‘parkland’. This may help to explain, at least partially, why co-management initiatives are often seen to be superficial, paying only lip service to emergent community social and political structures. In the paper I explore alternative models that give voice to community values while optimising the benefits of an archaeology that embraces a cultural landscape approach.

I argue that archaeology can play a useful role in redefining how cultural landscapes are understood and included in current land and heritage management regimes and reserve systems policy. The current focus on nature fails to understand the linkages between Indigenous people’s understanding of cultural landscapes and their role as active managers, users and owners of landscapes.
‘RITUAL ENGINES’: ARCHAEOLOGICAL AND HISTORICAL EVIDENCE FOR AN OUTFLOW OF WESTERN DESERT CULTURE INTO SOUTHWEST WESTERN AUSTRALIA

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Keywords: Australia, central; Bates, Daisy; ceremony; circumcision; Daisy Bates; linguistics; Western Australia; Western Desert; Western Desert culture bloc

Abstract

In the early years of the 20th century, Daisy Bates recorded evidence for the movement of the circumcision rite into the non-circumcising southwest region of Western Australia. Archaeological and linguistic evidence from Central Australia suggests that this may have been a continuation of an expansion of the boundaries of the Western Desert ‘cultural group’ which began almost 1,500 years ago. This paper considers how the sorts of social mechanisms noted by Bates after contact for the push of circumcision into the southwest, what we will characterize here as ‘ritual engines’, may well inform on much wider processes responsible for the remarkable geographic spread and speed of the transmission of the Western Desert culture bloc.
Abstract

Recently, radiocarbon dating of six bark burial coffins from the Central Queensland Highlands indicates that this form of burial is of greater antiquity than had previously been suggested. A range of historical and anthropological evidence further demonstrates that this form of burial has continued through to the present, albeit in a modified form. This paper then moves to explore the implications of these data for Native Title claims and cultural heritage management. It is our view that these will vary dependent on how Native Title is characterised: either as a bundle of rights or as a right in land. In recent cases and appeals, Native Title generally has been interpreted as a bundle of rights. Where such an interpretation applies, arguments of cultural continuity, while accepting processes of transformation, will be of considerable importance in establishing that Native Title has not been extinguished. In these circumstances, it is our view that marrying archaeological, anthropological and historical data will be essential.
‘WAYS OF SEEING’: INDIGENOUS AND NON-INDIGENOUS PERSPECTIVES ON SITES, SONG CYCLES AND LANDSCAPES

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Keywords: archaeological sites; boundedness; cultural heritage; cultural heritage management; cultural landscapes; landscapes, Western concepts; seascapes; song cycles; Yanyuwa

Abstract

In recent years a great deal has been written about the failure of cultural heritage legislation and management policies within Australia to deal with the recognition and therefore protection of all aspects of Indigenous cultural heritage. Much of the literature in this regard has been centred on Western notions of a bounded archaeological site as the main focus of legislation and management policies, which ignores the interconnectedness of different sites within a landscape. In addition to these critiques there has been a call from Indigenous communities for the inclusion of the more ‘intangible’ aspects of their cultural heritage such as stories, songs and designs which are interlinked with the more tangible aspects such as objects and sites. To highlight the problems inherent within Western concepts in relation to Indigenous cultural heritage, this paper investigates a Yanyuwa song cycle as an unbounded cultural heritage ‘land and seascape’ and the ability of current legislation within Australia to recognise and therefore protect such areas. Thus the concept of ‘boundedness’ and ‘tangibility’ are explored, with focus being given to the conflicting views and concepts Indigenous and non-Indigenous people have over land and seascapes within Australia based on traditional ‘ways of seeing’ inherent in each cultural perspective.
IDENTIFYING DOMINATION AND RESISTANCE THROUGH THE SPATIAL ORGANISATION OF POONINDIE MISSION, SOUTH AUSTRALIA

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Keywords: acculturation; contact; contact archaeology; critical theory; domination and resistance; Marxist theory; missions; Poonindie Mission; post-contact; segregationist missions; spatial organisation

Abstract

The study of the initial period of cross-cultural interaction between Indigenous and non-Indigenous groups and the changes this contact brought to both societies is a relatively new area of research in Australian archaeology. The material evidence from this period can provide us with valuable insights into the new relationships and ideologies which were emerging at this time. The majority of archaeologists studying contact sites around the world realise that contact is not unilateral, and the material culture found at contact sites does not simply reflect varying levels of coloniser dominance. Such acculturation theories ignore the complex ways in which power is exercised in society.

At historic sites around the globe, researchers have found that the processes of international capitalism have played a major role in the development of cross-cultural interaction. Therefore any analysis of the spaces where these relations evolved must include an analysis of the historic development of capitalism. The archaeology of capitalism involves a range of theoretical approaches including identifying areas of domination and resistance and using a critical approach to both the historical documents and the knowledge of the past presented by the researcher.

Mission sites are one of the most important spaces where the new contact relationships and ideologies were concentrated and played out. This poster will discuss the results of a detailed analysis of the use of space at Poonindie Mission, the first segregated mission in South Australia, which operated from 1850-1896.
OUR LAND, THEIR LAND: PRELIMINARY COMPARISONS OF THE ROCK ART IN ARRERNTÉ, ANANGU AND LURITJA LANDS

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Keywords: Anangu; arid zone; Arrernte; Australia, central; Luritja; rock art; social boundaries; social landscapes; Western Desert

Abstract

This paper presents the results of a preliminary analysis of the archaeological components of the rock art of the Arrernte, Anangu and Luritja lands of Central Australia. It is suggested that art was not used as a boundary maintenance feature but was more of an internal core that diffused towards the periphery of the respective language areas. Social boundaries in the Western Desert (Anangu and Luritja) were loosely defined while those in the Arrernte lands were more rigid. However, none of the art of these groups shows strong boundary definition. Within Arrernte art there is considerable spatial variation across the Arrernte region while within the Western Desert groups the art tends to be more homogeneous. The variation within the Arrernte art is seen as reflecting a tighter clan structure and land affiliation, while the greater homogeneity of the Anangu and Luritja arts are seen as reflecting their more open ties to their land.
IRON OXIDE AND PRESERVATION IN BURIED SOILS FROM THE MIDDLE BRONZE AGE

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Keywords: buried soils; Great Ouse Valley; groundwater; iron oxide; Middle Bronze Age; Over, England; preservation; water table; wetlands

Abstract

A Middle Bronze Age site from the lower Great Ouse Valley at Over, Cambridgeshire, England is examined. The presence of iron in wetland environments such as occur at the archaeological site at Over may indicate the preservation conditions within the site and its associated landscape. The preservation conditions in a wetland environment are influenced by three main hydrological factors including groundwater, soil acidity/alkalinity and oxygen. These same factors control the formation of different types of iron components present within the buried soil. By identifying these different iron components it is possible to determine the type of hydrological environment active within an archaeological site, therefore indicating preservation conditions. Using a combination of quantitative and qualitative techniques, the effect of groundwater on iron movement in buried soils is investigated and the implications are discussed.
AN HISTORICAL ARCHAEOLOGICAL STUDY OF CULTURE CHANGE IN AN ISOLATED SEMI-URBAN COMMUNITY IN THE NORTHEAST UNITED STATES

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Keywords: ceramics; Harpers Ferry; historical archaeology; industrialisation; post-processual methodologies; pottery; processual methodologies; United States

Abstract

Harpers Ferry is a small town situated in the northeast United States. During the 1830s, its inhabitants’ way of life and craft-based industries were transformed as a result of the rapid rise of a modern market economy driven by the effects of industrialisation and the rapid settlement of the nation’s interior. This period is also noted for the changes occurring to the role that women played in the domestic arena, as well as for the increased access to the nation’s heavily populated east coast afforded by new transportation routes, heralding a new era of economic prosperity for the inhabitants of Harpers Ferry. The town has since been extensively studied by the historical and archaeological communities, yet most of this research has focussed on the town’s later Civil War period. Relatively little attention has been paid to the town’s early development and the effects that industrialisation actually had on the town’s inhabitants.

The effects of industrialisation on society can be examined through the changes made to the material culture of those confronting it. Through the use of processual and post-processual methodologies, this poster demonstrates how a re-examination of historical literature and the archaeological record can give added perspective to known events from the historic past.
MISSING PERSONS: THE CHINESE IN TOWNSVILLE, 1864 TO 1940

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Keywords: Chinatown; Chinese; historical Archaeology; Queensland, north; Townsville; urban landscapes

Abstract

With the discovery of gold in north Queensland in the mid- to late-nineteenth century there was a large influx of Chinese settlers to the region, many of whom settled in coastal port towns, such as Townsville, where they serviced both the local community and their fellow countrymen on the goldfields in their positions as market gardeners, merchants, boarding house keepers, cooks and general shop keepers.

Despite the significant contributions made by the Chinese to the development of north Queensland, their roles have been largely neglected by historians and archaeologists alike. This research explores settlement patterns of the Chinese in urban Townsville between 1864 and 1940, focusing on how our understanding of concepts such as ‘Chinatown’ might colour our perception and interpretation of the Chinese in Australian historical archaeology. In an effort to break free from such stereotypes of urban Chinese settlement, a landscape-based approach is used to explore the complex interactions that took place between the Chinese and the predominant social and physical contexts of which they were a part. It is then considered how these factors influenced the spatial distribution of Chinese sites within the Townsville landscape.
ZEAMAYS-ING MAYA: INTEGRATING MICROSCOPIC EVIDENCE FOR CORN PROCESSING AT COPÁN, HONDURAS

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Keywords: Copán, Honduras; corn; Honduras; Maya; Mesoamerica; molecular archaeology; residue analysis; starch; stone artefacts; stone artefacts, analysis; subsistence; use-wear analysis; Zea mays

Abstract

Archaeologists have long known that corn (Zea mays) played an important role in the diet of the ancient Maya peoples of Mesoamerica. This belief is based on several indirect lines of evidence, including ethnographic analogy, the presence of stone grinding tools (manos and metates), and palaeobotanical studies including charred remains, pollen, and even plaster casts of maize plants. In addition, stable isotope studies of skeletal remains indicate that the typical Mayan diet was rich in C4 plant material, of which maize is the only widespread food plant represented in Mesoamerica. Residue analysis of stone artefacts can now be added to this suite of approaches, with the examination of 150 artefacts from Copán, Honduras, revealing direct evidence for the processing of Zea mays 2,000 years ago. Organic residues in the form of starch and cellulose were combined with concurrent use-wear analysis to assess artefact function. This represents one of the first such studies in Mesoamerica, and paves the way for further analyses.
Abstract

Indigenous people are using the notion of cultural landscape to emphasise their symbolic connections to land, and thus escape the tyranny of archaeology as a discipline that defines Aboriginality by prehistoric shell middens. Archaeologists are using cultural landscape to emphasise the broader context of sites, and escape the tyranny of managers obsessed with dots on maps. This growth is occurring at a time when the concept is on the decline in the parts of geography where it originated.

So, does the notion of cultural landscape provide useful conceptual and practical tools for heritage management and archaeology, or is it mired in a set of hopeless contradictions? Does it facilitate holistic thinking, or just messy thinking?

In this paper I unpack the century of baggage cultural landscape brings to these new applications. I argue that its historic usefulness has been oppositional; it has stretched us to consider the other end of whatever line of thought and/or practice we have been on. Whether it can help dissolve the binaries that currently perturb us so much remains to be seen, but I outline some of the preconditions that seem necessary for this to occur.
BOUNDLESS POSSIBILITIES: AN EXAMINATION OF THE NON-REALITY OF
TYPOLOGICAL BOUNDARIES AT A ‘CLASSIC’ AUSTRALIAN SITE

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Keywords: Capertee 3; lithics; reduction sequences; stone artefacts; stone artefacts, analysis; technological analysis; typology

Abstract

The composition of lithic assemblages is typically depicted in terms of the relative abundance of different implement types. In this paper we demonstrate that early industries at Capertee 3 consist of continuous morphological variation which is best explained as a reflection of different levels of reduction. This demonstration compliments a discussion of continuous variation presented elsewhere (Journal of Archaeological Science in press). The implications of this conclusion for typological discussions of artefact use and for explanations of chronological change in the archaeological record are discussed.
CULTURAL OR NATURAL?

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Keywords: Aboriginal involvement; Aboriginal perceptions; cultural heritage; cultural heritage management; cultural landscapes; cultural property; landscapes, Western concepts; management; Wet Tropics; World Heritage Areas

Abstract

A distinction is invariably made in the ‘Western’ world between the ‘natural’ and the ‘cultural’. It is presumably part of our cultural inheritance of seeing things as dualities or dichotomies, and it can be an extremely useful way of dealing with things.

However, there are situations where this dichotomy is not so useful. In this paper I will discuss the World Heritage definitions of cultural and natural property and the criteria by which they are assessed, including the categories of cultural landscapes. I set my discussion in the context of the Wet Tropics of Queensland World Heritage Area and rainforest Aboriginal aspirations to protect the values they have for the area and to be involved in management. For example, one of the ‘natural’ criteria for World Heritage listing (relating to aesthetics) is clearly a cultural value, and moreover, one which does not seem to allow for Aboriginal cultural perceptions of beauty.

Aboriginal values of the ‘natural element’, aesthetic or otherwise, can be addressed under the category of ‘associative cultural landscape’ - another dichotomy, I guess.
MORPHOLOGICAL VERSUS MOLECULAR: NEW TECHNOLOGIES FOR OLD TOPICS

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Keywords: DNA; hominid evolution; molecular archaeology; palaeoanthropology; primate evolution

Abstract

Poster For two centuries morphological analysis has dominated the study of the evolution of humankind. This is despite evidence that a reliance on morphological data is both a flawed and inadequate method from which to construct phylogenies. Such inadequacies include factors concerning taphonomy, environmental influences, and unintentional bias. Molecular data is suggested as an alternative and a complementary method from which to approach the phylogenies of ancient hominids and other primates. A feasibility study was conducted using selected regions of DNA from the 28S ribosomal subunit to determine if they could be used to construct the phylogenies of extinct hominids. The study found that variable region 3, 4 and 5 of 28S ribosomal DNA can be effectively applied to primate systematics and has great potential for ancient DNA studies of the hominids.
MORTUARY ARCHAEOLOGY AND SOCIOPOLITICAL BOUNDARIES: AN EXAMINATION OF THE MAYA BURIALS AT COPÁN, HONDURAS

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Keywords: burials; Copán, Honduras; Honduras; Mesoamerica; mortuary analysis; Viel, René

Abstract

Mortuary archaeology includes the analysis of all facets of a burial and its related components. Mortuary remains are examined from the site of Copán, Honduras, focussing on the variables of position, orientation, location and grave artefacts included in individual burials to aid in the (re-)construction of sociopolitical groups. Examination of René Viel’s sociopolitical model endeavours to test the notion of the presence of independent cultural groups or political lineages within the Copán valley during the Late Classic. While the primary focus of this study is the dynastic period beginning with the ruler Yax K’uk Mo (AD 426), this work has been extended to include the time from the first settlers in the valley through to the Postclassic. This study develops a comparative framework for the analysis of mortuary remains which can be applied to archaeology.
INVESTIGATING INDIGENOUS CULTURAL HERITAGE IN THE BOYNE VALLEY

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Keywords: Awoonga Dam; Awoonga Dam Cultural Heritage Project; axe; backed artefacts; Bailai; Boyne Valley; elouera; Gladstone; Gooreng Gooreng; Gurang; Queensland, central; tula

Abstract

Poster Until the raising of the Awoonga Dam near Gladstone in Central Queensland, virtually nothing was known about Indigenous occupation of the Boyne Valley. The Awoonga Dam Cultural Heritage Project Stage 2 is investigating a number of sites in collaboration with members of the Gooreng Gooreng, Gurang and Bailai Native Title claimants, in order to address questions raised by the Traditional Owners, including dating, trade links, and unique aspects of life in the Boyne Valley. Sites recorded so far include artefact types such as backed blades, eloueras, axes and tula-like retouched flakes.
GENETICS AND THE CANIDAE CONNECTION

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Keywords: bioarchaeology; Canis familiaris; Canis lupus; dogs; genetic analysis; molecular archaeology; wolves; zooarchaeology

Abstract

Bioarchaeological research integrates human history and the biological sciences. Usually this involves the study of human biology, but can include research questions of zooarchaeological interest. Most studies of biological variability involve metric and morphological trait analyses which are used to infer genetic differences underlying inter- and intra-species variability. Such variability can derive from the environment, lifestyle and genetic heritage, or some combination of all these factors. The development of molecular anthropology offers new tools to the bioarchaeologist to address the origins and nature of biological diversity, whether human or non-human.

This pilot study examines genetic relationships between domestic dogs (Canis familiaris) and wolves (Canis lupus). The study indicated very little genetic distinction between various breeds of C. familiaris, and sharp genetic distinctions from some of the wolves. Also, it became apparent that some wolves were genetically closer to the domestic dog, suggesting the possibility of identification of mixed breeds. Thus, the possibility of identifying wild, domestic and feral or mixed breed dogs in archaeological remains can be evaluated. Recent analysis seeks to address the genetic relationship of Australian dingos to other domestic and wild canids. Such an approach offers the potential to address the evolutionary history and time depth of dingos in Australia, and the micro-evolutionary relationship of these animals to other canids on a global scale.
GIRT BY SEA: HOLOCENE PATTERNS OF STONE PROCUREMENT, DISTRIBUTION AND USE IN THE WHITSUNDAY ISLANDS

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Keywords: Border Island; islands; Nara Inlet 1; quarries; raw material procurement; reduction sequences; sea-level; South Molle Island; South Molle Island Quarry; stone artefacts; stone artefacts, analysis; technological analysis; Whitsunday Islands

Abstract

The South Molle Island Quarry, Whitsunday Islands, was first utilized as a source of raw material c.9,000 years ago. Between that time and the present, there have been significant sea-level changes which have altered the landscape of the region, separating the source of raw material from the mainland, and in doing so, forming what is now South Molle Island. An analysis of two Holocene stone artefact sequences from Border Island and Nara Inlet 1 has contributed to our understanding of regional patterns of raw material exploitation. This paper explores ways in which these patterns are affected by the unique island geography of the area, and posits a model for observed early/late Holocene trends in raw material procurement and use.
WRITTEN IN STONE: REGIONAL, TEMPORAL AND TECHNOLOGICAL BOUNDARIES IN AUSTRALIAN STONE ARTEFACT ASSEMBLAGES

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Keywords: stone artefacts; stone artefacts, analysis; stone artefacts, classification; stone industries; technological analysis; typology

Abstract

The aim of this session is to explore ways in which the study of stone artefact technology can inform current debates about spatial, temporal and classificatory boundaries in Australia. Papers will address such issues as the nature of the transition between industries often depicted as chronologically distinct, and whether temporal boundaries are real or an artefact of certain approaches. Papers will also explore the delineation of regional typologies and spatially bounded technologies, with emphasis on factors creating variability within and between regions. Additionally, the session will examine alternatives to traditional typological boundaries and will consider new approaches to stone artefact classification.
UNEARTHING ANTIQUARIANS: REASSESSING ARCHAEOLOGICAL PRACTICE IN RURAL AUSTRALIA

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Keywords: antiquarianism; Burnett Region; community archaeology; Grahame Walsh; Kenyon, A.S.; Percy Trezise; rural Australia; Trezise, Percy; Walsh, Grahame

Abstract

Poster The objective of this poster is to illustrate why archaeologists should reassess their theories and methods when working in rural Australia. A process of realisation, reflection and engagement is proposed to achieve this objective. Initially, there is a need to realise that within the pastoral landscapes (the sheep/cattle properties and associated townships) that dominate rural Australia there are antiquarians whose knowledge, collections and guardianship of Aboriginal objects and sites (collectively referred to as the Aboriginal material past) is considerable and important. After acknowledging this, there is a need to reflect on the culture and history of such antiquarians. Lastly, the process of realisation and reflection is the basis for archaeologists to engage with antiquarians in meaningful dialogue and co-operation.

My contention is that antiquarians represent an ethnographic challenge to archaeologists. In a way reminiscent of archaeologists engaging with Aboriginal people and their cultural approaches to their ancient (prehistoric) and recent (post-contact) material past, a similar engagement is needed by archaeologists in relation to the important and diverse manifestations of antiquarianism in Australia. Antiquarianism can be described as both a discourse that a person adopts to understand the Aboriginal material past, and, as embodied by a type of person. Such a distinction indicates that some people are somewhat amateur in their antiquarianism, adopting it as a discourse, and can be classed as either an anonymous or active antiquarian. However, some people are so dedicated and authoritative - in effect, becoming local historians or ‘amateur’ archaeologists - that their antiquarianism is part of their identity.

Such historian antiquarians as A.S. Kenyon, Percy Trezise and Grahame Walsh are discussed to illustrate the diversity of antiquarian notions and uses of the Aboriginal material past. In particular, the case study explores the prevalence of antiquarianism in the central Burnett Region, Queensland.
ROCKSHELTER SITE USE IN THE KEEP RIVER REGION, NORTHERN TERRITORY, FOLLOWING THE INTRODUCTION AND EXPANSION OF THE PASTORAL INDUSTRY

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Keywords: contact archaeology; Granilpi; historical archaeology; intensification; Jinmium; Keep River; oral history; pastoral industry; resistance; rockshelters

Abstract

Poster When compared to other areas of Australia the introduction and expansion of the pastoral industry in the Keep River region was characteristically short, violent and late (1880s-1930s). As a result, an array of ethnographic evidence is available, including a comprehensive collection of Indigenous oral histories. By combining information from these sources with the archaeology of rockshelter sites in the region, continuity and change in the access and use of the landscape by Aboriginal groups was explored. It was proposed that, following pastoral expansion, there was a seasonal intensification of rockshelter site use in the region and that the materials and activities performed at the sites changed. These hypotheses were then tested by quantifying and analysing the material records of three rockshelter sites in the region: Jinmium, Granilpi and Punipunil. Preliminary results from the sites indicate that the use of rockshelter sites continued in station times, to varying degrees. The results from one site in particular suggest that Aboriginal groups may have avoided the pastoral industry by living in more remote areas. The study highlights the benefits of incorporating Aboriginal oral history and the archaeology of Aboriginal sites into culture contact studies undertaken in Australia.
REGIONS & BOUNDARIES: SESSION OVERVIEW

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Keywords:

Abstract

Paper

Thurs
11:40am
A NEW RELATIVE DATING TECHNIQUE AND ITS APPLICATION TO BARK BURIAL COFFINS FROM THE CENTRAL QUEENSLAND HIGHLANDS

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Keywords: axe; burials; burials, bark; Central Queensland Highlands; coffin, bark; contact archaeology; cultural heritage; cultural heritage management; experimental archaeology; mortuary analysis; Queensland, central

Abstract

Poster Forming part of an honours project that investigated many aspects of bark burial mortuary practices and bark coffins found throughout the Central Queensland Highlands, the issue of their antiquity was addressed. To determine if the bark coffins were pre- or post-contact in age, a replicative study was developed to identify the type of axe (stone, trade or a common steel axe) used to cut the bark that encases the remains. It was found that each type of axe produced its own specific cut marks or patterns, and that these specific patterns were consistent throughout the sample. This method and the criteria established to distinguish between the various axe cut marks were applied in the field on a select number of coffins. The bark coffins examined in the field were classified as stone axe cut; pre-contact in age. With permission from the appropriate traditional owners, a sample of bark was recovered from the deposits within the burial crypts for AMS dating. These dates support the classification of the coffins as stone axe cut. The criteria established to determine the differences between the various axe cut marks on bark are found to be reliable as a relative date to establish an age of bark coffins as pre- or post-contact.
FRONTIER-GAMES: ROCK ART VARIABILITY IN THE ARID ZONE

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Keywords: alliance systems; arid zone; Australia, central; Native Title; rock art; style

Abstract

Rock art can tell us about alliances between social groups and explore notions of ‘tribal’ boundaries through time. Such information has currency for Native Title claimants wishing to establish a time depth for their connection to country. Definitions of rock art style(s) and boundaries are of primary interest here. So too are the stylistic issues relating to scales of inclusion - individual, family groups, language group, region etc. We need to understand the complexities of intra-site patterning and the evidence from individual sites as well as the patterning which results from a regional perspective. It has long been presumed that the art of the arid zone is more homogenous (stylistically speaking) than that found around the fertile coastal strip. Recent research in Central Australia, the western desert and the arid northwest coast and interior, however, increasingly reveals complexity which challenges this supposition. This session will explore the following questions: How do the arid zone style regions interrelate? What is the local and regional variability inherent in the arid zone? Can differences within arid zone style regions be attributed to individual artists or social institutions (e.g. dreaming tracks, aggregation locales)? What has happened to art production during the contact/settler/recent past and how does this affect our understanding of style boundaries beyond the ethnographic present?
Abstract

We describe the pigment and engraved art at a place called ‘Kaalpi’ by the Martu - the Calvert Ranges on the Canning Stock Route at the south of the Little Sandy Desert. This comprises a series of well-watered gorges in a relatively small outlier of conglomerate quartz sandstone in the otherwise vast dune fields of the Little Sandy Desert. This location characterises some of the more marginal landscapes to have been occupied by people in the Western Desert.

This paper addresses the theoretical implications of a stylistically variable art assemblage operating in a context where social networks are known to be open and extensive. The Western Desert region of Australia is well understood archaeologically and artistic systems appear to have operated over a great time-depth as well as across vast distances.

The high degree of stylistic variability displayed in the engraved and painted motifs within the Calvert Ranges suggests that this place has acted as an aggregation locale, over a very long period of time. We conclude that in resource poor areas, aggregation locales are essentially the ‘engines’ for information exchange and these will exhibit high stylistic diversity, as an expression of contested group identities, not bounded territoriality.

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Keywords: Black Death; disease; DNA; genetic analysis; London; molecular archaeology; palaeopathology; plague bacillus; Yersinia pestis

Abstract

The plague bacillus (caused by the bacteria *Yersinia pestis*) has long been the suspected culprit for many epidemic outbreaks throughout history. However, as with many diseases which leave no physical manifestations on bone, current methods in palaeopathology are lacking in providing a complete diagnosis for the plague. Recent work by Drancourt (1998, 2000) has led to the development of new methodology for plague detection that utilises genetic testing, in particular, PCR amplification. This study applies a slightly modified methodology of Drancourt to detect the plague bacillus, *Yersinia pestis*, recognised as being the causative agent of the Black Death plague which ravished London in the mid-14th century, resulting in the death of two-thirds of London’s total population. Six samples which were excavated from a suspected plague burial dated at 1348-1350, were examined and the causative agent of the plague was detected. The development of genetic methodology for the detection of ancient septicemia is of great importance in filling the methodological void in palaeopathology and exponentially increases the number of diseases that can tested for and identified.
WHAT HAPPENS BETWEEN THE DESERT AND THE SEA?: HOW PATTERNS OF PLEISTOCENE AND HOLOCENE ABORIGINAL OCCUPATION OF THE INLAND PILBARA RELATE TO THOSE OF THE NORTHWEST COAST AND THE DESERT INTERIOR

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Keywords: demography; Hamersley Plateau; intensification; occupation intensity; Pilbara; population dynamics; Western Australia

Abstract

The Hamersley Plateau is an area that is frequently investigated but poorly represented by published literature in Australian archaeology. The Hamersley Plateau is a bridge between coastal and northern regions such as North West Cape and the Kimberley and the Western Desert in the interior. In this paper I present results of the analysis of three rockshelter excavations from the northeast of the Hamersley Plateau. Using these results, results of previous archaeological research, ethnographic, genetic and linguistic information I propose a model of changing patterns of occupation in the inland Pilbara that are part of broader regional patterns and trajectories involving coastal and interior populations. The ethnographic, genetic and linguistic records demonstrate processes of movement, fission and fusion of cultural groups that precede European contact in the inland Pilbara. Increases in artefact discard and the appearance of new artefact forms during the Holocene of the inland Pilbara coincide with similar events at Western Desert sites. The Pleistocene occupational hiatus observed at sites at the North West Cape and the Kimberley coincides with increases in occupation intensity at sites in the inland Pilbara. I argue that population and cultural dynamics (analogous to those observed using ethnography, genetics and linguistics) can explain changes observed in the archaeological record of the inland Pilbara and the changing relationships of its occupants with people of the surrounding regions.
BIOLOGICAL BORDERS AND BOUNDARIES: THE GENETIC PUZZLE

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Keywords: bioarchaeology; gene flow; genetic analysis; molecular archaeology

Abstract

Biology continually defines groups and sub-groups from phylogenetic species to population groups. The boundaries and borders identified for these classifications are based on living biological properties, however, when these properties are used in material from the past, the classification systems break down. Genetic analysis has been employed to overcome these shortfalls with extremely varied success. The analysis of genetic material is based on the identification of inherent variation. It is this variation which is used to build borders and boundaries of the biological world. Caution must be taken, however, on how significant these borders or boundaries are to the archaeologist or anthropologist. Biological groups may not define cultural, social or ethnic groups and the biological mixing of groups evident by gene flow and fluctuations in the gene pool may not indicate a union of these more cultural factors. Biological material from the past has to be fully understood before genetic analysis will provide any information.
PORTABLE ART: A PRELIMINARY LOOK AT COLLECTIONS AND CONTEMPORARY CREATIONS FROM WESTERN ARNHEM LAND

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Keywords: Arnhem Land; art; collecting; Gunbalanya; portable art; style

Abstract

Alongside analyses of rock art, portable art has the potential to shed light on alliances between particular social groups and cultural restrictions on art production. Though far from suggesting that ethnographic collections of portable art and contemporary artworks can extensively inform us about rock art meanings and styles, these artworks do present to us interesting and challenging cultural information about styles, methods of production and boundaries for each. What can early collections tell us about stylistic restrictions and ownership? Are collections limited in their use due to the nature of the collection process and their associated documentation? What can contemporary art production tell us about style margins and rights to imagery today? This paper will address questions of innovations and continuities in Indigenous Australian art production since contact and how these changes affect our understanding of style boundaries perhaps even beyond ‘the ethnographic present’.

Findings from initial research with artists working out of Gunbalanya in Western Arnhem Land and institutional collections of portable art from this region will be considered with the ultimate intention of identifying trends and possibly paralleling similar studies from arid zones. This paper stems from work-in-progress and, as a result, will outline intentions for further research.
SEA-CHANGE IN THE KEPPELS?

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Keywords: isolation; Keppel Islands; linguistics; physical anthropology; Queensland, central; Woppaburra

Abstract

Numerous physical anthropologists have suggested that the inhabitants of the Keppel Islands were different from their mainland contemporaries:

They have such a combination of primitive characters that we are justified in considering the question whether these people are not perhaps the remnant of an older and more primitive variety than other Australians (Klaatsch 1908).

Within the general framework of Aboriginal morphology this little group shows some peculiar specializations and deviations (Larnach and Macintosh 1972:10).

The Keppel Islanders have been shown to be different in many ways to those of the mainlanders … We have documented the possibility of introduction of genes into the Keppel Islands from outside Australia (Pardoe and Donlon 1991:33).

Did the 14km sea crossing between the Keppel Islands and the coast provide a sufficient barrier to make the Keppel Islanders different from the mainlanders? Can some of these differences be attributed to contact with people from outside the region?

This paper will bring together the evidence from physical anthropology and linguistics, to supplement Rowland’s paper (9:00am Friday) on the archaeology, and review the question of the distinctiveness of the Keppel Islanders.
MOUNDS AS METAPHORS? SHELL MOUNDS AND SHORT-TERM SOCIAL DYNAMICS AT WEIPA, CAPE YORK PENINSULA

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Keywords: aggregation sites; Cape York Peninsula; cultural landscapes; Marxist theory; Queensland, north; shell middens; shell middens, analysis; shell mounds; social organisation; Weipa

Abstract

In this paper it is suggested that shell mounds at Weipa, Cape York Peninsula, are more than simply the residue of past economic activities. Instead, the hypothesis advanced is that shell mounds are related to cultural knowledge and associated meanings of the landscape that were only accessible to particular people, or groups of people. It is suggested that relatively large-scale social gatherings were associated with this cultural knowledge, and that this hypothesis is supported by archaeological evidence from the region.

Within these particular social contexts existed contradictory social relations that influenced the location, timing and size of the social activities that led to mound formation in the short-term. Sources of these contradictions included both social and environmental factors. The outcome of action taken to overcome these contradictions were social hierarchies, and it is argued that it was the shifting nature of these hierarchies that predominantly influenced spatial and temporal variability in shell mound development. These short-term social dynamics are reflected in the (long-term) archaeological record principally in the form of variability in shell mound distribution and chronology, mound size and form, shell deposition rates, and phases of mound use and growth.
POPULATION, ENVIRONMENT AND KIMBERLEY ROCK ART

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Keywords: Arnhem Land; beeswax figures; Kimberley; rock art; rock art dating

Abstract

The Kimberley and Arnhem Land rock art sequences are likely to be two of the longest and most complex in the world. They therefore have unique potential as evidence for past landuse systems, ideologies, material culture inventories and culture contact.

This paper will summarise available dating evidence for Kimberley beeswax figures and rock paintings, then relate chronological and spatial variation in the art to other cultural and natural determining factors.
Abstract

Flores, in the Wallacean region of east Indonesia, lies on the most probable route for colonisation of Australia along the Lesser Sunda Island chain. It is also half-way between the Asian and Australian continental areas, as apparent in the characteristics of its modern-day peoples and languages.

The Island has a terrestrial fossil sequence extending back at least 1 million years and showing major changes in faunal composition, including extinctions, arrival of new species and endemism. Hominids, as evidenced by stone artefacts with fossil faunas in geological strata of the Soa Basin, central Flores, reached the Island 840,000 years ago despite the required sea crossings.

Until recently, there was a hiatus in the archaeological and palaeontological records between Middle Pleistocene sites of the Soa Basin and Mesolithic sites of the early Holocene. Evidence from our excavations at Liang Bua, a limestone cave in West Flores, is now shedding light on this.

Liang Bua has basal deposits containing ‘archaic’ hominin remains with a range of extinct and extant fauna, stone artefacts and pigment. Higher in the sequence there are several changes in human morphology, economy and technology represented. This paper will describe some of these changes and their significance for the appearance of modern people, food producing economies, the appearance of Austronesian-speaking peoples and metallurgy in the region.
**SNAKE SISTERS AND THEIR IMPRINT ON THE LANDSCAPE: SACRED SITES AND THE CHANGING PATTERN OF PETROGLYPHIS**

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**Keywords:** arid zone; Ashburton Range; ceremony; engravings; Kankarlu; Kurutiti; Marrapinti; Milywaru; Nyanya; Panaramitee; rock art; Tanami Desert; Tennant Creek; Warlmampa

**Abstract**

The mythology associated with Milywaru, Two Snake Sisters, is an important Dreaming tradition for Warlmampa and adjoining tribal groups in the region north of Tennant Creek, Northern Territory. In Warlmampa country the sacred sites associated with the Milywaru tradition are predominantly linked to specific sandstone formations, within and adjacent to the Ashburton Range. These sisters travelled extensively, heading north through the eastern edge of the Tanami Desert before moving back down south and crossing the Ashburton Range. The Milywaru are associated with the restricted men’s ceremonial business Kankarlu, for which there are specific songs, dances and designs.

This is not a region known for its rock art. However, two Milywaru places - Nyanya and Kurutiti - contain over 6,000 petroglyphs. Other sites contain between 10-100 motifs. The vast majority of this art fits within what is understood by the ‘Panaramitee’. However, there are specific subjects depicted that are particular to a site and these parallel the Dreaming relationship ascribed to that place.

At Nyanya there are distinct ‘snake-like’ motifs that overlie most of the other art. While at Kurutiti there are depictions that have semblance with the stone-bladed picks recorded by Spencer and Gillen. There is a profusion of incised lines at Marrapinti, the nose-bone ornament site in the Milywaru tradition. It is evident that the Dreaming interleaves with the physical and cultural landscape. What is explored here is the timing and interconnectivity of the Dreaming with the rock art.
Abstract

Routine examination of skeletal remains as they are reported to police in the Northern Territory has identified some interesting, although not unexpected aspects.

A particular feature of the Top End was the annual exploitation in Australia’s tropical waters by the Macassan trepang fishers. To some extent the activities of these southeast Asian peoples on Australian shores has been studied, primarily focusing on their industrial sites. That people died during their voyages or ended their days on Australian soil is evidenced in the archival documents and the recorded graves across the Top End. Information available from the few excavations conducted of Macassan graves indicate particular burial features, principally related to the Muslim observances.

Skeletal remains frequently are exposed following the monsoonal deluge of each wet season, with the discovery of these reported to the police. Examination of the remains is carried out to determine ethnicity and eliminate foul play in each case. Distinctive anatomical traits assist in this process, and in the main the skeletal material pertains to Aborigines buried according to traditional custom. Recently, there have been a number of cases where particular anatomical anomalies exist. Some are likely Macassan seafarers, other are interpreted as indicative of Macassan/Aboriginal mix, documenting in fact that contact was not just of the social or economic.

The specific anatomical traits observed on these Top End remains is discussed in light of the patterns of variation that contact between two groups is evidenced, and how group definition may be carried to the grave.
FACES IN THE CROWD: THE INDIVIDUATION OF COMMINGLED BURIALS

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Keywords: burials; burials, commingled; individuation; mortuary analysis; physical anthropology; ultraviolet fluorescence

Abstract

Human burials provide archaeologists with a vast array of information that cannot be gained from other sources of data. Although mass graves present various problems for investigators, including individuating remains and accurately determining the number of people present, they are valuable for research on a large sample of people, often from one time period and one location. The use of ultraviolet fluorescence to individuate commingled remains has not been studied since 1975 owing to inconsistent results. This research is a feasibility study to ascertain if a chemical fluorescent dye can enhance the results of this technique. Three fluorescent dyes were tested on a sample of mixed human remains from the Anthropology Museum, University of Queensland, to determine their ability to individuate mixed skeletal remains without affecting the integrity of the specimens. The results indicate that the remains could not be individuated using ultraviolet fluorescence and a chemical dye.
AN APPLICATION OF USE-WEAR AND RESIDUE ANALYSES TO WOODEN DIGGING STICKS

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Keywords: digging sticks; molecular archaeology; phytoliths; raphides; residue analysis; spherulites; starch; use-wear analysis

Abstract

Poster Usually utilised in ancient stone and bone tool research, use-wear and residue analyses techniques were implemented in a systematic integrated approach to ascertain whether a sample of 12 post-contact Australian wooden digging sticks from two museums retain traces of their use as food-procuring tools. Ethnographic literature and museum records proved vital, providing necessary information for analytical procedures and evidence with which to compare results. The procedures undertaken included macroscopic examination of the sample and replication of digging stick manufacture. Empirical data for an application of Facet Theory and statistical analyses were obtained during low-magnification microscopic examination of the artefacts. These analyses included multivariate statistical analyses aimed to differentiate use-wear from manufacture marks. Hemastix tests for blood residues were undertaken, and high-magnification microscopy was used to detect and identify extracted residues. No blood residues, suggestive of animal food-procurement, were detected. However, the results obtained suggest that ethnographic wooden digging sticks retain traces of residues and use-wear indicative of their use as plant food-procuring tools. Identified residues included starch granules, raphides, phytoliths and spherulites, and complex marks were isolated as probable use-wear marks. Based on the corresponding distribution on the sample of residues with marks indicative of use-wear, it is inferred that 10 digging sticks had been used to procure plant foods. The information obtained has increased the value of the sample, benefiting the two museums. The results obtained also suggest that similar analytical methods could be used in future research on other ethnographic wooden artefacts and archaeological wooden artefacts.
BEYOND THE BRICKS AND UNDER THE ASPHALT: CULTURAL LANDSCAPES IN THE TOWNSVILLE CBD

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Keywords: community attachment; historical archaeology; Queensland, north; Townsville; urban landscapes

Abstract

Over 137 years of European settlement from 1864 to 2001, the north Queensland city of Townsville has developed a dynamic nature which has been shaped by a variety of historical and cultural influences. This nature is reflected in the landscapes that survive in the city of Townsville, and in particular the study area, which comprises four streets in the city’s central business district. Dubbed the Flinders Street East Precinct (or FSEP), this area constitutes the earliest locale of European settlement and has seen both change and continuity of various elements through time. These stable and fluid elements include fabric, commercial and private practices and most importantly community interaction in the FSEP. A small scale study was undertaken to identify these elements and examine how they have changed or continued over time with an assessment of the possible implications these may have on community attachment.

Certain methodologies were developed to enable this exploration of the FSEP, which in turn has implications for other urban landscape studies and cultural heritage assessments. Drawing upon arguments in recent landscape and heritage literature it is argued that there is a need for more fine-grained approaches to landscape, particularly in urban contexts. Further the outcomes of this study reflect the value of such approaches, while offering a methodology that could be adapted to other research situations.
Barriers, Borders, Boundaries

THE REALITY OF BARRIERS: THE EVIDENCE FROM BIOLOGICAL ANTHROPOLOGY

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Keywords: bioarchaeology; ethnicity; genetic analysis; identity; physical anthropology

Abstract

Boundaries and the groups they enclose are important areas of study for archaeology and for people wishing to define themselves within a nation state. This social process is as evident in the current (and hotly debated) discussion of ethnicity in the archaeological record in European prehistory as it is in Indigenous Australia. We propose to present ongoing biological work relevant to the conference theme, with an emphasis on how borders and barriers are analysed within Evolutionary Theory. Evolutionary Theory is most commonly incorporated within archaeology via biological studies of human variation. In this session we propose to bring together work on (1) patterns of variation that might shed light on group definition; (2) processes such as Gene Flow and Selection that affect relations between groups; (3) the nature of borders for both biological and social groups; and, (4) methods of biological analysis relevant to archaeology. We hope to investigate the nature of groups in ‘archaeological time’. Where are the boundaries of groups? Can we relate present day boundaries to the presumed historical ebb and flow of tribal groups? What is the shape of group borders; are they well- or ill-defined, wide or narrow, related to linguistic and other borders?
ARCHAEOLOGY AND THE CURATIVE ENVIRONMENT

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Keywords: disease; historical archaeology; mental illness; psychiatric hospitals

Abstract

Many of us will be familiar with the modern mental hospital but few people realise the origin of many of these buildings as 19th century lunatic asylums. Images of lunatic asylums have appeared in a wide range of modern media, reflecting images of imprisonment and harsh treatment. Few realise that the lunatic asylum was intended to be a curative environment playing an essential role in the treatment of mental illness. By taking an archaeological approach it is possible to access the ideas about the curative environment and to consider whether these ideas were realised in the built environment of lunatic asylums. In this respect the paper will address a particular problem confronting archaeologists: the relationship between documents and the archaeological record.
THE ARCHAEOLOGY OF ISOLATION

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Keywords: isolation

Abstract

Wherever boundaries exist particular groups become marginalised or isolated. This can occur for social, spatial, environmental or temporal reasons and at the scale of the individual, group or population. Some examples of isolated groups may include those seeking refuge at the glacial maximum, island communities, shipwreck survivors, lighthouse keepers and families, inmates of all kinds and migrants/refugees. This session is designed to explore the archaeological character of such places and peoples across all time periods relevant to Australian archaeology. Although investigation of these particular types of places has often been the domain of historical archaeologists, conceptual frameworks using isolation as an explanatory tool have been used in hunter-gatherer archaeology. In this session, therefore, there are papers related to islands, coasts, and inland Australia presenting specific case studies that range in time from the deep past to the 20th century.
UNIVERSITY OF QUEENSLAND ARCHAEOLOGICAL SERVICES UNIT’S
SALVAGE OF THE NORTH BRISBANE BURIAL GROUND

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Keywords: burials; cultural heritage management; management; University of Queensland Archaeological Services Unit

Abstract

Poster  Between August and October 2001 the University of Queensland Archaeological Services Unit (UQASU) archaeologically salvaged the contents of 277 burials (and mapped the location of many more) from the site of the first free settlement cemetery in Queensland. The cemetery, located one mile from the city centre, opened in 1843 and closed, with the opening of the Toowong Cemetery, in 1875. The cemetery was divided into separate sections for Anglicans, Aborigines, Roman Catholics, Presbyterians, Wesleyans, Jews and Congregationalists. The area became wasteland until 1914 when a process of landfilling began. From the 1930s onwards it was used for sporting activities culminating in the development of the Lang Park rugby league ground (Suncorp Metway Stadium); often known as the ‘graveyard of New South Wales rugby league’. The Queensland Department of Public Works is currently redeveloping the site to house a purpose-built rectangular stadium. As part of the work, UQASU developed a CHMP that called for scientific salvage of those parts of the cemetery that would be disturbed by the redevelopment. A UQASU team, headed by Jon Prangnell and Tam Smith undertook the salvage with the assistance of the Turrbal Association Inc. Parts of the Anglican, Aboriginal, Roman Catholic and Presbyterian sections were salvaged. All skeletal remains, grave goods and coffin furniture recovered, as well as historical items found in the overlying fill, were taken to the Anthropology Museum at the University of Queensland. The remains will be held there for studies into mortality rates, health, nutrition and diet, as well as religious and socio-cultural practices, before re-interment at Mt Gravatt Cemetery. UQASU maintains a monitoring role in the continuing redevelopment work as per the Cultural Heritage Management Plan.
Barriers, Borders, Boundaries

CHINESE COOKTOWN: COPING WITH ISOLATION, LONELINESS AND POVERTY

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Keywords: Chinatown; Chinese; Cooktown; Far North Queensland; historical archaeology; Overseas Chinese; Palmer River; Palmer River Goldfields; Queensland, north; racism

Abstract

During the late 19th and early 20th centuries a large Overseas Chinese community existed on and around the Palmer River in Far North Queensland. The impetus for the creation of this community was the discovery of gold in 1873, but a host of other industries quickly followed. At its peak, between 1875 and 1878, the Overseas Chinese community constituted 90% of the district’s entire population. Chinese labour and commerce were integral to the district’s economic prosperity during this peak phase of activity. After 1878 declining gold yields forced a general migration of both Chinese and Europeans out of the region. An Overseas Chinese community persisted, however, and remained an important economic element through to the end of the 19th century.

Despite their significance to the Palmer area, the Overseas Chinese experienced various forms of social and physical isolation, forms which became more extreme over time as their population contracted and European hostility towards an Asiatic presence became formalized with the White Australia Policy. Most were young male peasant farmers who had not travelled beyond their home villages in China before. They were transported to a rugged, alien land where they were surrounded by strange people, language, laws and customs, and subjected to racism. They were disconnected from kin and many became immersed in poverty, loneliness and despair.

In response to this isolation, the Overseas Chinese devised a number of ‘coping’ strategies which today can be examined in the historical and archaeological records. This paper examines both the forms of isolation and the responses. In particular, it focuses on the role of the Chinatown at Cooktown, the port established to serve the Palmer River Goldfields, in ameliorating isolation.
CONJOIN ANALYSES FROM GRINDING GROOVE CAVE, SOUTH CENTRAL QUEENSLAND

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Keywords: Cania Gorge; conjoin analysis; Gooreng Gooreng Cultural Heritage Project; Grinding Groove Cave; rockshelters; stone artefacts; stone artefacts, analysis

Abstract

Poster  Grindind Groove Cave is a 10,500 year old rockshelter site located in Cania Gorge in central Queensland and is the second oldest site investigated by the Gooreng Gooreng Cultural Heritage Project. Situated at the base of a sandstone escarpment, Grinding Groove Cave appears to have been subject to periodic flooding by nearby Three Moon Creek. Excavation revealed 4.6m of fine clay sediment containing stone artefacts to the base of the deposit. Cultural materials include ochre, charcoal, faunal remains and stone artefacts (including backed artefacts). A conjoin analysis of approximately 320 stone artefacts plotted in situ is currently underway to assess the stratigraphic integrity of the sediments. The study is intended to elucidate the degree of chronological resolution afforded by the site to questions of Aboriginal occupation of the Gorge system.
Abstract

The focus of this paper is Native Title and how archaeology can profitably contribute to the delivery of land justice to Aboriginal people, particularly in the intensively settled regions of Australia. I will argue that the greatest potential for archaeology lies not in supporting the identification of anthropological boundaries in space and time or, necessarily, in providing “proof” of Aboriginal histories. This is not to say that anthropology and other forms of history (Indigenous or otherwise) are not relevant to archaeological practice. They are suggestive of profitable paths for archaeology in which the discipline can provide evidence not readily accessible by other means. The recent Yorta Yorta ruling on appeal suggests that the issue of cultural change within colonial Aboriginal Australia remains highly problematic. Little joy is to be found in non-Indigenous histories of the Aboriginal past to reveal the reality of change. I will argue that archaeology is well situated to reveal such change providing it is willing to focus on the construction of colonial era cultural landscapes.

The Native Title landscape has obviously resulted in a reorientation of both archaeological thinking and the relationship between all parties concerned with Aboriginal cultural heritage. It is becoming clear that effective solutions to land and heritage concerns will only be developed through a broad approach to articulating cultural landscapes and a recognition of the multiplicity of interests involved. This context offers huge opportunity for the development of new relationships between Aboriginal people and archaeologists as new areas of research align themselves more closely with Indigenous requirements for historical knowledge. The implication here is that cultural heritage management is potentially the most exciting arena for the development of archaeological thought. It will be argued that Native Title claimants and archaeologists will best be served by the development of archaeology as a discipline independent of anthropology and history. By so doing, the unique insights offered by the archaeological record can be most successfully exploited.
SOUTH AUSTRALIAN INDIGENOUS PERSPECTIVES OF ARCHAEOLOGY

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Keywords: Aboriginal perceptions; Indigenous perspectives, South Australia

Abstract

The disciplinary history of Australian archaeology has in recent decades been subject to criticisms from Indigenous Australians for its treatment of and lack of consultation with Indigenous communities. This has lead to the situation where archaeologists are now required to consult with Indigenous communities. In addition, these criticisms have lead archaeologists to conduct their own analyses of such issues. However, some archaeologists have observed (see Field et al. 2000:35) that Indigenous peoples are at present all too commonly spoken for by archaeologists and others who have a range of political and other agendas. Thus, it is often difficult to determine or separate current Indigenous perspectives from the reflections, speculations and personal feelings and observations of non-Indigenous researchers. Indeed, this observation lead Field et al. (2000:35) to pose the following question in a recent article - “How do Aboriginal people really feel about archaeologists and archaeology?” This paper presents an investigation of this question in relation to South Australian Indigenous perspectives. The study will outline some results obtained from in-depth interviews conducted over the last two years and will cover the following themes: the ‘lived experience’ of being a researched community; the ‘lived experience’ of working with archaeologists; and, beyond working together - other areas of perceived tension or conflict and the way forward.
Poster

There is considerable ethnographic literature on the capture and use of birds and their feathers by Aboriginal people, but there is little extant evidence for their use in the distant past. While bird bones and feathers have been found in archaeological sites in Australia, bones are often too fragmented for identification and cultural association for feathers is difficult to establish. This poster examines microscopic features of feathers used in feather identification and demonstrates the significance of this methodology in archaeological residue analysis. Microscopic residue and use-wear analysis is applied to lithic artefacts dated to between approximately 3,500 BP and 1,000 BP, demonstrating that a number of these artefacts were associated with feather use and/or processing.
A TECHNIQUE FOR OBTAINING LIGHTWEIGHT CASTS OF ARCHAEOLOGICAL PROFILES

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Keywords: Brisbane Southbank; casts; historical archaeology; moulds; sections; Southbank, Brisbane; stratigraphy

Abstract

Poster In December 1996 a large pit was excavated to remove toxic soils prior to the building of Stage V of the Brisbane Cultural Centre. Raids on the site by bottle collectors alerted staff of the Queensland Museum to the potential historical significance of the site. Inspection of the walls of the pit revealed the potential for further archaeological investigation, and the Museum was commissioned to record nine sections around the edge of the pit. These sections revealed a complex sequence of European occupation, dating from the 1840s when the site was cut up for European settlement. In one section near the pit, and covered by two metres of fill, parts of a timber hut including bush timber bearers, sawn pine floorboards fastened with hand-made nails, pole rafters and bark roof were uncovered. Associated with the bark was straw that contained a large number of blowfly pupae - one of the earliest records for Australia. The pit was demolished and covered by the 1857 and 1863 Brisbane River floods.

The sections were initially cleaned using an excavator, and then trimmed with spades, trowels and brushes. Natural latex was then sprayed over the surface and allowed to dry for 12 hours. Then, after an additional layer of latex was applied, three layers of chopped strand matting and latex were applied. After the latex dries the mould was then pulled, rolled up and transported to a commercial company who applied a polyurethane sandwich of hard urethane then foam urethane backed with more hard urethane. This formed the basis for the cast, which was then pulled from the mould. The cast was then braced with timber and touched up with paint. The result is a cast that is lighter and easier to handle than the more common fibreglass cast, although somewhat more fragile.
BOUNDARIES OF ARCHAEOLOGICAL THINKING

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Keywords: archaeology and anthropology; archaeology and Native Title; cultural landscapes; Native Title

Abstract

Recent developments in the discipline have recognised the need to move away from the confines of a sites-based approach to both research and management. The recognition of cultural landscapes, within which archaeological sites exist, has formed the basis of the nexus between archaeological research and Native Title/heritage management practice. In this session we explore the impact of these new directions on the discipline of archaeology generally, and examine the place of anthropological, ethnographic, and Aboriginal perceptions of the past on the future directions of the archaeological and cultural heritage disciplines. Head opens the debate with a review of the concept of cultural landscapes in archaeological, Aboriginal and geographical discourse. She asks the question: ‘does the notion of cultural landscape provide useful conceptual and practical tools for heritage management and archaeology?’ George provides an Aboriginal perspective on the issues raised by Head, arguing that archaeological practice and Indigenous knowledge inform our view of cultural landscapes, and that co-management provides a way forward for a more integrated approach to land management. Horsfall also takes up this argument, using a review of opposing management goals for the Wet Tropics to illustrate the divisions between Western and Indigenous thought on what constitutes ‘natural’ vs ‘cultural’ landscapes. The next three papers, by Goring, Tunn & Carter, and Smith & Burke, all provide specific case studies that illustrate the divide between Western and Indigenous thought, and present their views on where they feel archaeology can (or cannot) make a contribution. This last two papers, by Riches, and Godwin et al., focus on the role of Native Title in research and methodologies about landscape management. Riches argues that archaeology and Native Title are only bedfellows when dealing with the recent past, but that Native Title and cultural heritage can provide an important way forward for archaeological practice. She goes so far as to argue that ‘CHM is potentially the most exciting arena for the development of archaeological thought.’ Godwin et al. would agree with this view, arguing that Native Title and cultural heritage management cannot be considered separately. They demonstrate that Native Title issues in the modern climate cannot be ignored by cultural heritage practitioners, or by those developing cultural heritage legislation and policy. Overall, the session provides a review of current archaeological practice against a politically active and sometimes confusing backdrop. Although Riches argues ‘that Native Title claimants and archaeologists will best be served by the development of archaeology as a discipline independent of anthropology and history’, the majority of papers in the session argue for a greater integration of archaeological theory and practice with Indigenous and anthropological knowledge, thereby redefining the boundaries of archaeological thinking.
ROCKING THE BOUNDARIES

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Keywords: arid zone; Australia, central; engravings; pigment art; rock art; rock art analysis; rock art dating

Abstract

Arid zone rock art researchers have traditionally analysed engraved and pigment art as separate bounded assemblages with an implied understanding that much of the engraved art is old and the pigment art more recent. Division of rock art assemblages based on technique has in part resulted from ethnographic studies and evaluation of taphonomic processes. Current research in Central Australia suggests that while some clear differences between techniques exist, considerable parallels in content and context between the two are also evident. A fine-grained understanding of the similarities and differences between techniques has provided a clearer understanding of the relative chronology of the art assemblage. The spatial distribution of the resulting patterns holds the potential to further the understanding of the ways in which art systems functioned in mediating social interaction in arid regions in the past.
‘CROWS’, SWIMMING LOGS AND AUDITORY EXOSTOSES: A REASSESSMENT OF ISOLATION ON THE KEPPEL ISLANDS AND BROADER IMPLICATIONS

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Keywords: islands; isolation; Keppel Islands; Queensland, central; Woppaburra

Abstract

In 1978 I presented a seminar entitled ‘Crows, Swimming Logs and Auditory Exostoses: Paradoxes from the Keppel Islands’, at a number of venues. It was argued in these presentations that there was sufficient linguistic (‘Crows’), material cultural (swimming logs) and biological (auditory exostoses) evidence to suggest that the Woppaburra of the Keppel Islands, central Queensland coast, were at least semi-isolated from the mainland.

Since that time considerable work has been undertaken on islands to the north of the Keppels and elsewhere in Australia and this paper will reassess the degree of isolation of the Keppel Islanders in view of that new evidence.

In broader terms I will address the ‘myth of the primitive isolate’ (e.g. Terrell) and the issue of Australia as a ‘cultural cul de sac’ (e.g. Beaton, Diamond).
CHANGING PATTERNS OF HOLOCENE ISLAND USE: A COMPARISON BETWEEN FINDINGS IN SOUTHERN AND NORTHERN AUSTRALIA

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Keywords: Gulf of Carpentaria; islands; Sir Edward Pellew Group

Abstract

This paper reviews evidence of island occupation and use in northern and southern regions of Australia, and presents preliminary findings from recent investigations in the Sir Edward Pellew Group of Islands in the Gulf of Carpentaria. These results and the implications of Holocene Aboriginal occupation patterns on these islands are compared with findings from southern Australia. In particular the question of mid-Holocene changes is addressed; both causal factors and manifestations (regionalised variation) for these changes are examined.
The Diamantina River is part of a larger arid zone catchment that flows into Lake Eyre. The River is characterised by extensive systems of braided and fine anastomosing channels that periodically link the flood plains with dunefields in the west, and low jump-up to the east. The catchment is an extensive but isolated area with much potential to increase our understanding of how inland river systems may have both influenced and characterised arid zone colonisation.

My research seeks to understand and characterise the archaeological record and put it into context with current theories of arid zone colonisation. It is my contention that while the Diamantina may appear as a well-watered conduit to the Simpson Desert it may have been necessary prior to occupation to have in place those adaptive strategies and skills usually associated with desert societies.

What was the relationship between those people who occupied the Diamantina River and those who lived in the Simpson Desert? Was there a close cultural affinity between the two? How can this relationship be identified (e.g. is it reflected in trade routes, linguistic groupings, commonality in technology and/or sharing of genes)? Finally, how old is this potential relationship? Currently, most observations in the Diamantina are from open or surface artefact assemblages and most seem recent, late Holocene. A critical difficulty in addressing these important questions is the temporal barrier associated with open sites.
JOINING THE DOTS: MANAGING THE LAND AND SEASCAPES OF INDIGENOUS AUSTRALIA

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Keywords: community archaeology; cultural heritage; cultural heritage management; cultural landscapes; Indigenous knowledge

Abstract

This paper discusses issues relating to the management of the living heritage of Indigenous Australians, the land and seascapes of Australia. The landscapes that are inhabited by Indigenous Australians today are full of meaning, inherently powerful and potentially dangerous. Many of the places that are important to Indigenous peoples are not apparent to non-Indigenous people. The successful management of these places poses a challenge to conventional land management strategies. This poster keys into an emerging debate amongst Australian archaeologists and cultural heritage managers about the most appropriate ways to identify and manage Indigenous sites. This a direct outgrowth of recent co-operative research with Aboriginal people, and has resulted in concerted attempts to develop a more culturally sensitive approach to cultural heritage management.
Isolation can be used as a mechanism of control which is a characteristic of ‘total institutions’. The term ‘total institutions’ formulated by the sociologist Erving Goffman (1961) has been applied to specific missions and reserves in Australia by researchers such as Rowley (1971, 1970), Long (1970), Koepping (1976) and Haebich (1988). The use of this definition has since been challenged by research by Trigger (1992, 1985), Rowse (1993) and Lydon (2000). The aim of this paper is to present new evidence which will shed more light on this debate by exploring the concept of isolation, specifically as a form of control in relation to missions and reserves in Queensland. The paper is based on the comparative analysis of photographs, maps and plans of missions and reserves throughout Queensland from the 1880s to 1980s. These three kinds of data are analysed as parts of a greater colonial and post-colonial discourse of surveillance of Indigenous communities by the State. This bias and others is considered in their analysis.

Physical evidence provided in this paper illustrates that the missions and reserves had a variety of characteristics of ‘total institutions’. Maps and plans of missions and reserves indicate common physical and spatial attributes such as the use of surveillance, physical isolation and control of access points and exits which are common to total institutions. Photographic evidence shows barred windows and high-tiered fences which are physical attributes of Goffman’s definition of ‘total institutions’. Another important issue explored here is that missions and reserves were not isolated institutions but features of a wider network of more readily recognised ‘total institutions’ such as prisons, asylums, workhouses and reformatory schools in which the State aimed to control Aboriginal communities. The last and most important issue explored in this paper will be how in reality isolation and other forms of spatial control and physical barriers assisted in Aboriginal resistance to these institutions, the persistence of a strong cultural identity and strengthening new cultural ties.
OBSIDIAN USE AND LAND-USE STRATEGY IN WEST NEW BRITAIN DURING THE PERIOD 5,900-3,600 BP

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Keywords: obsidian; Papua New Guinea; reduction sequences; settlement patterns; West New Britain; Willaumez Peninsula

Abstract

The timing and nature of the first sedentary villages in West New Britain has been a controversial issue in Pacific archaeology. Traditionally, the emergence of Lapita is thought to represent the first appearance of sedentary village settlements. The nature of pre-Lapita occupation between 5,900 and 3,600 BP is the focus of this work, and is an important source of information on the extent of land-use changes with the following Lapita period. Obsidian was a widely distributed resource in West New Britain during the study period. Recent open site excavations on the Willaumez Peninsula have provided the opportunity to look at whether this obsidian material was deposited by mobile communities moving around the landscape, or by sedentary villages. A previous study by Robin Torrence of obsidian use in the source area on the Willaumez Peninsula has suggested that pre-Lapita occupation was mobile. The aim of this work is to test this model by looking for intra- and inter-site variability of obsidian use over a larger area, including sites within and outside this obsidian source area. This involves looking for evidence that the reduction of obsidian in a mobile land-use strategy was spread over numerous sites, including quarrying and initial reduction, manufacture of tools and transportable cores, and the use of this material around the landscape. These reduction stages should be confined to each site in sedentary villages because most activities occurred at the one location. This will be shown by analysing the distribution of different categories of obsidian artefact, including evidence of tool manufacture, cores and flakes. Attributes on these have also been chosen that can be used to show different reduction stages.
KEEP RIVER REGION ROCK ART: VARIABILITY, RELATIONSHIPS AND TEMPORAL CHANGE

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Keywords: beeswax figures; Keep River, Northern Territory; rock art

Abstract

A complex body of carved, painted and beeswax rock art, distinct from but with links to regions to the east, west and south can be found in the Keep River region of northwest Northern Territory. At least four major periods of figurative art have been identified with differing subject matter and age. Various forms of non-figurative art have also been recorded. Significant changes in depiction form, style, technique and media are evident between certain locations and over time. It is argued that these reflect shifts in emphasis associated with perceptions of environmental change as well as changing social connections.

The complex task of accounting for change by teasing out the environmental versus social influences on Keep River region rock art is the focus of this paper. This not only gives us insight into changing ecological concerns or perceptions of the environment but also changing connections between people and landscapes. Furthermore, a better understanding of regional social connections, movements of people across time and space and the development of symbolic expressions of relationship can be gained by studying the region’s rock art subject matter from different periods. The trick is to not ‘read’ too much specific meaning into the art but rather to see what trends are highlighted by its formal analysis. These trends can then be tested against other forms of evidence with the goal of defining a picture of past change in art, land, ecology and culture. In the process interrelationships between these can also be better understood.
INDIAN OR INDIGENOUS?: TRACING THE ORIGIN OF THE CARNELIAN BEADS OF IRON AGE SOUTHEAST ASIA

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Keywords: carnelian beads; diffusion; geochemical analysis; sourcing; Southeast Asia

Abstract

Iron Age carnelian beads found in Southeast Asia have long been assumed to be Indian imports, often featuring in diffusion theories of Southeast Asian state development that cite Indian influence as a major causal factor. The origin of these beads is tested here, through a pioneering non-destructive geochemical sourcing study of carnelian beads and potential source material. The results suggest that many of these beads do not derive from India. Instead, a complex multi-source origin, involving some local Southeast Asian manufacture, appears likely. While this is a blow for diffusion theories of Southeast Asian state development, geochemical analysis can be used to help trace trade in these beads, and, from this, to better understand their role as prestige goods, and their impact on existing prestige goods exchange networks, within Southeast Asia.
EDUCATING RUDDOCK: WA AACAI’S PROACTIVE APPROACH TO EDUCATING LOCAL AND STATE GOVERNMENT ABOUT WESTERN AUSTRALIA’S (ABORIGINAL) CULTURAL HERITAGE

Jo Thomson and Christine Martin

Abstract

In recent months the Australian Association of Consulting Archaeologists Inc. (Western Australia Chapter) has been spurred into taking a proactive approach on promoting and supporting archaeology and heritage in WA. This action was triggered by a number of things including:

• continued efforts by the WA government to re-draft and possibly weaken the WA Aboriginal heritage act; and
• the recent climate of discussions on the fate of archaeology in Australia.

The approach taken was to produce a multi-media presentation that could be used to lobby the Minister for Indigenous Affairs and the WA state government, promoting WA’s unique heritage, the strengths of the heritage act and the need for archaeology and cultural heritage management. It was envisaged that the final product would be versatile enough that a condensed version could be given to the Minister to be used to educate personnel internally in government, and parts of it could also be adapted for general public education and awareness programs for members to use as the need arises.

This poster summarises the processes followed, the product produced and the outcomes of the project. The key reason for presenting this poster, however, is to share our experiences and to hopefully assist or inspire other Australian archaeologists to also take a proactive stance.
AN ANALYSIS OF EXCHANGE NETWORKS FOR STONE AXES IN THE LAKE EYRE BASIN DURING THE MID- TO LATE HOLOCENE

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Keywords: alliance systems; exchange; intensification; Lake Eyre basin; reciprocity; risk-minimisation; trade

Abstract

Some archaeologists have been reluctant to accept the concept of increasing complexity in economic and exchange mechanisms during the mid- to late Holocene. However, intensification in Australian prehistory during the mid- to late Holocene has been strongly argued for by Lourandos (1983, 1985, 1997); Lourandos and Ross (1994); with Veth (1989, 1993) making a case for improved reciprocity. This paper develops this line of thinking in relation to stone axe exchange in the Lake Eyre basin and is supported by the preliminary archaeological, petrological and statistical analyses. These hypotheses are explained in the context of emerging complexities in economics and exchange mechanisms during the mid-to late Holocene and are based on the assumption that successful risk-minimisation strategies might be self-defeating. Successful risk-minimisation strategies probably lead to higher population levels. Therefore, to maintain or increase the effectiveness of successful risk-minimisation strategies further changes in the degree of complexity within economic and exchange systems might be necessary.

Although, it has been questioned whether the analysis of stone artefacts can be a useful tool in interpreting socio-cultural change in Australian prehistory (Beaton 1983), the research of Hiscock (1994), Smith (1989), and Veth (1989, 1993), has effectively applied the analysis of stone artefacts towards interpreting socio-cultural change in the Holocene. It is argued that a single site or multiple site analysis is not the only effective method to interpret change in the archaeological record. It is hypothesised that from the regional archaeological record, trade and reciprocal networks can be interpreted from relevant pre-contact behaviour of Aboriginal groups in the Lake Eyre basin.
BIG LAKE BOORT: A REVIEW OF RECENT WORK AND INTERPRETATIONS

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Keywords: co-management; Dja Dja Wrung Aboriginal Association; Indigenous knowledge; Lake Boort

Abstract

At Lake Boort, 200km northwest of Melbourne in central Victoria, a well preserved and unique archaeological record represents an important cultural landscape. Indigenous knowledge regarding the lake and an increased understanding of the nature of Aboriginal occupation there, sees Lake Boort as a highly significant locale for the Native Title claimants, several local Aboriginal community groups, and a challenge for all parties involved in the ongoing management of the area. The high quality and diverse record consists of both prehistoric and historic components - the latter associated with the earliest European occupation at Boort Station in the 1850s, and the subsequent operation there from 1861 to 1874 of a Victorian Honorary Correspondent Supply Depot. Since 1997, the Bendigo Dja Dja Wrung Aboriginal Association, the North West Region Aboriginal Cultural Heritage Program, and several State Government and non-government agencies have been working together to document the heritage values at Lake Boort. From this work and the stronger relationships that have developed, an integrated approach to management of the lake and its surrounds has emerged, one that endeavours to accommodate not only the acknowledged cultural values, but also the identified natural and social values. In this presentation we provide an overview of this work.
VALVE-PAIRING AND STRATIGRAPHIC INTEGRITY IN COASTAL MIDDEN DEPOSITS: A PRELIMINARY STUDY FROM THE SEVEN MILE CREEK MOUND, CENTRAL QUEENSLAND

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Keywords: conjoin analysis; Gooreng Gooreng Cultural Heritage Project; Seven Mile Creek Mound; shell middens; shell mounds, analysis; shell mounds; stratigraphy

Abstract

Poster Conjoin analyses of stone artefact assemblages have been employed successfully to assess the stratigraphic integrity of rockshelter deposits in Australia (e.g. Kenniff Cave). Paradoxically, no comparable studies are available for open coastal midden sites despite frequent references to this site type as stratigraphically problematic. Indeed, Lourandos has argued that rockshelter deposits provide a “sounder” data set as they “are not subject to the same degree of post-depositional modification as open sites.” Implicit in this argument is the notion that rockshelter deposits are somehow exempt from post-depositional modification such as that documented for open archaeological deposits located in coastal landforms. A related problem is that although investigations of rockshelter deposits have provided a sound chronological framework for Australian prehistory, they are heavily biased in favour of a limited range of behaviours which took place in rockshelter contexts. In this poster we present preliminary results of a conjoin analysis of the bivalve *Anadara trapezia* excavated from the Seven Mile Creek Mound in Central Queensland. The aim of the project was to evaluate the potential of using bivalve conjoin analyses to assess the integrity of coastal midden deposits. The efficacy of the method is evaluated using a series of live-collected *A. trapezia* specimens as well as articulated specimens recovered from archaeological contexts. We demonstrate that although articulated *A. trapezia* valves exhibit considerable dimorphism, umbo length reliably identifies probable conjoins which can be manually refitted for confirmation.
MULLETING IT OVER …

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Keywords: faunal analysis; fish bones; Mugilidae; mullet; New South Wales; shell middens

Abstract

Archaeological investigations of the marine fauna from shell middens on the mid-north coast of New South Wales in the 1970s suggested that the apparent lack of mullet (Mugilidae) in the fish bone assemblages had ramifications for the interpretation of seasonality of occupation. However, the winter mullet runs along the east coast played a significant role in the lives of Aboriginal people according to oral tradition. The research presented in this poster examines the reasons for the inconsistency between the archaeological record and the oral history, and suggests an alternative solution to the problem.
MEGAFAUNA MANIA

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Keywords: DNA; genetic analysis; megafauna; molecular archaeology; phylogenetics

Abstract

Poster  The demise of the Australian megafauna is shrouded in mystery and contention. Three Pleistocene megafaunal extinction theories have arisen since the 1950s. Extinct marsupial analyses are bound by current methodological limitations of skeletal analyses. Advances in molecular-genetic techniques in our laboratory have lead to the successful retrieval of DNA from archaeological and palaeontological bone, including megafauna, providing access to a wealth of new information. Some of our samples are in excess of 100,000 years old and this time depth allows long-term evolutionary questions to be addressed. Molecular genetics provides a powerful new approach to archaeological and palaeontological research and will result in the development of a genetic reference collection that has the potential to tackle questions posed by the megafaunal extinction debate.
Marginal Isolation, Coasts of Continuity

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Keywords: Allen’s Cave; Hawker Lagoon; intensification; refugia model

Abstract

I am looking at the archaeology of South Australia’s marginal country. This includes the area northeast of Port Augusta, toward the Flinders Ranges and west of Port Augusta to the Western Australia border, excluding the Eyre Peninsula. Obviously such a vast tract of land displays very different physical characteristics, as demonstrated by the Flinders Ranges to the east and the Nullarbor karst system to the west. However, there are also surprisingly similar physical features throughout, such as salt lakes, late Quaternary dune systems and granite or quartzite outcrops allowing the development of rockshelters, caves and rockholes.

The archaeology of the selected region is characterised throughout by stone tool scatters, painting and engraving sites, quarries, hearths and middens. In attempting to interpret the archaeology I have looked at two models - the ‘refugia’ model for Pleistocene occupation and the model for mid-Holocene intensification. The ‘refugia’ theory predicts the impact of the Last Glacial Maximum on occupation during the Pleistocene whilst intensification has been recognised in this part of the country as an increase in coastal occupation, although arguing that the economy is essentially ‘pre-marine’. Intriguingly, the refugia model, suggests that the arid zones were largely unoccupied until the mid-Holocene, whilst the latter argues that people spread out of desert regions and onto the coast due to demographic pressure. However, both models refer to barriers between the coastal margin and the arid interior and to isolation between groups of people occupying particular regions at particular points in time. Both models also use the concept of a contracting and expanding population in response to significant environmental or cultural change.

These models raise challenging questions for archaeology. For example, can or should a stone tool scatter, painting or engraving site, hearth or midden express at some level a barrier, isolation, contraction and/or expansion within the cultural landscape? Or are the signatures for significant changes in human response over time only identifiable via the broader cultural landscape? If so, how then do we use archaeology to recognise the changing spatial and temporal cultural landscape? This paper focuses in particular on two sites (Hawker Lagoon and Allen’s Cave) with reference to numerous others in order to discuss the position of an individual site within the relevant model, the definition of the spatial and temporal cultural landscape and the ability of broad scale models to enlighten and inform the archaeological landscape. A final question is posed - how does the archaeology indicate isolation and barriers?
HAWKER LAGOON, INDIGENOUS ARCHAEOLOGY FIELD SCHOOL

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Keywords: ethnoarchaeology; Hawker Lagoon; Kartan Industry; reconciliation

Abstract

Poster Hawker Lagoon has been a focus of archaeological investigation for at least 15 years. Ron Lampert initially presented the site as expressive of the ‘Kartan Industry’ and derived occupation dates commencing around 15,000 BP. More recently the site has been discussed in the ‘refugia’ model established by Peter Veth. In 2001, the Department of Archaeology at Flinders University ran a field school in Indigenous archaeology in collaboration with the local Indigenous community, at Hawker Lagoon. Our approach to the site and the surrounding landscape reflect significant methodological differences in the discipline of archaeology, compared to 15 years ago. In particular, it is the integration of contemporary Indigenous culture (ethnobiological knowledge) that has generated noticeable change in the archaeological response. We are now finding a very different view and interpretation of the site and surrounding landscape. This is work in progress and will continue for some years.
IS THE LADY OF THE HOUSE HOME?: HISTORICAL ARCHAEOLOGY AND COLONIAL MYTHS AT MRS WATSON’S COTTAGE, LIZARD ISLAND

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Keywords: cultural heritage; cultural heritage management; Far North Queensland; Lizard Island; management; Mary Watson; mythology; Queensland, north; Watson, Mary

Abstract

Located northeast of Cooktown, Lizard Island is a small and isolated part of Australia that is known for both its resort and its association with Captain Cook. The Island is also well known in Far North Queensland (FNQ) for its association with the tragic story of Mary Watson. Mrs Watson’s story and the ruin of her cottage are widely accepted by Indigneous and non-Indigenous people as important elements of the recent history of FNQ. Whilst recent conservation works on the Island have improved both our understanding of the site and visitor management, there is an increasing body of evidence that suggests the ruins are not those Mrs Watson’s cottage. However, far from diminishing the site’s significance, the new evidence suggests a new layer of importance and an opportunity to learn more about the colonisation process of northern Australia.
TOWARD AN UNDERSTANDING OF THE TAPHONOMIC HISTORIES AT NGANDONG

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Keywords: hominid evolution; Homo erectus; Indonesia; Java; Ngandong; physical anthropology; taphonomy

Abstract

When did Homo erectus become extinct? Dates taken from faunal remains at the Indonesian site of Ngandong, Central Java, have been used to bring the boundary forward for the extinction event to the late Pleistocene, between 53,000 to 27,000 BP. It is argued that as the fauna are associated with the hominids they are most likely contemporaneous. If accurate, the implications of these dates suggest that there were sympatric hominid species in some parts of Sunda, with Homo erectus coexisting for at least several millennia with Homo sapiens (Swisher et al. 1996). Preliminary analysis of the fossil assemblage at Ngandong suggests that the faunal and hominid remains have quite different taphonomic histories. This paper looks at the results of a taphonomic study on elements of the assemblage from the site, and suggests that the faunal remains may not be contemporaneous with the hominids. The study cautions against the use of dates taken from faunal remains to establish the age of Homo erectus at Ngandong.
STONE TECHNOLOGICAL BOUNDARIES IN SOUTHEAST AUSTRALIA

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Keywords: Australia, southeast; stone artefacts; stone artefacts, analysis

Abstract

Aboriginal flaked stone assemblages in southeast Australia (New South Wales and Victoria) vary considerably according to manufacturing strategies and regional distribution. These flaking strategies include the following:

- Utilitarian tools made on a nuclear body. These are generalised tools made on a nodular or weathered block as ‘nuclear tools’ or ‘core tools’.
- Utilitarian tools made on a flake body. These are generalised tools made on a flake which has been detached from a nucleus or outcrop.
- Intense tool reduction. This is the extreme reduction of tools in which the nuclear or flake origins are not recognisable. It also includes most bi-polar reduction.
- Microblade production. This is the production of flakes (not necessarily as classic ‘blades’) for backed blade manufacture, normally from specialised prepared cores.
- Tula flake production. This is the use of a specialised core to produce a flake suitable for hafting as a tula adze.
- Lamellate reduction. This is an anvil-rested technique to produce flat thin square quartz flakes.

The Dividing Range Country, Riverine Plains and West Darling Country comprise the three major zones for differences in stone flaking strategies. For example, in the Dividing Range Country (throughout most of Victoria and eastern New South Wales) the flake tools are smaller, less varied, and the nuclear tools are in a greater proportion than in western New South Wales. This, however, is allowing for a great ‘hole’ consisting of the Riverine Plain which extensively shows intense tool production. The Dividing Range Country is notable for its prominence of microblade technology particularly in regions such as the Hunter Valley or Gippsland. Some regions in the Dividing Range Country are dominated by quartz flaking. These have workshops for the production of flat thin square non-conchoidal flakes about 10mm x 10mm in size. A distinctive multifaceted core is used to make these ‘lamellates’. Most of the quartz flaking however seems to be the propagation of existing fracture lines rather than conchoidal flaking. This process seems to be absent in the Barrier Range quartz region of the West Darling Country where much of the quartz flaking appears to be by a soft hammer technique. In the northwest part of the West Darling Country some of the quarries produce the type of cores needed to produce tula flakes. Thus in addition to the three main zones there are a variety of smaller technological regions which can be mapped. Variation in the flaking properties of raw materials and logistical access to them is an explanation for much of the regional variation. However, functional and cultural factors also seem to be important.
A PRELIMINARY INVESTIGATION OF THE SEVEN MILE CREEK MOUND THROUGH AN ANALYSIS OF SPECIES DIVERSITY AND INTRA-SPECIFIC SIZE OF SHELLFISH RECOVERED

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Keywords: Gooreng Gooreng Cultural Heritage Project; Seven Mile Creek Mound; shell middens; shell middens, analysis; shell mounds

Abstract

The Seven Mile Creek Mound (SMCM), located on the coast of central Queensland just south of Gladstone, has been dated to 3,904 cal BP. The site is one of the earliest open archaeological sites on the Queensland coast and demonstrates high levels of marine resource exploitation. The SMCM reveals a pattern of discrete site use that terminates rather abruptly after only 300 years of occupation. As part of a larger study, intra-specific size and species diversity of shellfish were examined for nine excavation units to explore possible reasons for site abandonment. Preliminary results suggest dramatic changes in the shellfish assemblage through time, including a change in species representation and shell size. In terms of weight, oyster dominates the shellfish assemblage throughout the deposit. However, a more complex pattern emerges when minimum number of individuals (MNI), average shell length, shell size classes and weight of shell to non-shell are examined. This analysis revealed that oyster MNIs initially increased through time and then decreased rapidly. The average length and total weight of oyster per excavation unit followed a similar pattern. This indicator of possible predation pressure on oyster coincides with an increase in the deposition of mud ark (*Anadara trapezia*), hairy mussel (*Trichomya hirsuta*) and other shellfish. In the terminal two excavation units, however, overall shell MNIs and weight per excavation unit decreases with concomitant increases in the average lengths of mud ark. This pattern could imply a reliance on oysters, suggesting the possibility that when this resource diminished the value of the site waned leading to its gradual abandonment. These suppositions are based on only a partial analysis of the site and more research needs to be done before any explanation can be put forward with any confidence.
Abstract

The change in subsistence strategy, from hunting and gathering to agriculture, and the associated development of social hierarchy form a series of changes of particular biological interest. There are two main aspects to these changes, which interact and modify each other; the first relates to human biology and human variation, and the second to the history of population movements along the Nile.

The emergence of Egyptian civilisation was preceded by the introduction of agriculture in the Nile Valley. The emergence of the First Dynasty was a major development in the political and sociocultural transformation of the agricultural communities inhabiting the lower Nile Valley.

This paper concentrates on understanding the population affinities of the skeletal groups studied, employing craniometric variation in the absence of available reliable genetic data. These results suggest that a level of local population continuity exists within Egyptian populations, but also some changes in population structure, which reflect immigration and admixture of new groups. The composition of the morphological groups was then compared with archaeological evidence for social groupings, to further understand Egyptian social differentiation.

The patterns of population change suggested by the craniometric analyses were compared with both previous genetic studies, and with archaeological evidence to develop new hypotheses surrounding the formation of the Egyptian State.
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