

Anticipating loss: rethinking endangerment in heritage futures

Caitlin DeSilvey & Rodney Harrison

To cite this article: Caitlin DeSilvey & Rodney Harrison (2019): Anticipating loss: rethinking endangerment in heritage futures, International Journal of Heritage Studies, DOI: [10.1080/13527258.2019.1644530](https://doi.org/10.1080/13527258.2019.1644530)

To link to this article: <https://doi.org/10.1080/13527258.2019.1644530>



© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 26 Aug 2019.



Submit your article to this journal [↗](#)



Article views: 758





View related articles [↗](#)



View Crossmark data [↗](#)

Anticipating loss: rethinking endangerment in heritage futures

Caitlin DeSilvey ^a and Rodney Harrison ^b

^aEnvironment and Sustainability Institute, University of Exeter, Penryn, United Kingdom of Great Britain and Northern Ireland; ^bUCL Institute of Archaeology, University College London, London, England

ABSTRACT

Heritage relies, to a large extent, on notions of endangerment and consequential attempts to arrest or reverse processes of loss and change. The papers in this special issue engage critically with this underlying orientation, exploring the social and cultural work which is produced through efforts to avert loss. In doing so, the papers also point towards alternative ways of valuing objects, places and practices which are not solely determined by notions of endangerment and risk. We suggest three general themes which connect critical investigation of these issues across the varied natural and cultural heritage contexts through which these papers work – the *inevitability* of loss; the *politics* of loss; and the *potential* in loss. These themes have significant implications not only for the future of natural and cultural heritage preservation, conservation and management but also in mapping out future research directions for critical heritage studies.

ARTICLE HISTORY

Received 4 July 2019

Accepted 13 July 2019

KEYWORDS

Endangerment; loss; futures; change; Anthropocene

Introduction

The destabilisation of current ecological, political and economic orders is accompanied by the anticipation of accelerated and unpredictable loss in many contexts (Bendell 2018), including those related to a broad range of heritage objects, places and practices. Heritage is no stranger to the prospect of loss: in fact, it could be argued that the perception of risk and endangerment is a fundamental element in the production of heritage value. In their articulation of the ‘endangerment sensibility’, Fernando Vidal and Nélia Dias (2016) argue:

... the notion stands at the heart of a network of concepts, values, and practices dealing with entities considered threatened by extinction and destruction, and with techniques aimed at preserving them. An entity’s endangered status crystallizes by way of its incorporation into various documentary devices – archives, catalogues, databases, inventories and atlases. These devices materialize values that inspire an urge to perpetuate ... (2016, 1)

The endangerment sensibility operates across cultural and natural heritage preservation, conservation and management contexts, through apparatuses such as the UNESCO List of World Heritage in Danger (Rico 2015; Harrison 2016) and the IUCN Red List of Threatened Species (Harrison 2013a; Heise 2016). As such, ‘loss aversion’ (Holtorf 2015) is understood to be a critical motivating factor in heritage practice. Grounded as it is in sustained analysis of cultural responses to perceived loss and endangerment, heritage studies are perhaps uniquely positioned to provide critical perspectives on the current global crisis and the anticipation of widespread attrition and extinction across a range of cultural, social, geographical and ecological contexts.

The papers in this special issue highlight loss as a motivating factor in natural and cultural heritage practices and investigate the social and cultural work which is produced through related

efforts to avert or arrest loss or change. They also go beyond such observations to explore alternative ways of valuing objects, places and practices which are not solely determined by endangerment and risk. By way of introduction, we articulate three themes which cut across the varied natural and cultural heritage contexts which are explored in more depth in the papers that follow – the *inevitability* of loss; the *politics* of loss; and the *potential* in loss.

The inevitability of loss

The assertion that heritage assets are irreplaceable and that heritage is a ‘non-renewable resource’ has underpinned a commitment to protect heritage from damage, decay and destruction – and other forces, cultural or biophysical, which may lead to harm or loss. The overall goal of such protective action is to sustain heritage significance, usually defined with reference to a set of specific values. In the UK, for example, Historic England identifies values related to cultural heritage as ‘evidential’, ‘historical’, ‘aesthetic’ and ‘communal’, while the Australia ICOMOS Charter for Places of Cultural Significance (The Burra Charter) defines the significance of cultural heritage assets in terms of ‘aesthetic, historic, scientific, social or spiritual value for past, present or future generations’ (Australia ICOMOS 2013, 2). The equivalent framing in natural heritage contexts is articulated through the notion of the intrinsic values of biological diversity. The Convention on Biological Diversity (United Nations 1992), for example, refers to the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity. How such values might be articulated, defined, conserved and managed constitutes a significant area of concern for heritage (see discussion in Fredheim and Khalaf 2016).

In the face of accelerated climate and environmental change, however, promises of conservation and perpetuation are looking increasingly unsustainable. If climate change predictions are accurate, then some form of heritage loss, particularly in coastal contexts, appears to be inevitable, and heritage values may need to adapt to reflect this new reality (Harvey and Perry 2015; Koslov 2016; DeSilvey 2012). ‘Loss and change are part of life, and part of the currency that gives our heritage value’, argue Hannah Fluck and Meredith Wiggins, ‘It is not so much loss that is problematic, but how individuals, communities and societies choose to deal with loss’ (Fluck and Wiggins 2017, 167).

The actual process of ‘dealing with loss’ in heritage practice and policy is still in its early stages and often more about recognition of the problem than formulated response. The US National Park Service, in its 2016 Cultural Resources Climate Change Strategy, made the bold statement that, ‘We will ensure that our management options recognize the potential for loss . . . Managers should consider choices such as documenting some resources and letting them fall into ruin’ (Rockman et al. 2016, 34). In the UK, Historic England has committed to ‘develop an approach for dealing with inevitable change, including loss’ (Fluck 2016). As yet, however, responses have tended to focus on refining systems for assessing significance and setting priorities for conservation, making difficult choices about where to direct limited resources. Strategies for the intentional management of loss – of integrity, form and fabric – are still underdeveloped (though see Harvey and Perry 2015; Hambrecht and Rockman 2017; DeSilvey 2017). The papers in this special issue provide a range of conceptual and practical resources for extending this conversation and developing meaningful ways of responding to loss in specific cultural, ecological, political and social contexts.

The politics of loss

It is a widely accepted trope that the conservation or preservation of both natural and cultural heritage is something which is done ‘for the future’ or on behalf of ‘future generations’ (Harrison 2013a, 2015; Harrison et al. 2016; see also Stainforth 2017; Stainforth and Graham 2017). Explicit statements to this effect have for some time been common. In cultural heritage fields, they often appear as a justification for a focus on the past, where heritage may appear to be something which is ‘of the past, in the present, for the future’ (e.g. Agnew and Bridgland 2006). In natural heritage

fields, especially following the widely cited definition of sustainable development which was popularised by the Brundtland Report on ‘Our Common Future’ (World Commission on Environment and Development 1987), the implication that the future is something which ‘we’ have responsibilities ‘to’ has become particularly widespread. But who is this ‘we’ (c.f. Thomas 2016)? Precisely ‘what’ are we obligated to do, and to ‘whom’? And ‘when’ is this future to which we are obligated?

These kinds of statements about the future appear to normalise and lend moral weight to the mission of conservation practice, whilst detracting from a consideration of how the salvage paradigm in heritage is fundamentally premised on a system which is equally implicated in the *sacrifice* and *loss* of certain less valued cultural and natural formations alongside the preservation or conservation of more valued ones. While it is conventional to think about conservation or preservation as a series of different practical fields oriented towards managing and maintaining what remains of biological and/or cultural diversity from the past, scholarship in critical heritage and museum studies has been important in showing how heritage ‘works’ to promote certain kinds of objects, places, practices and values to the detriment of others – heritage generates its own particular systems of value which emerge from specific collecting and ordering practices, each of which in turn has its own set of governmental implications (e.g. see Bennett et al. 2017).

These questions are fundamentally political ones. Whose stories are collected, remembered and celebrated and whose are forgotten? How are the limited funds for nature conservation distributed amongst the world’s endangered species? Who decides what gets lost and what to save? While these discussions have dominated the consideration of the politics of representation in cultural heritage for decades, they are equally applicable to issues of natural heritage conservation (e.g. see Orlove and Brush 1996; Zerner 1999; Tsing 2005; Benson 2010; Bird Rose, van Dooren, and Chrulew 2017). Increasingly, heritage scholars are adopting integrated approaches to examine the politics of loss in both cultural and natural heritage contexts. A recent study of the effects of sea level rise on Kiribati, a low-lying island nation in the Pacific Ocean, for example, engages with questions about the extent to which an indigenous, largely oral culture can be ‘preserved’ outside its ‘natural’ and dynamic setting (Woodham et al. 2018). In this context, the conventional question of whose heritage is to be preserved is reversed to engage instead with the question of ‘whose heritage will be lost?’

The potential in loss

As noted above, there is already an appreciation of the ways in which loss can enhance heritage value – in order for certain types of (natural or cultural) heritage asset to achieve a level of rarity and scarcity which triggers protective action, many other others must be lost along the way (see Bartolini and DeSilvey, in prep). Partial loss can also be productive of aesthetic value, as with the example of ‘patina’ in a gradually degrading historic structure, which can confer a sense of authenticity and age (Dawdy 2016; Douglas-Jones, Hughes, Jones and Yarrow, 2016). Total loss, however, and the fatal undermining of stability and integrity, is usually seen as something to be avoided at all costs.

There are emerging perspectives which go further, however, and see loss as potentially generative and emancipatory, facilitating the emergence of new values, attachments and forms of significance. Rodney Harrison (2013b) has drawn analogies with memory practices to suggest that heritage may need to actively tend to its conservation objects by both ‘pruning’ and ‘forgetting’. Jem Bendell, in his discussion of ‘deep adaptation’, presents the concept of ‘relinquishment’, as the intentional ‘letting go of certain assets, behaviours and beliefs where retaining them could make matters worse’ (2018). He sees relinquishment as a precondition for the emergence of alternative behaviours and beliefs, aligned with the acceptance of irrevocable loss as a background condition. In cultural heritage contexts, relinquishment resonates with concepts of ‘curated decay’ (DeSilvey 2017) and the celebration of new possibilities which can emerge from

destruction (Rico 2016). Such approaches aim to work *with* change rather than arrest or reverse it: '[B]y accepting ongoing process we are not automatically triggering disposal and loss, but may in fact be opening ourselves up to a more meaningful and reciprocal relationship with the material past' (DeSilvey 2017, 179). In a similar vein, the work of Liz Koslov counters prevailing negative associations with coastal 'retreat' to argue that it can be empowering for affected individuals and communities; there is a 'positive potential for the process of giving in and giving up to prove reparative rather than harmful' (Koslov 2016, 364).

In natural heritage contexts, ecologist Chris Thomas discusses the pervasive tendency for ecologists to interpret change (usually the arrival of new species or the shifting habitats of established ones) as 'further evidence that the world is deviating from some imagined, idealised state, set at an undefined time in the past'. In an argument with clear relevance for built heritage management, he argues that, 'We need to avoid interpreting change as loss when change is inevitable' (Thomas 2018, 40–43). There are gains as well as losses in change, he asserts, and we need to be more open to the emergence of unexpected, non-analogue ecologies. These arguments regarding the potentially positive and generative aspects of loss are explored in detail in the papers that follow.

Contents and contexts

The majority of the papers collected in this special issue were originally presented as part of two sessions on 'Anticipating Loss', organised by Caitlin DeSilvey and Rodney Harrison at the Second International Conference on Anticipation, held at Senate House in London in November 2017 as part of the *Heritage Futures* research programme (www.heritage-futures.org). The papers presented here focus on different forms of heritage loss and range across diverse geographical and conceptual territory.

Some papers pitch their focus at a landscape scale, exploring questions of identity and place, and suggesting ways in which loss and rupture could be productive of new social, cultural, material, political and ecological alignments and attachments. Rico presents an analysis of the response to the destruction and loss of material cultural heritage as a result of tsunami events in Banda Aceh, Indonesia. She highlights the tension between the impulse to reconstruct heritage to its pre-disaster condition and the emergence of practices that sought to socially and materially construct new forms of heritage, oriented to the remembrance of the disaster itself, and anticipating responses to future loss. These post-disaster memorials are revealed, however, to be unstable objects in their own right, at risk of becoming irrelevant or incoherent with the passage of time. Bartolini and DeSilvey touch on similar themes to those explored by Rico, but with an explicitly methodological focus. They explore the use of film as a method in critical heritage studies, describing research they carried out with a group of citizen archaeologists who were recording eroding and deteriorating heritage features at an exposed coastal site. The paper discusses their understanding of loss in this context, as something inevitable and anticipated, but also generative: coastal process and gradual decay expose new archaeological features and facets and provide opportunities for engagement with the spirit of the place.

Another theme that unites several of the papers is the role of collections in the articulation and management of endangerment. In their paper, Breithoff and Harrison discuss strategies for the conservation of species perceived to be under threat, against a background context of extinction and habitat loss. Here, anticipated loss, interpreted by way of late capitalist logics, is taken as a prompt to collect and accumulate. The DNA of endangered animals is assembled in a (bio)'bank', which the authors argue functions for the creation and accumulation of new forms of biocapital, the assumption being that such collections can provide resources for as yet uncertain future applications. This biodiversity insurance policy is defined by the perception of risk, and by the logic of the proxy, through which certain kinds of biological materials come to stand in for the animal species they were extracted from. Morgan and Macdonald also focus on collections, but their concern is the processes of deaccessioning and disposal in the context of museums with social history collections and the strategies designed to cope with the logical end

result of a tendency within heritage to over-accumulate (Harrison 2013b). The paper explores practices of intentional, calculated loss, intended to address the problem of profusion. A proactive response to the anticipated loss of resources (and space) can be framed through the concept of 'degrowth', the authors argue, challenging taken for granted assumptions about the desirability of continued growth and accumulation.

Questions of alternative heritages and futures provide the focus for the final pair of papers. May presents a critical analysis of endangerment narratives as a basis for collective action. She argues that calls to 'save' endangered landscapes and features offer limited opportunities for sustained and meaningful participation. Her paper presents a case study of heritage participation in a specific landscape, the UK's Lake District, through the practice of fell-shepherding, a practice defined by care, complexity and collaboration, and oriented to the production of desirable futures rather than imperilled pasts. In the final paper, Pétursdóttir addresses the circulation and accumulation of seaborne debris as part of the peculiar heritage of the Anthropocene. This material is conventionally defined by its status as 'waste', stripped of its function (and often its form), and reduced to problematic matter which poses a threat to marine and terrestrial ecologies. But, perceived from another angle, she argues, the ambiguity and instability of this drift matter can be productive of alternative ways of knowing and making sense of more-than-human worlds, with relevance for future heritage and heritage futures.

Conclusion

The papers in this special issue point to both the inevitability and the creative potential of loss and change. Such observations seem inescapable for heritage in light of the current recognition of the Anthropocene or what might be termed the 'climate change era' (Solli et al 2011; Harrison 2015; Harvey and Perry 2015; Lorimer 2015; Olsen and Pétursdóttir 2016; Harrison and Sterling in press). However, we should be careful not to overestimate or romanticise the emancipatory potential of such processes. In *Rubble*, Gastón Gordillo (2014) reminds us of the inequalities of power which underpin processes of ruination in many global contexts. Yael Navaro-Yashin (2012) and Shannon Lee Dawdy (2016) articulate how those objects, places and practices which are transformed through processes of destruction and loss are also deeply politically contested. Nonetheless, it is clear that the more sophisticated ways of understanding, anticipating and engaging forms of heritage loss outlined here point not only to challenging new ways of 'doing' and practising natural and cultural heritage preservation, conservation and management but also map out important new lines of enquiry for heritage studies in the future.

Acknowledgements

The majority of the papers in this special issue were originally presented as part of two sessions on 'Anticipating Loss' co-organised by the guest editors at the Second International Conference on Anticipation, held at Senate House in London in November 2017. We thank all participants for their insights and contributions which have helped shape our thinking on the questions addressed here. Participation in the session was made possible by the *Heritage Futures* research programme (2015–2019), which was funded by an Arts and Humanities Research Council (AHRC) 'Care for the Future: Thinking Forward through the Past' Theme Large Grant (AH/M004376/1), awarded to Rodney Harrison (as principal investigator), Caitlin DeSilvey, Cornelius Holtorf, Sharon Macdonald (as co-investigators), Antony Lyons (as senior creative fellow), Martha Fleming (as senior postdoctoral researcher), Nadia Bartolini, Sarah May, Jennie Morgan and Sefryn Penrose (as named postdoctoral researchers). Three PhD students were additionally funded as in-kind support for the research programme by their respective host universities – Kyle Lee-Crossett (University College London), Bryony Prestidge (University of York) and Robyn Raxworthy (University of Exeter). The team of researchers was subsequently joined by Esther Breithoff (as postdoctoral researcher) and by Hannah Williams (as administrative assistant and events coordinator, a role which was in turn later filled by Kyle Lee-Crossett) and, in its final year, by Harald Fredheim (as postdoctoral researcher). See www.heritage-futures.org for further information. RH's work on this special issue has also been supported by his AHRC Heritage Priority Area Leadership Fellowship Grant (AH/P009719/1). See www.heritage-research.org for further information.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding



This work was supported by the Arts and Humanities Research Council (AH/M004376/1, AH/P009719/1).

Notes on contributors

Caitlin DeSilvey is Associate Professor of Cultural Geography at the University of Exeter, where she has been employed since 2007. Her research explores the cultural significance of material and environmental change, with a particular focus on heritage contexts. She has worked on a range of interdisciplinary projects, supported by funding from UK research councils (AHRC, EPSRC, NERC), the Royal Geographical Society, the Norwegian Research Council and the European Social Fund. Recent publications include *Anticipatory History* (2011, with Simon Naylor and Colin Sackett), *Visible Mending* (2013, with Steven Bond and James R. Ryan) and *Curated Decay: Heritage Beyond Saving* (2017).

Rodney Harrison is Professor of Heritage Studies at the UCL Institute of Archaeology and Arts and Humanities Research Council (AHRC) Heritage Priority Area Leadership Fellow. He is Principal Investigator of the AHRC funded Heritage Futures Research Programme; Director of the Heritage Futures Laboratory at UCL; and leads the Work Package on ‘Theorizing heritage futures in Europe: heritage scenarios’ as part of the European Commission funded Marie Skłodowska-Curie action [MSCA] Doctoral Training Network CHEurope: Critical Heritage Studies and the Future of Europe. He is the founding editor and editor-in-chief of the *Journal of Contemporary Archaeology* and was a founding executive committee member of the Association of Critical Heritage Studies. He is the (co) author or (co)editor of more than a dozen books and guest edited journal volumes and over 70 peer reviewed journal articles and book chapters. In addition to the AHRC his research has been funded by the Global Challenges Research Fund, British Academy, Wenner-Gren Foundation, Australian Research Council, Australian Institute of Aboriginal and Torres Strait Islander Studies and the European Commission.

ORCID

Caitlin DeSilvey  <http://orcid.org/0000-0003-1629-8414>
 Rodney Harrison  <http://orcid.org/0000-0002-5030-0525>

References

- Agnew, N., and J. Bridgeland, editors. 2006. *Of the Past, for the Future: Integrating Archaeology and Conservation*. Los Angeles: Getty Conservation Institute.
- Australia ICOMOS. 2013. *The Burra Charter. The Australia ICOMOS Charter for Places of Cultural Significance*. Burwood, Vic: Australia ICOMOS.
- Bendell, J. 2018. “Deep Adaptation: A Map for Navigating Climate Tragedy,” IFLAS Occasional Paper 2. <http://insight.cumbria.ac.uk/id/eprint/4166/>.
- Bennett, T., F. Cameron, N. Dias, B. Dibley, I. Jacknis, R. Harrison, and C. McCarthy, eds. 2017. *Collecting, Ordering, Governing: Anthropology, Museums and Liberal Government*. Durham, NC: Duke University Press.
- Benson, E. 2010. *Wired Wildness: Technologies of Tracking and the Making of Modern Wildlife*. Baltimore, MD: Johns Hopkins University Press.
- Bird Rose, D., T. van Dooren, and M. Chrulow, eds. 2017. *Extinction Studies: Stories of Time, Death, and Generations*. New York: Columbia University Press.
- Dawdy, S. L. 2016. *Patina: A Profane Archaeology*. Chicago: Chicago University Press.
- DeSilvey, C. 2012. “Making Sense of Transience: An Anticipatory History.” *Cultural Geographies* 19 (1): 31–54. doi:10.1177/1474474010397599.
- DeSilvey, C. 2017. *Curated Decay: Heritage beyond Saving*. Minneapolis: University of Minnesota Press.
- Douglas-Jones, R., J. Hughes, S. Jones, and T. Yarrow. 2016. “Science, Value and Material Decay in The Conservation Of Historic Environments.” *Journal of Cultural Heritage* 21: 823-833. Retrieved from doi:10.1016/j.culher.2016.03.007
- Fluck, H. 2016. “*Historic England Climate Change Adaptation Report*,” Research Report Series 28/2016. Historic England, ISSN 2059-4453 (Online)

- Fluck, H., and M. Wiggins. 2017. "Climate Change, Heritage Policy and Practice in England: Risks and Opportunities". *Archaeological Review from Cambridge* 32(2), 159–181.
- Fredheim, L. H., and M. Khalaf. 2016. "The Significance of Values: Heritage Value Typologies Re-examined." *International Journal of Heritage Studies* 22 (6): 466–481. doi:10.1080/13527258.2016.1171247.
- Gordillo, G. R. 2014. *Rubble: The Afterlife of Destruction*. Durham, NC: Duke University Press.
- Hambrecht, G., and M. Rockman. 2017. "International Approaches to Climate Change and Cultural Heritage." *American Antiquity* 82 (4): 627–641. doi:10.1017/aaq.2017.30.
- Harrison, R. 2013a. *Heritage: Critical Approaches*. Abingdon and New York: Routledge.
- Harrison, R. 2013b. "Forgetting to Remember, Remembering to Forget: Late Modern Heritage Practices, Sustainability and the 'crisis' of Accumulation of the Past." *International Journal of Heritage Studies* 19 (6): 579–595. doi:10.1080/13527258.2012.678371.
- Harrison, R. 2015. "Beyond 'Natural' and 'Cultural' Heritage: Toward an Ontological Politics of Heritage in the Age of Anthropocene." *Heritage & Society* 8 (1): 24–42. doi:10.1179/2159032X15Z.00000000036.
- Harrison, R. 2016. "World Heritage Listing and the Globalization of the Endangerment Sensibility." In *Endangerment, Biodiversity and Culture*, edited by F. Vidal and N. Dias, 195–217. Abingdon and New York: Routledge.
- Harrison, R., and C. Sterling, eds. *In press*. *Deterritorializing the Future: Heritage in, of and after the Anthropocene*. London, UK: Open Humanities Press.
- Harrison, R., N. Bartolini, C. DeSilvey, C. Holtorf, A. Lyons, S. Macdonald, S. May, J. Morgan, and S. Penrose. 2016. "Heritage Futures." *Archaeology International* 19: 68–72. doi:10.5334/ai.1912.
- Harvey, D. C., and J. Perry, eds. 2015. *The Future of Heritage as Climates Change: Loss, Adaptation and Creativity*. Abingdon and New York: Routledge.
- Heise, U. K. 2016. *Imagining Extinction: The Cultural Meanings of Endangered Species*. Chicago, IL: University of Chicago Press.
- Holtorf, C. 2015. "Averting Loss Aversion in Cultural Heritage." *International Journal of Heritage Studies* 21 (4): 405–421. doi:10.1080/13527258.2014.938766.
- Koslov, L. 2016. "The Case for Retreat." *Public Culture* 28 (2): 359–387. doi:10.1215/08992363-3427487.
- Lorimer, J. 2015. *Wildlife in the Anthropocene: Conservation after Nature*. Minneapolis, MN: University of Minnesota Press.
- Navaro-Yashin, Y. 2012. *The Make-Believe Space: Affective Geography in a Postwar Polity*. Durham, NC: Duke University Press.
- Olsen, B., and P. Pétursdóttir. 2016. "Unruly Heritage: Tracing Legacies in the Anthropocene." *Arkæologisk Forum* 35: 38–46.
- Orlove, B. S., and S. B. Brush. 1996. "Anthropology and the Conservation of Biodiversity." *Annual Review of Anthropology* 25 (1): 329–352. doi:10.1146/annurev.anthro.25.1.329.
- Rico, T. 2015. "Heritage at Risk: The Authority and Autonomy of a Dominant Framework." In *Heritage Keywords: Rhetoric and Redescription in Cultural Heritage*, edited by K. Lafrenz-Samuels and T. Rico, 147–162. Boulder: University Press of Colorado.
- Rico, T. 2016. *Constructing Destruction: Heritage Narratives in the Tsunami City*. Abingdon and New York: Routledge.
- Rockman, M., M. Morgan, S. Ziaja, G. Hambrecht, and A. Meadow. 2016. *Cultural Resources Climate Change Strategy*. Washington, D.C.: Cultural Resources, Partnerships, and Science and Climate Change Response Program. National Park Service.
- Solli, B., M. Burström, E. Domanska, M. Edgeworth, A. González-Ruibal, C. Holtorf, G. Lucas, T. Oestigaard, L. Smith, and C. Witmore. 2011. "Some Reflections on Heritage and Archaeology in the Anthropocene." *Norwegian Archaeological Review* 44 (1): 40–88. doi:10.1080/00293652.2011.572677.
- Stainforth, E. 2017. "Mixing Memory and Desire: Exploring Utopian Currents in Heritage." *Future Anterior* 14 (2): 1–12.
- Stainforth, E., and H. Graham. 2017. "Utopian Currents in Heritage." *Future Anterior* 14 (2): iii–vi.
- Thomas, C. 2018. "Time to Embrace the Anthropocene: An Interview with Chris Thomas." *British Ecological Society Bulletin* 49 (1, March): 40–43.
- Thomas, J. A. 2016. "Who Is the 'We' Threatened by Climate Change?" In *Endangerment, Biodiversity and Culture*, edited by F. Vidal and N. Dias, 1–48. Abingdon and New York: Routledge.
- Tsing, A. L. 2005. *Friction: An Ethnography of Global Connection*. Princeton, NJ: Princeton University Press.
- United Nations. 1992. *Convention on Biological Diversity*. Paris: United Nations.
- Vidal, F., and N. Dias. 2016. "Introduction: The Endangerment Sensibility." In *Endangerment, Biodiversity and Culture*, edited by F. Vidal and N. Dias, 1–48. Abingdon and New York: Routledge.
- Woodham, A., S. P. Jones, B. Onciul, and M. Gordon-Clark. 2018. "Enduring Connections: Heritage, Sustainable Development and Climate Change in Kirbati." *Journal of Museum Ethnography* 31: 199–211.
- World Commission on Environment and Development (WCED). 1987. *Our Common Future: Report of the World Commission on Environment and Development*. Oxford and New York: Oxford University Press.
- Zerner, C., ed. 1999. *People, Plants, and Justice: The Politics of Nature Conservation*. New York: Columbia University Press.