

## BEN MARWICK

### education

Ph.D., Archaeology and Natural History, Australian National University, 2008.

Dissertation: *Stone artefacts and human ecology at two rockshelters in Northwest Thailand*

M.A., Archaeology, University of Western Australia, 2002.

Dissertation: *Inland Pilbara Archaeology: A Study of Variation in Aboriginal Occupation over Time and Space on the Hamersley Plateau*

B.A. (Hons.), First Class, University of Western Australia, 1999.

### employment

Senior Research Fellow (ARC Future Fellow), University of Wollongong, 2015–present.

Associate Professor in Archaeology, University of Washington, 2015–present.

Assistant Professor in Archaeology, University of Washington, 2008–2015.

Consultant Archaeologist, Huonbrook Environment and Heritage, South Australia, 2006–2008.

Research Associate, Society, State and Governance in Melanesia Project and The Pacific Centre, Research School of Pacific and Asian Studies, The Australian National University, 2006–2008.

### research projects & grants

Marwick, B. ‘Palaeolithic archaeology in Myamnar and western Thailand’ Australian Research Council Future Fellowship (awarded Sept 2014, TDC AUD 640,000)

Louys, J., B. Marwick, J. Stevenson, G. Price. “Super-volcanos and the human evolutionary trajectory: examining the ecological impacts of the Toba eruption on late Pleistocene hominids and fauna.” Leakey Foundation (awarded April 2014, TDC USD 12,552)

Marwick, B. Deutscher Akademischer Austausch Dienst, Research Visit Travel Grant (awarded 2014, sole PI, TDC USD 6,000)

Marwick, B. “Micromorphology at key archaeological sites at the end of the arc of modern human dispersal”, UW Royalty Research Fund, (awarded 2014, sole PI, TDC USD 31,005)

Marwick, B and S. Kwak. “Long-term chronology of subsistence and the role of intensive rice agriculture in the central part of the prehistoric Korean peninsula”, National Science Foundation Doctoral Dissertation Research Improvement Grant, (awarded 2013, PI with graduate student, TDC USD 23,373)

Roberts, R., Mokhtar Saidin, Ben Marwick, Dong Truong Nguyen, Nigel Spooner, Regina DeWitt, Anatoly Rosenfeld, Zenobia Jacobs, Bo Li, Susanna Guatelli,

- C. Clarkson, Adam Brumm and Kat Szabó “Out of Asia: unique insights into human evolution and interactions using frontier technologies in archaeological science”. Australian Research Council (awarded 2013, TDC AUD 3,182,338)
- Lewis, H. and B. Marwick, University College Dublin Seed Funding. University College Dublin (awarded 2012, Co-PI, TDC EUR 5,200.00)
- Marwick, B. Vice Provost’s International Faculty Exchange Grant (awarded 2012, PI, TDC USD 3500)
- Marwick, B. “Investigating modern human origins and early behavioural complexity in Australia”, UW Office of Research Trans-Pacific Early Career Academic Fellowship (awarded 2011, sole PI, TDC USD 13,125)
- Marwick, B. UW Office of Global Affairs Herbert H. Gowen International Studies Award (awarded 2011, sole PI, TDC USD 2,500)
- O’Connor. S., J. Fenner, J. Stevenson, K. Dobney, B. Marwick, E. St Pierre and G. Larson “The Archaeology of Sulawesi: A Strategic Island for Understanding Modern Human Colonization and Interactions Across our Region”, Australian Research Council (awarded 2010, Co-PI, TDC AUD 1,757,919)
- Clarkson, C., B. Marwick, L. Wallis, M. Smith and R. Fullgar “Modern Human Origins and Early Behavioural Complexity in Australia and South East Asia”, Australian Research Council (awarded 2010). (Co-PI, TDC AUD 1,189,790)
- Marwick, B. UW Centre for Statistics in the Social Sciences Undergraduate Research Grant (awarded 2010, sole PI, TDC USD 4,480)
- Marwick, B. UW Office of Global Affairs Herbert H. Gowen International Studies Award (awarded 2010, sole PI, TDC USD 5,000)
- Marwick, B. UW Centre for Statistics in the Social Sciences Seed Grant (awarded 2009, sole PI, TDC USD 18,347)
- Marwick, B. Dorothy Cameron Prize for best archaeological publication at The Australian National University (awarded 2008, AUD 500)
- Marwick, B. Postgraduate Research Grant, Australian Institute of Nuclear Science and Technology (awarded 2007, sole PI, TDC AUD 5,000)
- professional  
awards
- Fellow, Technology Teaching Institute, UW Center for Teaching and Learning (awarded 2013, sole PI, TDC USD 7,000)
- Post-Doctoral Fellow, ACLS/Luce Foundation (Awarded 2010, sole PI, TDC USD 35,000)

talks &  
presentations

*Invited scholarly talks (since 2009)*

- Marwick, B. Convener and Chair, [Roundtable Discussion on Myanmar and the Rohingya Crisis](#) UW Southeast Asia Centre, 11 Jan 2018, Seattle, with 5 UW faculty panelists
- Marwick, B. 2018. "Adaptations to sea level change and transitions to agriculture at Khao Toh Chong rockshelter, Peninsular Thailand", Invited presentation, Washington State University, 18 Jan 2018
- Marwick, B. 2017 "Madjedbebe, Australia's earliest archaeological site Site formation, artefact movement and human behaviour", Invited workshop presentation at the 'Using Archaeological Sciences to Address Human Behaviour' workshop, University of Tübingen, Germany, 12-17 Nov, 2017
- Marwick, B. 2017. "rrtools: writing reproducible research", Invited workshop presentation presented at the DataONE WholeTale 'Prov-a-thon', University of Illinois, August 31–September 1, 2017
- Marwick, B. 2017. ["Extracting Sunbeams Out of Cucumbers: Why Archaeology Isn't a Science, and How It Can Become One"](#) Keynote presentation, Summer School on Computational Archaeology, Freie Universität Berlin, 17-21 July 2017
- Marwick, B. 2017. "A Practising Academic's View of Field Data Collection Technologies." Workshop on Archaeological Database Evaluation, Cotsen Institute of Archaeology, UCLA, Jun, 9, 2017. Invited Presentation.
- Marwick, B. 2017. ["Reproducible Research Compendia via R packages."](#) ZüKoSt: Seminar on Applied Statistics, ETH-Zurich, Mar, 2, 2017. Invited Presentation.
- Marwick, B. 2017. 'Using R in the development sector in Myanmar and Vietnam: Benefits, challenges, and impacts of open source tools for working with data.' Mathematical and Data Sciences for Development Forum, ETH-Zurich, Mar, 1, 2017. Invited Presentation.
- Marwick, B. 2017. ["The Galisonian program, hard cores, and mirror recursion in Archaeological science."](#) Conference on Critical Perspectives on the Practice of Digital Archaeology, Harvard University, Feb, 3, 2017. Keynote Presentation.
- Marwick, B. 2016. "Geoarchaeology of tektites in mainland Southeast Asia." Symposium on Anh Khe Archaeology, Institute of Archaeology, Vietnam, Oct, 30, 2016. Invited Presentation.
- Marwick, B. 2016. ["Computational reproducibility in research and teaching: A case study from archaeology."](#) University of Wollongong National Institute for Applied Statistics Research Australia, May, 25, 2016. Invited Presentation.

- Marwick, B. 2016. "Moving on from Movius: Recent research in Pleistocene archaeology in Myanmar." Monash University Archaeology Department, Melbourne, May, 17, 2016. Invited Presentation.
- Marwick, B. 2016. "[Computational Reproducibility in Archaeological Research: Basic Principles and a Case Study of Their Implementation](#)." Monash University Econometrics and Business Statistics, Melbourne, May, 17, 2016. Invited Presentation.
- Marwick, B. 2016. "Mau A and the Hoabinhian-Sonvian transition." Vietnam Institute of Archaeology, Hanoi, Vietnam, 6 May 2016. Invited Presentation.
- Marwick, B. 2015. "Three styles of Darwinian evolution in the analysis of stone artefacts Which one to use in East/Southeast Asia?" Department of History, Kyung Hee University, Seoul, Korea, Mar 3, 2015. Invited Presentation.
- Marwick, B. 2014. "Palaeolithic archaeology in mainland Southeast Asia". Department of Archaeology, University of Yangon, Myanmar. Jan 19, 2014. Invited Presentation.
- Marwick, B. 2014. "A primer on reproducible research: Basic principles and common tools". Department of Applied Mathematics and Theoretical Physics, University of Cambridge. Nov 11, 2014. Invited Presentation.
- Marwick, B. 2013. "Research Report on Middle Holocene Research in mainland Southeast Asia". Southeast Asia Archaeology Workshop, University of Hawaii-Manoa, April 2013. Invited Presentation.
- Marwick, B. 2013 "The Hoabinhian of Southeast Asia and its relationship to global Pleistocene lithic technologies". International Symposium on the Palaeolithic Cultures in Taiwan and Its Surrounding Areas, Academia Sinica, Taitung, Taiwan, 29-31 March 2013. Invited Presentation.
- Marwick, B. 2013 "Pleistocene lithic technologies in Mainland Southeast Asia: How does the Hoabinhian fit in?" International Conference on Recent Advances in the Archaeology of East and Southeast Asia. University of Wisconsin-Madison, Wisconsin, USA, March 15-16, 2013. Invited Presentation.
- Marwick, B. 2012 "Cultural Phylogenetics of Religion using Thai and Lao Bronze Buddha Statues". Department of Archaeology, University College Dublin, Ireland. Nov 22, 2012. Invited Presentation.
- Marwick, B. 2009 "Pleistocene Exchange Networks as Evidence of Language Evolution". UBC/SFU Human Evolution, Culture and Cognition seminar series, UBC, Vancouver, Canada. Invited presentation

*Contributed scholarly talks & presentations (since 2009)*

- Marwick, B. et al. [Modeling the Innovation and Extinction of Archaeological Ideas](#), presentation at the Society of American Archaeology meeting, 13-15 April, 2018, Washington DC.
- Marwick, B. and S. Schmidt 2018. "[Reproducible research in archaeology using R & rrttools](#)", presentation at the Computer Applications and Quantitative

- Methods in Archaeology (CAA) Annual Conference, 2018, Tubingen, Germany, 19-21 Mar 2018.
- Marwick, B. et al. 2017 “Stratigraphy, site formation, and artefact taphonomy at Madjedbebe, NT” presentation at the Australian Archaeological Association Conference, 2017, Melbourne, Australia, 6-8 Dec 2017.
- Yue H., B. Marwick, W. Huang, J. Zhang and B. Li 2017. “Middle Pleistocene Lithic Technology at Guanyingdong, Guizhou Province, China”. Peer-reviewed presentation at the Society of American Archaeology conference, Apr 2017, Vancouver.
- Marwick, B. 2017. “Moving on from Movius: Recent research in Pleistocene archaeology in Myanmar”. Peer-reviewed presentation at the Society of American Archaeology conference, Apr 2017, Vancouver.
- Conrad, C., C. Higham, M. Eda and B. Marwick 2016 “Hunter-Gatherer Foraging Adaptations at Spirit Cave and Banyan Valley Cave (Mae Hong Son Province, Northwest Thailand) During the Late Pleistocene and Holocene.” Peer-reviewed presentation at the SEAMO-SPAFA conference, Apr 2016, Bangkok, Thailand.
- Kretzler, I., J. Whittaker and B. Marwick 2015. “Grand Challenges vs Actual Challenges: Text Mining Small and Big Data for Quantitative Insights”. Peer-reviewed presentation at the Society of American Archaeology conference, Apr 2015, San Francisco.
- Marwick, B. 2015 “[Reproducible Research in Archaeology: Basic Principles and Common Tools](#)”. Peer-reviewed presentation at the Society of American Archaeology conference, Apr 2015, San Francisco.
- De Boer, D., Zara Steinhart, Ben Marwick, David Bulbeck and Sue O’Connor. 2015 “Stone Artefacts from Southeast Sulawesi: Technology Beyond the Toalean”. Peer-reviewed presentation at the Society of American Archaeology conference, Apr 2015, San Francisco.
- Marwick, B. and Maloney, T. 2014 “[Elliptical Fourier Analysis Unravels a Palimpsest of Point Technology in the Kimberley, Western Australia](#)”. Peer-reviewed presentation at the Society of American Archaeology conference, Apr 2014, Austin.
- Kretzler, I. and B. Marwick 2014 “[Understanding Archaeological History Through Textual Macroanalysis: The Role of Feminism in Gender Research](#)”. Peer-reviewed presentation at the Society of American Archaeology conference, Apr 2014, Austin.
- Sonethongkham, S. and B. Marwick 2014 “Variation in cores excavated from four rockshelter sites in Luang Prabang Province, Lao PDR”. Peer-reviewed presentation at the Indo-Pacific Prehistory Association conference, Jan 2014, Siam Reap.
- Marwick, B. and S. Sonethongkham 2014 “Patterns in Holocene flaked artefact technology from excavations in Luang Prabang Province, Lao PDR”. Peer-reviewed

- presentation at the Indo-Pacific Prehistory Association conference, Jan 2014, Siam Reap.
- Marwick, B. C. Clarkson, S. O'Connor and S. Collins 2014 "Pleistocene lithic technology from East Timor: remarkable long term stability in technological behaviours". Peer-reviewed presentation at the Indo-Pacific Prehistory Association conference, Jan 2014, Siam Reap.
- Hayes, E., R. Fullagar, C. Clarkson, M. Smith and B. Marwick 2014 "Pleistocene evidence for seed grinding in Australia". Peer-reviewed presentation at the Indo-Pacific Prehistory Association conference, Jan 2014, Siam Reap.
- Steele, T, A. Mackay, K. Fitzsimmons, B. Marwick, J. Orton, S. Schwartz, M. Stahlschmidt 2014 "Varsche Rivier 003: A Middle Stone Age site with Still Bay and Howiesons Poort assemblages in southern Namaqualand, South Africa." Peer-reviewed presentation at the European Society for the study of Human Evolution (ESHE). 18-20 September, 2014, Florence, Italy.
- Clarkson, C., M. Smith, B. Marwick, R. Fullagar, T. Manne, K. Lowe, X. Carah, A. Florin, A. Fairbairn, C. Pardoe and L. Wallis 2014 "Excavations at Malakunanja II, northern Australia", Peer-reviewed presentation at the Indo-Pacific Prehistory Association conference, Jan 2014, Siam Reap.
- Clarkson, C., M. Smith, R. Fullagar, B. Marwick, T. Manne, L. Wallis, Z. Jacobs, R. Roberts, K. Lowe, A. Florin, X. Carah, C. Pardoe and E. Hayes 2013 "Report on new research at Madjedbebe (Malakunanja II)". Peer-reviewed presentation at the Australian Archaeological Association Annual Conference, Dec 2013, Coff's Harbour.
- Wallis, L., C. Pardoe, T. Manne, K. M. Lowe, J. Matthews, C. Clarkson, B. Marwick, R. Fullagar and M. Smith 2013 "Much more than just an old site: Human remains from the 2012 excavations at Madjedbebe, western Arnhem Land, Australia". Peer-reviewed presentation at the Australian Archaeological Association Annual Conference, Dec 2013, Coff's Harbour.
- Lowe, K. L. A. Wallis, C. Pardoe, B. Marwick C. Clarkson, T. Manne, M. Smith and R. Fullagar. 2013 "Ground-penetrating radar, GIS and burial practices in western Arnhem Land, Australia". Peer-reviewed presentation at the Australian Archaeological Association Annual Conference, Dec 2013, Coff's Harbour.
- Hayes, E. R. Fullagar, C. Clarkson, B. Marwick, M. Smith, L. Wallis and T. Manne, 2013 "Pleistocene evidence for seed grinding in Australia". Peer-reviewed presentation at the Australian Archaeological Association Annual Conference, Dec 2013, Coff's Harbour.
- Florin, A., C. Clarkson, A. Fairbairn, R. Fullagar, B. Marwick, L. Wallis, X. Carah, T. Manne and M. Smith. 2013 "Archaeobotanical investigations into plant food use at Madjedbebe (Malakunanja II)". Peer-reviewed presentation at the

- Australian Archaeological Association Annual Conference, Dec 2013, Coff's Harbour.
- Marwick, B. E. Hayes and C. Clarkson 2013 "Movement of lithics by trampling: An experiment in the Malakunanja II sediments". Peer-reviewed poster at the Society of American Archaeology Annual Meeting, April 3-7, Honolulu, Hawaii. 2013
- Macy, K., B. Marwick, B. S. Hanyu, C. Conrad and A. Mackay 2013 "Where did the dirt come from? Geochemical sediment tracing at Klipfonteinrand rockshelter, western South Africa". Peer-reviewed poster at the Society of American Archaeology Annual Meeting, April 3-7, Honolulu, Hawaii. 2013
- Bulbeck, D., B. Marwick, S. O'Connor, F. Aziz, A. Calo, J. Fenner, B. Hakim, A. Oktaviana and E. St Pierre 2013 "Archaeology of Lake Towuti: Survey and Excavation in South Sulawesi". Peer-reviewed poster at the Society of American Archaeology Annual Meeting, April 3-7, Honolulu, Hawaii. 2013
- Marwick, B., P. Hiscock, P. Hughes and M. Sullivan. 2013 "The use of mobile Geographic Information Systems for intensive archaeological survey in arid northeastern South Australia". Peer-reviewed presentation at the Computer Applications and Quantitative Methods in Archaeology Conference, University of Western Australia, Perth, Australia, March 18-21, 2013
- Marwick, B. "How archaeologists explain (and how they ought to): Theory and practice of explanation in Australian archaeology". Peer-reviewed presentation at the Australian Archaeological Association, Wollongong, Australia, Dec 2012.
- Marwick, B, Anna Cohen, S. Kwak, K. Macy and A. Cowan 2011 "Geoarchaeology of Iron Age ceramics at Tham Sua Cave, Northern Lao PDR". Peer-reviewed poster at the Society of American Archaeology Annual Meeting, Sacramento, CA.
- Marwick, B, T. Field, J. Martinez, P. Przystupa, K. Abbott, K. Macy, L. Minchik, P. Hughes and M. Sullivan 2010. "Landscape archaeology in arid northeast South Australia: Preliminary investigations into relationships between site distributions, surface geology, water sources and wind patterns". Peer-reviewed poster at the Australian Association of Archaeology Annual Conference, Bateman's Bay, New South Wales.
- Marwick, B, S. O'Connor and S. Collins 2010. "Pleistocene-aged stone artefacts from Jerimalai, East Timor: Early modern human technology in island Southeast Asia". Peer-reviewed presentation at the 13th International Conference of the European Association of Southeast Asian Archaeologists (EurASEAA), Berlin, Germany.
- Marwick, B and Vanpheng Keopanna 2010. "A pilot study of Geometric morphometric analysis of bronze Buddha craft traditions in the Lao PDR". Peer-reviewed

presentation at the 13th International Conference of the European Association of Southeast Asian Archaeologists (EurASEAA), Berlin, Germany.

Marwick, B, 2010. “Do Model-based explanations suit archaeology better than Inference to the Best Explanation?” Peer-reviewed presentation at the Society of American Archaeology Annual Meeting, St Louis, MO.

Marwick, B, Ariel Auerbach and A. Cowan 2009. “Geoarchaeology at Tham Sua Cave, Luang Prabang Province, Lao PDR”. Peer-reviewed presentation at the Indo-Pacific Prehistory Association Congress, Hanoi, Vietnam.

Brockwell, S., B. Marwick, P. Bourke, P. Faulkner, R. Willan 2009. “Climate change records from North Australian cultural midden deposits: evidence from a pilot study of oxygen isotopes in mollusc shells”. Peer-reviewed presentation at the Australian Archaeological Association Annual Conference, Flinders University, Adelaide, South Australia.

## Service

### *Professional service*

- Co-chair of the committee for the Institute for Southeast Asian Archaeology Early Career Award in Archaeology.
- Committee member for the Open Context and Carleton Prize for Archaeological Visualization.
- Committee member for the Society of American Archaeology publications committee.
- Member for the Society of American Archaeology Task Force for the Implementation of Data Availability and Data Archiving Recommendations.

### *Editorial service*

My current editorial contributions include:

- Editorial Board member, Scientific Data
- Associate Editor, Journal of World Prehistory
- Associate Editor, Frontiers in Digital Archaeology
- Editorial Advisory Board, Heliyon

### *Reviewer service*

In the last five years I have reviewed manuscripts and proposals for:

- Australian Research Council



- National Science Foundation
- National Geographic Society
- Leakey Foundation
- *Nature*
- *Journal of Human Evolution*
- *Journal of Archaeological Science*
- *Journal of Archaeological Science: Reports*
- *Journal of Archaeological Method and Theory*
- *Archaeological and Anthropological Sciences*
- *Journal of Field Archaeology*
- *Journal of Indo-Pacific Archaeology*
- *Archaeology in Asia*
- *American Antiquity*
- *Archaeology in Oceania*
- *Australian Archaeology*
- *Antiquity*
- *Quaternary Science Reviews*