



KEYWORDS: *Central Queensland – Carnarvon Gorge – Baloon Cave – First Nations rights*

FIVE MANAGEMENT DILEMMAS FOR CENTRAL QUEENSLAND ROCK ART

Madeleine King

Abstract. This paper outlines the pressing conservation issues relating to the care and management of central Queensland rock art. I draw out from the literature five key dilemmas that current models of cultural heritage management cannot easily resolve. Looking beyond the isolated threats of fire, weathering or visitation, harm to First Nations cultural heritage is also considered to result from more complex management pressures, such as competing priorities and stakeholder interests. A failure to manage this complexity and prioritise First Nations cultural rights is discussed through a recent worst-case scenario: the destruction of rock art at Baloon Cave, Carnarvon Gorge.

Central Queensland context

The Central Highlands, a remote area of Queensland, presents a rich context for the study of cultural heritage management for complex and layered reasons. The first relates to the region's significance. It is a sacred cultural and natural landscape for several Aboriginal cultural groups who hold both ancestral and ongoing cultural and spiritual connections. Rock art in the sandstone belt of central Queensland is both a source of and context for knowledge, culture, lore, gathering, and spiritual and customary practices. Central Queensland holds one of the state's most significant and varied concentrations of rock art, featuring complex, multilayered compositions of great technical diversity, including a distinctive method of stencilling and various painting and engraving methods (see Morwood 1978, 1981, 2002; Quinnell 1976; Walsh 1979; Beaton 1991a, 1991b). Importantly, for First Nations people (but not always recognised by non-Indigenous scholars), this region's rock art and other cultural sites are inseparable from the cultural story of the lands and waters of Carnarvon Gorge and its surrounds (Kerkhove 2010: 8).

Two of central Queensland's best-known, documented and managed rock art sites are the Art Gallery and Cathedral Cave—galleries of composite positive and negative stencils, alongside engraved, drawn and painted imagery—both of which are situated within the Carnarvon National Park, an area comprising seven sections that include the renowned Carnarvon Gorge and Mt Moffatt, all managed by Queensland Parks and Wildlife Service (QPWS). The Gorge is part of a powerful and extensive natural system of national significance, as a key intake bed for the Great Artesian

Basin and the headwaters of five major rivers that travel vast distances across the continent (two of which reach the sea at South Australia via the Murray-Darling system), influencing several diverse environments downstream. While the region's cultural and natural significance is clear, the challenges associated with its care and management are not. There has been modest scholarly interest in the rock art of this region, and only some analysis of cultural heritage management issues (see: Morwood 1978, 1981, 2002; Quinnell 1976; Walsh 1979; Beaton 1991a, 1991b; Godwin et al. 1999; Taçon et al. 2022).

A distinctive combination of features, values and resources makes the region's rock art a complex focal point for a range of cultural, social, economic and scholarly interests. Moreover, complexity is magnified because many of these interests are in direct competition or conflict with each other. While archaeological studies have typically centred on a small number of sites managed by QPWS, the region's rock art is extensive. Many rock art sites are locked up on privately owned land throughout the sandstone belt, mostly pastoral properties to which First Nations people or others involved in their care have no formal means of access. Though they lack individual documentation, the total sites are estimated to be numerous and span multiple cattle stations (Beaton 1991b: 3; Quinnell 1976: 3–21). The region also overlaps with the Bowen Basin, identified for its major coal reserves and natural gas extraction, as well as irrigation-intensive agriculture (Godwin et al. 1999: 30). In short, central Queensland is endowed with many highly desirable resources, making cultural heritage subject to competing economic interests.

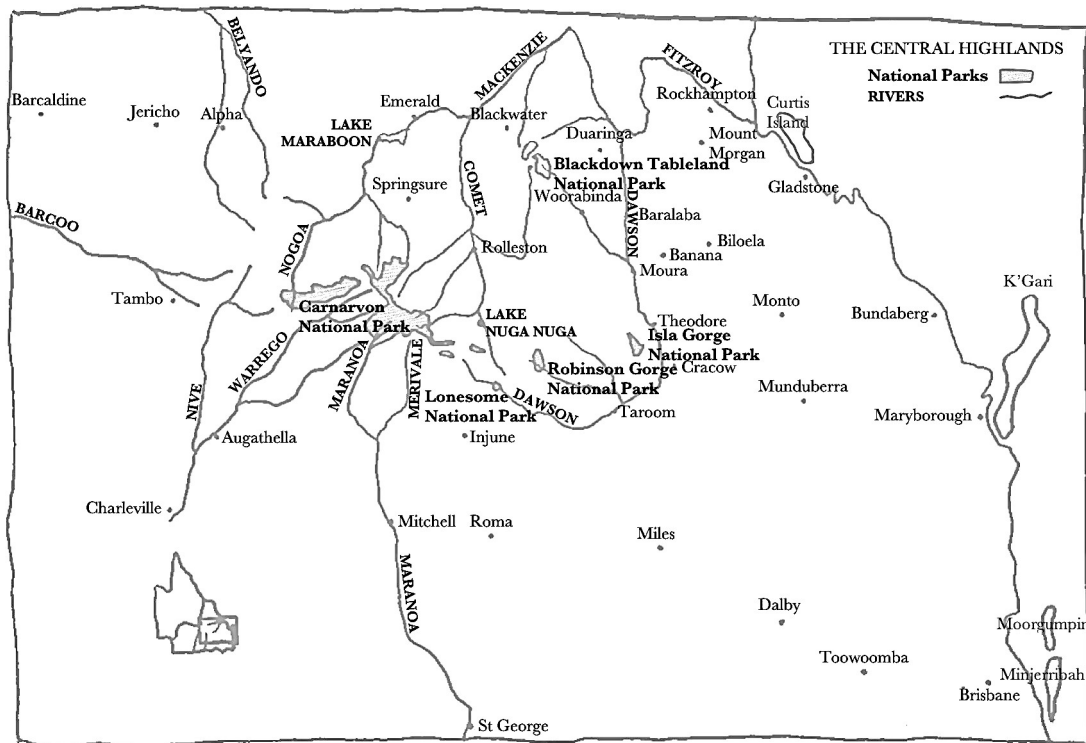


Figure 1. Map of Central Highlands national parks and rivers. Image: MK 2024.

Threats to Aboriginal rock art in central Queensland are both intensifying and multiplying. Alongside the ever-mounting pressures of mining, development, agriculture and tourism, wildfires (uncontrolled bushfires) are expanding into previously unaffected rainforest environments such as those of Carnarvon Gorge—one of Queensland’s most visited parks (QPWS 2005: 2). The challenges of scale, distance and remoteness of sites, combined with a distinct lack of resources and trained personnel have made strategic and adequate management of rock art rare in central Queensland. This remains the case for even the apparently better-resourced rock art sites, such as those managed by the State. This paper analyses the complex dilemmas present in rock art management in central Queensland and considers their broader implications for cultural heritage management.

Baloon Cave

The catalyst for this inquiry into management dilemmas is the tragic destruction of rock art at Baloon Cave at Carnarvon National Park following wildfires that affected the park in late 2018. A fire ignited a recycled plastic boardwalk and viewing platform installed by QPWS to provide visitor access and protect the rock art. Large sections of the painted rockshelter, containing ancient stencils of hafted stone axes and small hands, sheeted off in the fire’s intense heat (Taçon 2019: 10–12, Taçon 2021). Remaining sections were blackened with soot beyond recognition, and the majority have since sheeted off.

The First Nations community connected to Baloon Cave is suspended in grief and despair at their recent loss and inability to prevent it, and the anguish of a

seemingly unstoppable trajectory towards future loss. Reflecting on the gravity of the damage and the State’s role in the mismanagement of cultural treasures, Bidjara Elder Dr Jackie Huggins commented after we had checked in on Baloon Cave in 2022: ‘This has to stop. Enough is enough. You’ve taken so much from us. Give us back our pride, our dignity and those places we truly love and cherish here’ (interview with author, 24 March 2022). Uncle Milton Lawton, who joined Uncle Fred Conway at Carnarvon Gorge for four days immediately after the fire, recalled that on his return to Woorabinda:

My whole family was taken out. I couldn’t walk for five days, I couldn’t eat. I couldn’t get out of bed. My wife was the same, three of my grandchildren were the same. My son was the same. I had to get doctors in to give my wife peace of mind that it wasn’t a physical thing—and I knew it was spiritual. This is the thing people don’t understand, when this sort of stuff occurs, our spirit is first to feel the pain (interview with author, 26 March 2022).

What happened at Baloon Cave is not an isolated tragic event. There are insufficient resources, including human resources, allocated to preventing and protecting State parks from dangerous bushfires, increasing the risk to cultural heritage. The climate crisis has brought about an unprecedented acceleration of wildfires in the cultural landscape, which means that cultural heritage sites that previously had a low risk of fire devastation now have a higher or uncharted risk of fire devastation. Archaeological literature is responding to the scale, severity, and intensity of climate-induced wildfires by documenting known impacts on rock art and other cultural heritage (see Gunn and Whear 2009; Carmichael et al. 2017; Davis 2018;



Figure 2. Baloon Cave before and after the 2018 fires. Left: Baloon Cave stencilled imagery before the fires. Right: Baloon Cave after the 2018 fires, photographed four years later. Images: (l) Alamy stock photo; (r) Image: MK March 2022.

Huntley et al. 2021; Scott and Sloggett 2022; Sloggett and Scott 2022; Buettel et al. 2023). However, the question of how to adequately respond to the increased and unpredictable pressure on already vulnerable sites remains unanswered. In Australia, the literature is increasingly turning to First Nations practices and understandings of fire management as an important part of the response (see Carmichael et al. 2017; Buettel et al. 2023). This literature points out that there is no time to lose: new climate patterns and long gaps in cultural fire management over much of the continent have generated a fire risk at a magnitude that First Nations peoples have not had to contend with previously, which includes the introduction of new fire-prone ecosystems (Buettel et al. 2023).

The impacts of uncontrolled hot fires on rock art depend on the material properties and form of the rock substrate and artwork (pigment or petroglyphs) (Huntley and Webster 2023). Drawing on the work of Huntley and Webster, the likely impacts of fire and extreme heat on stencilled rock art in central Queensland's sandstone belt can be extrapolated as: loss and flaking of painted rock art, with white ochre being more susceptible to heat extremes than red ochre; change of pigment colour through exposure to heat (for example, yellow changing to red); crazing, fracturing, and spalling of painted rock surface; and loss of imagery due to dark ash particles becoming trapped in sandstone (Huntley and Webster 2023: 98–104). Devastating short- and long-term secondary impacts can result from changed conditions



Figure 3. Thermal fracturing at Baloon Cave led to more painted rock surface sheeting off to the ground. Image: MK March 2022.

to the rock surface and surrounding vegetation after fire, for example, altered microbiology, increased sunlight, weathering, and thermal shock (Huntley and Webster 2023: 101). At Baloon

Cave, the deleterious impacts of thermal fracturing only became clear in the months after the fire. Beyond these tangible impacts, there are also the intangible impacts of fire devastation: on the broader cultural landscape, its story, and people.

In addition, as I detail shortly, the series of management decisions that led to the construction of a boardwalk and viewing platform at Baloon Cave demonstrate some of the major failures and oversights of cultural heritage management in central Queensland. Through an analysis of the literature, this paper presents what happened at Baloon Cave as the worst-case scenario arising from a set of dilemmas that are common to cultural heritage management throughout the state.

In the immediate aftermath of the 2018 fires, archaeologist Paul Taçon attended Baloon Cave with First Nations Elders and community members to assess the damage. In the report he produced immediately thereafter, he explicitly attributes the fire damage to the use of inappropriate, highly combustible materials in the platform and boardwalk—namely, the recycled plastic used as planks (Taçon 2019). The material provided the fire with an excessive fuel load, causing it to burn extremely hot and explosively.

In my subsequent engagement with First Nations community members connected to Baloon Cave, I learnt that the QPWS's decisions in 2014 to proceed with its plans for the boardwalk and viewing platform were made despite several community concerns about the serious risks it posed to cultural heritage. These included: the material used (Elders I have spoken with say they raised concerns at the time of construction that the plastic was highly flammable, based upon their experiments); the disturbance to the rock art (such as dust and movement generated by the excavation and compaction machinery); and the hundreds of artefacts unearthed during excavation works, for which there was no cultural heritage planning (Harding 2019: 54–71; see also testing reports in Taçon 2019: 17). In addition, Taçon's report raises a previously documented fire event that damaged rock art at Nganalang, Keep River, Northern Territory, due to a similarly constructed boardwalk. This suggests either little communication between Australian states and territories or a failure to act on critical information. In a positive response to the damage caused by the recycled plastic at Baloon Cave, the State of Queensland has since advised other states and territories to conduct surveys to locate the material. While two individuals connected with the fires have been investigated—they were attempting to create firebreaks to protect private property—to date, the State has not been subject to any inquiry or faced repercussions for their role in the destruction of Baloon Cave rock art (a *Courier Mail* report on the Queensland Government's review into the 2018 central Queensland bushfires discussed confusion around the scope of landowner rights to backburning; see Vogler 2019).

Harm to rock art is not only a result of malintent, as in the case of vandalism, or mismanagement, as in the case of sites neglected to overgrown vegetation and feral animals. As this paper explores, harm is also the result of more complex management pressures, such as competing priorities and interests. If we take Baloon Cave as a case in point, the boardwalk and viewing platform were plainly devised to deliver on QPWS's commitment to *protect* and *present* the park, including any Aboriginal cultural heritage within park boundaries. The recycled plastic material would have undoubtedly appealed to the Department's environmental values. However, in light of the catastrophic outcome, the decision to build a visitor viewing platform and boardwalk to protect cultural heritage appears to be as risky as the decision to start a fire to protect private property. This is the high-stakes territory in which cultural rights intersect with conflicting stakeholder interests and government priorities.

Five dilemmas for rock art management

I want to turn now to the five dilemmas I have drawn out of the literature on rock art management in central Queensland and elsewhere in the state. These issues appear to have no straightforward resolution under existing legislation, conditions and conventional archaeological approaches to planning and management. This paper summarises these five dilemmas concerning the specific context of central Queensland and their broader implications for cultural heritage management. The purpose of emphasising these complex issues is not to dwell on negatives but to consider where the fields of archaeology and cultural heritage management may most fruitfully direct positive focus and creative problem-solving. They are thus the dilemmas that any new or improved approach to rock art management in the region would need to address, and they highlight an important set of considerations for cultural heritage management more generally.

(1) *While the statutory landscape has strengthened in favour of First Nations cultural rights, these efforts have been undermined in implementation and enforcement.*

The levers of the State and Federal statutory mechanisms to protect First Nations cultural rights are penalties and plans, both aimed at reducing harm to existing cultural heritage and ensuring the involvement of First Nations Owners in all management matters. Queensland's *Aboriginal Cultural Heritage Act 2003* and *Torres Strait Islander Cultural Heritage Act 2003* recognise Aboriginal and Torres Strait Islander peoples as the only parties able to hold knowledge of their cultural heritage and, therefore, to be able to assess significance. The Acts require that anyone wanting to conduct fieldwork at a cultural heritage site must have evidence of consultation with the correct person/people responsible for that knowledge (Smith and Burke 2007: 141). The Acts legally require the development and approval of a Cultural Heritage Management Plan (CHMP) in cases where a project,



Figure 4. Protective measures at Art Gallery, Carnarvon Gorge section, Carnarvon National Park: a timber visitor boardwalk and notice of penalties for violating cultural heritage legislation. Image: MK March 2022.

such as a mining development, triggers the need for an Environmental Impact Statement. There is provision for a CHMP to be drawn up voluntarily and submitted for State approval (DATSIP 2005: 1). State guidelines, therefore, shape the pervasive approach to cultural heritage management in Queensland.

Considerable fines for both individuals and corporations aim to address the intentional and unintentional impacts of both visitation and development (in Queensland, a corporation faces a maximum of \$A1,548,000, and an individual \$A154,800 for unlawfully harming Aboriginal cultural heritage. DATSIP 2005: 1). Rock art researchers Fay Gale and Jane Jacobs established in the 1980s that warnings of fines have a measurable impact on visitor behaviour at rock art sites (1986: 6), and these warnings are clearly visible at the most visited sites at Carnarvon National Park (see Fig. 4). However, the legislation on its own is a limited instrument, and as the literature observes, one that is routinely undermined. For example, ongoing compliance issues are comprehensively outlined by archaeologists and heritage specialists Michael J. Rowland, Sean Ulm and Jill Reid in their paper 'Compliance with Indigenous cultural heritage legislation in Queensland: perceptions, realities and prospects' (2014: 329–351. See also: Martin et al. 2016: 137–158; McNiven et al. 2016: 159–186). Further to this, Nicola Winn and Paul Taçon's paper 'Managing the past in northern Australia: challenges and pitfalls for Indig-

enous communities, rock art and cultural heritage' identifies specific barriers that the State and Federal legislative framework pose to Aboriginal groups in Queensland, including native title holders, as well as the limitations in available funding and professional support for First Nations Owners to undertake the cultural heritage management work (2016: 168–190). Further limitations of the legislation relating to intangible heritage are discussed in: Ross 2016: 107–128; McKercher and Du Cros 2002: 50).

As it currently stands in Queensland, it is the State, rather than First Nations peoples, that authorises any permitted act of cultural heritage management, including acts of cultural maintenance and continuation by First Nations Owners (Division 5, Section 107, Aboriginal Cultural Heritage Act 2003). According to the legislation, Queensland's cultural heritage acts are designed to 'recognise the key role of Traditional Owners in cultural heritage matters' and 'establish practical and flexible processes for dealing with cultural heritage in a timely manner' (Queensland Government 2021a). In reality, the scope of rights and roles for First Nations Owners are limited, as is the State's capacity for timely responses to cultural heritage issues.

The 'Carnarvon National Park – Management Plan' (2005) outlines state government guidelines and aspirations relating to managing cultural heritage sites within the Park, particularly for significant and well-documented rock art sites (QPWS 2005). The key



Figure 5. Visitors logbook at Cathedral Cave, Carnarvon Gorge section, Carnarvon National Park. Image: MK March 2022.

rock art conservation issues the plan identifies are the impact of visitors, vandalism, climate and weathering (QPWS 2005: 25). The plan has not been revised since 2005 and as a result, many items are now out of date. For example, it references the Register of the National Estate, which ceased in 2007, meaning Carnarvon National Park no longer appears on any national statutory list – the same, unfortunately, is true for the whole of the central Highlands region (only one of the thirteen Queensland entries on the National Heritage List is included for its significant rock art: Quinkan Country in north Queensland. DCCEEW 2020). Detail is also missing that may prevent good intentions from being meaningful and effective. For instance, the plan does not provide clear measures for implementation or resourcing intended actions, such as greater involvement of First Nations Owners – support for which has wavered in the decades since the plan was written. The plan also does not name which sites have restricted access to visitors (for example, First Nations Owners have expressed wishes to close the Amphitheatre to visitors for cultural reasons, see Giorgi and Taçon 2019: 188). These omissions are reinforced by the Park’s website, which makes no mention of any restricted access or cultural safety considerations (for example, the website overlooks the cultural significance of the Amphitheatre and instead draws comparisons to Tolkien’s Middle Earth. See QPWS 2020).

(2) *While tourism offers great potential to drive community support and potentially finance for rock art conservation, it also comes with real risks to conservation and cultural safety.*

The management strategies implemented by QPWS at Carnarvon National Park have been primarily focused on addressing the negative impacts of visitors on rock art, such as through physical barriers, penalties and education (see QPWS 2005). However, the effectiveness of these management strategies has been limited, and in some cases, they have led to other,

more catastrophic impacts on rock art.

Education, such as through interpretive materials and guided tours, is a positive indirect response to both vandalism and accidental damage caused by visitors. It is a management solution that appeals to our better nature (if only we knew better). However, as Janette Deacon has noted, it is unknown whether education can help deter intentional and unintentional visitor damage or whether it may also contribute to the growth of visitor numbers, which may result in further harm (2006: 381). It is also not known the extent or quality of education required to prevent visitors from harming sites. This dilemma is discussed in a paper co-authored by Marisa Giorgi and Paul Taçon that considers visitor impacts at two key sites at Carnarvon Gorge (Art Gallery and Cathedral Cave). They consider both intentional acts of vandalism and the non-intentional, but similarly adverse, wear and tear caused by visitor presence (Giorgi and Taçon 2019: 189–190). The paper provides a clear example in which education did not deter vandalism at Carnarvon Gorge: one vandal had attended a rock art information evening at a resort immediately before intentionally harming the site (Giorgi and Taçon 2019: 190).

The sustained intentional impacts of visitors are the subject of a study on visitor books conducted by Natalie Franklin at Carnarvon Gorge (see Fig. 5). She set out to test the claim that if tourists are encouraged to sign their names on paper, they may be dissuaded from marking their names as graffiti on the rock art (Franklin 2011). It is an appealing theory, but the results were inconclusive. Nevertheless, the study was able to determine that insights from visitor books could otherwise be used in cultural heritage management, such as to better direct signage, physical infrastructure and interpretive materials (Franklin 2011: 259).

Giorgi and Taçon also raise the underexplored dimension of cultural distress to First Nations Owners caused by visitors accessing sacred or avoidance sites (Giorgi and Taçon 2019: 191). The paper considers appropriate management responses according to the preferences of First Nations Owners, for example, improving visitor education and restrictions to such areas and policy support for the greater presence, involvement and leadership of First Nations Owners (Giorgi and Taçon 2019: 186, 191; see also Giorgi 2017). They also highlight the key social and cultural tensions between the wishes and interests of First Nations Owners and other stakeholders, namely QPWS and Park visitors.

Where education cannot alone meet the pressures of visitation or where better access is required, physical measures have been introduced to protect rock art. Like education, however, protective infrastructure has presented both limitations and unintended consequences. Grahame Walsh was the first in the literature on Carnarvon Gorge rock art to identify issues surrounding ‘hard’ conservation measures, such as

protective barriers and boardwalks around vulnerable rock art sites (see Fig. 4). His paper considers how the visual disturbances they create may be fundamentally at odds with the rock art's cultural heritage and natural values (Walsh 1984). Further, the subtitle of Walsh's paper, 'A case history in the dilemma of presentation or preservation', identifies the potential conflict between the goals of 'presentation' and 'protection'. For example, infrastructure such as paths and stairs can significantly impact the flow of runoff water and generate dust. Infrastructure also increases visitors, which may not only lead to visitor damage but also cause the cultural and spiritual distress of First Nations Owners about sites that they wish to be closed or restricted. Close to four decades on from Walsh's paper, the consequences of this particular visitor management strategy at Baloon Cave have proven to be grave.

(3) *While archaeologists' and cultural heritage management professionals' expertise and commitment to conservation are invaluable, their knowledge cannot be presumed to be complete, neutral or necessarily effective in the face of other, more powerful influences.*

The structured site management methodology originally outlined by Sharon Sullivan in the 1980s remains the gold standard for caring for and managing rock art within the Australian archaeological community (Sullivan 1989; see also Smith and Burke 2007: 228). The process Sullivan outlines is broadly consistent with the ethics outlined in the Burra Charter. Other scholars have added some important updates—for example, Melissa Marshall and Paul Taçon urge that all decision-making and practices relating to the care of rock art be guided by First Nations peoples, and others, such as Deacon and Michael Pearson and Sharon Sullivan, have proposed steps before and afterwards to identify stakeholder interests, review strategies, and conduct document management (Marshall and Taçon 2014: 217. See also: Deacon 2006: 379–399; Pearson and Sullivan 1995).

However, practically speaking, Marshall and Taçon observe that successful rock art site management in Australia is hindered by several ongoing issues (Marshall and Taçon 2014: 214–128). These include: the limited circulation of management strategies and conservation approaches in the literature and beyond; the restricted and rare nature of rock art conservation training; limited funding for Indigenous placements in conservation and ranger programs; the growing pressures of tourism (particularly with GPS technology aiding visitor awareness of remote sites), alongside those of development and natural resource extraction; long gaps in the monitoring and maintenance of rock art sites that have previously received care due to lack of ongoing resources and available expertise; and finally, the potential for hard conservation strategies (such as visitor boardwalks, drip-lines, and protective grilles) to have negative, and in some cases, tragic consequences, such as accelerating the impact of fire or creating visual disturbances (Marshall and Taçon

2014)—both of which have played out at Carnarvon Gorge. Further to this, Deacon points out that few of the potentially thousands of rock art management plans developed around the world have been monitored or reviewed, aside from those of world heritage sites that have a built-in mechanism for international oversight (Deacon 2006: 391).

Beyond these practical concerns, decisions around the material conservation of rock art are inherently fraught with questions of value. For example, the answer to the crucial conservation question of what to preserve and what to allow to change—either passively via natural processes of age and weathering or actively through the living forces of culture—is informed by training, perspective and cultural background. Many First Nations communities consider change to be part of the continuing vitality of rock art (this may extend to both natural and cultural changes, such as retouching or overpainting artworks). The general tendency in conservation has been the opposite: to maintain rock art in the condition that best resembles its original creation, or at the very least, to avoid any physical changes that might shift the significance or meaning recognised by the conservation community (Deacon 2006: 381). There are other influences upon conservation decisions: for example, consulting archaeologists are often employed for native title claims or through the development process, and thus, their outputs are driven by the strictness of legislation (Smith and Burke 2007: xx–xxii).

Archaeology of the past has largely been able to pursue its commitment to cultural, scientific or conservation values with little responsibility to anyone else. This approach has detrimentally excluded the voices and rights of First Nations Owners. Archaeology of the present is becoming both ethically and pragmatically conscious of the social, political and economic exigencies of any research, conservation or management project (see: Egloff 2006a; Charoenwongsa 2006; Robles García 2006; Cabeza 2006). Whereas prior to the past two decades, the archaeological and cultural heritage literature on rock art conservation has tended to focus on a limited set of material concerns (for example, insect damage, weathering, vandalism etc.), now, once peripheral issues are more central to the discourse. These issues include the pressures of development, land use, political structures, local communities and various interest groups. Given there are often many urgent conservation issues to balance in cultural heritage management, it is easy to forget that interest groups can be powerful; their demands have the potential to overtake or undermine any heritage protection priorities (Egloff 2006a; Robles García 2006). For rock art researchers, taking into account the interests of stakeholders also means considering the diverse values attributed to cultural heritage. Stakeholders may regard rock art variously, and at times concurrently, as culture, science, nature or economic resource.

(4) *Stakeholder support may be essential to the success of conservation management plans; however, long-running conflicts and divisions between stakeholders and interest groups can be extremely difficult to reconcile.*

Rock art connects many individuals and groups who, for assorted, overlapping and conflicting reasons, have a stake or interest in the site or its surroundings (Egloff 2006a: 85). The stakeholders of central Queensland rock art typically include: first and foremost, cultural groups with a connection to the cultural landscape (the most widely acknowledged cultural group/s are the First Nations Owners, however, as is the case with Carnarvon Gorge, rock art and the surrounding cultural landscape may connect many cultural groups not legally identified as custodians with associated rights); individual researchers, as well as education institutions (schools and universities); responsible government agencies; and commercial operators, such as those in the tourism or primary industries.

Cultural heritage management is still a young and evolving framework, and stakeholders have only been given serious attention in recent decades (see McKercher and Du Cros 2002). Bob McKercher and Hilary Du Cros argue that for cultural heritage management to be successful, it must be 'both professional and systematic', with preparedness for potential use conflicts and integration of multiple stakeholders as managers (2002: 52). This kind of forward planning and sophistication was not present in the earlier stages of cultural heritage management (McKercher and Du Cros 2002: 52).

Central Queensland rock art exists both on privately owned land and state-owned land managed by QPWS. Privately owned land is dominated by primary producing and mining interests (the region is the biggest beef producer in Australia, which means cattle grazing accounts for the largest land use, followed by broadacre crops, mostly cotton). There are some rock art sites on land owned by organisations or corporations, such as those established for tourism.

Thus, the term 'stakeholder' encompasses a broad range of connections and interests in central Queensland rock art, centred immediately within the site's geography as well as outside of it. Stakeholder groups are complex, with a range of potential risks, benefits, conflicts and opportunities that must be carefully weighed and examined rather than taken at face value. For example, the tourism industry is clearly interested in preserving rock art in central Queensland, as it attracts visitors to the region. However, tourist operators may be less interested in the cultural rights of First Nations peoples or the standard of care of rock art sites. They may also be unwilling to take responsibility for the impacts of visitors.

The cattle industry is a stakeholder with a track record of harming cultural heritage in central Queensland. Cattle and other introduced animals can directly damage rock art, as well as change the

surrounding vegetation, which can lead to other damage or increased risk of fire (Agnew et al. 2015: 20). Nevertheless, grazing is classed under Queensland's Cultural Heritage Act as a category 2 'low impact' activity that 'causes no additional surface disturbance', and therefore a CHMP or consultation with Aboriginal parties is not required unless some impact occurs (Rowland et al. 2014: 342-343). The Australian Archaeological Association submission to the Queensland Cultural Heritage Act Review noted that legislation's reliance on private land users self-assessing their duty of care 'is a failed concept which has led to the damage or destruction of thousands of cultural heritage sites, places and landscapes over the past 15 years of the Act's operation' (Australian Archaeological Association Incorporated 2019: 3). The protection of cultural heritage has also been politicised as a threat to pastoral interests, leading Walsh to declare the 'end to landholder tolerance of interest in rock art' in central Queensland following the Mabo decision (Walsh 2006: 4). At the same time, sites on cattle stations are not impacted by high numbers of visitors, meaning that they may offer some measure of protection for rock art as compared to sites within popular National Parks (assuming primary production itself does not cause damage).

Finally, there are the mining and development industries. On the face of it, they have no clear positive incentives for protecting rock art, meaning that the negative incentives of penalties and associated reputational risk are what compel protection. As potential and actual profit far outweigh financial penalties, it appears that there are competing financial incentives for non-compliance, making corporate and shareholder attitudes a potentially more powerful influence than legislation.

With varying degrees of attachment and influence on the cultural heritage 'asset', the literature indicates that the coordination, consultation and conflict resolution between the region's diverse stakeholders throughout the planning process can determine the success of cultural heritage management (see: McKercher and Du Cros 2002: 58; Robles García 2006: 105-112). Noting central Queensland's Bowen Basin as a region rich in both Aboriginal cultural heritage and resources, a paper by a group of archaeologists (Luke Godwin, Michael Morwood, Scott L'Oste-Brown and Allan Dale) calls for a regional approach to cultural heritage management. The conflicting land-use interests presented by the region's economically significant coal reserves are their primary focus, alongside natural gas (the extraction of which has considerably intensified in the time since their article was published), agriculture, and its associated irrigation and transport infrastructure (Godwin et al. 1999: 29-34). The paper makes a compelling case for more strategic forward planning, in light of what they describe as the reactive nature of the present system of cultural heritage management planning (for example, impact assessments

and cultural heritage management plans triggered by development planning).

(5) *The cultural priorities of First Nations Owners are increasingly being respected by the fields of archaeology and cultural heritage management, as well as the legislation that applies to each. However, there is more nuance required in the literature to understand cultural heritage as a living, continuous practice that takes place in a variety of contexts.*

From both an ethical and practical standpoint, cultural heritage management in Queensland must prioritise the decisions of First Nations people as rightful owners and custodians of their cultural inheritances, recognised internationally through the *United Nations Declaration on the Rights of Indigenous Peoples*, the *Burra Charter* (2013), and more recently, the *Queensland Human Rights Act* (2019), as well as proactively manage the (positive or negative) influence of other stakeholders and interest groups. Both Brian Egloff and Richard Mackay state that all involved in heritage conservation should work in partnership with First Nations communities, with projects and priorities to be determined by the 'culture bearers' on their terms and according to their cultural values and meanings, not those of the specialist (Egloff 2006b: 92; Mackay 2006: 131). This presents a new set of considerations for cultural heritage managers, including whether conservation projects can be designed to provide positive social and economic outcomes for communities (Egloff 2006b: 92).

In central Queensland, Aboriginal cultural groups with longstanding or ancestral connections to the region's rock art are quite diverse. The groups identified as First Nations Owners, including through native title claims, may live on Country, in larger nearby regional centres, or much further away. Many other cultural groups from surrounding regions do not claim ownership but hold deep-time connections and responsibilities to the cultural landscape, including rock art sites and those holding ancestral remains, through regular and ongoing ceremonial journeys and active engagement. There is also contention over who claims custodianship or connection rightfully, as indicated by overlapping native title claims.

Before First Nations groups can even become party to an approved cultural heritage management plan, they must first endure the time-consuming processes of asserting a rightful claim to a site, such as through native title, or by forming a working group. First Nations 'statutory parties' consulted for planning are narrowly defined as either native title holders, or if no successful native title determination has been made, it falls to the last group who submitted a claim (Queensland Government 2021b). This systemically excludes all other groups who may claim the site, regardless of their connection's sanctity, significantly impacting their cultural rights and obligations, and the potential for cultural continuation. In central Queensland, where sites at Carnarvon National

Park are sacred to many cultural groups, the narrow definition of statutory parties presents a significant problem to many First Nations peoples who may wish to engage in the maintenance and continuation of rock art sites.

Increasingly, rock art is understood according to First Nations terms of reference as part of the cultural landscape. As advocated by the World Heritage Committee, there has been a move from the CHMP towards a new type of document that situates cultural heritage values within the broader context of the surrounding environment, known as an Integrated Management Plan (Deacon 2006: 390-91). This signals a growing awareness of the expansive context of rock art, including a greater awareness of intangible and living heritage (see also: Poulios 2014; Taçon and Baker 2019).

Managing complexity

The five dilemmas I have identified resist easy resolutions by their very nature. To date, there are no robust models for integrating the variable, complex and sometimes conflicting conditions, risks, rights and perspectives involved in the care of rock art. Emergent approaches to managing cultural heritage, namely ones that prioritise First Nations stewardship and consider the need for stakeholder management, are discussed in the literature on a 'limited and ad hoc' basis (Egloff 2006a: 85).

Looking at international examples, a handful of case studies in the literature demonstrate that being prepared for stakeholder conflict increases the chances of successfully uniting different interest groups around cultural heritage values. A proactive approach to stakeholder conflict means including and consulting, rather than alienating, diverse stakeholders. Ángel Emilio Cabeza Monteiro discusses the progress of Chilean cultural heritage management according to the social, cultural and economic rights and interests of Indigenous communities, as well as traditional knowledge of their heritage, in his paper as part of the 5th World Archaeological Congress (Cabeza 2006: 105-112). He reaches the same powerful conclusion as the 'communities themselves' that 'the search for joint solutions' is 'more satisfying and long-lasting than any conflict could ever be' (Cabeza 2006: 129).

In the same proceedings, Pisit Charoenwongsa discusses the Nan Project in Thailand, which involved community stakeholders in meaningful ways: training community members in some of the on-site archaeological processes, integrating contemporary Indigenous cultural practices and objects in associated communications and cultural heritage displays, and converting the privately-owned site into public land (Charoenwongsa 2006: 103). The benefits of stakeholder inclusion were: cultural pride and continuation for Indigenous communities, educational and economic opportunities for the broader community, and resistance to development (Charoenwongsa 2006: 102-104).

Anabel Ford describes a similarly successful

community stakeholder-led approach at the El Pilar Archaeological Reserve for Maya Flora and Fauna (Ford 2006). The stakeholder group, 'Amigos de El Pilar', made up of local villagers, was able to clarify and advance its own priorities for conservation and management. This included changing the legal status of the reserve; raising international visibility; setting up education initiatives, including visitor trails that highlight traditional knowledge; fundraising and establishing partnerships with universities and NGOs; and developing commercial revenue streams in line with heritage values, such as eco-tourism ventures (Ford 2006).

While very different from a First Nations context in central Queensland, these examples provide promising instances of how grassroots initiatives can mobilise stakeholders around the complexities of cultural heritage management, and with minimal resources. They emphasise values and principles as the resin that binds diverse (and, at times, dissenting) communities around a common purpose. Beyond these small number of case studies, decision-making on priorities and approaches for conservation tends to be reactive (Marshall and Taçon 2014: 214–228) rather than values-based. The literature reflects insufficient discourse on how values and principles can help guide decisions, aside from those minimal ones set by the statutory landscape and professional standards (cf. Buckley and Sullivan 2014).

While the traditional orthodoxy suggests that an archaeologist, conservator or parks manager attempts to find solutions to isolated problems as they arise and typically operates within the confines of their respective roles, the literature discussed makes it clear that the scale, complexity and interconnectedness of risks to rock art means that to focus on one problem (for example, visitor impacts) is to overlook another, potentially more catastrophic, issue (for example, wildfire) (see Gale and Jacobs 1987; McKercher and Du Cros 2002; Deacon 2006; Egloff 2006a; Marshall and Taçon 2014: 214–228; McGrath 2016; Winn and Taçon 2016). In other words, to focus on parts is to overlook the complex whole. As discussed, some types of risk are so catastrophic that they eclipse all others (for example, the destruction of a cultural heritage site through mining activities), while others compound risks.

This may appear to present a bleak outlook; however, the emerging literature on stakeholders just discussed suggests that the solution may lie in the very nature of the problem. By embracing rather than avoiding complexity, such as the complexity of managing competing stakeholder interests, cultural heritage management may become more resilient in the face of growing challenges. By comprehensively embracing First Nations leadership in managing their cultural heritage according to self-determined priorities and processes rather than the narrow ones outlined in legislation and government policy, com-

munities may be able to offer solutions that better integrate the needs of people, culture and the natural landscape.

Conclusion

The history of material conservation in rock art is more often than not a story of 'perverse results' or solutions that accidentally make the problem worse: protective grilles that create unintended visual disturbances, chemical treatments that hasten the deterioration of rock art (e.g. Marshall 2020: 173, 229), or physical barriers that create fuel loads for fire. Baloon Cave is now a sorry chapter in this history. However, the First Nations community's experience of what happened there challenges the comfortable narrative of good intentions and unforeseen consequences. For the First Nations peoples connected to Baloon Cave, it seems that the State's good intentions were narrowly focused on legislation and visitors over sacred cultural heritage protection. For the Elders who raised concerns about the recycled plastic material, it appears the consequences were not so much unforeseeable as they were inconvenient.

Regardless of the theoretical soundness of any singular conservation or management intervention, adverse impacts may only become apparent following tragedy – after which, they become obvious. It is easy to ask now, with hindsight, how encircling the rock art at Baloon Cave in a petrochemical could ever have been imagined to be a protective measure. The more complicated question for the State, as for any other cultural heritage managing entity, is how the goals of 'protecting and presenting' First Nations cultural heritage can be more carefully weighed with the risks accompanying both protection and presentation.

Legislation, policy and international human rights make it clear that First Nations cultural rights must be given due primacy in relation to other competing priorities and stakeholder interests in First Nations cultural heritage. In doing so, the key assessment that must be undertaken is weighing the impacts on each party, such as catastrophic loss of cultural heritage versus reduced profit or restricted access. At least one point presents no dilemma: any new or improved model for managing First Nations cultural heritage must clearly be led by First Nations peoples, focused on their individual and collective cultural rights, interests and preferences.

Acknowledgments

This research has taken place on Yuggera, Jagera, Turrbal, Garingbal, Bidjara, Nguri, Gunggari, Ghungalu, Darumbal and Inningai Countries. It refers to places of extraordinary significance for these and other cultural groups who share waters, stories and songlines. This project is indebted to their Elders, past and present, and all First Nations people who care for and continue their cultural heritage. In particular, I am grateful for the close involvement of Dr D. Harding and Cheryl Leavy, and their ongoing insights and feedback on culture, Country and care for people and place. I am also

thankful for the important inputs of Uncle Fred Conway, Dr Jackie Huggins, Uncle Milton Lawton and Auntie Suzanne Thompson. I appreciate the many informal conversations I shared with members of the Interim Aboriginal Working Group and Indigenous Rangers at Carnarvon National Park, which helped grow my understanding of the issues and complexities of cultural heritage management in central Queensland. I extend enormous thanks to my PhD supervisors, who have expertly grounded the project in their respective disciplines: Professor Susan Best and Professor Paul Taçon. I also thank my paper's three anonymous RAR peer reviewers for their constructive comments. This research has been supported by an Australian Government Research Training Program Scholarship, and the development of this paper has been supported by a Griffith University Research Outputs Excellence Scholarship.

Dr Madeleine King
Queensland College of Art & Design, Griffith University
madeleine.king@griffith.edu.au

REFERENCES

- AGNEW, N., J. DEACON, N. HALL, T. LITTLE, S. SULLIVAN and P. S. C. TAÇON 2015. *Rock art: a cultural treasure at risk*. The Getty Conservation Institute, Los Angeles.
- Australian Archaeological Association Incorporated 2019. Review of the Cultural Heritage Acts, Submission 40.
- BEATON, J. M. 1991a. Cathedral Cave, a rockshelter in Carnarvon Gorge, Queensland. *Queensland Archaeological Research* 8: 33–84.
- BEATON, J. M. 1991b. Excavations at Rainbow Cave and Wanderer's Cave: two rockshelters in the Carnarvon Range, Queensland. *Queensland Archaeological Research* 8: 3–32.
- BUCKLEY, K. and S. SULLIVAN 2014. Issues in values-based management for Indigenous cultural heritage in Australia. *APT Bulletin* (1986) 45(4): 35–42.
- BUETTEL, J., B. DAVID, R. MULLETT, J. FRESLØV, K. SZABÓ and GunaiKurnai Land and Waters Aboriginal Corporation (eds) 2023. *Fires in GunaiKurnai Country: landscape fires and their impacts on Aboriginal cultural heritage places and artefacts in southeastern Australia*. Archaeopress Publishing Ltd, Oxford.
- CABEZA, A. 2006. Reflections on archaeological heritage and indigenous peoples in Chile. In N. Agnew and J. Bridgland (eds), *Of the past, for the future: integrating archaeology and conservation*, pp. 105–112. Getty Conservation Institute, Los Angeles.
- CARMICHAEL, B., G. WILSON, I. NAMARNYILK, S. NADJI, J. CAHILL, S. BROCKWELL and D. BIRD 2017. Australian Indigenous rangers managing the impacts of climate change on cultural heritage sites. In T. Dawson, C. Nimura, E. Lopez-Romero and M. Daire (eds), *Public Archaeology and Climate Change*, pp. 162–174. Oxbow Books, Oxford.
- CHAROENWONGSA, P. 2006. Community-based archaeological resource management in South East Asia. In N. Agnew and J. Bridgland (eds), *Of the past, for the future: integrating archaeology and conservation*, pp. 102–104. Getty Conservation Institute, Los Angeles.
- DAVIS, C. M. 2018. Effects of climate change on cultural resources in the northern Rockies. In J. E. Halofsky and D. L. Peterson (eds), *Climate change and Rocky Mountain ecosystems*, pp. 209–219. Springer, Cham.
- DATSIP (Department of Aboriginal and Torres Strait Islander Partnerships) 2005. Aboriginal Cultural Heritage Act 2003 cultural heritage management plan guidelines. Queensland Government, Brisbane.
- DEACON, J. 2006. Rock art conservation and tourism. *Journal of Archaeological Method and Theory* 13(4): 379–399.
- DCCEEW (Department of Climate Change, Energy, the Environment and Water) 2020. Australia's national heritage list. <https://www.environment.gov.au/heritage/places/national-heritage-list>, retrieved 24 March 2020.
- EGLOFF, B. 2006a. Introduction. In N. Agnew and J. Bridgland (eds), *Of the past, for the future: integrating archaeology and conservation*, pp. 85–86. Getty Conservation Institute, Los Angeles.
- EGLOFF, B. 2006b. Conservation, researchers, and Aboriginal heritage: a perspective from coastal southeastern Australia. In N. Agnew and J. Bridgland (eds), *Of the past, for the future: integrating archaeology and conservation*, pp. 87–93. Getty Conservation Institute, Los Angeles.
- FORD, A. 2006. Adaptive management and the community at El Pilar: a philosophy of resilience for the Maya Forest. In N. Agnew and J. Bridgland (eds), *Of the past, for the future: integrating archaeology and conservation*, pp. 105–112. Getty Conservation Institute, Los Angeles.
- FRANKLIN, N. R. 2011. Visitor books in the management of rock art sites: an evaluation using Carnarvon Gorge as a test case. *Rock Art Research* 28(2): 251–64.
- GALE, F. and J. JACOBS 1986. Identifying high-risk visitors at Aboriginal art sites in Australia. *Rock Art Research* 3(1): 3–19.
- GALE, F. and J. JACOBS 1987. Aboriginal art—Australia's neglected inheritance. *World Archaeology* 19(2): 226–235.
- GIORGI, M. 2017. New interpretations of petroglyphs in Carnarvon Gorge, Queensland, Australia: analysis of the vulva-like images in the Art Gallery and Cathedral Cave sites. Unpubl. MA honours thesis, School of Humanities, Languages and Social Science, Griffith University, Gold Coast.
- GIORGI, M. and P. S. C. TAÇON 2019. Carnarvon Gorge: safekeeping a place and Indigenous agency within rock art research and management. *Australian Archaeology* 85(2): 184–195.
- GODWIN, L., M. J. MORWOOD, S. L'OSTE-BROWN and D. ALLAN 1999. Bowen Basin Aboriginal cultural heritage project: a strategic regional approach for research and management. *Australian Archaeology* 48: 29–34.
- GUNN, R. G. and R. L. WHEAR 2009. Bushfire-induced heat and smoke patterns within an Aboriginal rock art shelter. *Rock Art Research* 26(2): 205–212.
- HARDING, D. 2019. The language of space. Unpubl. PhD thesis, Griffith University, Brisbane.
- HUNTLEY, J., M. AUBERT, A. A. OKTAVIANA, R. LEBE, B. HAKIM, B. BURHAN, L. M. AKSA, I. M. GERIA, M. RAMLI, L. SIAGIAN and H. E. A. BRAND 2021. The effects of climate change on the Pleistocene rock art of Sulawesi. *Scientific Reports* 11(1): 9833.
- HUNTLEY, J. and C. WEBSTER 2023. The impacts of fires on rock art sites and ochre. In J. Buettel, B. David, R. Mullett, J. Fresløv, K. Szabó, and GunaiKurnai Land and Waters Aboriginal Corporation (eds), *Fires in GunaiKurnai Country: landscape fires and their impacts on Aboriginal cultural heritage places and artefacts in southeastern Australia*. Archaeopress Publishing Ltd., Oxford.
- KERKHOVE, R. 2010. Bidjara signs—a report on the styles of rock art, ceremonial sites and other material culture in and near the Bidjara claim area. Unpubl. report, Interactive Community Planning Australia, Nambour.
- MACKAY, R. 2006. Whose archaeology? Social considerations

- in archaeological research design. In N. Agnew and J. Bridgland (eds), *Of the past, for the future: integrating archaeology and conservation*, pp. 131–142. Getty Conservation Institute, Los Angeles.
- MARSHALL, M. 2020. Rock art conservation and management: 21st century perspectives. Unpubl. PhD thesis, Australian National University, Canberra.
- MARSHALL, M. and P. S. C. TAÇON 2014. Past and present, traditional and scientific: the conservation and management of rock-art sites in Australia. In T. Darvill and A. P. Batarda Fernandes (eds), *Open-air rock-art conservation and management: state of the art and future perspectives*, pp. 214–228. Routledge, New York.
- MARTIN, R. J., A. SNEDDON and D. TRIGGER 2016. Conservation, commodification and Indigenous heritage in Queensland. In P. F. McGrath (ed.), *The right to protect sites: Indigenous heritage management in the era of Native Title*, pp. 137–158. AIATSIS Research Publications, Canberra.
- MCGRATH, P. F. (ed.) 2016. *The right to protect sites: Indigenous heritage management in the era of native title*. AIATSIS Research Publications, Canberra.
- MCKERCHER, B. and H. DU CROS 2002. *Cultural tourism: the partnership between tourism and cultural heritage management*. Haworth Hospitality Press, New York.
- MCNIVEN, I. J. and G. HITCHCOCK 2016. From missionaries to Mabo: place-based heritage management and native title in Torres Strait. In P. F. McGrath (ed.), *The right to protect sites: Indigenous heritage management in the era of Native Title*, pp. 159–186. AIATSIS Research Publications, Canberra.
- MORWOOD, M. J. 1978. Ken's Cave and the art of Central-Western Queensland. *Australian Archaeology* 8: 22–31.
- MORWOOD, M. J. 1981. Archaeology of the Central Queensland Highlands: The Stone Component. *Archaeology in Oceania* 16(1): 1–52.
- MORWOOD, M. J. 2002. *Visions from the past: the archaeology of Australian Aboriginal art*. Allen & Unwin, Crows Nest, NSW.
- PEARSON, M. and S. SULLIVAN 1995. *Looking after heritage places: the basics of heritage planning for managers, landowners and administrators*. Melbourne University Press, Carlton.
- POULIOS, I. 2014. *The past in the present: a living heritage approach – Meteora, Greece*. Ubiquity Press, London.
- QPWS (Queensland Parks and Wildlife Service) 2005. Carnarvon National Park – management plan. Queensland Environmental Protection Agency, Brisbane.
- QPWS (Queensland Parks and Wildlife Service) 2020. Amphitheatre walk. <https://parks.des.qld.gov.au/parks/carnarvon-gorge/journeys/amphitheatre-walk>, retrieved 28 July 2020.
- Queensland Government 2021a. Aboriginal and Torres Strait Islander cultural heritage: cultural heritage laws in Queensland. <https://www.qld.gov.au/firstnations/environment-land-use-native-title/cultural-heritage/queensland-legislation>, retrieved 7 September 2023.
- Queensland Government 2021b. Aboriginal and Torres Strait Islander cultural heritage: Aboriginal and Torres Strait Islander statutory parties. <https://www.qld.gov.au/firstnations/environment-land-use-native-title/cultural-heritage/aboriginal-and-torres-strait-islander-statutory-parties>, retrieved 7 September 2023.
- QUINNELL, M. 1976. Aboriginal rock art in Carnarvon Gorge, south central Queensland. Unpubl. MA thesis, University of New England, Armidale.
- ROBLES GARCÍA, N. 2006. Social landscapes and archaeological heritage in Latin America. In N. Agnew and J. Bridgland (eds), *Of the past, for the future: integrating archaeology and conservation*, pp. 105–112. Getty Conservation Institute, Los Angeles.
- ROSS, A. 2016. Defining cultural heritage at Gummingurru, Queensland, Australia. In H. Allen and C. Phillips (eds), *Bridging the divide: Indigenous communities and archaeology into the 21st century*, pp. 107–128. Taylor and Francis, Walnut Creek.
- ROWLAND, M. J., S. ULM and J. REID 2014. Compliance with Indigenous cultural heritage legislation in Queensland: perceptions, realities and prospects. *Environmental and Planning Law Journal* 31(5): 329–351.
- SCOTT, M. and R. SLOGGETT 2022. Climate change and rock art: a valuable resource at risk. In R. Sloggett and M. Scott (eds), *Climatic and environmental threats to cultural heritage*, pp. 60–78. Routledge, Abingdon.
- SLOGGETT, R. and M. SCOTT 2022. *Climatic and environmental threats to cultural heritage*. Routledge, Abingdon.
- SMITH, C. and H. BURKE 2007. *Digging it up down under: a practical guide to doing archaeology in Australia*. Springer, New York.
- SULLIVAN, S. 1989. *Site management. Rock art of Baja California*. Getty Conservation Institute, Los Angeles.
- TAÇON, P. S. C. 2019. Baloon Cave visit and assessment, Carnarvon Gorge, Queensland Fieldwork Report. Griffith Centre for Social and Cultural Research PERAHU, Gold Coast.
- TAÇON, P. S. C. 2021. Baloon Cave visit and assessment, Carnarvon Gorge, Queensland. Fieldwork report, 7 February 2019. In H. Matthews and D. Harding (eds), *Dale Harding: through a lens of visitation*, pp. 141–156. Monash University Museum of Art, Melbourne.
- TAÇON, P. S. C. and S. BAKER 2019. New and emerging challenges to heritage and well-being: a critical review. *Heritage* 2(2): 1300–1315.
- TAÇON, P. S. C., S. THOMPSON, K. GREENWOOD, A. JALANDONI, M. WILLIAMS and M. KOTTERMAIR 2022. Marra Wonga: archaeological and contemporary First Nations interpretations of one of central Queensland's largest rock art sites. *Australian Archaeology* 88(2): 159–179.
- VOGLER, S. 2019. Heat on clearing laws. *The Courier Mail*, 16 July. <https://infoweb.newsbank.com/apps/news/document-view?p=AWNB&docref=news/174B33539428C440>.
- WALSH, G. L. 1979. Mutilated hands or signal stencils? A consideration of irregular hand stencils from central Queensland. *Australian Archaeology* 9: 33–41.
- WALSH, G. L. 1984. Archaeological site management in Carnarvon National Park: a case history in the dilemma of presentation or preservation. In H. Sullivan (ed.), *Visitors to Aboriginal sites: access, control and management: proceedings of the 1983 Kakadu Workshop*, pp. 1–14. Australian National Parks and Wildlife Service, Canberra.
- WALSH, G. 2006. Development of Australian rock art recording methodologies: for the interpretation of cultural and environmental histories. Unpubl. PhD thesis, Griffith University, Brisbane.
- WINN, N. B. and P. S. C. TAÇON 2016. Managing the past in northern Australia: challenges and pitfalls for Indigenous communities, rock art and cultural heritage. *Heritage & Society* 9(2): 168–190.