CURRICULUM VITAE William Robert (Sam) Challis MSt, DPhil (Oxon) sam.challis@wits.ac.za

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H-index 19 – Scholar

16 - ResearchGate

10 – Scopus

i10-index 24 – Scholar

Citations 1165

Education

2004–2008 University of Oxford DPhil (AHRC Studentship) Archaeology

The impact of the horse on the AmaTola 'Bushmen': new identity in the Maloti-

Drakensberg mountains of southern Africa.

2002–2003 University of Oxford MSt (Distinction) World Archaeology

Many paintings, no ethnography: rhebok in the art of the south-eastern mountains

of southern Africa.

1993–1996 University of Durham BA (Hons) Archaeology

Current positions

2020-present Director, Rock Art Research Institute (RARI) University of the Witwatersrand,

Johannesburg, South Africa

2017–present Senior Researcher (permanent) Univ. Witwatersrand, Johannesburg, South Africa

Previous positions

2014–2016 Senior Researcher, Rock Art Research Institute, Univ. Witwatersrand, South Africa

2011–2013 Lecturer, Department of Archaeology School of Geography, Archaeology and

Environmental Studies, University of the Witwatersrand, Johannesburg, South

Africa

2009–2011 Postdoctoral Research Fellow, RARI, Univ. Witwatersrand, South Africa

Fellowships and awards

2022 Edinburgh University 'Africa Fellowship' at the Institute for Advanced Studies in

the Humanities: Digital innovation in decoloniality: enhancing the images of

'Bushman' resistance.

2014–2018 'Y2' (Young) Rated Scientist. Internationally peer-reviewed scientific rating.

National Research Foundation, South Africa.

2017 Outstanding Academic Title by Choice Journal. Chapter in edited volume. Tribing

and Untribing the Archive (Hamilton and Liebhammer, eds.) Article: Re-tribe and

resist: the ethnogenesis in response to colonisation.

2012 Best Article: Journal of Southern African Studies Terence Ranger Prize:

Creolisation on the nineteenth-century frontiers of southern Africa.

Postdoctoral Fellows hosted and advised

2021-2023	Vibeke Viestad (PhD Oslo) Three-years; Norwegian Research Council
2021-2022	Joshua Kumbani (PhD Wits) Two-year Mellon-funded project
2021	Andrew Skinner (PhD Wits) Six-month writing fellowship
2020	Brent Cinclair Thomash (DhD Wite) Civ. month writing followship

2020 Brent Sinclair-Thomson (PhD Wits) Six-month writing fellowship 2016–2017 Tim Forssman (DPhil Oxon) One-year NRF Innovation postdoc

2015–2016 Mark McGranaghan (DPhil Oxon) One-year postdoc Claude Leon Foundation

2014–2015 Mark McGranaghan One-year postdoc; Claude Leon Foundation 2012–2014 Mark McGranaghan Two-year NRF African Origins Platform

Professional Organisation Membership

- Fellow of the Royal Anthropological Institute
- Association of Southern African Professional Archaeologists (ASAPA) 277
- PanAfrican Archaeological Association for Prehistory and Related Studies (PanAf).
- Society of Africanist Archaeologists (SAfA)
- Society for American Archaeology (SAA) 67592158
- World Archaeological Congress (WAC)

Honorary and contract positions held

2024-present	Research Affiliate, Museum of Anthropological Archaeology, University of Michigan, USA.
2022	Africa Fellow, Institute for Advanced Studies in the Humanities (IASH) University of Edinburgh
2021-present	Member of the Bradshaw Foundation Rock Art Network
2018–2021	Regional Representative, southern Africa, PanAfrican Archaeological Association for Prehistory and Related Studies (PanAf).
2013–2015	Transformation Officer, Association of Southern African Professional Archaeologists

Institutional responsibilities (examples)

Director, Rock Art Research Institute, University of the Witwatersrand
The Dean's Select Committee for the Earth Sciences Cluster, Univ. Witwatersrand
Convener of the RARI Scientific Advisory Committee
Honours Course Co-ordinator 'Theory of Archaeology IV', Archaeology Department
Chair of the Patrons Committee of the Rock Art Research Institute
Futureproofing Our Past: fundraising initiative for RARI Transformation posts
The Dean's Centenary Champions Committee, Fac. of Science, Univ. Witwatersrand
External Exams Moderator, Dept. Anthropology and Archaeology, Univ. Pretoria
Human Research Ethics Committee (non-medical), Univ. Witwatersrand
First Year Co-ordinator, Archaeology Dept., Univ. Witwatersrand
Honours Year Co-ordinator, Archaeology Dept., Univ. Witwatersrand
Publications Subsidy Officer, Archaeology Dept., Univ. Witwatersrand

Editorial Board, Monograph Series, Centre for Rock Art Research and Management (CRAR+M) University of Western Australia, Perth.

Peer-reviews for: Antiquity; Current Anthropology; Cambridge Archaeological Journal; Quaternary International; Journal of the Royal Anthropological Institute; Journal of African Archaeology; Azania Archaeological Research in Africa; Encyclopaedia of Global Archaeology; The South African Archaeological Bulletin; Southern African Humanities.

Assessments for: FIAS French Institutes for Advanced Study Fellowship Programme; National Research Foundation, South Africa; Riksbankens Jubileumsfond Grants Foundation, Stockholm, Sweden.

Funds raised (examples in 2021-23) – total R4,420,988 (£184,309 GBP)

2023	Capex – Two new servers for RARI Digital Archives R413,396
2021-23	Canon S.A. – Three Transformation posts for RARI Digitization Lab R1,979,860
2022	Centenary Fund, Wits University – Permanent exhibit in Origins Museum R500,000
2021	Rupert Art Foundation – Two Transformation posts for RARI Junior Lecturers R1,404,000
2021	Research Office – QNAP Network Attached Storage archive backup devices R123.732

Research Grants - total £354,009 GBP

2022	University of Edinburgh IASH Africa Fellowship £6200 GBP
2022	European Research Council (ERC) IPERION Heritage Science – Research Grant Stone Age colouring material procurement strategies in southern African mountain ranges with G. Mauran (PI), P. de la Peña and T. Hodgskiss. €10,000 (£8,580 GBP)

2021	University of Edinburgh and University of the Witwatersrand joint seed funding. Rock Art Scotland South Africa (RASSA) – innovative and cost-effective digital rock art recording with local community custodians. £5,000 GBP
2019–2021	African Origins Research Platform - National Research Foundation, South Africa Research Award: Operating costs; Student support; Technical Skills Award R1,940,000 (£104,942 GBP)
2017–2018	Seed Grant - Department of Afroamerican and African Studies, University of Michigan Highland Lesotho Ecomuseum Project \$9,170 USD (£7,092 GBP)
2014–2019	'Y2' Rated Scientist. National Research Foundation, South Africa R40,000 per annum (total £10,813 GBP)
2013–2015	African Origins Research Platform - National Research Foundation, South Africa Research Award: Operating costs; Postdoctoral support; Student support; Technical Skills Award. R2,199,000 (£118,900 GBP)
2014	University of the Witwatersrand Research Office CAPEX call for equipment funding. R80,244 (£4,325 GBP)
2012	African Origins Research Platform - National Research Foundation, South Africa Research Award: Operating costs; Technical Skills Award R542,208 (£29,311 GBP)
2011	African Origins Research Platform - National Research Foundation, South Africa Research Award: Operating costs; Postdoctoral support; Student support; Technical Skills Award; Technical Equipment Award R1,088,338 (£58,846 GBP)

Professional posts responsibilities

2020-present	Director , Rock Art Research Institute (RARI) University of the Witwatersrand, Johannesburg, South Africa	
2017-present	Senior Researcher (permanent staff) , Rock art Research Institute (RARI) University of the Witwatersrand, Johannesburg, South Africa	
2014–2016	Senior Researcher , Rock art Research Institute (RARI) University of the Witwatersrand, Johannesburg, South Africa.	

To interpret material culture in the idiom of its indigenous authors using ethnographic, historical and neuropsychological means. Continuing to co-ordinate and teach the undergraduate *World Hunter-Gatherer* and rock art courses as well as Honours Theory for the Archaeology Division.

Curating the archive of the Rock Art Research Institute, both physical and digital, brokering collaboration agreements and overseeing loans and permit applications.

Supervising Honours (a separate fourth year in South Africa), Master's and PhD students and continuing as Principal Investigator of a research programme: the Matatiele Archaeology and Rock Art programme – which endeavours to engage with the local community training members to become archaeological Field Technicians. To discover, document, publish and present the archaeology of this neglected former-apartheid homeland. Having also been Transformation Officer to the ASAPA board from 2013-15, I am committed to securing official professional accreditation for these Field Technicians, thus ensuring them, and future technicians, further employment as well as uplifting previously-disadvantaged students.

2011–2013 Lecturer, School of Geography, Archaeology and Environmental Studies University of the Witwatersrand, Johannesburg, South Africa.

Lecturing in archaeology and rock art studies from first to fourth year (Hons.) level as well as supervising Honours and Masters students' dissertations. Courses taught: World Hunter-Gatherers at first year, Southern African Rock Art and World Rock Art at second and third year, and Approaches to World Rock

Art at Honours level. Field School supervision carried out as a compulsory component of the archaeology course, but supplemental trips also undertaken as part of the MARA research programme. Administrative duties for the archaeology division included first year and Honours course co-ordination, exams co-ordination and publication co-ordination and submission. The lectureship was a three-year non-renewable contract position.

2009-2011

Post-doctoral Research Fellow, Rock art Research Institute (RARI) University of the Witwatersrand, Johannesburg, South Africa.

Research Fellowship with Professor D. Lewis-Williams to investigate the decipherment of rock art based on testimonies of San teachers on rock art images. Location and re-recording of sites copied in the nineteenth-century in order to assess their accuracy and hence the reliability of the informants' remarks. The book, 'Deciphering Prehistoric Minds' was published by Thames & Hudson in 2011. A significant amount of fieldwork carried out to obtain the data for this publication.

Involved with the running of the Institute from procurement of equipment to vehicle maintenance. Involved in the organisation of the 14th PAA Congress (PanAfrican Archaeological Association for Prehistory and Related Studies) held in Johannesburg in 2014.

06/2003-06/2004

Research Assistant, Oxford University

Research Assistant to P. Mitchell, Professor of African Archaeology, Oxford. Illustrating archaeological data for publication, including the book *African Connections*.

03/04/2005-14/04/2005

Archaeologist to expedition to the Mauritanian Sahara

Investigating a report of a new rock art discovery in the Tagant region of Mauritania, West Africa. Undertaken with the University of East Anglia and the Trust for African Rock Art (TARA). Funded by the British Academy and National Geographic. Results published in the *Journal of North African Studies* in 2005.

02/1999-06/2002

Research Officer, Rock Art Research Institute (RARI), University of the Witwatersrand, Johannesburg, South Africa.

Research Officer undertaking the location, recording and preservation of rock art sites in all provinces of South Africa as member of the Rock art 911 or 'Rapid Response Field Team'. Called out to sites reported by public; dealing with land managers, the press and academics (see 'Fieldwork'). Co-author of nationwide land manager's information pack. Illustrations for D. Lewis-Williams book *The Mind in the Cave* in 2001-02.

Teaching experience (for details please refer to my Teaching Portfolio)

The following describes responsibilities held, teaching philosophy as well as courses designed from starting as a postdoctoral fellow through to being Director and Senior Researcher at the Rock Art Research Institute, in the Faculty of Science, University of the Witwatersrand, including posts as Course Co-ordinator for rock art studies and Course Co-ordinator for 1st Year and Honours in archaeology.

In my undergraduate teaching I have introduced new methods to the Archaeology Department at the University of the Witwatersrand based partly on my teaching experience at Oxford, and partly on the *Community of Philosophical Inquiry* approach. In the absence of capacity to give students sufficient one-to-one tutorial attention (sometimes classes over 100 students), I have addressed the problem using peer-learning and the Read-Enquire-Write method. Put simply, students prepare three items from each of their readings: a quote, a question for clarification (short answer) and a question for discussion. Dividing the class into groups of between three and five, the students spend the first half of a two-hour tutorial engaging with each other's questions and choose one (or prepare a new one) to be presented to the class as a whole. In the second half the questions that they have prepared are debated by the entire class. In all this the teacher or tutor acts as a facilitator to make sure everyone has an opportunity to speak, with 'complete turn-taking'. The idea is that the questions, the debate, and the subsequent retention of information, are all driven by the students themselves as opposed to being delivered by the teacher. This system has met with some success and is now used in the Academic Development classes run by the Archaeology Department.

Before describing the courses designed, I list my undergraduate and Honours year teaching experience in reverse chronological order (the academic year runs from January to November in four blocks).

Sabbatical (Institute for Advanced Studies in the Humanities, University of Edinburgh)

2022	Sabbatical (Institute for Advanced Studies in the Humanities, University of Edinburgh)
2021	Course Co-ordinator for 4 th Year Honours Theory of Archaeology IV
2020	Course Co-ordinator for 1st Year Archaeology
2018 – present	4 th Year Honours <i>Theory of Archaeology IV</i> Week 2 <i>Marxist Archaeology.</i> Part of a multicomponent/multiple lecturer theory course for the Honours Year, assessed by seminar, annotated bibliography and essay
2018 – present	1st Year World Hunter-Gatherers. Course design updated from that developed in 2011-13
2017 – present	3 rd Year Southern African Rock Art. Course design updated from 2011-13
2016	2 nd Year <i>World Rock Art.</i> Course design based on that developed in 2010 and updated in 2013. The course is taught by RARI colleague, Catherine Namono
2016	3rd Year Southern African Rock Art. Course design updated from 2014-15 Teaching was shared between myself and my postdoctoral fellow, Tim Forssman
2014 – 2015	3rd Year <i>Southern African Rock Art.</i> Course Co-ordinator and supervisor. Course design updated from 2011-13. Teaching was shared between myself and my postdoctoral fellow, Mark McGranaghan, as well as Dr Rachel King and Dr Catherine Namono
2013	Course Co-ordinator for 1st year Archaeology
2012	Course Co-ordinator for 4th Year (Hons) Archaeology
2011 – 2013	As Lecturer in Rock art Studies, Division of Archaeology 1st Year World Hunter-Gatherers, 3rd Year Southern African Rock Art
2010	As postdoc and contract lecturer, Division of Archaeology 1st Year Introduction to Southern African Rock Art, 2nd Year World Rock Art.

<u>Position</u>		Course	Student numbers	Contact hours
	• 2010	ARCL1000 Southern African Rock Art	+/-90	56
Postdoctoral fellow	\langle	ARCL2002 World Rock Art*1	+/-35	56
	• 2011	ARCL1000 World Hunter-Gatherers *	+/-90	56
	2 011	ARCL2002 Rock Art Field School*	+/-35	40
_		ARCL4000 Approaches to World Rock Art	* 10	21
Lecturer, Division of Archaeology		ARCL3002 Rock Art Field School*	8	64
aeo	• 2012	ARCL1000 World Hunter-Gatherers *	+/-90	56
۱rch		ARCL2002 Rock Art Field School	+/-35	40
of <i>f</i>)	ARCL3002 Southern African Rock Art *	+/-35	56
ig \prec	,	ARCL4000 Approaches to World Rock Art	10	21
)ivis		& Hons Year Co-ordinator *	14	
er,	• 2013	ARCL1000 World Hunter-Gatherers	+/-90	56
ctur		& 1 st Year Co-ordinator *	+/-90	
Ге		ARCL2002 Rock Art Field School	+/-35	40
		ARCL3002 Southern African Rock Art	+/-35	56
		ARCL4000 Approaches to World Rock Art	10	21
(• 2014	ARCL3002 Southern African Rock Art *	+/-35	32
		ARCL2002 Rock Art Field School	+/-45	40
	• 2015	ARCL3002 Southern African Rock Art	4	16
	• 2016	ARCL3002 Southern African Rock Art	11	16
	• 2017	ARCL3006 Southern African Rock Art *	8	56
		ARCL2002 Rock Art Field School *	+/-45	40
	• 2018	ARCL1000 World Hunter-Gatherers	+/-90	24
		ARCL3006 Southern African Rock Art	8	56
RARI		ARCL2002 Rock Art Field School	+/-45	40
		ARCL4027 Theory of Archaeology IV*	10	4
che	• 2019	ARCL1000 World Hunter-Gatherers	+/-70	40
sear A	<i>)</i>	ARCL3006 Southern African Rock Art	16	56
Res		ARCL4027 Theory of Archaeology IV	10	4
Senior Researcher, λ	• 2020	ARCL1000 World Hunter-Gatherers & 1st Year Co-ordinator	+/-70 +/-70	40
0,		ARCL3006 Southern African Rock Art	16	56
		ARCL4027 Theory of Archaeology IV	10	4
	• 2021	ARCL1000 World Hunter-Gatherers	53	40
		ARCL3006 Southern African Rock Art	21	56
		ARCL 4027 Theory of Archaeology IV & Course Co-ordinator	13 13	8
	• 2023	ARCL1011A World Hunter-Gatherers	122	40
		ARCL3006A Southern African Rock Art	4	56

All teaching at the University of the Witwatersrand comprises a combination of weekly lectures, practicals and tutorials, giving eight hours of contact time per term week, except Honours seminars which give three hours per term week.

¹ *Courses or sections of courses created

Course design

Assessment of undergraduate courses is conducted by term essays and exams marked by me, and by summaries and tests marked by me and my tutors. Honours courses are assessed by weekly reports, term essays and exams, all marked by me and improved annually with the help of student feedback, internal reviewers and external examiners.

- 1st Year: I created and taught the seven-week first year undergraduate course entitled World Hunter-Gatherers. A demanding course to build having to condense the human prehistory of the world (pre-farming) into one teaching block but one which met with some success. From anatomically, then behaviourally, modern humans to the colonisation of each continent and case studies of modern hunter-gatherers. Class practicals require spot-tests and critique of the 1986 documentary television series 'Strangers Abroad: Pioneers of Social Anthropology.
- In 2013 and again in 2020 I was allocated the portfolio of course co-ordinator for 1st year archaeology. Further to normal administrative duties, I was tasked with addressing the issue of 1st Year academic development (AD). The decision was taken to mainstream the AD programme throughout the 1st year Tutorials in order that academic learning might be implemented and progress might be monitored, with the aim of promoting critical thinking. The initiative has met with some success.
- 2nd and 3rd year: Creating and teaching the seven-week course World Rock Art. Using different case studies each year, we take an overview of the rock art of different continents, focusing on case studies from particular regions. For example, we study the rock art of the Arctic Circle, focusing on the images of northern Norway and the ethnographic research on the modern Sami people. Rock art specialists are invited to give guest lectures.
- **3rd Year:** Teaching the seven-week course *Southern African Rock Art.* Having made numerous changes to the pre-existing course, I cover the essential background to the developments in southern African rock art research, addressing San art of the traditional corpus, the post contact art, and the art of Khoe-and Bantu-speaking peoples.
- **Honours Year:** A six-week Honours course in *Approaches to World Rock Art*. In 2011 and 2012 I ran the Honours rock art course. This was a seminar series with selected readings. Students were required to report each week and submit a write-up with the benefit of the seminar discussions.
- In all of this I have been teaching through dialogue, using methods from the Community of Enquiry approach and I work closely with my tutors to ensure students receive the attention they need.

Postgraduate Supervision

2021-present

Postgraduate Supervision		
	Doctoral	
2020-present	Wilby, M. The story of kabbo: negotiating social & sensorial challenges to narrative cinematic representation. Co-supervised with Heatlie, D. of Wits School of the Arts.	
2020-present	Hlangani, M. Into the Unknown: Satellite Remote Sensing for rock shelters in rural mountain regions of South Africa (NRF MARA programme scholarship). Co-supervised with Mhangara, P. of Wits School of Geography, Archaeology and Environmental Studies.	
2019–2020	Sinclair Thomson, B., Bandits of the eastern border: the rock art of raiders in the Eastern Cape, South Africa in the eighteenth and nineteenth centuries (NRF MARA programme scholarship). Upgraded from MSc in 2019 . Co-supervised with Blundell, G. of KwaZulu-Natal Museum. Completed	
2018–2021	Skinner, A., Valley of snakes: rock art and landscape, identity and ideology in the Eastern Maloti-Drakensberg (DAAD/NRF Joint In-Country Masters and Doctoral scholarship). Completed	
	Masters (MSc and MA)	

Mayet, Z. The role of the trickster in San cosmology (RARI scholarship).

2021-present	Bansal, S. Hands from the Past: Hands, Haptics and Handprints in Southern African Khoe-San Rock Art. Co-supervised with Pearce, D.
2019–2021	van den Heever, S. Botanical motifs in the rock art of Zimbabwe (NRF MARA programme scholarship). Co-supervised with Hollman, J. Completed
2018	Jobard, L. The study of the wall grooves of Bushman Rock Shelter (Limpopo, South Africa): chronology and interpretation (EU Erasmus+ scholarship). Co-supervised with Bourdier, C. of University of Toulouse 2 Jean Jaurès. Completed
2017	Sinclair Thomson, B., Indigenising the gun: experiencing and imaging firearms in southern African rock art. Upgraded to PhD in 2019
2014–2017	Skinner, A., In our land: modelling spatial engagements in the engraved landscapes of the Xam (NRF MARA programme scholarship). Part-time. Completed
2014–2015	Zulu, J., The material culture of Hlubi male initiation: a case study from Matatiele, Eastern Cape, South Africa (NRF MARA programme scholarship). Completed
2013–2015	Mokoena, N., Community-involved heritage management: the case of Matatiele (NRF MARA programme scholarship). Completed
2013–2015	Pugin, J., Locating the rock art of the Maloti-Drakensberg: identifying areas of high probability using remote sensing (NRF MARA programme scholarship). Completed
	Honours (Fourth Year BSc and BA)
2024	Xalabile, N. Lithic tool production in the last 2000 years at Gladstone Shelter in the Eastern Cape, South Africa. Co-supervised with Guillemard, I.
2021	Mohlomi, K. The significance and sustainability of the local use and knowledge of the medicinal plants in the Matatiele region.
2021	Greyling, P. Addressing the suitability of rock art archives for heritage management and research: a geographer's perspective on the ARADA archives.
2021	Kgowa, M. Enhancing community engagement in Matatiele: rock art surveys with the DStretch cellphone app.
2021	Zitha, T. Advertising and graffiti: popularizing rock art with unrestricted site access.
2020	Mabehle, N. From seeds to vegetation: an analysis of the identified seeds, fruits and nuts from Bushman Rock Shelter, Limpopo Province. Co-supervised with Sievers, C.
2020	Chetty, D. The dangers of the spirit world: human interactions with monsters in the rock art of the Matatiele Maloti-Drakensberg, Eastern Cape, South Africa.
2019	Mayet, Z. Mr. Jackal in the hide: a study of therianthropic, jackal-headed rock paintings in the Matatiele region of southern Africa.
2017	Maseko, M., 'Looking for Mchithwa': tracking an archaeo-historical event amongst the amaBhaca (1851).
2017	Wallace, K., The impact of iron trade on hunter-gatherers: an ethno-historical analysis of iron artefacts found at Gladstone, Matatiele, Eastern Cape.
2016	Sinclair Thomson, B., Martial Art: Connections between San- and Bantu-speaker peoples' in rock art images of shields and spears (NRF scholarship).
2016	Johnson, K., Monsters Within and Without: Grotesque human figures in San rock art (NRF scholarship).

2015	van den Heever, S., Macrobotanical remains from excavations in Matetiele, Eastern Cape, South Africa (NRF MARA programme scholarship).
2014	Siteleki, M., Plant power and land use: a case study in GIS and IKS in Matatiele, Eastern Cape, South Africa (NRF MARA programme scholarship).
2013	Skinner, A., The war inside: experiences of trauma in San contact-era rock art (NRF MARA programme scholarship).
2012	Pugin, J., Improving rock art survey: finding the sandstone shelters of the Maloti-Drakensberg(NRF MARA programme scholarship).
2012	Regensberg, R., The changing social character of a shelter: a case study from Matatiele (NRF MARA programme scholarship).

Field Schools

2011–present Honours project, Masters and PhD fieldwork

Since its inception in 2011, with the Matatiele Archaeology and Rock Art (MARA) programme and the attendant bursaries, I have accompanied every one of the aforementioned research projects in the field, whether relating to excavations, survey or interviews.

2011–2014 and 2017 Archaeology Division field schools

For the Archaeology Division I run field schools to Clarens, in the Free State, for approximately 35 2nd year students. The format for these field schools has proven very successful. Dividing the class into small groups, they then rotate between 'skill stations' in the rock shelters, where they are given instruction in six different aspects of rock art, surface archaeology and site recording. They then repeat the exercise the following day, without assistance, to test their newly acquired skills. All work is recorded in field journals.

2010 Special field school

With the then RARI Director Benjamin Smith, I organised and ran a 'special' field school for interested students. This proved an enormous success and encouraged several students who have since gone on to Honours and masters level.

2010 Second year field school.

Directed 2nd year field school to Clarens in the eastern Free State. The school was organised in conjunction with the Geography Department.

2009-present Fieldwork with Wits and Oxford students

Each year, owing to continued contact with my DPhil supervisor Peter Mitchell, I take an Oxford undergraduate student into the field as part of their course requirements. This usually consists of the 2nd year departmental field school, as well as a Masters research trip or other research work on the MARA programme.

The fieldwork conducted in 2009, as outlined below, twice involved the participation of students from the University of Oxford. DPhil student Mark McGranaghan and 3rd year student Jamie Coreth (as part of course requirements) accompanied me to sites in the Eastern Cape, and were instructed in the use of cameras, GPS, reflectors, and site-record forms, as well as rock art survey and site sketching. Jamie returned later in the year to make sketches at rock art sites to show the use of the rock face.

2000–2001 Field schools – University of the Witwatersrand

15 students to the Maclear region of the Eastern Cape Drakensberg.

20 students to the Lapalala region of the Waterberg in Northern Province. Teaching in rock art survey, site recording, photography, tracing and interpretation.

Fieldwork

2023-present Maloti SEArCH

Principal Investigator on project Maloti SEArCH 'Surveys in the EthnoArchaeology of Contact and Hybridity' which looks to indigenous rock art of the Winterberg and Maloti-Drakensberg, and living oral traditions to illuminate processes of contact, colonisation, social transformation, and resistance. Fieldwork in May 2023 took us to the site of Khomo Patsoa in southern Lesotho where a previously-unpublished tradition of scratched horses and other motifs of resistance was found, leading to publication in the South African Archaeological Bulletin.

2021–2022 RASSA research project

Co-Principal Investigator on University of Edinburgh/Wits seed-funded project (closely allied with MARA programme below) in which six rural community Field Technicians were equipped with smartphones that were enabled with an enhancement app. Two field trips in 2021 were undertaken to equip and train technicians – to encourage custodianship of heritage sites, to gather data and to start them on their paths to becoming accredited field archaeologists.

2011–2023 MARA research programme – survey, excavations and analysis

Principal Investigator of multi-disciplinary and collaborative research programme in the Matatiele region of the Eastern Cape province, South Africa, awarded prestigious funding from National Research Foundation (NRF) African Origins Platform (AOP) from 2011 to 2015 and from 2019 to 2021. The MARA programme (Matatiele Archaeology Rock Art) was initiated in 2011 in order to redress the history of this region of the former 'Transkei' apartheid-era homeland. The research addresses four key resources of the region's heritage: the historical archives, oral traditions, rock art (paintings) and archaeology. We have undertaken the first systematic survey for rock art in the Matatiele Drakensberg, and the first archaeological excavations. Over 200 sites have been discovered and recorded. Two rock shelters have been excavated: Mafusing Shelter in 2011 and Gladstone Shelter in 2012. Both sites took two months each to complete. Findings from Mafusing were published in the *Journal of African Archaeology* in 2018. Analysis of material is ongoing at the archaeological labs of Wits university. Flotation of organic material in 2013 and 2014 gave tremendous insight into the historic and palaeoenvironmental records of the Maloti-Drakensberg going back some 7000 years.

2015 UNESCO survey and report

Project Director of contract work undertaken by the members of the MARA programme: Rock Art and Baseline Archaeological Survey of the Sehlabathebe National Park, Kingdom of Lesotho for the Ministry of Environment, Tourism and Culture, Kingdom of Lesotho and World Heritage Committee of the United Nations Educational, Scientific and Cultural Organisation (UNESCO). A total of three months' survey (two of which supervised remotely) of extremely hard terrain in the Lesotho Highlands. Results published in final report and Cultural Heritage Management Plan (CHMP) to UNESCO.

2014–2015 Strandberg survey, Karoo, South Africa

Co-supervisor, with my postdoctoral fellow, of Masters student Andrew Skinner, whose thesis is based on an ethnographically-informed understanding of the landscape inhabited by the historical |Xam Bushman people. Three weeks' supervision of surveying in the desert environment of the Karoo.

2010 Re-location and refitting of a rock art panel

Directed (with Benjamin Smith) a special field school for enthusiastic students to the Barkly East district of the Eastern Cape. One of the objectives was to find the original location of a rock art panel removed by Walter Battiss in the 1940s and now housed in the Origins Museum. The site was re-located and photographed for a virtual refitting.

2009 Fieldwork for book 'Deciphering Ancient Minds' (Thames & Hudson 2011)

Five research field trips from March to December 2009. Sites recorded in the nineteenth-century were relocated, photographed, and in some cases traced for publication (e.g. *Before Farming* 2010). Fieldwork centred around the southern Freestate and north Eastern Cape with one exception in the Maloti. Two field trips involved the participation of students from Oxford and Wits Universities.

2007

Excavation in Lesotho

One month excavating previously recorded rock shelters in Lesotho in order to obtain samples for Optically Stimulated Luminesence (OSL) dating of the Middle Stone Age sequence of Lesotho, possible dates of around 70,000 years BP. Conducted with R. Roberts and Z. Jacobs of the University of Woolongong, Australia. Results published by Jacobs *et al.* in *Science*, October 2008.

2006

Rock art tracing in Lesotho

A one-week field trip to the Sehonghong area of the Maloti to trace a rock art site next to the open-air seasonal LSA fishing camp at Likoaeng with P. Mitchell and J. Orton. Results published in the *Journal of African Archaeology* 2008.

2006

Rock art survey in Sehlabathebe National Park, Lesotho

One-week survey on behalf of the Maloti-Drakensbrg Transfrontier Project (MDTP) in partnership with Chester Cain. This horseback survey, though intensive, was extremely short and only sufficed to cover a very small proportion of the National Park. It did, however, give me a good insight into the logistics of getting to and from the park, and the extent of that ground that would need to be covered in order to complete a full survey of the area.

2005-2006

Fieldwork and Archival work in South Africa and Lesotho

One year living and working in Pietermaritzburg for DPhil at Oxford University. Archival work conducted at the Natal Museum and KwaZulu-Natal Archives, fieldwork totalling four months in Drakensberg-Maloti mountains of KwaZulu-Natal and Lesotho.

2005

Mauritanian Sahara Expedition

Three week expedition to find and record rock art in Mauritania, funded by the British Academy and National Geographic. First author on resulting publication.

2004-2005

Fieldwork survey in Eastern Lesotho

Total of three weeks survey and field walking in Qacha's Nek, Sehlabathebe and Sehonghong areas: looking for previously documented rock art sites and recording and mapping new sites.

2004

Refitting and illustration at University of Cape Town

Three months refitting and illustrating pottery from Dunefield Midden for B. Stewart. Results published in *Before Farming* 2005.

2001

Survey of a proposed resettlement region in Swaziland

Three-week EIA contract survey of resettlement region proposed for the Komati dam in Swaziland on behalf of Professor Tom Huffman, University of the Witwatersrand. Field walking for rock art sites. Traced a large painted site close to the construction site for the dam.

1999-2002

Rock Art Research Institute - recording and conservation

Three and a half years' worth of experience in searching for, and documenting rock art sites in southern Africa. Much work undertaken in the Free State, Eastern Cape, Mpumalanga and KwaZulu Natal provinces. Recorded over 100 new sites all over the country and collaborated with a project in Mpumalanga in which over 200 new sites were discovered – aspects of which were published in 2002. During 1999, approximately half the year was spent in the field. Salvaged and re-housed a large engraving collection that was threatened by pollution from Johannesburg zoo. The engravings are now curated by RARI and displayed by the Origins Museum in Johannesburg. A large percentage of this job was to advise land managers as how best to conserve rock art sites, training for which included a 10-day intensive rock art conservation workshop presented by US conservator, Ms Claire Dean.

International Collaborations

2023–present Oxford and Exeter Universities

In 2024 I am Project Adviser to the project *NoMAD: Non-destructive Mobile Analysis and imaging Device,* funded by the UKRI (UK Research and Innovation). Professors Nimura, C. and Hampson, J.

2022–present University of Bordeaux: European Research Council

ERC IPERION Heritage Science – Stone Age colouring material procurement strategies in southern African mountain ranges with G. Mauran (PI), P. de la Peña and T. Hodgskiss. Research partnership with Dr Guilhem Mauran.

2021-present University of Oxford, School of Archaeology

Brokered MoU with Professor Peter Mitchell and Professor Amy Bogaard for partnership between archaeology departments, especially (among other things) to facilitate Oxford students' attendance on Wits University field schools and postgraduate field research.

2021 University of Edinburgh - Rock Art Scotland South Africa (RASSA)

University of Edinburgh and University of the Witwatersrand joint seed funding – innovative and cost-effective digital rock art recording with local community custodians. https://rassarockart.co.uk/

2017–present University of Michigan, USA, Department of Afroamerican and African Studies, (B. Stewart) *Highland Lesotho Ecomuseum Project*

Awarded \$9,170 USD in seed funding, preliminary fieldwork began in March 2018. This collaborative began laying the groundwork for the creation and implementation of a financially sustainable, heritage-conscious, community-based ecomuseum in highland Lesotho. Numerous Traditional Leaders were consulted in and around the Sehlabathebe region where it is envisaged a heritage trail will start – running through to Qacha's Nek on the South African border. The trail will have the potential to link up with the Mehloding Community Tourism Trust Adventure Trail (The organisation with whom the MARA programme is run).

2017–2023 University of Oxford, Department of Zoology, University of Oxford (R. Daniels and C. Capelli) Signature of the San: Genetics of the Lesotho Baphuthi

As part of an ongoing commitment to investigate the interactions between hunter-gatherers and farmers in the subcontinent, this project explores genetic diversity of Lesotho and South African populations, including the Baphuthi people, and their levels of Khoe-San ancestry. Samples from South Africa were taken from villages in the MARA programme study area in 2017, and samples from Semonkong and Sebapala in Lesotho in 2019. Samples are processed at the University of Oxford for the analysis of genetic variation. Data generated will be used to investigate the genetic history of Lesotho and its implications for human history.

2016–2021 Travaux et Recherches Archéologiques sur les Cultures, les Espaces et les Sociétés UMR 5608 T.R.A.C.E.S. Université de Toulouse (2) Jean Jaurès, France (C. Bourdier). **Brokered MoA.**

Following a symposium held in 2015 celebrating 20 years of Franco-South African co-operation in archaeology, and a session at the SAfA conference in Toulouse in 2016, my colleague Dr Camille Bourdier and I planned and implemented a bilateral partnering agreement between RARI and the Laboratoire T.R.A.C.E.S., University of Toulouse (2) Jean Jaurès. Not only are the two institutes partnered, but the two Universities, meaning for instance that Joint/Double Masters programmes can be run between the two Archaeology Departments. The agreement was signed on 8th March 2016 in Johannesburg.

Collaborative research in 2018 with the hosting and co-supervision of Toulouse student Léa Jobard for her Masters research project *The study of the wall grooves of Bushman Rock Shelter (Limpopo, South Africa):* chronology and interpretation, led to Ms Jobard's PhD research and Erasmus+ Mobility funding in 2021

Museum work

Temporary exhibitions

2021	"Diverse People Unite" the national coat of arms and motto: a Wits Centenary exhibition of the original painted San art image of the national coat of arms. Sponsored by Canon South Africa, the exhibition presented a new ultra-high-resolution facsimile of the exceptional San rock art panel that contains the original painted image that was chosen for the national coat of arms. The exhibition will show how and why the San image came to be where it is now,in the centre of our country's national emblem.
2018	South Africa's Oldest Art. Ochre workshop and side exhibit to Lascaux exhibition. Working with the French Institute IFAS (Institut Français d'Afrique du Sud) and the Origins Centre Museum to organise a companion display to the world-renowned travelling exhibition Lascaux III. To be shown at Sci-Bono Discovery Centre between March and August 2018.
2016	South Africa: The Art of a Nation. British Museum – Consultant for rock art display coordinated by John Giblin.
2016	The Origins of Walter Battiss: "Another Curious Palimpsest". Origins Centre Museum – assisting conservator Claire Dean.
2011	Sharing our Ancient Rock Art Treasures South Africa, Botswana, Mozambique and Mexico collaboration. Origins Centre Museum – hanging and verbal presentation, as a result of which Minister Paul Mashatile promised to assist with MARA community heritage centre, which directive he gave DAC acting Director Moleleki (Frank) Ledimo).

Permanent exhibitions	
2022	Stories' People, Xam descendant artists', a collective response to the Coat of Arms created by artists at the Bushman Heritage Museum in Nieu Bethesda. Commission and design. Permanent display in the Origins Centre Museum.
2022	!ke e: xarra ke, 'People who are different, come together'. The Rock Art Research Institute in collaboration with the Origins Centre, an exhibition of an ultra-high-resolution facsimile of the exceptional San rock art panel that contains the original painted image that was chosen for the national coat of arms. Displayed on interactive zoom console. Combined with Stories' People above. Permanent display in the Origins Centre Museum.
2019-present	Text for the new Lesotho National Museum – specifically sections on prehistory and rock art, as well as historical section 'The birth of a nation'.
2017-present	Origins Centre Committee – concerned with the transition of the Origins Centre Museum to the School, which involved restructuring the museum staff, drawing up new organogram, discussion of budget constraints, pay structures and new displays.
2017	Text for UNESCO World Heritage Site visitor centre – copywriting for the new visitor centre in Lesotho's first World Heritage Site, Sehlabathebe National Park, installed in January/February 2018.
2015-present	Origins Centre Museum – consultant on permanent display in the new 'rock wing' housing engravings.
2012	KwaZulu-Natal Museum – consultant on new panel for colonial rock art in the region, designed by Jeremy Hollmann.

Strategy documents

2020 Five-Year High-Level Strategic Plan 2021-25, Rock Art Research Institute, University of the Witwatersrand

Institute Reports

- 2024 Quinquennial Review (Five-Year) Final Report to Committee, Rock Art Research Institute, University of the Witwatersrand
- 2024 Quinquennial Review (Five-Year) Self-Assessment Report, Rock Art Research Institute, University of the Witwatersrand
- 2020 '23 Annual Reports on Rock Art Research Institute to Faculty Research Committee

Publications

Heritage Survey and Management Reports

- 2017 Cultural Heritage Management Plan: Maloti-Drakensberg Park World Heritage Site (with A. van de Venter-Radford). Integrated CHMP for extension of uKhahlamba-Drakensberg Park World Heritage Site (South Africa) to include Sehlabathebe National Park (Lesotho), for World Heritage Committee of the United Nations Educational, Scientific and Cultural Organisation (UNESCO).
- Cultural Heritage Management Plan for Sehlabathebe National Park, Kingdom of Lesotho. Final Report to the Ministry of Environment, Tourism and Culture, Kingdom of Lesotho and World Heritage Committee of the United Nations Educational, Scientific and Cultural Organisation (UNESCO).
- Rock Art and Baseline Archaeological Survey of the Sehlabathebe National Park, Kingdom of Lesotho (with A. Mullen and J. Pugin). Final Report to the Ministry of Environment, Tourism and Culture, Kingdom of Lesotho and World Heritage Committee of the United Nations Educational, Scientific and Cultural Organisation (UNESCO).

Books

2011 Deciphering ancient minds: the mystery of San Bushman rock art (with D. Lewis-Williams). London and New York: Thames & Hudson.

Edited Volumes and Special Issues

- In prep. Challis, S. and A. Skinner (eds). Archaeology in post-apartheid rural South Africa: the many ways of redressing the past. *Interdisciplinary Contributions to Archaeology*, Special Issue. Springer.
- Past Environments and Human Lifeways of Lesotho and the Wider Maloti-Drakensberg Region of Southern Africa. Challis, S., B. Stewart and J. Knight (eds). *Quaternary International,* Special Issue. Volumes 611–612: 25-230.
- 2022 Powerful Pictures: Rock Art Research Histories Around the World. Hampson, J., Challis, S. and Goldhahn, J. (eds) Oxford: Archaeopress.

Book Chapters (peer-reviewed)

- Cultures of appropriation: rock art ownership, Indigenous intellectual property, and decolonisation (with J. Hampson). In O. Moro Abadía, M. Conkey and J. McDonald (eds), *Deep-Time Images in the Age of Globalization: Rock Art in the Twenty-First Century.* Cham: Springer.
- Why the history of rock art research matters (with J. Hampson and J. Goldhahn). In J. Hampson, Challis, S. and Goldhahn, J. (eds) *Powerful Pictures: Rock Art Research Histories Around the World*, pp 1-5. Oxford: Archaeopress.

- History debunked: endeavours in rewriting the San past from the indigenous rock art archive. In J. Hampson, Challis, S. and Goldhahn, J. (eds) *Powerful Pictures: Rock Art Research Histories Around the World,* pp 89-104. Oxford: Archaeopress.
- Transformation as development: southern African perspectives on capacity building and heritage (with C. Arthur and R. King). In Stig Sørensen, M. and B. Baillie (eds) *African Heritage Challenges Communities and Sustainable Development (Globalization, Urbanization and Development in Africa*), pp 201-231. London: Palgrave Macmillan.
- 2019 Creolization in the investigation of rock art of the colonial era, In B. David and I. McNiven (eds) *The Oxford Handbook of the Archaeology and Anthropology of Rock Art*, pp 611-633. New York: Oxford University Press.
- Concerning heritage: lessons from rock art management in the Maloti-Drakensberg Park World Heritage Site (with G. Laue and A. Mullen). In S. Makuvaza (ed.) *Aspects of management planning for Cultural World Heritage Sites principles, approaches and practices,* pp 119-130. Cham: Springer.
- An Introduction to the Problems of Southern African Rock Art Regions: The Rock Art of Bongani Mountain Lodge and its Environs. (with J. Hampson, G. Blundell and C. de Rosner). In G. Nash and A. Mazel (eds), *Narratives and Journeys in Rock Art: A Reader*, pp 27-55. Oxford: Archaeopress.
- Re-tribe and resist: the ethnogenesis of a creolised raiding band in response to colonisation. In C. Hamilton and N. Leibhammer (eds) *Tribing and Untribing the Archive: identity and the material record in southern KwaZulu-Natal in the late Independent and Colonial periods*, pp 282-299. Pietermaritzburg: University of KwaZulu-Natal Press. [Choice Journal 2017 Outstanding Academic Title].
- Binding beliefs: the creolisation process in a 'Bushman' raider group in nineteenth-century southern Africa. In J. Deacon and P. Skotnes (eds) *The courage of ||Kabbo and a century of Specimens of Bushman folklore*, pp 246-264. Johannesburg: Jacana.
- Taking the reins: the introduction of the horse in the nineteenth-century Maloti-Drakensberg and the protective medicine of baboons. In: P. Mitchell & B. Smith (eds) *The Eland's People: Essays in Memory of Patricia Vinnicombe*, pp104-107. Johannesburg: Witwatersrand University Press.
- Funerary monuments and horse paintings: a preliminary report on the archaeology of a site in the Tagant region of south east Mauritania near Dhar Tichitt. (with A. Campbell, D. Coulson and J. Keenan. In J. Keenan (ed.) *The Sahara, Past, Present and Future*, pp 202-213. Abingdon: Routledge.

Accredited Journal Articles

- In press. Khomo Patsoa: a multi-temporal, multi-authored rock art site in the southern Lesotho Highlands, southern Africa. Southern African Archaeological Bulletin.
- Becoming elands' people: high-altitude subsistence and spiritual transformations in the Maloti-Drakensberg Mountains, southern Africa (with B. Stewart). *Transactions of the Royal Society of South Africa* 78:1-2, 123-147.
- Post-Traumatic Stress Disorder (PTSD) in San forager theories of disease, and its implications for understanding images of conflict in southern African rock art (with A. Skinner). *Cambridge Archaeological Journal* 33:4.673–691.
- Genetic heritage of the BaPhuthi highlights an over ethnicised notion of 'Bushman' in the Maloti-Drakensberg, Southern Africa (with R. Daniels, M. D'Amato, M. Lesaoana, M. Kasu, K. Ehlers, P. Chauke, P. Lecheko, K. Rockett, F. Montinaro, M. González-Santos, C. Capelli). *The American Journal of Human Genetics* 110, 880–894.

- Ecological stability of Late Pleistocene-to-Holocene Lesotho, southern Africa, facilitated human upland habitation (with R. Patalano, C. Arthur, W. Carleton, G. Dewar, K. Gayantha, G. Gleixner, J. Ilgner, M. Lucas, S. Marzo, R. Mokhachane, K. Pazan, D. Spurite, M. Morley, A. Parker, P. Mitchell, B. Stewart and P. Roberts). *Nature Communications Earth and Environment.* 4, 129.
- The impact of contact and colonisation on the Indigenous worldview, rock art and history of southern Africa: the Disconnect (with B. Sinclair-Thomson). *Current Anthropology 63*(S25) S91–S127.
- Fluidities of personhood in the idioms of the Maloti-Drakensberg, past and present, and their use in incorporating contextual ethnographies in southern African rock art research (with Andrew Skinner). *Time and Mind: The Journal of Archaeology, Consciousness and Culture* 15(2): 101-141
- Past Environments and Human Lifeways of Lesotho and the Wider Maloti-Drakensberg Region of Southern Africa (with B. Stewart and J. Knight) *Quaternary International Special Issue* 611-612: 25-28.
- 2021. Art and Influence, Presence and Navigation in Southern African Forager Landscapes (with Andrew Skinner) in Wallace, R. & Carocci, M. (eds) *Art, Shamanism and Animism.* Special Issue: *Religions* 12(12): 1099.
- The devil's in the detail: revisiting the ceiling panel at RSA CHI1, Kamberg, KwaZulu-Natal, South Africa (with D. Lewis-Williams, D. Pearce and D. Witelson. *Azania: Archaeological Research in Africa*, *56*(1): 34-59.
- 2020 Runaway slaves, rock art and resistance in the Cape Colony, South Africa (with B. Sinclair-Thomson). In S. Wynne-Jones and H. Rødland (eds). Archaeological approaches to slavery and unfree labour in Africa. *Azania, Archaeological Research in Africa*. Special Issue. 55(4): 475-491
- 2019 High and mighty: a San expression of excess potency control in the high-altitude hunting grounds of southern Africa. In Goldhahn, J. (ed.) 2019. Special Issue Rock Art Worldings: *Time and Mind: The Journal of Archaeology, Consciousness and Culture 12*(3):169-185.
- The Matatiele Archaeology and Rock Art (MARA) programme excavations: the archaeology of MAF 1 rock shelter, Eastern Cape, South Africa (with H. Pinto, W. Archer, D. Witelson, R. Regensberg, S. Edwards Baker, R. Mokhachane, J. Ralimpe, N. Ndaba, L. Mokhantso and P. Lecheko). *Journal of African Archaeology* 16 (2):145-167.
- 2018 Collections, collecting and collectives: gathering heritage data with communities in the mountains of Matatiele and Lesotho, southern Africa. *African Archaeological Review* 35 (2): 257-268
- The 'bullets to water' belief complex: a pan-southern African cognate epistemology for protective medicines and the control of projectiles (with B. Sinclair-Thomson) *The Journal of Conflict Archaeology* 12 (3): 192-208
- The 'interior world' of the nineteenth-century Maloti-Drakensberg mountains (with R. King) *Journal of African History* 58 (2): 213-37.
- Reconfiguring hunting magic: Southern Bushman perspectives on taming and their implications for understanding rock art production (with M. McGranaghan). *Cambridge Archaeological Journal. 26* (4): 579-599.
- Joseph Millerd Orpen's "A Glimpse into the mythology of the Maloti Bushmen": a contextual introduction and re-published text (With M. McGranaghan and D. Lewis-Williams). Southern African Humanities: a journal of cultural studies, 25 (1):137-166.
- 2013 'Rain snakes' from the Senqu River: new light on Qing's commentary on San rock art from Sehonghong, Lesotho (with J. Hollmann and M. McGranaghan). *Azania: Archaeological Research in Africa*, 48 (3): 331-354.
- Spatial Distribution of rock art sites in Didima Gorge, South Africa (with J.D. Lewis-Williams, J.H.N. Loubser, and D.G. Pearce). *American Antiquity*, 77 (4): 808-812.

- Creolisation on the Nineteenth-century Frontiers of Southern Africa: A Case Study of the AmaTola 'Bushmen' in the Maloti-Drakensberg, *Journal of Southern African Studies*, 38 (2): 265-280.
- Truth in Error: an enigmatic nineteenth-century San comment on southern African rock paintings of 'lions' and 'shields' (with D. Lewis-Williams) *Before Farming*, 9 (1): 1-13.
- Fishing in the rain: control of rain-making and aquatic resources at a previously undescribed rock art site in Highland Lesotho (with P. Mitchell and J. Orton). *Journal of African Archaeology.* 6 (2): 203-218.
- A first glimpse into the Maloti mountains: the diary of James Murray Grant's expedition of 1873-1874 (with P. Mitchell) *Southern African Humanities* 20 (1): 401-463.
- Funerary monuments and horse paintings: a preliminary report on the archaeology of a site in the Tagant region of south east Mauritania near Dhar Tichitt (with A. Campbell, D. Coulson and J. Keenan) *The Journal of North African Studies*. 10: 459-470.
- 'The men with rhebok's heads; they tame elands and snakes': incorporating the rhebok antelope in the understanding of southern African rock art. South African Archaeological Society Goodwin Series. 9: 11-20.
- The rock art of Bongani Mountain Lodge and its environs, Mpumalanga Province: an introduction to problems of southern African rock art regions (with J. Hampson, G. Blundell and C. De Rosner) *South African Archaeological Bulletin* 57: 15-30.
- Threads of light: re-examining a motif in southern African rock art (with J.D.Lewis- Williams, G. Blundell and J. Hampson) *South African Archaeological Bulletin* 55: 123-136.

Non-accredited/popular articles

- 2022 How South Africa's coat of arms got to feature an ancient San painting. *The Conversation, Africa*. https://theconversation.com/rock-art-how-south-africas-coat-of-arms-got-to-feature-an-ancient-san-painting-195297
- Collaboration between the University of the Witwatersrand (Wits) and the University of Edinburgh helps protect and promote South African Heritage. In N. Agnew, Deacon, J., Hall, N., Little, T., McClintock, T., Robinson, P., Sullivan, S., and Taçon, P. (eds) Networking for Rock Art, Global Challenges, Local Solutions. Los Angeles: The Getty Conservation Institute, 34.
- 2021 South Africa's bandit slaves and the rock art of resistance (with Brent Sinclair-Thomson) *The Conversation, Africa.* https://theconversation.com/south-africas-bandit-slaves-and-the-rock-art-of-resistance-165107
- An ancient San rock art mural in South Africa reveals new meaning. *The Conversation, Africa*. https://theconversation.com/an-ancient-san-rock-art-mural-in-south-africa-reveals-new-meaning-157177
- A Glimpse into the minds of the Maloti-Drakensberg San (with D. Lewis-Williams & M. McGranaghan). *The Digging Stick* 30 (2): 8-11.
- Some Mauritanian rock art sites (with A. Campbell, D. Coulson and J. Keenan) Sahara. 17: 139-141.

Presentations

Professional conferences

Sessions organized

- Indigenous Archaeology, Rock Art, Decolonisation and Wellbeing (with Gerrit Dusseldorp) Faculty of Archaeology, World Archaeology; Human Origins, University of Leiden, 21st June 2023.
- The history of rock art research (with Jamie Hampson and Joakim Goldhahn). 20th International Rock Art Congress, International Federation of Rock Art Organisations (IFRAO), Valcamonica, Italy, 1st September 2018.
- Session 24, Connecting rock art/L'art rupestre comme connecteur (with Stéphane Hoerlé and Laure Dayet). 23rd Biennial meeting of the Society of Africanist Archaeologists, Université Toulouse-Jean Jaurès, Toulouse, France, 30th June, 2016.
- 2015 Past experiences and new perspectives in rock art studies (with Stéphane Hoerlé and Laure Dayet). 20 Years of Franco-South African co-operation in archaeology. University of the Witwatersrand, Johannesburg, South Africa, 14th October 2015.

Sessions chaired

- The history of rock art research (with Jamie Hampson and Joakim Goldhahn). 20th International Rock Art Congress, International Federation of Rock Art Organisations (IFRAO), Valcamonica, Italy, 1st September 2018.
- 2017 Rock Art Worldings Materialities (Chaired discussion on behalf of Joakim Goldhahn). Rock Art Worldings: chronologies, materialities and ontologies. Linnaeus University, Kalmar, Sweden, 24th October 2017.
- 2016 Connecting rock art/L'art rupestre comme connecteur (with Stéphane Hoerlé and Laure Dayet). 23rd Biennial meeting of the Society of Africanist Archaeologists, Toulouse, France, 30 June 2016.
- Indigenous Archaeology session at the combined Congress of the Pan African Archaeological Association for Prehistory and Related Studies and the Biennial Meeting of the Society of Africanist Archaeologists, Johannesburg, South Africa, 18th July 2014.
- 2014 Rock Art sessions 4 and 5 at the combined Congress of the Pan African Archaeological Association for Prehistory and Related Studies and the Biennial Meeting of the Society of Africanist Archaeologists, Johannesburg, South Africa, 17th July 2014.

Professional conference papers presented

- An animist shamanism: the world behind San rock art (with A. Skinner), in Painting The Past: Interpretive Approaches In Global Rock Art Research. 89th Annual Meeting of the Society for American Archaeology (SAA), New Orleans, USA, 19th April 2024.
- Ritual and Social Adaptations to Climate Change in the Neoglacial of Southern African Mountains (with B. Stewart), in Questioning Posthumanism: Archaeological Approaches to Climate Change. 44th Theoretical Archaeology Group (TAG) conference, Climate Archaeology: Temporalities and Ontologies, University of East Anglia, Norwich, UK, 20th December 2023.
- PTSD and the Disconnect: valorizing violent encounters and transformations of identity in relation to contact and colonisation colonisation in the Indigenous worldview, rock art and history of southern Africa. Indigenous Archaeology, Rock Art, Decolonisation and Wellbeing. Faculty of Archaeology, World Archaeology; Human Origins, University of Leiden, Netherlands, 21st June 2023.
- Manipulating the morals of PTSD: valorizing violent encounters and transformations of identity in the colonial rock art of southern Africa (with A. Skinner) Archaeologies of Seeing, Hearing, Experiencing, SAA 88th Annual Meeting, Portland Oregon, USA,30th March 2023.

- Rock Art Scotland and South Africa (RASSA): working with local communities to record and preserve rock art in South Africa (with Jon Henderson). In *Rethinking rock art: Biographies of research, new theoretical explorations and multidisciplinary approaches.* 43rd Theoretical Archaeology Group (TAG) Conference Edinburgh, UK, 16 December 2022.
- An animist shamanism: the world behind San Rock Art. In *Rethinking rock art: Biographies of research, new theoretical explorations and multidisciplinary approaches.* 43rd Theoretical Archaeology Group (TAG) Conference Edinburgh, UK, 16 December 2022.
- "It is high, so the rain's blood falls down." Brokering relations with the rain and its animals in the rock art of southern Africa's highest peaks (with B. Stewart). Foragers in High Places: huntergatherers and mountain landscapes, Conference on Hunting and Gathering Societies (CHAGS), University College Dublin, Ireland, 29th July 2022.
- Shrouded in 'freezingly cold mist': multi-domain human responses to stadial-phase cooling in highland Lesotho, southern Africa (with B. Stewart, K. Pazan, P. Mitchell and G. Dewar). Southern African Mountain Conference: Southern African mountains their value and vulnerabilities, Cathkin Park, KwaZulu-Natal, South Africa, 14th March 2022.
- Slavery's aftermath: troubled times call for pirate magic (with B. Sinclair-Thomson). Association of Southern African Professional Archaeologists Biennial Conference, McGregor Museum & Sol Plaatje University, Kimberley, South Africa, 3rd-5th July 2019.
- Pirates of the Dragon's Back: Bushman Painting and Magic after the Time of Troubles (with B. Sinclair-Thomson). From the Ashes Reborn: Reconsidering the "Time of Troubles" in Southern Africa in the Context of Global History African Studies Centre Workshop, Leiden, Netherlands, 7th June 2019.
- Runaway slaves, rock art and resistance in the Cape Colony, South Africa (with B. Sinclair-Thomson). 84th Annual Meeting of the the Society for American Archaeology, Albuquerque, New Mexico, USA, 10th-14th April 2019.
- 2018 Creolization as an alternative lens to view colonial-era rock art. The 15th Congress of PanAfrican Archaeological Association for Prehistory and Related Studies (PanAf), Rabat, Morocco, 10th September 2018.
- 2018 How rock art made archaeology: the effects of rock art studies on the archaeology of southern Africa. 20th International Rock Art Congress of the International Federation of Rock Art Organisations (IFRAO). Valcamonica, Darfo Boario Terme, Italy, 1st September 2018.
- 2017 High and mighty: a San expression of excess potency control in the altitudinous hunting grounds of southern Africa. Rock Art Worldings: chronologies, materialities and ontologies. Linnaeus University, Kalmar, Sweden, 26th October 2017.
- 2017 Rock Art and Emergent Identity: The Creolization Process in Nineteenth-Century South African Borderlands. Rock art, embodiment, and identity. 82nd Annual Meeting of the Society for American Archaeology, Vancouver, Canada, 30th March 2017.
- 2016 Collections, collecting and collectives: gathering heritage data with communities in the mountains of Matatiele and Lesotho, southern Africa. African rock art: research, digital outputs and heritage management Stevenson Lecture Theatre, British Museum, London, UK, 5th November 2016.
- Cut-throat razors and cut-throat raiders: Material culture in the 'contact' rock art of the Bushmen of the nineteenth-century Maloti-Drakensberg, southern Africa. The Pasts and Presence of Art in South Africa: Technologies, Ontologies, and Agents. McDonald Institute, University of Cambridge, UK, 28th October 2016.
- Investigating rock art through creolization: connections between colonial history, ethnic essentialism and creativity. 23rd Biennial meeting of the Society of Africanist Archaeologists, University of Toulouse 2 Jean Jaurès, France, 30 June 2016.
- 2015 Ups and downs of survey and management at the new UNESCO World Heritage Site at Sehlabathebe, Lesotho. The Alta Conference on Rock Art (ACRA) III: Perspectives on Differences

- in Rock Art. Tromsø University Museum, UiT The Arctic University of Norway and The World Heritage Center for Rock Art Alta Museum, Alta, Norway, 16th September 2015.
- 2015 Medicine dog; medicine baboon: images of horses perceived by contact cultures in rock art. Paper presented at the 80th Annual Meeting of the Society for American Archaeology, San Francisco, USA, 16th April 2015.
- "We must approach nicely, approach with understanding...": images of taming, approaching and understanding in San rock art with special reference to rhebok, elands and snakes. The 14th Congress of the Pan African Archaeological Association. University of the Witwatersrand, Johannesburg, South Africa, 17th July 2014.
- Collaboration and credentialing in transfrontier projects: the view from Sehlabathebe Park. Paper presented at the Advancing Archaeology and Heritage in Lesotho workshop, Roma, Lesotho, 11th July 2014.
- Painted in a favourable light: narrative in the rock art of nineteenth-century frontier raiders in southern Africa (with Andrew Skinner). 2nd International Contact Rock Art (ICRA) Symposium, Darwin, Australia, 14th September 2013.
- Findings of the MARA programme: rock art and archaeology in the Matatiele region of the Eastern Cape Province, South Africa. Association of Southern African Professional Archaeologists (ASAPA) conference at the University of Botswana, Gaborone, 4th July 2013.
- 'Scattered Botwas': ivory, chieftaincy and adoption in nineteenth-century KwaZulu-Natal.Seminar on Khoi and San Representation, University of KwaZulu-Natal, Pietermaritzburg, South Africa, 19th April 2013.
- Ambiguous women: rock art evidence for the increasing rôle of female diviners, or shamans, among the creolised AmaTola 'Bushmen' of the Maloti-Drakensberg, South Africa. The 21st conference of **SAfA** (**Society of Africanist Archaeologists**), Victoria College, University of Toronto, Canada, 22nd June 2012.
- 2012 Rock art tourism and community archaeology: case studies highlighting the (re)negotiation of identity (with J. Hampson). 77th annual meeting of the Society for American Archaeology (SAA) Memphis, USA, 21st April 2012.
- 2012 Re-tribe and resist: the ethnogenesis of a creolised raiding band in response to colonization. Tribe/Un-tribe workshop of the Johannesburg Art Gallery (JAG) and the Archive and Public Culture Research Initiative. Origins Centre, Johannesburg, South Africa, 24th March 2012.
- The MARA programme: redressing the history of the misunderstood Matatiele 'Transkei'. With A. Mullen and R. Regensberg. Association of Southern African Professional Archaeologists (ASAPA) conference at Waterford Kamhlaba United World College, Mbabane, Swaziland, 2nd July 2011.
- Bushman herders of the Drakensberg: the creolisation of beliefs in mixed hunter-pastoralists on the nineteenth-century frontiers. The courage of ||kabbo and a century of Specimens of Bushman folklore. Conference, University of Cape Town, South Africa, 18th August 2011.
- Binding beliefs: the creolised cosmology and rock art of the AmaTola Bushmen in the nineteenth-century Maloti-Drakensberg. Paper Presented at the 13th PAA Congress (PanAfrican Archaeological Association for Prehistory and Related Studies), and the 20th conference of SAfA (Society of Africanist Archaeologists), University Cheikh Anta Diop in Dakar, Senegal, 4th November 2010.
- 2010 Creolisation on the nineteenth-century frontiers of southern Africa: a case study from the Maloti-Drakensberg. Paper presented at 500 Year Initiative Concluding 500 Years Conference, University of the Witwatersrand, Johannesburg, South Africa, 30th October 2010
- Binding beliefs: a creolised cosmology of protective plants and animals in the rock art of a mixed raiding group on the nineteenth-century colonial frontier. Paper presented at 500 Year Initiative Workshop, History and Archaeology in conversation South Africa meets East Africa, Origins Centre, University of the Witwatersrand, 26th July 2009.

- 2009 Rock Art of the Drakensberg: understanding the significance of its World Heritage status. Paper presented at the World Heritage and Geotourism Conference of The Geological Society of South Africa, 5th June 2009
- Bushmen of a new order: the formation of a horse nation amongst the people of the south-eastern mountains of nineteenth-century southern Africa. Paper presented at the 18th Biennial Meeting of SAfA (Society of Africanist Archaeologists), Calgary, Canada, 26th June 2006
- The AmaTola: the identification of a horse nation amongst the 'Bushmen' of the south-eastern mountains. Paper presented at the 1st Biennial Meeting of the Association of Southern African Professional Archaeologists, Pretoria, South Africa, 11th April 2006.

Invited lectures and public talks

Sessions organized

Oxford workshop on future research directions in the archaeology and history of the Maloti-Drakensberg Mountains of Lesotho and South Africa. St Hugh's College, Oxford, United Kingdom. 21 June, 2016.

Papers presented

- Becoming eland's people: neoglacial subsistence and spiritual transformation in the Maloti-Drakensberg mountains, southern Africa (with B. Stewart). RARI Seminar Series, 25 October 2023
- Manipulating the morals of PTSD: valorizing violent encounters and transformations of identity in the colonial rock art of southern Africa (with Andrew Skinner). RARI Seminar Series, 26 April 2023
- Becoming eland's people: neoglacial subsistence and spiritual transformation in the Maloti-Drakensberg mountains, southern Africa (with B. Stewart). Archaeology Working Paper Series, Department of Anthropology, Michigan State University, 4th November 2022
- Images of insurgency: indigenous material culture in decolonising the colonial narrative. Institute of Advanced Studies in the Humanities (IASH), University of Edinburgh, 9th March 2022.
- The archaeology of rock art in Africa and the Edinburgh connection: how rock art is helping to rewrite the colonial past for the better. University of Edinburgh Archaeology Department, 3rd March 2022.
- Setting up research programmes: gathering heritage data with communities in southern Africa. Rewriting World Archaeology Online workshop Antiquity, Durham Archaeology and the British Academy 17th January 2022.
- The effects of contact in the rock art of southern Africa, Online lecture to the Centro Camuno di Studi Prehistorici, Valcamonica, Italy. 5th May 2021.
- Southern African rock art. Online lecture to the University of the Third Age in Cambridge (U3AC), United Kingdom, 10th March 2021
- Southern African rock art. Online seminar with the Melville Salon, Johannesburg, South Africa 13th November, 2020.
- Southern African rock art. Online lecture to the University of the Third Age (Africa group) in Cambridge (U3AC), United Kingdom, 6th November, 2020.

- The mind in the cave: the book behind explaining Lascaux. Wonders of Rock Art. Lascaux Cave and Africa Exhibition Lecture Series. Sci-Bono Discovery Centre, Johannesburg, South Africa, 28 June 2018.
- 2018 Gathering heritage data with communities in the mountains of Matatiele and Lesotho, southern Africa. ASAPA-PAST Student Development Workshop, Mokhotlong, Lesotho, 10th December, 2018.
- Advances in southern African rock art. Oxford Workshop on Future Research Directions in the Archaeology and History of the Maloti-Drakensberg Mountains of Lesotho and South Africa. St Hugh's College, Oxford, UK, 21st June, 2016.
- 2016 Creolization in the investigation of rock art of the colonial era. African Archaeology Group (AAG) Seminar, McDonald Institute for Archaeological Research, University of Cambridge, UK, 13th June, 2016.
- 2013 Rock art, interaction and creolisation on the nineteenth-century South African frontier(s). Presentation to the Department of Archaeology's Centre for Rock Art Research and Management, University of Western Australia, Perth, 20th September 2013.
- The community of Matatiele in research and conservation of rock art. Presentation to the Getty Foundation, Australian National University (ANU) Rock Art Conservation, Management and Tourism Southern Africa Australia Exchange Programme. University of the Witwatersrand, Johannesburg, South Africa, 17th August 2013.
- The San commando: dispelling the myth that horse and hat equals European in the rock art of southern Africa. Public Lecture Series, the Origins Centre Museum, University of the Witwatersrand, 12th February 2013.
- The Impact of the horse on the hunter-gatherers of southern Africa: rock art evidence from the Maloti-Drakensberg. The South African Archaeological Society Transvaal Branch, Johannesburg, South Africa, 19th May 2011
- 2010 Creolisation, identity and rock art: reaction to colonisation in the Maloti-Drakensberg of southern Africa. Presentation of doctoral research to the Department of Archaeology, University of Cape Town, South Africa, 11th February 2010.
- The new Bushmen of the nineteenth century: frontier people creolised around shared beliefs in horses and baboons. Seminar given at University of South Africa (UNISA) department of Anthropology and Archaeology, Pretoria, South Africa, 11th June 2009.
- Horses in Rock Art. Lecture given at the Himeville Historical Society AGM, Himeville, KwaZulu-Natal, South Africa, 17th August 2006.

Media Appearances (recent)

- Cape Talk and Radio 702 with Clarence Ford: 'Diverse people come together': how San history became part of our coat of arms. 8th February 2023
- SAfm Radio Facts of Faith with Patricia Ntuli *How South Africa's Coat of Arms Got to Feature an Ancient SAN Painting.* 27th November 2022

Teaching: experience and philosophy

I was appointed Lecturer in the Department of Archaeology at the University of the Witwatersrand in 2011 and Senior Researcher in 2014 – to a permanent post in 2017. Over the past decade it has been my privilege to mentor several students through undergraduate to postgraduate and PhD level. I have also encouraged some of my African students to apply for funded PhD programmes elsewhere (e.g. Universities of Cape Town and Oslo) to broaden their research experience. Further, I have hosted four postdoctoral fellows, European and African. Postgraduates and postdocs have contributed to my multidisciplinary research programme in the former apartheid-era homeland in the 'Transkei' with Honours, Masters and Doctoral dissertations in historical, excavated, survey and interpretive archaeology as well as ethnographic survey, genetic survey and interview projects in social anthropology, some in combination. Nine of these projects are to be published in a Springer special issue, *Interdisciplinary Contributions to Archaeology*, which will include 'letters from the field' written by the community Field Technicians I have trained.

Searching for ways to achieve close classroom tutoring in South Africa, with undergraduate classes of between 40 and 90 students, I discovered the *Community of Enquiry* approach and the 'Read-Enquire-Write' system. Learners come to class having analysed readings, with a set of written questions for discussion. The students pose their questions to one another, and answers come from peers who may have different and diverse views. This is first done in small groups of four or five, following which the most engaging questions and answers are put to the class as a whole. Tutors facilitate discussion and assist with factual queries. The Read-Enquire-Write system is an innovation that I have introduced to my department, along with several items to facilitate its use – an instruction document explaining A. what to do individually before class, B. what to do in the tutorial and C. what to do individually after the tutorial on the 'Tut Summary Worksheet'. This approach has had relatively dramatic effects in raising grades especially from the 50% bracket.

I have designed and delivered several courses: *World Hunter-Gatherers* is a seven-week first year undergraduate course, covering behavioural complexity and Homo sapiens' movement out of Africa, to case studies of modern hunter-gatherers, including a brief background in the history of social anthropology. *Deciphering Ancient Minds* is a seven-week third year course covering the essential background to the developments in southern African rock art research, with an emphasis on ethnographic approaches and indigenous, insider perspectives. *Marxist Archaeology* is part of a multicomponent/multiple-lecturer theory course for the Honours class in fourth year. I also run the annual second year field school.

Directorship and fundraising experience

In August 2020 I was voted in as Director of the Rock Art Research Institute and was called upon to draft the Five-Year Strategic Plan. In its strategic goals I placed most emphasis on Transformation – the demographic shift within the academy in South Africa – with the objective of creating five new internships for African staff members. Within two years I had implemented three technical internships for the digitization laboratory sponsored for two years (renewable) by Canon South Africa and two academic internships sponsored for three years (renewable) by the Rupert Art Foundation. I also secured funding to maintain hardware and software in the lab, as well as funding for public exhibitions to showcase its capabilities – chiefly sponsored by Canon. Added to this, I have secured memoranda of understanding between my university and the universities of Toulouse 2 (Jean Jaurès) and Oxford – facilitating student projects and joint supervision, staff and student travel and knowledge exchange.

My multidisciplinary research programme has received generous funding from the South African National Research Foundation, largely for its emphasis on Transformation in the field – that is to say, the training of local community members as Field Technicians, several of whom now have credentials as members of the professional association. This skills transfer enables better training of future Technicians, better field surveys and excavations, better interviews for historical and ethnographic projects and a better future for team members. All of this work is conducted in collaboration with the local Mehloding Community Trust.