Geographies of Authority

Julian Brigstocke, Patrick Bresnihan, Leila Dawney, Naomi Millner

Abstract

We propose a geography that pluralises the sites, practices, and politics of authority. We defend an approach that tracks less perceptible forms of authority emerging through everyday micropolitics and experimental practices. In contrast to dominant definitions of authority as institutionalized legitimate power, we propose a definition of authority as a relation of guidance emerging from recognition of inequalities in access to truth, experience, or objectivity. Analysing four intersecting areas of authority (algorithmic, experiential, expert, and participatory authority), we propose analyses that trace authority's affective force, and which address the tension between, but also mutual constitution of, authority and equality.

Keywords

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I Introduction

Across political, social, and cultural life, authority is increasingly contested, challenged, and problematized. As traditional authorities decline and new authorities come to prominence, it is hard to find *positive* visions of authority from any side of the political spectrum (Glaser, 2018:59). We face, if not a crisis of authority, then certainly a shift in structures and experiences of authority across many areas. Conventional authority figures such as politicians, religious leaders, scientists, judges, civil servants, academics, and other 'experts', encounter increasing resistance to their authority. Diverse new authorities have acquired greater weight, from credit ratings agencies and other spokespersons for 'the market', to populist leaders, celebrities and social media, new forms of dispersed intelligence, algorithmic life, and nonhuman actors. More recently, responses to the covid-19 outbreak endlessly repeated the mantra of 'following the science', without ever explaining what this might mean. Such phenomena point to a need to re-evaluate the spaces, politics, and aesthetics of authority.

This article draws connections across a range of geographical literatures to explore how authority is tied up with everyday spatial practices, aesthetics, and affect. Authority is often associated with legitimate power, or assumed to be dominating, rationalized, and exclusively tied to institutional or bureaucratic hierarchies. Instead, we propose a definition of authority as a relation of guidance emerging from recognition of inequalities in access to truth, experience, or objectivity. Our approach theorises authority as multiple, dispersed, productive, and grounded in affective and experiential relations. We establish authority as a relation that is distinct from power but, like power, is produced through everyday practices and can generate new orderings of sensation and experience, as well as new common grounds of judgment and thought. Spatially, authority depends on relations of proximity, distance, and presence, often through topological distortions of reach that make authority feel at once present and absent, both proximate and mysterious.

We begin by critiquing influential Weberian and Foucauldian theoretical positions within geographies of authority. In section III we defend a new definition of authority rooted in political aesthetics, stressing the role of authority in disclosing the 'common': the shared grounds of experience and judgment. Sections IV -VII address specific forms of authority production: algorithmic authority, experiential authority, expert authority, and participatory authority. These sections ask what insights research in these areas offers for developing a

broader theorisation of authority. Section VIII moves on to explore the relationships and co-constitution of these four practices of authority, showing how multiple and heterogeneous geographies of authority are entangled through improvisatory, experimental, and participatory practices that generate new topologies of reach. Finally, drawing to our conclusion, we indicate some routes for future travel.

II Geographies of Authority

Although power is a concept that is central to contemporary Geography, the closely related concept of authority remains 'curiously unexplored' (Bulkeley, 2012: 2428) and 'neglected' (Blackstock et al., 2017) within the discipline. This is surprising. After all, questions of authority, including where it is exercised, how it is authorised, and who practices it, are vital for understanding changing spatialities of governance in contemporary societies (Allen, 2003; Bulkeley, 2012). A few studies, however, have explicitly focused on authority, arguing that authority is increasingly: privatized (Cutler et al., 1999); internalized (Dean, 1996; Huxley, 2006); fragmented (Sassen, 2006); diffuse and deterritorialized (Agnew, 2005; Green, 2016); and automated and depersonalized (Amoore, 2013; Beer, 2017). Such work counters any narratives about the weakened importance of authority for today's world, and presents a picture of overlapping domains of authority exercised by competing bodies including state institutions, legal systems, non-governmental organizations, supra-national entities, social movements, private companies, criminal organizations, and everyday cultural practices. What is curiously under-emphasized in much of this work, however, is analysis of how authority acquires its force. What inspires trust and confidence in authority? Why do subjects willingly acquiesce to it? What distinctive spatialities are involved in the practice and recognition of authority, as distinct from other forms of power, influence, and control? How is authority experienced and practised at embodied, subjective, or affective registers?

Since the 1980s, Geography has embraced the language of power, but has been more suspicious of the vocabulary of authority, which can seem to imply a conservative appeal to fixed order, stable structures, or prior authorizations. It is tempting to view authority as inherently repressive and prohibitive - as encapsulated by the distanced and objectifying gaze of patriarchal, colonial, and aristocratic landscapes of authority, for example (Cosgrove, 1985; Harris, 2003; Kenny, 1995; Rose, 1995; Withers, 2000). Yet we suggest that authority can also be experimental, lively, constructive, disruptive, or revolutionary. Moreover, emergent forms of authority are often constituted in and by challenging authority (Luxon, 2013; Sennett, 1980; Brigstocke, 2014). A richer theorisation of the spatialities of authority, as distinct from power,

has much to offer human geography. The lens of authority opens up useful perspectives for thinking about the spaces and politics of aesthetics, the emotional experience of power and influence, and how radical, subversive, or experimental spatial practices can meet the desire for guidance, education, advice, and stability.

Two perspectives are especially influential within geographical accounts of authority. First is the Weberian view of authority as legitimate power. In Weber, power (*Macht*) is a generalized phenomenon: 'Power is the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis upon which that probability rests' (Weber, 1957: 152). By contrast, authority (*Herrschaft*) relates specifically to institutionalized command, and is one of the most important *sources* of power, along with coercion and discipline (see Haugaard, 2018). Authority, according to Weber, is the probability that a command will be obeyed. In contrast to coercion, a system of authority relies on voluntary submission, due to belief in its legitimacy. There are three mains grounds for legitimacy in Weberian theory: rational ('resting on a belief in the legality of normative rules'); traditional ('resting upon established belief in the sanctity of immemorial traditions); and charismatic ('resting upon devotion to the specific and exceptional sanctity, heroism, or exemplary character of an individual person' (Weber, 1957: 215). According to Weber, bureaucratic, 'rational-legal' authority is the dominant mode of authority in modern capitalist societies. Such authority is rule-bound, impersonal, cold, calculating, and emptied of emotion and affect.

Much geographical work on authority reproduces key elements of Weberian theories of authority, defining authority as a form of legitimate domination (on a command-obedience model), and/or assuming that modern authority is almost exclusively sited in institutional settings. John Agnew's influential account of sovereignty, authority, and territory, for example, defines authority in Weberian terms as the 'legitimate exercise of power' (Agnew, 2005: 441). Blackstock, Dinnie & Dilley's research on rural governance, similarly, theorises authority 'as a form of institutionalised power, categorising individuals into the position of dominance or subjection' (2017:13). While this Weberian picture has been extended in insightful ways, such as by highlighting different bases of legitimacy including transparency, efficiency, expertise and popularity (Agnew, 2005: 442), the core understanding of modern authority as a form of bureaucratically legitimated command remains widespread.

This way of thinking about authority is limited in important respects. Construing authority on a model of institutionalized command and obedience obscures how authority can be characterized by dynamic, critical, and sometimes creative or playful exchanges between the

parties involved (Luxon, 2013). Crucially, the model of authority as institutionalized command also denies the possibility of exerting 'illegitimate' authority. Yet an important body of work exploring ideas such as wounded attachments (Brown, 1995), cruel optimism (Berlant, 2011), the bonds of love (Benjamin, 1988), and affective intimacies (Weston, 2017), shows that people easily bind themselves to authorities although – or even because – they experience these authorities as illegitimate and damaging (Sennett, 1980). Conversely, a key insight of feminist performativity theory is that sometimes 'it is possible to speak with authority without being authorized to speak' (Butler 1997: 157). Authoritative speech may derive from factors such as embodiment and affective relationships that have nothing to do with what it is permitted to say or do. Subversive acts of resistance and rebellion can carry authority, weight, and gravitas despite being 'illegitimate' from the perspective of dominant institutions of power, authority, and domination (cf Lovell 2003).

A second key theoretical influence on geographies of authority is Foucauldian theories of governmentality (Elden, 2007; Hannah, 2000; Larner & Walters, 2004; Legg, 2008). According to the governmentality perspective, conduct is guided by a wide variety of authorities and agencies that target everyday forms of practice and experience, through reference to expert knowledge. Foucauldian analyses explore how external authority and truth discourses are folded into the interior of subjects, so that subjects come to work on themselves in ways that internalise authority (Dean, 1996:222). Spatial relations are central to this enfolding of authority (Huxley, 2006; Osborne and Rose, 1999). In such analyses, no useful distinction can be made between power and authority, since power is everywhere, and authority is implicated in all forms of truth.

One problem with geographies of governmentality is that they generalise authority as an almost universal modality of control, thereby marginalizing the importance of other practices such as persuasion, manipulation, seduction, incentivisation, and coercion (Allen, 2003). This leads to a lack of clarity over the spatial mechanisms through which governmentalities are internalized across dispersed populations, and a lack of attention to subjects' critical, embodied, and affective relations with authority - as if people simply internalized governmentalities without question. This assumption is perplexing given the broader context of increasing suspicion of, and rejection of, expert authority. It also fails to ask how experimental, creative, radical, or subversive spatial practices might invent, build, and nurture new and more egalitarian relations of authority. Moreover, this failure to differentiate between different modalities of control makes it impossible to account for the lived and embodied experience of authority; for example, whether we perceive something as authority or manipulation (implying involuntary obedience)

makes a profound difference to our experience of it, including our willingness to consent to it or rebel against it. Normative distinctions between authority, coercion, manipulation, seduction, power, and persuasion – despite the difficulties in establishing clear analytical boundaries between them – are a fundamental and unavoidable aspect of people's experience of space, power, and politics.

III Authority, Aesthetics, and the Common

What, then, *is* authority? In contrast to dominant geographical definitions of authority that equate it with institutionalised command, sovereignty, or legitimate power, we propose a more limited and specific definition of authority as a relation of guidance that takes place between free actors, and is performatively enacted by recognizing inequalities in access to truth, experience, or objectivity. In this definition, 'guidance' refers to any practice that helps an actor orient herself in time, space, and the social field (for example, through practices such as advice and education). 'Actor' refers to any human or nonhuman cognitive assemblage capable of exercising agency and judgment (see the discussion in Section IV). 'Free' is open to multiple interpretations, but implies the capacity to exercise agency, and the absence of coercion or manipulation. 'Performatively enacted' means that authority is constituted solely in and through the practice of recognition; the moment consent is withdrawn, authority vanishes. Finally, 'recognition' refers to respect for, or acknowledgement of, the unequal relation; recognition need not be conscious and willed but may be pre-conscious and affective.

Conventional authority figures include doctors, teachers, parents, advisors, lawyers, religious leaders, and elected politicians; these figures have authority insofar as people have trust and respect for them, and hence voluntarily allow themselves to be guided by them. Arendt's (1961) genealogical account of authority reminds us that authority has typically taken the form of 'wise counsel': advice, guidance, instruction, education, judgment. Arendt recalls the Roman definition of authority as more than advice but less than command – advice that cannot safely be ignored (Arendt 1961: 123). Authority demands recognition of the authority figure's expertise, wisdom, or skill; when recognition is no longer granted, the authority relation immediately collapses. This makes it very fragile. Authority is the opposite of persuasion and coercion (meaning that so-called 'authoritarianism', insofar as it rules through violence, often exercises little authority). It relies neither on reason, nor on the force of law or command, but on an affective relationship of trust or respect that generates recognition for the hierarchical relation itself. In this respect, authority comes close to other forms of influence such as manipulation and seduction. Seduction (through advertising, for example), works by suggestion, acting upon desires (Allen,

2003; Bissell, Hynes & Sharpe, 2012). Manipulation involves a concealment of intent to bring about desired outcomes (e.g. Adey, 2008). Authority differs from these is that it requires that submission is free and voluntary. Authority leads rather than misleads. Finally, authority can be distinguished from power, both in Arendt's sense of power as the capacity to act collectively ('power to'), or in the more common sense of power as some kind of command or 'power over'.

There is much to gain from distinguishing authority from these related, but distinct, forms of influence and control (see also Connolly 1987; Dovey 1999). Each modality of control has its own distinctive spatial logic. According to Allen (2003), a distinctive feature of authority is its reliance on spatial relations of *presence* and *proximity*: 'authority's constant need for recognition implies that the more direct the presence, the more intense the impact … proximity and presence have a significant part to play in the successful mediation of authority relations when confronted with a diverse and dispersed civic population' (Allen, 2003: 148-149). This is an important starting point for theorising authority's spatial logics. However, Allen's account of authority's spatialities loses sight of more enigmatic and non-representational registers of authority. Authority is often highly elusive: it gains hold of us in ways that often resist explicit thought, reflection, or representation (Ronell, 2012). It has a kind of 'mystical force' (Benjamin 1978; Derrida 1990), or functions as a form of 'social magic' (Bourdieu 1996). We do not always know *why* we desire to be guided by a particular authority. This means that if authority requires presence, this presence is often enigmatic and elusive: it reaches towards the 'outsides' of knowledge and experience. Authority acquires strength by connecting individuals to dynamic forces and processes that are greater than themselves. These might be metaphysical foundations such as God, community, or nation; or immanent processes such as biological life (Blencowe, 2012; Braun, 2007), economic life (Terranova, 2009), or spiritual life (Dewsbury & Cloke, 2009); or a shared experience of a *loss* of transcendence, communion, or metaphysical grounds (Kirwan, 2013).

Because authority, as we have defined it, is reducible neither to command and law, nor to reason and logic, the authority relation necessarily presupposes forms of *judgment* that are embodied and affective. For this reason, we suggest that analysis of geographies of authority requires a grounding in political aesthetics, since the aesthetic, at least in post-Kantian philosophical traditions, is the sphere of embodied judgement. Extending work in geographical politics of aesthetics (Hawkins & Straughan, 2015), we suggest that spaces of authority play an important role in giving form and order to objects of perception, thus enabling things to appear in a common, shared world (Dikec, 2015:5). Linking authority to political aesthetics recalls an Arendtian tradition that emphasizes the need to generate forms of 'community sense', shared

judgment, and practices that build and protect spaces for the constitution, disclosure, and contestation of a common world (Last, 2017; Szerszynski 2003). This enables us to conceptualise authority as a relation that generates shared grounds for experience, judgment, and 'ideas of objectivity' (Blencowe 2013a). In this spirit, we are arguing for an approach to authority that addresses the problem of how experience is materialised, collectivised, shared, transformed, experimented with, and intensified (Noorani, 2013; Lea, Philo & Cadman 2016). An political aesthetics of authority demands analysis of spatial practices that reinforce, revise, or contest the nature of the 'common' – the shared grounds of judgment.

This emphasis on a political aesthetics of authority means it is important to extend current understandings of authority by asking how more egalitarian forms of authority might be co-constituted through experimental, collective, more-than-human practices that experiment with the forms and limits of experience (Brigstocke 2020a; Dawney 2013; Millner 2013). Authority is a relation that presupposes recognition of some form of inequality, and therefore it always sits in tension with a politics of equality (Arendt, 1961). At the same time, practices of equality often require *building* structures of authority to make them possible. This is exemplified in Rancière's (1991) well-known discussion of schoolteacher Pierre Jacotot, which shows the importance of authoritative relationships in building the conditions for practices of equality. Jacotot does not succeed in teaching what he does not know by simply renouncing authority over the students; rather, he guides the students to engage with a common object (a dual language book) in a particular way that makes possible a practice of radical equality (see Blencowe, Brigstocke & Noorani, 2015; cf Millner, 2013). He uses an inequality between teacher and student to develop a new teaching practice that enacts a new form of equality. Rather than seeing authority as the *opposite* of equality, we suggest that it is always it is always *in tension* with equality – a tension that can be productive and creative. A geographical aesthetics of authority, therefore, demands further analysis of whether and how some authority relations might help build and sustain collaborative settings, spaces, and materials for making new claims to equality.

We now turn to four intersecting practices of authorization that play important roles in contemporary geographies of authority. These are: algorithmic and automated authority; experiential and affective authority; expert authority; and participatory authority. Applying an analysis rooted in political aesthetics to each of these areas of authority, we explore each separately, before finally asking how these forms and practices of authorization are entangled and co-constitutive. These four forms of authority have been chosen because together they cover a wide range of intersecting calculative, affective, and political practices of authority that do not easily fit models of state, institutional, or bureaucratic command. Many other important

forms of authority could have been discussed here, including charismatic authority, religious authority, educational authority, 'authoritarianism', bureaucratic authority, and much else. These could not be discussed in the space here, but we believe parallel analyses can and should be made across the varied geographies of authority.

IV Algorithmic Authority

Calculative, algorithmic, and automated technologies of authority are a useful place to start because they immediately problematize one of the most pervasive and problematic assumptions in theories of authority: the anthropocentric idea that authority is necessarily a relation exerted by human actors, upon human actors (e.g. Kojève, 2014; Raz, 1986). Countering this humanism is politically an important move, since it helps us recognise that many avowedly 'anti-authoritarian' practices merely displace human authority towards more dispersed, technologically mediated, more-than-human assemblages of authority.

Consider the rationalities of neoliberalism, which in one sense are deeply anti-authoritarian, because they seek to replace individual human judgment and cognition with calculation and objective indicators such as market price (Davies, 2014). Neoliberalism is hostile to all institutions which claim authority without any relationship to markets, calculation, or individual choice (from trade unions to cultural and artistic organisations to laws and democratic procedures, all of which appeal to qualitative judgments about the common good, and thus exceed or refuse measurement). Price and objective indicators supposedly offer alternatives to notions of justice and the common. Yet there is a paradox here: the more neoliberalism seeks to rationalize, quantify and de-mystify authority, the more its calculative instruments – price, league tables, audits, and so on – acquire their own kind of quasi-sovereign, mystical authority. Rather than being devices for calculating reality, they start to *constitute* reality. Economic techniques themselves become ritualized, so that during moments of crisis such as the 2008 financial crash, they require spectacles of state and military sovereignty to shore them up (Cowen, 2010). Far from vanishing, authority shifts towards techniques and technologies of calculation that sometimes require coercive state intervention to support them. Neoliberal calculative devices assert authority, asking us to place our trust in them even after they have demonstrably failed.

This dispersal of authority is also visible in the growth of algorithmic governance (Beer, 2017; Kitchin, 2017). Here, human judgment is replaced by automated, calculative judgments that extract value from diverse sources of unknown reliability – as with Google's PageRank algorithm or Facebook's news feed algorithm. Individuals, consumers, institutions, and

governments place a great deal of trust in these sources of information and advice. Authority becomes separated from human judgment, and instead is 'coded into' opaque technologies and software (Amin & Thrift, 2017). Authority is redistributed algorithmically through technologies such as search engines, news trends, credit scoring, risk profiling, advertising and market segmentation, and ambient intelligence (Pasquale, 2015: 8). Far from being entirely 'rational' in the Weberian sense, however, algorithmic authority often combines rationalized calculation with intuitive, speculative, and affective judgments – such as judgments about what variables are considered to indicate riskiness or trust-worthiness (Amoore, 2013). Such technologies express values and may make discriminatory decisions, but their rules and procedures are often opaque and unaccountable (Burrell, 2016). This opacity plays an important part in the political aesthetics of authority. Algorithmic governance demands trust, but the grounds on which these authoritative judgments are based are opaque and hard to engage with critically. Thus Amoore (2020: 165) emphasizes the importance of developing a new ethics 'that puts into question the authority of the knowing subject and opens onto the plural and distributed forms of the writing of algorithms'.

These forms of algorithmic governance raise difficult questions around the relationship between agency and authority. Without a clearly defined actor, authority is hard to distinguish from manipulation, seduction, and coercion. Yet the distinctions between these phenomena are central to the lived experiences of everyday life in a technically mediated, more-than-human world. Disentangling the modalities of influence at play here requires less anthropocentric models of authority that engage with the question of how dispersed actors earn the trust of the people who are guided by them. Conversely, viewing algorithmic governance through the lens of authority, rather than manipulation or seduction, helps us conceptualise the affective and emotional economies linking subjectivity, agency, trust, and technology.

One useful point of departure for conceptualising this is Kathleen Hayles' (2017) account of distributed intelligence and nonhuman cognition, which replaces the human / non-human binary with a new distinction between 'cognizers' and 'noncognizers'. Actors include humans, other biological life forms, and many technical systems, such as the intelligent traffic flow system in Los Angeles. Noncognizers include material processes and inanimate objects. Hayles' concept of the cognitive assemblage aims to capture the 'complex interactions between human and nonhuman cognizers and their abilities to enlist material forces' (Hayles, 2017: 115). This enables another distinction between actors and agents, where 'actors' are cognizers that exercise choice and make decisions, while 'agents' are material forces that may have vast agential powers (such as a tornado or hurricane) but do not make choices, perform

interpretations, or exercise judgment (Hayles, 2017: 31-32). This way of conceptualising more-than-human agency makes an important contribution to a feminist politics of situated knowledge, by conceptualising ecological forms of thought where knowing and being are mutually implicated (Hughes and Lury, 2018). Hayles' distinctions enable a theorisation of authority that focuses on how affective relations like trust, respect and care play central roles in constructing and disclosing the common (the shared grounds of experience and judgment) as well as extending authority beyond human-to-human relations. Authority can then be further conceptualized as a form of influence, grounded in emotional and affective relations such as trust and respect, that is exercised by human or non-human cognizers over other cognizers, and sustains common grounds for making judgments. In such a conception, authority is a crucial domain in which contestation over the distribution of voice, capacity, and intelligence – who or what are recognised as exercising judgments – takes place. Authority partly functions to define (or challenge) what kinds of being can exercise authority.

V Experiential Authority

Authority is a relation that gains its force from emotional relations such as trust, respect, love, or fear (Sennett, 1980). Theorists of authority often stress that authority is earned through performance and recognition of personal attributes or ethical qualities such as courage, strength, wisdom, foresight, fairness, creativity, objectivity, or impartiality (e.g. Kojeve 2014). Authority is also associated with more unnameable affects; Griffero's (2018) work on the authority of atmospheres, for example, points to the importance of ineffable experiences, akin to the experience of the numinous, in creating a distinctive experience of authority based on a combination of attraction and repulsion. To understand this mysterious, transcendent quality of authority, analysis of 'experiential authority' (Dawney 2013; Lea, Philo & Cadman, 2016; Millner 2013; Noorani, 2013) and the emergence of authority within everyday affective environments is needed.

Authority, we suggest, gains its force and its capacity to inspire recognition through an augmentation of immanent, collective capacities and experiences, and hence a disclosure of the common – a shared ground for experience, judgment, and 'ideas of objectivity' (Blencowe, 2013). People willingly follow authority, indeed actively desire to follow authority, because doing so promises to nurture and nourish them: to increase their collective capacities. Spinozist theories of affect, broadly defined as an increase or decrease in bodily capacity, have done much to develop this idea. As Philippopoulos-Mihalopoulos (2015) discusses, a crucial issue in Spinozist politics is how actors make embodied judgments about the causes of their desires. An

actor must make judgments about which desires allow her to preserve her 'conatus' (the desire to keep on becoming and becoming stronger) and which desires diminish this capacity. For Spinoza, the difference between positive affects (joy) and negative affects (sadness) is a question of knowing the causes and processes behind them. Thus, Spinozist affect theory would tie authority to embodied judgments about processes underlying an actor's desires.

One resource for understanding how such affective judgments are formed might come from Foucauldian geographies of parrhesia, or fearless truth-telling (Legg 2019; Brigstocke, 2020b). Such accounts emphasise the emergence of authority out of mutual provocation, agonism, and creative subject-formation, through practices that are bound together and nourished by affective relations of care and trust. Luxon (2013), for example, argues that experimental spaces of authority emerge through agonistic, combative 'games of truth' that tie truth to ethical qualities and practices of self-formation. Here truth is co-created in an experimental, agonistic space where all parties who claim to speak the truth must risk themselves and account for themselves, to demonstrate their sincerity and worthiness to speak the truth. Such spaces of authority-formation rely on establishing affective relations of care and trust to succeed. Truth emerges in an experimental, agonistic space of authority where embodied, emotional, and affective relations, far from being excluded from notions of objectivity and truth, are the conditions of possibility for truth.

Whilst this is a powerful model for thinking about how affective and embodied relations enable authority to emerge from outside dominant institutions and hierarchies, the picture of the spatialities of such encounters is limited (Legg 2019). Moreover, the role of non-human agency is barely acknowledged in research in this area. Thus, theories of risky truth-telling might usefully be supplemented with a clearer theorisation of material agency and the active role of space and place in conditioning practices of authority. It is here that recent geographical work exploring the pervasive influence of 'atmospheric' modalities of influence, can speak to broader accounts of the geographies of authority.

Embodied affects, conditioned by spatial forms and atmospheres, are central to the successful performance and recognition of authority. Consider a courtroom - a space that dramatizes the authority of the law and the state (cf Philippopoulos-Mihalopoulos 2015). The spatial architecture of the court, with elevated judge's bench, witness stand and jury box, the comportment and language of the participants and the choreography of court procedure, perform that authority and contribute atmospherically to how it is experienced and embodied by those in the courtroom (Barshack 2000). Liberman's (2018) oral history of court clerks describes how the clerk maintained this atmosphere through constant surveillance,

management of movement and enforcement of etiquette. As 'custodians of continuity', court clerks learned ways of speaking, moving and performing that positioned themselves as the mouthpiece of the court, augmenting, through atmospheric management, the authority of the law (Liberman, 2018). Barshack argues that the court enacts the 'totemic authority' of civil religion, where the presence of the sacred thing is known and felt through the performance of ceremony: 'the court reproduces the law by constantly enacting it magically' (Barshack, 2000:307). Such magic is figured by the Judge, who is produced as separate from the world, unquestioned and unquestionable, part of a clerical community entrusted to preserve the sanctity and authority of the law. The atmosphere of the courtroom, in other words, enacts the authority of the law and of the civil state through material and affective spatialities.

Thinking with atmosphere helps reveal the spatiality of authority as a relation between actors that is dispersed and diffuse (Lea, Philo & Cadman 2016). It allows dispersed forms of agency to emerge, while maintaining the position of the sensing body as the conduit through which they become apprehended. The 'engineering' of atmospheres (McCormack, 2018) does powerful political work in the manufacture and governing of consent, for example in producing the imagined community of the nation, or the authority of the state (Sumartojo, 2016; Fregonese, 2017; Adey et al., 2013). Closs Stephens, in her analysis of the atmospheres of the 2012 Olympic Games, argues that the authority of the nation, as lived and felt experience, is constituted through an atmospheric 'micropolitics of a feeling' (Closs Stephens, 2016: 188). Similarly, atmosphere has been argued to pay an important role in generating military authority and cultures of militarism (Dawney 2018; 2019).

A key issue, however, is how atmospheric authority can be rejected, transformed, or experimented with. Work on geographies of affect and affective atmosphere too seldom distinguishes between power, authority, manipulation, and seduction. An affective analysis that focused more specifically on atmospheric authority, we suggest, could deliver powerful insights into how atmospheres are contested and challenged (e.g. Edensor, 2015).

VI Expert Authority

In the lead up to the 2016 Brexit referendum, UK Secretary of State for Justice Michael Gove claimed that 'people in this country have had enough of experts' at the same time as he and his colleagues mobilized inaccurate facts and figures to bolster their campaign – provoking the UK Statistics Authority to claim that they had 'undermined trust in official statistics'. While many commentators rightly lamented the 'post-truth' tenor of the Brexit campaign, there is nothing new or surprising about the idea that people have had enough of expert authority, or that

people have lost trust in 'official statistics'. Since at least the 1960s, from within the academic field of philosophy of science, as well as via new social and environmental movements, the idea of universal, value-free science has been repeatedly questioned and challenged. It is important to distinguish here between the critique of liberal institutions' claim to neutral and universal knowledge, and the 'post-truth' / 'fake news' discourse that opportunistically channels disenchantment with these elite institutional authorities. Rather than replacing a form of elite authority based on claims to universality with an anti-authoritarian rejection of truth and expertise, the challenge is to understand how authority, objectivity, and expertise can be reconstituted in more plural, egalitarian, and disruptive ways (Neimark *et al.*, 2019).

Perhaps the most influential body of work developing these ideas has been feminist epistemology's emphasis on reclaiming objectivity, for example through Haraway's (1988) concept of 'situated knowledge' and Sandra Harding's (1992) work on standpoint theory and strong objectivity. Geographers have engaged with the key tenets of feminist epistemology with the aim of pluralizing sites and subjects of expert knowledge production (Lave et al., 2014; Dillon et al., 2017; Whitman et al., 2015). Moving beyond critique of liberal scientific rationality, this diverse work surfaces the ways that situated collectives construct and present alternative understandings of their conditions through the sharing of experience and the grounding of truth in the conditions of everyday life (Brown, 1992). For example, Whatmore & Landström (2011) apply an Actor Network Theory approach to knowledge production in which a 'matter of concern' (flood risk) becomes a means for mobilizing both certified experts (academic natural and social scientists) and noncertified experts (local people affected by flooding) to develop a more distributed understanding of flood hydrology. Without flattening the promise and potential of such collaborations, it is also important to recognize that the productive potential of citizen science initiatives, indigenous knowledge, and the adaptive qualities of local knowledge more generally, have been targeted and enrolled within neoliberal governance strategies over the past thirty years as state and corporate responsibility (for flood mitigation, for example) has retreated (Reid, 2013; Mirowski, 2017).

There is always a tension in 'expert–lay' collaborations as power relations are both re-distributed and reinforced. Community-based movements for health and environmental justice, for example, have historically sought to reclaim citizens' power by authorizing and legitimizing lay knowledge in science, policy, and public debate (Epstein, 1995; Strasser et al., 2019). Accounts of successful expert–lay collaborations tend to follow a familiar trajectory: individualized experience of a problem is followed by the socializing of the problem, which in turn is followed by the politicization of the problem as the affected community appeal to the

State for recognition, rights and inclusion (See Ottinger, 2010). But a limitation on these accounts is that the authority of the new epistemic community is aligned with its efficacy in establishing a coherent 'public', gaining recognition as a 'public', and forcing the state to address a specified problem. This linear understanding can end up reinforcing the authority of the very institutions and modes of expertise that had previously ignored or abandoned these communities. As we have stressed throughout this paper, authority is not only a question of validation by elite authorising institutions. But if expert authority is not about recognition by the powerful, then how else does it gain its force as objective expertise rather than mere subjective opinion?

Recent work addresses this question within the context of late industrialism – a term borrowed from Kim Fortun (2012) to characterize the widely distributed (if uneven) toxic legacies of industrial capitalism and the high degree of complexity and uncertainty that places inherited traditions of scientific expertise, political agency and social change into question (Hobson, 2006; Liboiron et al., 2018; Tironi, 2018). In such contexts, individuals and communities may not seek action or recognition from existing institutions; instead they act by developing and sharing knowledge and resources that allow them to practically intervene and change their everyday, material conditions. Through her ethnographic work with communities in China living with high-levels of industrial pollution (and suffering through illnesses like cancer), for example, Lora-Wainwright (2017) describes a spectrum of perceptions and practices that affected communities deploy. These include more conventional, collective actions (protest, petitions), as well as less confrontational, family-orientated strategies aimed at minimizing the effects of pollution – closing windows at night to limit exposure to fumes, sending children to live elsewhere, or quitting the most harmful of jobs. Similarly, Manuel Tironi uses the term 'hypo-interventions' to conceptualize the 'minimal and unspectacular yet life-enabling practices of caring, cleaning and healing the ailments of…significant others, human and otherwise' that take place in Puchuncaví, a heavily contaminated area of Chile (Tironi, 2018: 438). Such forms of micro-political action 'blur the difference between activism and everyday practices', signalling 'how acting in a toxic world does not have to pass through the production of evidence or counter-evidence' (Liboiron et al., 2018: 342). We can discern here steps towards a new account of expert authority, one that places a greater emphasis on the plural forms of authority that emerge through everyday practices, over the forms of authority that appeal to recognition by the State in order to gain legitimacy.

The idea that authority emerges from the often-imperceptible ways through which individuals and groups articulate their experiences and intervene in their everyday lives is not itself new

(Harding, 1992; Blencowe et al., 2016). Noorani (2013) describes this as the making of 'experts-by-experience', evoking 'a form of authority and expertise that relies on collective meaning-making, the sharing and connecting of experiences, and the production of a body of collective knowledge around ways of working on experience at its boundaries' (Noorani, 2013: 65). With Papadopoulos (2018), we might take this further by emphasizing the ontological aspects of such knowledge practices: the material infrastructures and networks of spaces, objects, technologies, and people that are required for alternative meanings and subjectivities to take shape. This takes us towards a more explicitly posthumanist reading of authority, emphasizing the more-than-human, material conditions and ecologies required to object to dominant regimes of expertise before such alternatives may be mediated and rendered governable by those regimes.

Our argument is that these accounts of expertise offer important resources for a rethinking of authority. First, they show that expert authority can arise in ordinary, unspectacular ways, through everyday negotiation or coping with circumstances. Such forms of authority do not need to appeal to recognition by the State or other elite authorising institutions to inspire trust and confidence. Second, these accounts of authority demonstrate the importance of building relations and infrastructures capable of changing how experiences are felt or phenomena are known through collective, collaborative, experimental practices. Such practices play a central role in a political aesthetics, by taking part in a simultaneous contestation of and disclosure of the common. Finally, they show the importance of developing an account of expert authority that avoids either appealing to elite authorising institutions for recognition, on the one hand, or falling into an anti-authoritarian relativism, on the other hand. Experimental forms of expert authority object to existing hierarchical distributions of authority, expertise, capacities, and knowledge: not by seeking recognition, but by staging a disagreement over who or what has authority to know about a particular field of experience or phenomenon. They pluralise the 'ideas of objectivity' that legitimise authority by creating shared grounds of experience and judgment (Blencowe, 2013; Blencowe, Brigstocke & Noorani, 2018).

VII Participatory Authority

In recent decades, participatory politics have acquired an important place in social governance and political decision-making. Some even describe an 'age of participation' (Blowers and Sundqvist, 2010; Chilvers and Kearnes, 2015). However, it is often noted that the superficial incorporation of participatory mechanisms is more about the production of a pseudo-authority, a claiming of popular permission in order to manipulate legal mechanisms that can work against the interests of poor and marginalised groups (McCarthy, 2005). Conversely, participatory practices that work with more radical and egalitarian perspectives can struggle to acquire

authority, often being dismissed as partial, biased, or overly subjective. It is important to understand the dynamics of 'participatory authority', we suggest, to develop tools for differentiating radical experiments in democratic knowledge-production from manipulative legitimacy-tricks. Reading against the grain of much theorising of participatory politics, here we argue for the importance of asking how participatory mechanisms can generate new forms of authority, rather than simply ending or flattening authority. Although authority is not often explicitly theorised in the literature discussed here, these critiques provide vital building resources for theorising the geographies of authority.

Participatory mechanisms typically aim to empower and authorize lay actors, marginalised communities, and those with first-hand experience in diverse fields of practice. With Pearce (2013a), we suggest that such mechanisms entail not only participation in power relations, but also a participatory co-production of and assertion of authority (e.g. questions around whose voices have weight, whose opinions are accorded respect, whose wisdom is recognised). Authority relations concern dynamics of advice and instruction and allow for the consideration of modes of participatory practice that entail consent and the augmentation of marginal voices. In our reading, there is a risk that critical literatures on participatory practice, by focusing heavily on issues around empowerment, overlook closely related but distinct issues around authority – not only the relations of authority *within* the participatory mechanism, but also how participatory practices make authoritative claims and demands upon wider society.

Theorising the political dynamics of participatory authority does, however, require an account of the growing, and problematic, authority of participation as a short-cut to legitimacy (Cooke and Kothari, 2001). Participation can easily reproduce existing authority structures rather than reconfiguring them towards more egalitarian ends. Indeed, the growing authority of participation in contemporary governance, rather than reflecting a truly emancipatory turn, testifies to the new weight placed on civic society within neoliberalising political-economies (Millner, 2020; McCarthy, 2005; Raco, 2000; Swyngedouw, 2005). A troubling deferral to the authority of 'community' to solve structural issues of uneven access to voice, decision-making and capital may be seen to reflect a 'tyranny' of participation as a form of governmental rule, and not a true reordering of social roles and wealth (Cooke and Kothari, 2001).

In this context, we might define participatory authority as a relation of guidance that is grounded in an affirmation of the capacity of minorities, 'the people', or 'the community' to inform governance, based on recognition of their superior expertise, depth of experience, or capacity for objective judgement. Through the emphasis on aesthetic and more-than-human dimensions of authority developed throughout this paper, we may also think of participatory authority as a production of forms of guidance, influence and consent that operates through the

incorporation of voices, presences or experiences that were previously outside the community of decision-makers. This account seeks to cultivate modes of participatory authority that counter geographies of social exclusion and marginalisation. By co-producing authority, we can avoid falling back on existing distributions of voice and agency (McDermont et al. 2018).

On this point it is vital to remember how much the repertoire of participatory politics owes to longer histories of social movements and popular activism. Participatory methods and mechanisms can be traced to popular education movements across Latin America associated with the adult literacy programmes coordinated by Paulo Freire (1972). Pedagogies based in authorising individual and collective readings of social experience were central to the revolutionary energies of such programmes, as well as the movements they inspired, such as agroecology (Anonymized). These trajectories were influenced by liberation theology, which is one of the few practical domains that *does* explicitly theorise participation in relation to relations of authority. Liberation theology seeks to shift religion from authoritarianism (where existing structures of authority remain the same) to authoritative practice – where structures are transformed in the interests of justice. Liberation theology grounds this authority in an understanding of the Holy Spirit that dwells within the hearts of the poor (Smith, 1991), while Freire's radical pedagogy calls this the experience of the oppressed. In both cases the locus of transformation are pedagogies that work on shared experiences of oppression to produce collective ways of naming and claiming (Pearce, 2010; Anonymized). Freire and the Christian church are both sometimes critiqued for establishing in advance a meta-narrative for how such productions should unfold. However, such movements have also fostered theories that interrogate the boundaries and limits of community as part of praxis. In particular, feminist critiques of Freire's reliance on Marxist theories of ideology and reading 'true' power relations (hooks, 2014; Caretta and Riaño, 2016) have prompted a fresh infusion of attention within participatory practice to embodied experience, diversity, and a multiplicity of potential co-authored narratives (Kwan, 2002).

This raises the question of how egalitarian participatory practices and politics gain authority and weight, rather than being ignored, dismissed, or co-opted. One way of approaching this issue, extending the arguments of previous sections of this paper, is to observe that authority is closely tied to claims upon reality and 'real-life experience' (Blencowe 2013a). As we have seen in earlier sections, authority is grounded in claims to a privileged access to reality and objectivity. Different practices of authority refer to varying conceptions of reality. 'Biopolitical' authority, for example, grounds authority in an experience of participation in the dynamic, generative, embodied energies of organic life (Schuller, 2018; Blencowe, 2012, 2013a). Neoliberal authority, by contrast, is grounded in participation in a very narrowly defined

conception of economic life (Davies, 2014; Reid, 2013; Larner & Walters 2004). As much feminist activism and scholarship has shown, remaking and redistributing authority often requires challenging accepted notions of what constitutes 'real' life: for example, what counts as healthy life or what counts as life at all (Povinelli 2016); what counts as participation in the economy (Cameron & Gibson-Graham, 2003); or what counts as valuable first-hand experience (Noorani, Karlsson & Borkman, 2019). This insight creates an interesting challenge for any kind of participatory politics, since it emphasizes the importance for participatory practices of redefining dominant ontologies – i.e. elitist and hierarchical constructions of reality itself (Blencowe, 2013b) – if they are to successfully assert authority. For example, in participatory mental health geographies, collaborative experimentation plays an important role in transforming distressing experiences, but also in creating shared material tools and practices that enable service-users to communicate with broader publics to challenge ontological divisions between the 'sane' and the 'mentally ill' (Noorani, 2013; Blencowe, Brigstocke & Noorani, 2018; Collinson-Scott et al., 2016).

Recognising the importance of transforming dominant ideas about what constitutes 'reality' and 'real life experience' in making participatory authority requires close engagement with materiality (Marres, 2012), objects (Askins & Pain, 2011), and what Honig (2017) theorises as 'public things'. Doing so means moving away from approaches within deliberative democracy that view publics as being constituted primarily by linguistic, deliberative, or abstract communicative processes. Instead, experimental more-than-human participatory practices experiment with explicitly listening to non-human processes and actors, thereby stylizing an aesthetics of authority that extends to a diverse, dispersed more-than-human community of actors (Bastian et al., 2016; Brigstocke & Noorani, 2017). Such participatory practices foreground the affective, embodied, material and nonhuman dimensions of authority. They take seriously everyday experience (Cahill, 2007), expertise-by-experience (McDermont et al., 2018), and experience derived from practices like walking (Pink et al., 2010) in research. Likewise, this experiential and embodied approach to working with participatory authority has been important to the co-production of alternative cartographies, including the use of participatory GIS to broaden public involvement in policy-making (Sieber, 2006) and the contestation of state-based representations of indigenous territories (Dunn, 2007). The notion of unsettling spatial categories via authority-by-experience and the performative aspects of place-making has also more recently been extended to queer geographies (Brown and Knopp, 2008) and non-representational theory (Gerlach, 2014).

This way of understanding the entanglements of participatory authority with more-than-human agencies and technologies has much to learn from Science and Technology Studies, where

participatory authority is reveales as a production always-in-the-making, influenced by framing political-economic conditions, but never finally decided (Chilvers and Kearnes, 2015). Sharing the 'enactive' quality of expert authority, participatory authority makes contingent accomplishments by coordinating translations between social and material worlds (Papadopoulos, 2018) that are granted legitimacy because they 'work' in the accounts of diverse constituents (Chilvers, 2008). Practices of public participation, from this vantage point, do not seek authority from pre-existing sources of recognition, but actively intervene in reality, transforming ideas about what is 'real' and what counts as 'real-life experience', thereby challenging and re-inventing the criteria and practices of recognition and consent. Participatory authority opens new sites of politics insofar as they break with given orders of voice and agency, bring new kinds of sense-making into existence, and reconstitute the 'real' which grounds claims to authority.

VIII Topologies of Authority

Having analysed four key forms of authorization that are central to key debates within contemporary political life (whilst acknowledging that there are many kinds of authority that we have insufficient space to discuss here), we now wish to ask how these different forms of authority come together to generate distinctive spatialities. If geographies of authority are to account adequately for dynamic, everyday, experimental, and more-than-human practices of authority, they must avoid falling back into logics that assume authority to involve sovereign command over a specific, spatially bounded sphere of influence with an identifiable centre. Instead, we must see authority as orientating actors within spatio-temporal relations of distance and proximity, presence and absence, transcendence and immanence, inclusion and exclusion, memory and anticipation. An important task for future research is to understand the relations between, and mutual co-composition of, multiple practices of authority, and to conceptualise the aggregated spatialities that this produces.

Work in Science and Technology Studies helps us think about how to trace the relational co-composition of multiple practices and spaces of authority, working transversally across affective, calculative, expert, and participatory authority. Work such as Papadopolous' (2018) research on experimental practices and Weston's (2017) exploration of new intimacies between humans, animals, and their surroundings in a high-tech ecologically damaged world, makes it clear that authority is a production-in-the-making, influenced by framing political-economic conditions, but never finally decided. An experimental politics of authority, from this vantage point, actively produces publics, commitments, affects, issues, and forms of democratic

engagement through the way they are composed, mediated, and performed. Thus, authority relations are always open to being recomposed, precisely because they are grounded in the 'always-contingent and compositional nature of the social world' (Chilvers & Kearnes, 2016:31). Such accounts lodge questions of politics, including the nature of political disagreement and action, and the conditions for the constitution and disclosure of new collectives, claims, and commons, at the heart of geographies of authority.

Conceptual vocabularies for describing the spatio-temporalities of these relational, performative, and compositional accounts of the social need to go beyond languages of fragmentation (Harrison, 2010), overlapping spheres of authority (Sassen 2006), the rescaling of authority (Brenner 2004), or extraterritorial authority (Elden, 2009). These languages do not entirely escape from geometric presuppositions that assume power and authority to unfold over pre-existing space, rather to co-compose space (Allen, 2016). Moreover, none of these framings give a clear picture of the distinctive spatialities of authority in contrast to other forms of power and control.

A promising alternative way in which future geographies of authority might usefully approach this issue is through work on spatial topologies. As Martin & Secor (2014: 431) observe, topology directs our thinking of relationality towards a questioning of 'how relations are formed and then endure despite conditions of continual change'. Topological thinking offers useful tools for geographical work analysing the dynamic spatialities of authority and its continually-shifting connections to other forms of control such as manipulation, seduction, power, and coercion. Topology emphasises how spatial figures can be distorted, stretched, folded, and knotted, forming relations that survive the process of distortion, but in a transformed way (Lury et al, 2012). Understanding how duration and stability are produced *through* change and transformation (rather than against them) is a key problem for theorising modern authority – and topological analysis offers a powerful way of understanding this. Moreover, topological analysis helps us get to grips with an important element of the experience of authority, where authority is linked to forces that appear simultaneously present and absent, both proximate and ungraspable (Brigstocke, 2013). As Allen (2016) argues, topological analysis shows how certain processes succeed in reaching across diverse domains, as well as how one modality of control such as authority can be stretched into another, such as manipulation or coercion. Conceived topologically, authority is revealed as a practice that enacts new forms of proximity, distance, and presence through the distortion (e.g. stretching, folding) of reach.

As an illustration of how different sites, practices, materialities and topologies of authority are intertwined, it may be useful to dwell on a concrete example. The Environmental Data and

Governance Initiative (EDGI) formed in 2016 in response to the US elections and change of administration which threatened the integrity of US environmental agencies and policy. Initially, the main aim of EDGI was to 'save' data by archiving vulnerable data from official repositories, as well as monitoring changes to information on federal environmental websites. Through engagement with existing environmental justice groups and activists, this work raised important questions about the politics of data and data stewardship (Vera et al. 2018). The EDGI sought to address questions of how and why particular data are collected by federal agencies by developing novel forms of data stewardship through 'Data Together', a community that aims to 'decompose how decentralized and peer-to-peer web infrastructure can enable communities to access, discover, verify, and preserve data they care about' (see www.datatogether.org). As well as developing the digital tools and technologies required to do this, Data Together also organises public engagement through in-person events and online webinars for topical conversations.

In terms of thinking critically about authority, this initiative illustrates some key points made in this article, exemplifying how expertise, objectivity, data, affect, and politics are entangled through improvisatory and participatory practices that generate new topologies of reach. First, it shows how the staging of a disagreement over the nature and substance of the common does not have to be polarising: the work of saving environmental data from federal archives and the work of creating new infrastructures for the community stewardship of data can be complementary (Vera et al. 2018). Second, the production of authority is not simply a human affair of the intellect; exemplifying feminist and anti-colonial epistemic practice, the work of the EDGI and Data Together make explicit the role of affective and convivial connection, as well as the need to use and combine technologies, to build effective infrastructures of expertise. Finally, the EDGI's open access ethos, combined with a strong environmental justice ethos, invites us to see how common projects do not have to be uniform. Protocols, tools, and technologies can be developed for everyone to use, but these must be translated into different contexts where specific concerns and distinct relations of subjugation need to be surfaced. This promotes something like an intensity of scale, focussing, critically, on how tools and technologies are applied in situ, rather than on how they can be 'scaled up' and replicated (Tsing 2012). The EDGI thus folds together digital, experiential, expert and participatory authority, resulting in a practice that does not radiate outwards from a centre, but creates new relations of distance, proximity, and reach.

IX Conclusions

In the context of acute environmental, ecological, and political crises, the changing nature of authority – memorably characterized by Arendt as the 'capacity for building, preserving, and caring for a world that can survive us and remain a place fit to live in for those who come after us' (Arendt 1961:95) – is an urgent issue. Resisting assumptions that authority is necessarily elitist or always antithetical to freedom or equality, this article has followed in the footsteps of writers such as Arendt (1961), Dewey (see Gordon, 1998) and Connolly (1987) in seeing authority, not as something inherently negative or repressive, but as a relation that is ambiguous, productive, and a precondition for pluralism. In limiting action, authority also provides direction, support, and orientation. In contrast to dominant social-science and philosophical framings that think of this orientation in temporal terms,as a link to the future or past (e.g. Kojève 2014; Arendt, 1961), Geography has important arguments to make about the nature of authority. Authority is a vital element in practices that create the spaces, worlds, and frames that make radical or disruptive assertions of equality possible. Authority arises in ordinary, unspectacular ways, sometimes making possible resistance to hierarchical distributions of expertise and capacity by staging disagreements over the composition and sensibility of the common.

Geographical accounts of authority, regrettably, currently have little purchase on broader interdisciplinary discussions. Furedi's (2013) 'sociological history' of authority, for example, makes no reference whatsoever to space, place, landscape, environment, or other spatial phenomena. Our aim in this paper has been to argue for the importance of further work that explicitly develops new spatial concepts, theories, and vocabularies of authority. Geographical research has much to offer the social sciences in making the case for a far more plural, post-humanist, and embodied conceptualisation of authority than we see in the most influential accounts, which largely come from Sociology and Political Science. The geographical research discussed in this article clearly shows the benefits of conceptualising authority in ways that are sensitive to materiality, distributed agency, micropolitics, and spatial distributions of voice, capacity, and trust. Too often, however, authority is only addressed indirectly or implicitly in this work. By engaging with authority more explicitly and directly, Geography may succeed in better communicating its insights beyond its disciplinary boundaries, thereby informing the lively interdisciplinary debates around authoritarianism, anti-authoritarianism, populism, expertise, and trust.

To achieve this, further theoretical and empirical developments are needed. We have suggested that geography's concern with spatial, affective, distributed, and participatory practices paves

the way for accounts of authority that contest overly humanist, institutional, procedural analyses. Whereas Weberian ideal-types separate the charismatic and the bureaucratic, and hence the affective and rational, dimensions of authority, other areas of geography emphasise the imbrication of human and non-human, the affective and the rational, complicating and disrupting easy bifurcations. Although the research we have discussed does not always explicitly theorise these transformations in terms of authority, we have sought to demonstrate that re-reading them through this lens takes these accounts further, and helps us grasp and grapple with contemporary transformations in authority. Future work in this area must be steeped in a post-humanist empiricism that is sensitive to everyday practices, micro-politics, and transversal relations, including new kinds of collaborations and participatory practices that strive to recognise the authority of non-human actors (Bastian et al, 2016; Brigstocke & Noorani, 2016). Taking these insights further will require further work directly confronting the question of authority from perspectives informed by political aesthetics, affect theory, relational geographies, STS, and topological accounts of the social. Connecting transformations in authority at different scales and in diverse domains may help establish a basis from which to challenge, confront, and reconfigure the influences on our social world, and reach toward modes of doing and conferring trust that are worthy of – or adequate to – that trust (Withers, 2018).

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