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Debate Response

Four challenges for usable/applied archaeologies

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We thank both Sarah Kerr and Christian Isendahl for their insightful and constructive comments to our debate article (Davies & Lunn-Rockliffe 2026), as well as the three anonymous reviewers and several colleagues whose feedback greatly strengthened the article. We are pleased that our contribution has been received positively and we thank the editors of *Antiquity* for providing an important platform for this and related debates.

Here, we respond to the useful comments from Kerr (2026) and Isendahl (2026) by clarifying four core elements of our argument. We frame these as four challenges for the future of usable archaeologies and hope they prove helpful in refining how archaeology might contribute meaningfully to contemporary global issues.

Challenge 1: make the case, don't state the case

We reiterate that we are not calling for all, or even most, archaeology to engage with contemporary grand challenges. While dissemination, preservation and multiple forms of public engagement are productive disciplinary requirements, we also recognise that most archaeological research has very little to say about major contemporary challenges, nor should it be obliged to do so. As Kerr quite rightly notes, any expectation that all archaeologists pursue such relevance "may simply not make sense to vast numbers of colleagues" (Kerr 2026: 221). Yet, it is becoming increasingly routine, at least in the UK, for papers and fellowship/grant applications to gesture toward contemporary significance and impact, often by asserting that studies of deep-time sociopolitical systems or ecologies can analogously inform challenges of the present. This tendency reflects a disciplinary (and perhaps wider structural) pressure, especially on early-career researchers, to state the relevance of their work in order to publish, secure funding or justify their research.

Such statements frequently fall flat, not necessarily because they lack clear mechanisms linking archaeological data to contemporary issues, but because primary data is usually produced to reconstruct and understand particular historical contexts, only to be later retrofitted to 'speak' to the present through analogous reasoning. Analogy of this kind, in our opinion, risks producing lazy statements of relevance and undermines archaeology as a broad discipline in which most practitioners should feel free to produce

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new knowledge without the burden of shoehorning their data into overstretched claims of contemporary significance.

With this said, we maintain that there remains a genuine space and opportunity for research to contribute to major global challenges if we can more directly address the underlying mechanisms through which relevance and impact are achieved—what Kerr calls actionable details and Isendahl calls remedies. It is precisely this need for actionable pathways that makes us less convinced of Isendahl's re-foregrounding of the need for renewed statements of relevance in archaeological fora. Perhaps these internal dialogues do shape the nature of the debate, but they also reproduce a long-standing problem in which archaeological knowledge is merely discussed as relevant without critically engaging the contemporary policy contexts into which it might be inserted.

Where archaeology is relevant, it demands explicit, well-specified demonstrations, without which we risk increasing fatigue built on unfounded claims. We therefore diverge from Isendahl's view that discourse alone constitutes an intervention; for us, impact requires pragmatically articulated pathways leading to concrete practice.

Challenge 2: develop specific pathways to impact

A major part of our original argument leaned into the concept of plurality, which Isendahl (2026) rightly seizes upon to note how applied archaeology necessarily encompasses multiple approaches. However, we argue for greater specificity about these pluralities, in both developing and critiquing specific methodological options. We summarise some of these possibilities below.

Big data

Isendahl reminds us of Smith's (2021) proposal in emphasising large-scale, often quantitative, datasets and modelling within interdisciplinary teams to address contemporary policy challenges. We might call this a 'big data' approach, where archaeological datasets are absorbed into broader policy-facing sciences by proxy, and where the resulting outputs inform policy decisions. We would welcome further focussed and preferably real-world (as opposed to purely theoretical) case studies that explore how such integration actually unfolds, and as noted below, we believe critical attention to contemporary policy contexts strengthen this pathway.

Analogy and storytelling

As above, we recognise the long history of analogical reasoning in archaeology but remain wary of claims to relevance based on similarities between ecological, climatic or sociopolitical/economic contexts removed from one another in time and space. Having said that, analogy can play a constructive role within archaeology as storytelling, and we agree with Kerr that such narratives can mobilise communities, shape identities and equip people with knowledge to undertake "cognizant discussions with policymakers, resulting in better-informed decisions on future adaptation scenarios in their locality"

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(2026: 222). In this sense narrative creation can be a powerful and necessary aspect of applied archaeological practice, although, as above, we need clearer demonstration of how storytelling translates directly into material and political processes. We contend that in most cases it does not.

Rehabilitation and experimentation

Distinct from storytelling in terms of practical and experimental nature, there is a rich literature on the rehabilitation of past landscape features and land-use practices, especially in the Andes, in relation to food-production systems (Isendahl & Stump 2019), and increasingly with regard to rewilding (Cooper & Roushannafas 2025). Smith (2021) treats such work as a form of local, place-based relevance that archaeology is already achieving, though others note the variability and unreliability of such impacts (Spriggs 2019). This is not to say that such projects should not be pursued. Indeed, successful examples typically stem from sustained community involvement and decades of experimentation, participation and relationship building within well-understood contemporary sociopolitical contexts (Kendall & Drew 2019).

Policy critique

A core feature of our argument, developed further in Challenge 3, is that archaeology can intervene not by contributing data to established scientific and policy frames (cf. Smith 2021) but by using archaeological data to critique and interrogate those frames (e.g. Lane 2009). Such work aligns with wider calls to decolonise structures of knowledge production and expands on literature already developing such approaches (e.g. Chirikure 2021; Davies *et al.* 2023). What remains needed is more targeted, practice-orientated development of this pathway.

Transdisciplinary design

Finally, our debate article emphasises the construction of transdisciplinary collaborations among diverse academic and non-academic actors to question existing policy assumptions and co-design futures grounded in temporally informed, materially grounded knowledge. We envision this building from archaeology's core strengths as both a science and a humanity, in both quantitative and qualitative data, and in our ability to work across temporal and geographic scales, from palaeoecology to ethnography. We see archaeology as a powerful convening discipline around which communities, scientists and policymakers can gather.

Challenge 3: interrogate the contemporary

Isendahl's discussion of 'actionable science' (2026: 219), to some extent, mirrors Smith's (2021) call to better embed archaeology within actionable practice, and reflects important disciplinary aspirations. Yet both risk placing archaeology in a passive role that uncritically accepts the framings of other disciplines and policy actors without interrogating the

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assumptions embedded in those models. Our original article sought to highlight precisely this problem by examining the contested nature of widely accepted global policy frameworks, such as the Sustainable Development Goals (SDGs). Archaeological data might be produced to neatly inform on SDG targets, but this does not mean that the SDGs themselves offer the right pathway to improve humanity's future (Moore 2015).

The fundamental question, put simply, is whether we are seeking to produce an applied archaeology that contributes to policy irrespective of outcome or underlying values, or one that informs more sustainable and equitable futures, full stop. Kerr's suggestion that archaeologists need not shoulder "the burden of policymaking related to global challenges" (2026: 222) sits directly within this subject area. For many archaeologists whose work does not seek contemporary impact, leaving the world of planning to policy actors may well be appropriate. However, for those working within applied spaces, and especially for those who *claim* contemporary relevance, simply assuming that others can 'tap' archaeological data, risks reproducing the very passivity we caution against. It also risks archaeological knowledge being mobilised in support of policies and interventions that run counter to the interests of the communities we work with and seek to support.

Our own work in Marakwet, Kenya (Davies *et al.* 2023, 2025) is a case in point. A policy brief handed to the County Government chronicles the failure of an imposed irrigation scheme, challenges the technocratic assumptions about optimisation, monocropping and market-led development, and demonstrates how the project collapsed precisely because it ignored the long-term ecological knowledge, flexible water management and fallowing regimes embedded in local irrigation systems. In this case, crisis narratives were driven through planners' uncritical use of others' long-term data on land use, demographic change, food insecurity and drought, which were used to legitimise urgent yet flawed technical interventions. Rather than feeding into these narratives to justify further interventions, our work demonstrates how critical engagement can instead challenge their underlying assumptions and redirect policy towards more equitable and sustainable alternatives.

This is what we mean by a critical engagement with the contemporary and we argue that applied archaeologies might more readily realise impactful and inclusive contributions if we are willing to accept that burden. In some contexts, this may mean actively working with policymakers (and other stakeholders) to develop and refine 'technocratic' plans and interventions; in other contexts, it will mean questioning or rejecting such frameworks. What matters is active engagement.

Challenge 4: enable all stakeholders

We are fully aligned with Kerr's emphasis on community-centred work and are encouraged that she sees value with our call for transdisciplinary methodologies informed by reversed temporal directionality. Her assertion that communities are the primary 'change makers'—supported by her own excellent examples—aligns strongly with our own approach, which begins with community-defined questions and priorities, such as examining agricultural sustainability historically to understand and challenge contemporary non-governmental organisation (NGO)-led interventions, and works to equip community members to research, analyse and present such knowledge on their own terms.

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With this focus on community approaches, Kerr also cautions against an overemphasis on policymakers, although we maintain that such engagement remains necessary. From our experience of working with the same community for more than 15 years, we argue that it is difficult to assist communities in developing sustained change without also giving attention to other influential actors—policymakers, governance structures, businesses, NGOs, other scientists—and that our role, depending on context, may be to constructively yet critically empower those other actors to think differently as well; a process we refer to as creative pluralism. We argue that it is precisely at the nexus of these actors that archaeological data and archaeologists, as facilitators and interlocutors, who are well attuned to diverse epistemologies, data, cultures and spatial and temporal scales, may have the biggest impact for tackling global challenges.

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