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ARTICLE

Towards a critical-conceptual analysis of 'research culture'

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Abstract

Universities and policymakers increasingly use 'research culture' and 'research environment' to govern as well as describe research. Both terms help frame who is considered a research actor; how researchers interact with the contexts in which they make knowledge; and what is considered malleable when attempting to improve how research is done. There are very few conceptual-critical analyses of either term, even as each is a complex abstraction with rich and contested histories and usage. I explore both, largely using the example of the United Kingdom (where improving 'research culture' is currently prioritised by many funders, and will be assessed by the UK's Research Excellence Framework (REF) in 2028). Research culture has a close relationship with the concept organisational culture, which emerged in the late 1970s and 1980s and prioritised particular – frequently psychological – constructs that focused on the norms, values, and attitudes of an organisation. 'Research labour' – the labour relations that underpin how people work together and shape organisational norms, values, and relational dependencies – tends to drop from view. Geographers have much to offer these debates, given how extensively the discipline has contributed to what culture and environment might mean. Institutional, national, and sectoral policies concerning research culture and environment significantly shape how knowledge-making is understood and intervened on. The processes that 'research culture' and 'research environment' authorise and foreclose require greater examination.

KEYWORDS

casualisation, critical university studies, labour, research environment, research culture, Research Excellence Framework

1 | ON RESEARCH CULTURE AND RESEARCH ENVIRONMENT

Type 'research culture' into the search bar of most university websites in the United Kingdom in 2023 and you'll find dedicated websites, working groups, action plans, and exhortations (My own university has been one of the forerunners in this regard; Casci & Adams, 2020). While attention to the contexts that best facilitate research extends back many decades (Hill, 1999), it is only in the last decade that 'research culture' has become solidly part of the institutional and policy landscape of UK universities. In 2017, The Royal Society defined research culture as 'encompass[ing] the behaviours,

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values, expectations, attitudes and norms of our research communities', making clear that changes in research culture were needed to ensure 'conditions for excellence' (The Royal Society, 2017, p. 3). In 2020, The Wellcome Trust, a global charitable foundation focused on health, published a report on what researchers think about 'the culture they work in', presenting findings indicating that 'poor research culture' leads to mental health problems, stress, and anxiety in researchers; damage to research itself (e.g., through increasing superficiality of research, problems with scientific reproducibility); and decreasing trust in research among various publics (Wellcome Trust and Shift Learning, 2020). UK Research and Innovation (UKRI), the non-departmental public body of the UK government in charge of research and innovation funding, meanwhile, is using the term research culture to prioritise research integrity, prevent bullying and harassment, champion equality, diversity and inclusion, and push for more open research (UKRI, 2022). In June 2023, the Research Excellence Framework (REF) – which assesses the quality of UK higher education research across all disciplines – announced that REF2028 would, for the first time, include an assessment of research culture (UKRI, 2023).

Much of the recent impetus for this turn to 'research culture' and for the shared assumption that we need to improve it, was initially generated by scientists committed to the need for more open science and concerned about the non-replicability of many experimental findings. Nosek and colleagues, in a widely cited 2015 paper titled 'Promoting an open research culture', called for the academic 'reward system' to better incentivise openness through requirements surrounding the funding and publication of research (Nosek et al., 2015). This paper appeared the same year that Nosek's collaborative laboratory reported that it had largely been unable to replicate 100 significant studies from earlier decades that had been published in three psychology journals (Open Science Collaboration, 2015). This publication is central to what has been termed the replication crisis, which names the concern that many scientific findings are difficult if not impossible to reproduce. Researchers in the history of the human sciences have demonstrated that invocations of culture that are found in many of the calls to improve openness, transparency, and reproducibility install particular models of science, culture, rationality, and epistemology (Callard, 2022; Flis, 2019; Morawski, 2019). Many of these are indebted to norms established in the vocational and professionalising era of twentieth-century scientific research and exemplified in the writings of Robert Merton (1957). Merton's institutional imperatives of universalism, communism (common ownership of scientific goods), disinterestedness, and organised scepticism remain an animating presence within scientific communities even as these norms have been extensively critiqued (Anderson et al., 2010). It is therefore unsurprising that literatures on research culture have revivified these norms, giving added weight to the models of rationality and epistemology that underlie them, even as a wide body of research has provincialised them by emphasising how varied are scientific methods, scientific ethos, and the means by which researchers bring their scientific objects into view (e.g., Daston, 2000).

Literature on research culture that is indebted to Mertonian norms has tended to envisage the route towards improving such cultures as one that incentivises individual actors to act differently. How might one, for example, combat individual scientists' urge towards, say, secrecy (for fear of being 'scooped') through particular kinds of organisational change? The behaviours of scientists tend to be theorised through behavioural-economics and cognitive-psychological frameworks: scientists tend to be envisaged as self-maximising agents, who seek to prioritise individual career success in a competitive academic marketplace (Morawski, 2020). Altering existing incentives – such as the reputational and career rewards that accrue from the publication of novel, striking findings – thereby becomes a way of re-routing individualistic, self-maximising behaviours on the part of researchers. Notably, there is often little acknowledgement or analysis in these literatures of how labour relations both shape actors' behaviours and help consolidate epistemic categories – such as the separation of so-called 'technical' from 'scientific knowledge' (Doing, 2004).

In tandem with 'research culture', we find 'research environment'. (Indeed, the two are often are rolled together, as in the 'Research Culture and Environment Toolkit' released by the UK Russell Group, the self-named group of self-identified leading research-intensive universities; Russell Group, 2021). 'Research Environment' has a particular resonance for UK university staff by dint of its use in the Research Excellence Framework (REF), the UK system for evaluating UK research. Each 2021 REF assessment unit had its research environment assessed to evaluate the 'vitality and sustainability' of such research – with documentation indicating that sustainability is understood as 'the extent to which the research environment ensures the future health, diversity, wellbeing and wider contribution of the unit and the discipline(s), including investment in people and in infrastructure' (REF2021, 2019, p. 58). REF2021 noted that 'Evidence submitted in environment statements continued to demonstrate the diverse vitality and sustainability of research in many areas' (REF2021, 2022, p. 5). Encomia for the sustainability of disciplines rub up awkwardly against evidence of universities' increasing reliance on casualised university workers whose career paths are far from sustainable, and a steadily increasing stream of statements that decry governmental and institutional attacks on disciplines – particularly those in the humanities and the interpretive social sciences (e.g., Royal Historical Society, 2023). Many current 'research environments' in the UK, on such accounts, would appear to be far from certain vehicles for the successful reproduction of disciplines and for the ongoing vitality of research.

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2 | WHAT'S IN A NAME?

The increasing centrality of research culture and research environment to higher education policy has brought lively debates over which measures should be used to assess them. And yet there has been surprisingly little critical and/or genealogical work on the concepts themselves. I say surprising because the words culture and environment are two dense and overdetermined abstractions. Raymond Williams famously described culture as 'one of the two or three most complicated words in the English language' (Williams, 1988 [1976], p. 87). Additionally, there is, across disciplines in the social sciences and the humanities, brilliant work that has opened up the conceptual histories, political sequelae, and epistemological consequences of different models of both environment and culture. Different articulations of culture – as they have moved through disciplines that include anthropology and psychology alongside geography – establish different ways of envisaging spaces of 'interpretative struggle', to use Stuart Hall's formulation of culture. It matters whether culture is envisaged as formed through the antagonism of social processes, or imagined instead as a kind of storehouse of national values, since these varying accounts shape how culture is assumed to inhabit distinct institutional forms, and how changes in culture are imagined to take place. Different uses of environment have moved, from the nineteenth century to the present, from biology to ecology to geography – and have entailed a variety of ways of envisaging the relationalities and dependencies that tie 'surroundings' and 'the surrounded' to one another. As Florian Sprenger, in his conceptual history of environment, has clarified, there are a wide range of 'forms, figures, metaphors, and images of causality and relationality' that have circulated through that term. These in turn precipitate different accounts of how surroundings – environments – might be 'modif[ied], controll[ed], and design[ed]' (Sprenger, 2023, p. 407). Indeed, one of Sprenger's core claims is that one of the reasons for the rise in environmental terminologies across multiple disciplines and domains is because of a conceptual shift in the term whereby the environment becomes something that is envisaged as something that can be orchestrated or controlled: environment thereby becomes an object of government and of manipulation (Sprenger, 2023, p. 408).

How one frames culture and environment, and *when* culture and environment come to be terms bound to the term research, matter deeply. At the heart of both culture and environment are embedded questions of material as well as interpretative struggle. Coiled inside conceptualisations of culture and environment lie particular imaginaries of how futures unfurl and of the agents – both human and non-human – in whom conviction of the ability to effect change is placed. As particular conceptualisations of research culture and environment come to be consolidated, we need to attend closely to how literatures and policies envisage and call for particular cultural and environmental transformations. Which imaginaries are prioritised, and which foreclosed? What might a model of culture preoccupied with the behaviour of self-maximising scientists miss about the social relations that constitute practices and spaces of research? How do current ways of diagnosing the longevity and vivacity of research environments determine what is, and is not, seen, as well as constrain the routes through which the design and modification of such environments are assumed to take place? Which actors are hyper-visible, and who (and what) goes missing? How might initiatives to transform cultures and environments end up reproducing institutional and social formations even as they are heralded for bringing change?

The term 'research culture' emerged from the concept of 'organisational culture', which developed out of research and publications by social scientists in the 1970s–1980s (Hofstede, 1980; Pettigrew, 1979; Schein, 1981). Organisational culture literature was preoccupied by the norms, attitudes, and values that shaped an organisation. While this early research drew extensively on anthropological and sociological constructs and epistemologies – Pettigrew, for example, in his research on a private British boarding school, analysed 'the amalgam of beliefs, ideology, language, ritual and myth' (Pettigrew, 1979, p. 572) – psychological constructs and models through which to approach culture were prominent, especially in the research of psychologist Edgar Schein. In relation to higher education specifically, organisational culture literature was used in the 1980s and 1990s to investigate the impact of managerial and market-oriented policies (Silver, 2003). While the importance of management techniques was acknowledged for the role these played in shaping institutional cultures, none of these literatures appears to have privileged material analyses of the labour and social relations underpinning those relations. There is historical research still to be done to track the actors – including management consultancies alongside university researchers themselves – that have disseminated organisational culture frameworks across academic and para-academic settings from the 1980s to the present. While the interdisciplinary field of organisational culture is undoubtedly theoretically and methodologically heterogeneous, it continues to prioritise certain facets of the workplace as manipulable – namely the leadership (via the particularity of leadership style) and the organisation's members (via the shaping of employee relations). The emergent literature on research culture continues this emphasis on institutional relationships and on levels of collegial and institutional support (Tucker & Tilt, 2019).

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Emergent framings of research culture cross paths with – and frequently incorporate – university efforts to render their cultures more inclusive via equality and inclusion initiatives. Such efforts are also frequently indebted to organisational culture literature. The Athena Swan initiative, an equality charter framework and accreditation scheme supporting gender equality in universities, references Schein's psychologically grounded framework, where culture is envisaged as a 'pattern of shared assumptions learned by a group as it solves its problems of external adaptation and internal integration' (Ovseiko, 2021). Alison Phipps and Liz McDonnell's account of their contributions to the 'Changing Cultures Collective' is instructive in demonstrating the difficulty of effecting substantive cultural change (Phipps & McDonnell, 2022). Between 2015 and 2020, the Collective was commissioned by senior leaders at four English universities to help collect and analyse data relating to university cultures and inequalities, and to initiate interventions in relation to gender-based violence, bullying, and harassment. (The Collective's own working definition of institutional culture they noted was also indebted to the work of psychologist Schein). After 5 years of work they felt 'compelled to acknowledge that changing university cultures may not be possible' (Phipps & McDonnell, 2022, p. 525). For them, institutional initiatives to change cultures frequently serve to preserve them. Drawing on Sara Ahmed's analyses of university initiatives around inclusion (Ahmed, 2012), Phipps and McDonnell indicate that institutional efforts to change culture too frequently work instead to foreclose the possibility of transformational change. Notably, their analysis makes clear how bureaucratic institutional processes are intimately tied to wider labour relations: they explain how they became acutely aware during the UK university pension strikes of 2018 that the institution (Universities UK) with which they had been collaborating on equality was simultaneously, in their eyes, not only absolutely 'central to the marketized systems that are its antithesis' but a key actor in the attack on pensions which would vastly exacerbate inequalities. In the letter in which the Changing Universities Cultures collective withdrew from its association with Universities UK, they stated that 'Institutional culture work cannot be window dressing for the systematic devaluation and precaritisation of staff and students' (Phipps & McDonnell, 2022, p. 517).

3 | LOCATING LABOUR

The Changing Cultures Collective's act is a salutary reminder of all that can easily slip out of view in efforts to improve institutional culture. If discussions of research culture do incorporate considerations of how people work together, questions of research labour – of the labour relations that underpin that working together – are often entirely absent within dominant conceptualisations of research culture. Within the now substantial body of literature addressing the replication crisis in the sciences, there remains very little substantive discussion of how changing labour relations within and without the university might be important to consider when exploring issues of research integrity and open data (Callard, 2022). There is a slow acknowledgement, in amidst what are too often frothy and insubstantial references to improving 'career paths' in academia, of the significant barriers that short contracts pose for improving research cultures. The impacts that research cultures built around casualised contracts have on mental health (Limas et al., 2022) and on junior researchers' desire to leave their research positions (Christian et al., 2021) are becoming more difficult to ignore. We can find, in funder and policy documents, evidence of lip service being paid to the need to address questions of labour when attempting to improve culture. But the models of culture we find in these documents too easily keep any sustained political-economic analysis out of sight, and replicate broader historical and philosophical difficulties of navigating the relations between material and cultural life (Butler, 1998). In particular, work and culture are still too often imagined as opposites, rather than culture being understood as imbricated within and through labour. A study on research integrity commissioned by UKRI, for example, mentions the 'precarious nature of employment' as another 'feature of the institutional environment' that can have a bearing on research integrity, but this brief mention occurs in a section stressing how 'local culture can strongly influence behaviour, overriding institutional and national policy' (Metcalfe et al., 2020, p. 8). The invocation of culture here ensures that the labour conditions that researchers face – and that are far from incidental in generating certain problems of research integrity – are kept at bay. These conditions end up being framed as a difficult – and presumably unshiftable – background element on top of which the efforts of research culture improvement might be directed.

We should be in no doubt that where there is substantial institutional engagement with the centrality of questions of labour to any discussion of research culture, this is owing to the hard-fought efforts of university workers – particularly those who are casualised – who have, through labour action, re-framed dominant accounts of what the university is and what kind of work(ers) make it up. Embedded in these struggles are writings that urge us to conceive of the labour of university workers outside of the dominant, vocational language of professionals and professionalisation (Carpenter et al., 2021; Lê & Osserman, 2021; Papoulias & Callard, 2022). Reckoning with the labour that makes up research

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cultures, such literatures demonstrate, demands a much more capacious imaginary through which to discern how the so-called 'behaviours, values, expectations, attitudes and norms of our research communities' (The Royal Society, 2017) are shaped by and emerge out of the contradictions of political-economic processes in which 'the university' is a core actor rather than, as so frequently imagined, simply subject to forces that impinge on it from the outside (Bacevic, 2019).

There remains a significant and unsurprising gap between institutions' acknowledgement that labour might need to be addressed when focusing on culture, and the behaviours that many of those institutions and organisations frequently manifest. On the one hand, the Russell Group, in its toolkit on research culture and environment (Russell Group, 2021), encourages universities to reduce the use of short, fixed-term research contracts. On the other hand, we find a Russell Group document, in a meeting on casualisation held 1 year before the release of the toolkit, placing casualisation in inverted commas,[1] and framing casualisation as a problem of 'reputational damage' rather than, say, as a damaging phenomenon requiring urgent action from self-described 'research-intensive' universities (University and College Union, 2020, pp. 1–2). What might we make of universities' commitments to improving research culture, and to equality and inclusion, when many of them simultaneously manifest profoundly punitive responses (that exacerbate inequalities) when their employees make their own demands, through legal industrial action, regarding the working conditions through which – or, we might say, the *culture* or *environment* in which – knowledge is produced?[2]

4 | WHAT'S GEOGRAPHY GOT TO DO WITH IT?

The terms research culture and research environment require greater critical, conceptual, and historical analysis. Their use shapes both imaginaries and material actualities concerning what is construed as malleable and modifiable. We ought collectively to deliberate further on the dominant models, figures, and modes of relationality and sociality that are privileged within currently dominant framings of research culture and research environment. Under the auspices of both terms, institutional, national, and sectoral policies are being rolled out that have significant implications for how researchers work and how universities function (e.g., Department for Business, Energy and Industrial Strategy, 2021). That research labour is so inadequately acknowledged in discussions concerning research culture and environment carries significant consequences.

Making research labour central to discussions of research culture and research environment demands, we suggest, bringing into the foreground that deep seam of historical-materialist writing that has grappled with articulations between labour and culture (e.g., Terranova, 2000). Rather than separating out culture and work, we need, we suggest, to grapple with what Michael Denning has described as a 'labour theory of culture', where culture is understood as the 'product and result of labor, a part of the same process' (Denning, 2004, p. 92). This will demand continuing to combat the reluctance that both the university and many individual disciplines have in incorporating labour into their accounts of knowledge-making (Discenna, 2018; Simbürger, 2014). Ensuring that discussions surrounding research culture centre research labour would also allow greater understanding of how precarious labour relations intersect with particular features of institutional culture – such as values of autonomy and intellectual leadership – to intensify relations of research dependency (Peacock, 2016). Such dependencies, when underpinned by precarious labour relations and precarious living conditions, need to be acknowledged if we are to address bullying, harassment, and sexual misconduct in universities (Page, 2022; University and College Union, 2021).

Geographers have much to contribute. Culture and environment are, after all, two of the most densely overdetermined and heterogeneously deployed terms within the discipline – and their adjectival forms name two subdisciplines (cultural and environmental geography). Geographical debates and geographical turns over the last half century have frequently circled around how to theorise one or other of these terms (Anderson, 2020; Harvey, 1993; Mitchell, 1995; though see too Barnett, 2004). Yet, despite geographers' interest in contributing to debates over research evaluation, research funding, and questions of inclusion – including in the pages of this journal (Evans, 2016; Gandy, 2023; Machen, 2020) – I have struggled to locate in the geographical literature any critical-conceptual investigations of research culture and research environment that takes on these concepts' increasing institutional power (cf. writings that document or analyse particular research cultures and environments; e.g., Scott et al., 2006).

What might geographers offer? Multiple theoretical and empirical resources are close at hand. Geographers have insisted on the need to acknowledge labour relations that underpin work that includes the university (Henry, 2018; Strauss, 2020) and infrastructure more broadly (Stokes & De Coss-Corzo, 2023). Hannah Schling and Ben Rogaly, in emphasising that labour geographers are also labouring geographers, clarify the stakes of labour geographers seeing themselves – ourselves – as workers within a struggle 'over the university but also over wider social relations' (Schling

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& Rogaly, 2022, p. 12). Gabrielle King, in her work on care and ethics processes, offers intriguing analogies for research culture. Through showing how both culture and care are frequently imagined as both cause of and solution for institutional problems (King, 2023, p. 108), she demonstrates the challenge of using either of these abstractions to anatomise hierarchies, dependencies, and infelicities within complex social systems.[3]

Geographical scholarship might additionally help us render more capacious imaginaries concerning the shape and perimeters of the 'surroundings' that make up research environments. This would yield ways of including other actors, other means of envisaging scalar relations across which research takes place. We might offer alternatives to models from organisational culture literatures that too frequently rely on thin psychological constructs to delineate social relations and model what drives individuals and collectivities to act. We might continue to develop alternative models to theorise and diagnose the sustainability, health, or reproduction of educational institutions and of disciplines. We might offer political-economic analyses of how the global contours of university research practices reinforce and widen zones of exploitation and epistemological dispossession as institutions in the Global North rely on outsourced labour in the Global South (Sukarieh & Tannock, 2019).

REF2028 is now starting to consult on how research culture should be measured and assessed. There is hope that its turn to culture will, in a sector 'with increasing precarious employment, "… encourage longer term investments in staff"' (O'Grady, 2023). We shall see. If funders, policymakers, and institutional leaders really wish to change 'ways of working' (a phrase repeatedly used in discussions of research culture), they will need to focus assiduously on how political-economic processes in general, and labour relations specifically, produce and constrain research cultures, as well as on their own roles in embedding and transforming these. Labour relations are not contextual backdrops against which policies and mechanisms intended to ameliorate culture and environment are installed. The work of improving culture must not serve to camouflage the work of (further) degrading labour. Both conceptual and material transformations are needed in clarifying what might change – and by whom, and how – in the work of making knowledge.

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DATA AVAILABILITY STATEMENT

Data sharing not applicable to this paper as no datasets were generated or analysed during the current study.

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ENDNOTES

1 The leaked Russell Group document reads: 'University staff and other stakeholders, such as funders and politicians are increasingly expressing concerns around the "casualisation" of teaching and research contracts and a perceived lack of support for career progression. Whilst there is likely to be variation both within and between different institutions with regard to employment practices, there is little information in the public domain explaining the need for different contract types and where and how often they are used. Within this vacuum, there is a risk that university critics could be left to shape this agenda, as well as the "solutions" to it. UCU for example has begun to conflate fixed-term contracts with casualisation, pledging to improve job security in this area' (University and College Union, 2020, pp. 1–2).

2 One example would be the excessive pay deductions imposed by many UK universities on union members participating in legal industrial action in the form of marking and assessment boycotts (Fazackerley, 2022; University and College Union, 2023).

3 See the special issue on 'Cultures of care' in which this paper appears, which addresses how the distributions of epistemic and caring labour across varied animal and human health contexts have significant consequences for knowledge production (Greenhough et al., 2023). I am grateful to one of the anonymous reviewers for pointing to this analogous phenomenon.

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