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ADVANCED REVIEW

Legal culture and climate change adaptation: An agenda for research

Eric Hoddy¹  | Simon Halliday²  | Jonathan Ensor^{2,3}  |
Christine Wamsler¹ | Emily Boyd¹ 

¹LUCSUS, Lund University, Lund, Sweden

²York Law School, University of York, York, UK

³Stockholm Environment Institute, University of York, York, UK

Correspondence

Eric Hoddy, Centre for Applied Human Rights, University of York, UK.
Email: eric.hoddy@york.ac.uk

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Abstract

While climate change adaptation research has increasingly focused on aspects of culture, a systematic treatment of the role of *legal* culture in how communities respond to climate risk has yet to be produced. This is despite the fact that law and legal authority are implicated in most, if not all, of the ways in which actors seek to reduce the risks posed to communities by climate change. Using a scoping review methodology, this article examines the intersection of climate change adaptation and legal culture in existing research. Overall, we find that the significance of legal culture for adaptation actions has been under-explored. Yet, it is also clear that a focus on legal culture holds significant promise for our understanding of climate change adaptation. We set out a research agenda for the field, highlighting the ways in which a focus on legal culture may enrich existing key themes within climate change adaptation research.

This article is categorized under:

Policy and Governance > Governing Climate Change in Communities, Cities, and Regions
Vulnerability and Adaptation to Climate Change > Institutions for Adaptation

KEYWORDS

legal actors, legal attitudes, legal consciousness, legal pluralism, legal practices

1 | INTRODUCTION

Within the field of climate change adaptation, there is growing recognition of the importance of culture in shaping adaptation processes and outcomes (Adger et al., 2013; Few et al., 2021; Granderson, 2014; Rühlemann & Jordan, 2019). This is a welcome development for moving the field away from an overreliance on scientific and technical approaches to risk and risk response (Boyd, 2017; Granderson, 2014; Grothmann & Patt, 2005; Lidskog & Sundqvist, 2012). While recognizing that “culture” is treated inconsistently in the literature, here we take it to refer to the symbols, meanings, beliefs, values, norms and practices shared by a group of people, which have influence on behavior and how the meaning of others' behavior is interpreted (Adger et al., 2013; Ensor & Berger, 2009; Few

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et al., 2021). Culture has significance for risk perception and response, shaping, for example, how people appraise the nature and tolerability of risks (Dow et al., 2013). It also informs their faith in information sources, their expectations for who can or should take action, and the acceptability of such responses (Few et al., 2021).

Yet, within this growing body of work on the role of culture in adaptation, a focus on legality as an aspect of culture is significantly underdeveloped. Legality, as a common and basic feature of social organization and social life (Galligan, 2006; O'Donnell, 2021; Unger, 1976), is an important focus for cultural enquiry around climate change adaptation, we suggest, not least because law and legal authority are implicated in most, if not all of the ways in which various actors seek to reduce the risks posed to communities by climate change (Garmestani et al., 2013). It is important to recognize that we live in “legally plural” environments: legality exists at local, national and international levels, and relates not just to state authorities, but also to nonstate entities such as customary, community, and religious institutions (Santos, 1987; Tamanaha, 2001). How people understand and respond to legality within legally plural environments is a question of legal culture (Merry, 2012). A focus on legality should become a routine concern in our exploration of culture's significance for climate change adaptation.

In this article, we explore the contribution that an examination of legal culture can make to our understanding of climate change adaptation. We apply a scoping review approach to the existing literature in order to assess the current intersection of climate change adaptation and legal culture within research. Ultimately, we argue that the study of legal culture can add significant depth to our understanding of communities in the face of climate change risks, but that this promise remains largely unfulfilled. Accordingly, we set out a research agenda for the field.

The article is structured as follows. First, in Section 2, we take care to distinguish “legal culture” from “law,” on the one hand, and other aspects of culture, on the other. In doing so, we make clear the distinctiveness of our contribution to climate change adaptation scholarship. In Section 3, we describe the methodological approach used in our project. In Section 4, we expand on the notion of “legal culture,” drawing out four dimensions of the concept. We illustrate these by situating our scoping review findings within those four dimensions, thereby demonstrating the existence, albeit nascent, of legal culture concerns in the study of climate change adaptation. We then reflect more broadly on our findings in Section 5, drawing out the links between legal culture and some key concerns of the climate change adaptation literature. This, together with an assessment of the gaps in knowledge that remain, brings together an agenda for research for the field. The article then briefly concludes.

2 | DISTINGUISHING LEGAL CULTURE RESEARCH FROM OTHER KINDS OF RESEARCH

Later in this article (Section 4 below), we expand on our key concept of “legal culture,” drawing on the work of the legal anthropologist, Sally Merry, who, in a review of the field, suggested four dimensions of the concept. We apply Merry's framework to the topic of climate change adaptation by situating the findings of our scoping review within those four dimensions. However, before we get to the detail of what we mean by “legal culture,” we must draw some boundaries around it, making clear how it differs from related notions that have also been the subject of climate change adaptation research. In other words, we seek to clarify our particular contribution to the field by distinguishing it from associated work. Here, we draw a distinction between research on legal culture and: (1) other kinds of legal research; and (2) other kinds of cultural research.

2.1 | Other kinds of legal research

Law is something of a “rendezvous subject” in academic terms: it is a place where different disciplinary approaches meet around a shared interest. Consequently, research on law is quite varied.¹ For the purposes of this scoping review, however, we can suggest a basic heuristic to help make clear the distinctiveness of our contribution. Such a heuristic would divide research about law on the basis of whether it focuses primarily on the content of law, as opposed to a focus on people's thoughts and actions around law and legality.

Research focusing on the content of law may relate to it in a number of different ways. It might interrogate or propose the precise meaning of laws, or examine their consequences, or consider their potential application for particular aspects of society. Indeed, there is a considerable volume of such work relating the content of law to the subject of climate change adaptation. Examples include: the exploration of the potential/shortcomings of laws for the management of flood risks (Mehryar & Surminski, 2021); the consideration of the potential of litigation for action on climate change

(Beauregard et al., 2021; Stuart-Smith et al., 2021); the assessment of the relationship between the complexity of land tenure law and climate vulnerability (McEvoy et al., 2020); the analysis of international Indigenous rights-based approaches for adaptation strategies (Craig, 2015); the reflection on the constraints placed by legal frameworks on adaptive capacities (Cosens et al., 2017; Ebbesson & Hey, 2013) or the potential for human rights to broaden adaptive capacity (Ensor et al., 2015); and the examination of the applicability of legal provisions (e.g., tort law, human rights law) to climate-related loss and damage (Boyd et al., 2021; Huggel et al., 2015). Such work is hugely valuable but generally engages with law as a body of rules and principles. By way of contrast, research on legal culture directs its attention less to the content of legal provisions or bodies of law, and more to what people think and do around law, thus framing law and legality as a form of cultural practice. While originally associated with legal anthropology, legal culture research has flourished within the sociology of law, legal geography, criminology, political science, socio-legal studies, and the broader “law and society” movement (Friedman, 1986). Our ambition in this article is to explore whether and, if so, how a focus on legal culture has illuminated (and might further illuminate) the study of climate change adaptation. Before doing so, however, we must draw a further distinction: between legal culture and other aspects of culture.

2.2 | Other kinds of cultural research

What constitutes the “legal” in “legal culture”? The question of what is “law” has been the subject of protracted disagreement within legal research and the broader social sciences. Most scholars would agree that state law in modern society is a central case of the social phenomenon (e.g., Hart, 1961). Equally, particularly in relation to climate change (Mayer, 2018), most would include international law within their concept of “law” (Payandeh, 2010). But the question of what else may count as “law” has been hotly contested (Griffiths, 1986, 1998; Merry, 1988). The debates around this have significance for the distinction we draw in this article between legal culture and other aspects of culture.

Those researching “legal culture” can be separated according to their method for identifying “law” (Tamanaha, 2001). On the one hand, there are those who believe that the question of what is “law” should ultimately be answered by the subjects of research: the ordinary people and communities who form the focus of a research endeavor. This approach may be termed “conventional,” identifying law by way of the conventions of those we study. On the other hand, there are those who (explicitly or implicitly) believe the researcher should decide what counts as “law.” This approach can be sub-divided between those who identify law by applying key conceptual criteria (an “essentialist” approach), and those who identify law according to the social ordering function it performs (a “functional” approach) (Tamanaha, 2001). For those who adopt a functional approach to the concept of law, the distinction between law and social norms thus becomes quite unclear (Merry, 1988): all social norms that perform a social ordering function are potentially treated as “law.” While the functional approach may be very useful for comparative research, offering a common unit of analysis that can encompass a variety of empirical phenomena across time or space (von Benda-Beckmann, 2002), it sidelines the fact that, phenomenologically, legality is a particular form of normativity: not all norms are identified as “legal” by social actors.

In this article, we adopt the conventional approach to the identification of the “legal” in “legal culture”: in seeking to understand the significance of legal culture for climate change adaptation, what matters most, we suggest, is what people identify as “legal.” Given that state law—a central and widely-recognized conception of legality—is frequently used in adaptation interventions to reduce the risks posed to communities by climate change, we should pay particular attention to what else is identified as “legal” by those communities (as well as what they think and do about all that is “legal”). This “conventional” approach to the notion of “legal culture” thus searches specifically for legality within broader social normativity. As such, our scoping review excludes research that examines the significance of nonlegal normativity (conventionally speaking) for climate change adaptation. There is, of course, great richness and significance in climate change adaptation research that focuses on nonlegal social norms (Adger et al., 2009), including work relating to gender (e.g., Cohen et al., 2016), social hierarchies (Ghorbani et al., 2021), identity and place (Neef et al., 2018) and traditional knowledge (e.g., Granderson, 2017). However, the assertion of this article is that within this broader corpus of work, there is a relative neglect of a specific focus on legal culture, approached through the perspectives and actions of those facing climate change risks.

3 | METHODOLOGY

A key aim of this article is to explore the existing intersection of legal culture and climate change adaptation within research. We adopted a scoping approach to achieve this. The scoping review is a recognized and systematic method for

determining the scope of a body of literature and assessing its focus (Munn et al., 2018). Its use is in line with calls for greater transparency in methods for sampling and synthesizing adaptation research (Berrang-Ford et al., 2015; Stagrum et al., 2020; Vincent & Cundill, 2021). Scoping reviews may be used for clarifying key concepts and definitions in the literature, examining how research is conducted on a topic, and/or for identifying and analyzing knowledge gaps (Arksey & O'Malley, 2005; Munn et al., 2018). As such, they are particularly useful where evidence and research areas are new or emerging (Arksey & O'Malley, 2005; Levac et al., 2010; Munn et al., 2018). Our scoping review proceeded through four key stages, summarized in Figure 1 below.

3.1 | Identifying the pool of journals for searching

The identification of potentially relevant studies in a scoping review may be achieved by the application of a search string to the comprehensive database of journal content within Web of Science. However, preliminary attempts at applying search strings encompassing relevant terms on legal culture and climate change adaptation produced an entirely unmanageable volume of articles relative to the resources of the research team (well over 140,000 articles). This

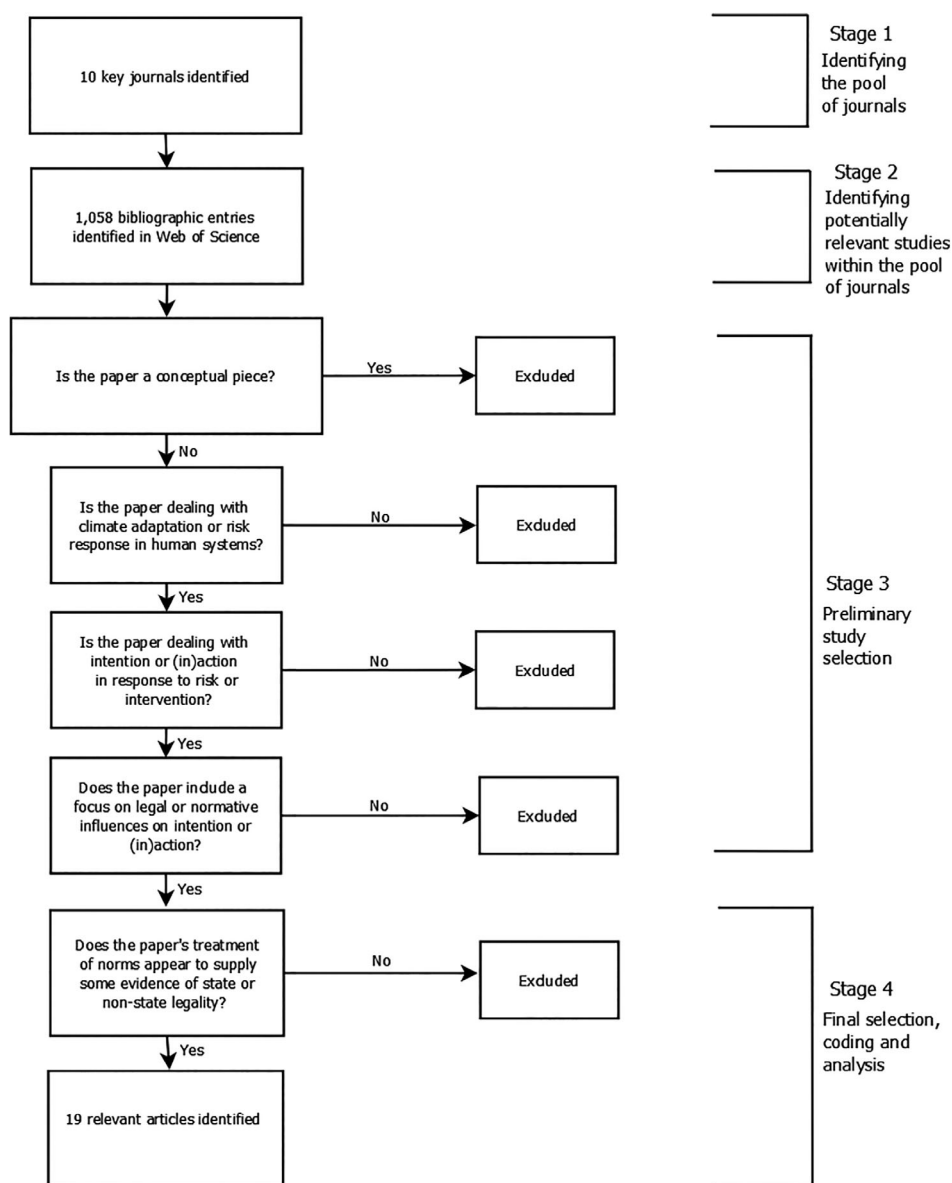


FIGURE 1 Overall process of search, selection, and analysis

was the case even after filtering to remove articles not published in journals included in the Social Sciences or Arts & Humanities Citation Indices (over 25,000 articles). Accordingly, a decision was taken to restrict our search to a sub-set of journals that represented the state of the art in the field. While, by searching only a subset of journals, we would lose the comprehensiveness of our analysis of the intersection of legal culture and climate change adaptation research, we would nonetheless retain the capacity to capture a strong sense of the legal culture ideas being used and the analytical purchase that a legal culture focus offers—sufficiently so that we can use the analysis to develop and articulate a research agenda for the field.

To identify an appropriate sub-set of journals, our first step was to conduct a simple search in Web of Science for all literature on climate adaptation. This identified exactly 500 journals publishing social science or arts & humanities content on climate adaptation. In combination, they had published 17,018 such articles. We purposively selected the top 10 journals on the basis of the volume of climate adaptation content published (Table 1 below). Between them, these journals had published over 25% ($n = 4341$) of the 17,018 articles. The impact factor of each journal was checked as a proxy for the relative weight that journals hold in the scientific community. All journals identified (Table 1) publish in the English language.

3.2 | Applying the search string to the top 10 journals

A search string was developed that combined terms on legal culture with the term “adapt*” (Table 2 below). The search string was expansive and included terms relating to social norms as an alternative to legality. Despite the conventional approach taken in this article to the concept of legal culture (Section 2.2 above), we recognized the possibility that some researchers may discuss, using the language of social norms, what their research participants might frame in terms of legality. At this stage of the process, we chose to be inclusive. Qualitative criteria were applied at a later stage of the process in deciding whether such articles should be retained for analysis (Section 3.4 below). Our search yielded 1059 results overall.

3.3 | Preliminary study selection

With 1059 results in hand, the titles, keywords, and abstracts were reviewed against key criteria for determining which articles would be retained for full analysis. This process occurred iteratively, with the retention criteria applied in a post hoc manner by reading identified studies and acquiring new familiarity with the subject matter (Rushton et al., 2016). To be retained, the research had to comprise case studies on climate change adaptation: purely conceptual articles were excluded since we were looking for evidence about legal culture and adaptation. Further, case studies had to include all of the following three features: (a) settings with climate change related hazards or risks; (b) adaptive action, inaction or intention on the part of individuals or communities in response to climate hazards or risk or external climate change

TABLE 1 Journal search and selection

Journal name	Impact score	No. of results	Percentage
Sustainability	3.25	1039	6.105%
Regional Environmental Change	3.38	578	3.396%
Climatic Change	4.74	499	2.932%
Climate and Development	4.28	459	2.697%
Global Environmental Change Human and Policy Dimensions	9.52	445	2.615%
Environmental Science & Policy	5.52	341	2.004%
Nature Climate Change	21.72 (2 years)	285	1.675%
International Journal of Climate Change Strategies and Management	2.65	241	1.416%
Ecology and Society	4.40	235	1.381%
Climate Policy	5.09	219	1.287%
		Total: 4341	Total: 25.5

TABLE 2 Search string on Web of Science

Search string on Web of Science

TI=("adapt*" AND (("legality" OR ("legal*" NEAR/4 "plural*") OR ("legal*" NEAR/4 "cultur*") OR ("legal*" NEAR/4 "conscious*") OR ("legal*" NEAR/4 "attitude*") OR ("legal*" NEAR/4 "mobili*") OR ("law" NEAR/4 "mobili*") OR "legal practices" OR "legal order*" OR "legal norm*" OR "dispute resolution" OR "rights*" OR "right to" OR "justice" OR "lore" OR "soci* norm*" OR "cultural norm*" OR "socio-cultural norm*" OR "normative pluralism" OR "normativity" OR "normative order" OR ("customary" OR "traditional" OR "indigenous" OR "informal") AND ("law*" OR "legal*" OR "rule*" OR "authorit*" OR "institution*"))))))

OR AB=("adapt*" AND (("legality" OR ("legal*" NEAR/4 "plural*") OR ("legal*" NEAR/4 "cultur*") OR ("legal*" NEAR/4 "conscious*") OR ("legal*" NEAR/4 "attitude*") OR ("legal*" NEAR/4 "mobili*") OR ("law" NEAR/4 "mobili*") OR "legal practices" OR "legal order*" OR "legal norm*" OR "dispute resolution" OR "rights*" OR "right to" OR "justice" OR "lore" OR "soci* norm*" OR "cultural norm*" OR "socio-cultural norm*" OR "normative pluralism" OR "normativity" OR "normative order" OR ("customary" OR "traditional" OR "indigenous" OR "informal") AND ("law*" OR "legal*" OR "rule*" OR "authorit*" OR "institution*"))))))

OR AK=("adapt*" AND (("legality" OR ("legal*" NEAR/4 "plural*") OR ("legal*" NEAR/4 "cultur*") OR ("legal*" NEAR/4 "conscious*") OR ("legal*" NEAR/4 "attitude*") OR ("legal*" NEAR/4 "mobili*") OR ("law" NEAR/4 "mobili*") OR "legal practices" OR "legal order*" OR "legal norm*" OR "dispute resolution" OR "rights*" OR "right to" OR "justice" OR "lore" OR "soci* norm*" OR "cultural norm*" OR "socio-cultural norm*" OR "normative pluralism" OR "normativity" OR "normative order" OR ("customary" OR "traditional" OR "indigenous" OR "informal") AND ("law*" OR "legal*" OR "rule*" OR "authorit*" OR "institution*"))))))

AND

SO=(CLIMATIC CHANGE OR SUSTAINABILITY OR REGIONAL ENVIRONMENTAL CHANGE OR CLIMATE AND DEVELOPMENT OR GLOBAL ENVIRONMENTAL CHANGE HUMAN AND POLICY DIMENSIONS OR ENVIRONMENTAL SCIENCE POLICY OR NATURE CLIMATE CHANGE OR INTERNATIONAL JOURNAL OF CLIMATE CHANGE STRATEGIES AND MANAGEMENT OR ECOLOGY AND SOCIETY OR CLIMATE POLICY)

TABLE 3 Retention criteria

Retention criteria

1. Peer-reviewed journal articles
2. Indexed in Scopus or Web of Science
3. Papers that focus on case studies where (a) climate related events have happened, are underway or expected to happen in the community; or (b) where there are external climate risk-related interventions that have happened, are underway or planned for the community
4. Papers that focus on intention and/or (in)action among individuals and/or communities in response to climate risk and interventions
5. Papers that consider legal or normative influences on individual and/or community intention and/or (in)action

interventions in response to climate hazards or risks; and (c) the influence of legal or normative factors on (in)action or intention as a key study focus (Table 3 below).

Retention criteria were applied by the first author and decisions validated by the research team through random checking (one sample of 20 items per team member). Disagreements were discussed among the team.

3.4 | Final study selection, coding, and analysis

The first task in this final stage was to verify whether articles discussing norms should be retained as studies of legal culture. There were nine such articles. If they used “norms” or similar terms interchangeably with “law” or “legality” in the context of the same study, we retained them. Equally, if an article used “norms” or similar terms where separate studies examining similar phenomena in the same community or country setting used “law” and “legality,” it was retained. As it turned out, only two articles focusing on social norms were retained for these reasons.

Retention criteria were applied by the first author and decisions validated by the research team through discussion. Ultimately, there were 19 studies left for coding and analysis. We applied a start list of four codes derived from the legal culture framework set out below (Section 4; Supporting Information S1).

We acknowledge that, despite our own commitment to a conventional approach to the meaning of “legal” culture (Section 2.2 above), it is possible that some of our analyzed studies refer to law or legality in a way that would not be

recognized by the studies' research participants—that the researcher has ascribed “legality” to a social phenomenon in a way that is not faithful to the research participants' perspectives. This, we suggest, is an unavoidable risk and is acknowledged as a potential limitation of this scoping review.

4 | DIMENSIONS OF LEGAL CULTURE IN CLIMATE CHANGE ADAPTATION RESEARCH

In this section, we expand on the concept of “legal culture,” drawing on Merry's analysis of how it has been applied within socio-legal research (Merry, 2010). Merry proposed four dimensions of legal culture: legal practices, legal attitudes, legal mobilization, and legal consciousness. As will become clear, the articulation of four dimensions is simply an analytical device. Their presentation as distinct social phenomena is, empirically speaking, artificial. In social reality, these “dimensions” of legal culture are intimately connected and overlap. As Merry notes,

Each dimension of legal culture can be distinguished analytically, although in practice the lines dividing them are quite blurry and each influences the others... they are not distinct forms of social behaviour but dimensions of social life always reshaping each other in some ways (2010: 43, 44)

Nonetheless, her “disaggregation” of the concept (Merry, 2010: 43) is particularly useful for our scoping review because of its inclusive approach. Its application enables us to examine research that applies a notion of legal culture spanning a broad range of social phenomena. Equally, it permits us to include a wide spectrum of studies that include a focus on what people think and do around legality, even though they may not specifically have used the term “legal culture.”

Below, we examine these four dimensions in more detail. We elaborate their meaning through discussion of the studies identified in our scoping review, thus illustrating something of the promise of a legal culture focus for climate change adaptation research.

4.1 | Legal practices

“Legal practices” refers to the ways in which specific legal institutions operate in reality—what the socio-legal scholar, Lawrence Friedman, has described as “internal legal culture” (Friedman, 1975). Key legal actors may share ideas about how to categorize problems, or about how and why things get done in particular ways within legal processes, or about whether and when to exercise legal authority. Thus, we might observe a difference between the “law in books” and the “law in action” (Pound, 1910). A number of studies identified in our review engaged with the idea of legal practices (albeit not using that term), showing how the realities of law in action can be quite different from the law in books. Such disconnection between the law in books and the law in action can be problematic for climate change adaptation: laws that appear to hold promise for adaptation may suffer from weak enforcement (Ruiz-Mallén et al., 2015; Owuor et al., 2012). For example, legal rules prohibiting environmentally harmful practices may be ignored because of officials' sympathies for the economic needs of local people (Betzold & Mohamed, 2017; Lau et al., 2021). Equally, formal land rights, which may be significant for adaptive capacities, may be rendered useless because of corruption within the justice system (Coirolo & Rahman, 2014).

4.2 | Legal attitudes

“Legal attitudes,” rather than focusing on practices within specific legal institutions, refers to the beliefs within a community or society about the place of a legal order in social life. Here, the focus is on the dominant or prevailing attitudes of a community or society, notwithstanding differences at the individual level that may reflect personal experiences. Attention is thus paid to the general expectations of a legal order, such as its level of corruption, its accessibility or efficiency, or its capacity to deliver on its promises. For example, as demonstrated in one of the studies identified in our scoping review, where a government categorizes an informal peri-urban community as an illegal and temporary occupation, withholding key services accordingly, that community may regard the state legal order with suspicion (Thorn

et al., 2015). The state's ascription of illegality to the informal community may be reciprocated by the informal community's ascription of illegitimacy to state law. In such circumstances, the informal community may generate its own informal legal order, particularly around, for example, land rights, and such may be significant for adaptive practices. Equally, in countries carrying a legacy of highly centralized and/or corrupt political power, expectations regarding the lawful implementation of water management rules may be low, influencing behavior in ways that are problematic for adaptation (Schlüter et al., 2010).

4.3 | Legal mobilization

Legal mobilization refers to the social practice of turning to law in some way for solutions to one's problems. Implicit to this notion, then, is the prior identification of problems as having a legal dimension (thus connecting to Merry's fourth dimension, "legal consciousness," discussed below). Perhaps most obviously, legal mobilization would involve seeking the assistance of legal actors or initiating a legal process to achieve some goal. Some of the studies identified in our review focused on such mobilization, discussing, for instance, the use of litigation to enforce land rights (Chan, 2013) or water rights (Bark et al., 2012), both of which had significance for climate change adaptation. Yet, the turn to legality for assistance may simply involve invoking the symbolic authority of law in the context of a dispute. Thus, when challenging authorities with respect to their responsibilities (which relate to climate change), the assertion that one's rights have been violated or unfulfilled is also a form of legal mobilization. This form of mobilization was seen in a few studies identified in our review: around land (Ruiz-Mallén et al., 2015), water (Eakin et al., 2020), and the need more generally to be protected from environmental change (Bulkeley et al., 2014; Karlsson & Hovelsrud, 2015).

4.4 | Legal consciousness

Legal consciousness focuses particularly on people's orientations toward legality. As we saw above, legal consciousness can be framed as an underpinning condition of legal mobilization: rights claiming around access to water, for example, evidences legal consciousness (Eakin et al., 2020). Yet, equally, legal consciousness may be expressed in a failure to turn to law. A legal consciousness whereby legal processes are understood as being too complex (Miller Hesed & Ostergren, 2017) or discriminatory (Nchu et al., 2019) may prevent legal mobilization, thus undermining law's potential to address climate change. Legal consciousness may also be expressed in a positive rejection of the authority of law, involving resistance to legality. Law may lack legitimacy in people's legal consciousness and so be powerless to prevent maladaptive practices. For example, laws forbidding forest foraging (Chan, 2013; Woittiez et al., 2013), mangrove cutting (Omukuti, 2020), or sand mining (Betzold & Mohamed, 2017) may be flouted because compliance would prevent people from meeting their everyday economic needs.

The illegitimacy of certain laws may also be the product of tension between legal orders. Legal consciousness may thus operate as a window onto people's navigation of, and orientations toward legally plural environments. For example, continued practices of accessing forests despite its illegality in state law may be understood in light of its acceptability under customary law (Mosberg & Eriksen, 2015; Owuor et al., 2012). In this way, the analysis of legal consciousness may reveal the importance for adaptation of the complementarity between centralized systems of state law and local customary law, as in Ghorbani et al.'s study of water management in Iran (Ghorbani et al., 2021).

5 | DISCUSSION

In the above elaboration of four dimensions of legal culture, we were able to demonstrate that, while not necessarily using the language or terms of legal culture, climate change adaptation researchers are already engaging with the relevant ideas. The significance of these ideas to the studies is variable: whereas in some articles it is central (e.g., Mosberg and Eriksen, 2015; Owuor et al., 2012), in others it is peripheral (Chan, 2013; Miller Hesed & Ostergren, 2017). Nonetheless, the very existence of the 19 studies identified suggests that legal culture offers analytical purchase for the climate change adaptation field.

Yet, if we consider the studies identified in our scoping review as indicative of the wider body of relevant research, we might suggest that the enterprise of exploring the intersection of legal culture and climate change adaptation is

likely to still be in its infancy. As we noted above in Section 3, our scoping review was not comprehensive: our search was restricted to the top 10 journals, which, in combination, had published roughly a quarter of the articles on climate change adaptation. Accordingly, we cannot make a definitive claim about the size of the body of climate change adaptation research exploring issues of legal culture. However, given that we were able to identify only 19 studies in 1059 articles, the overall “*n*” seems likely to be very small relative to size of global environmental change and adaptation field. Equally, the enterprise is also probably best regarded as quite a new endeavor: all of our identified studies were published in the last 11 years.

In light of the above, we take the opportunity in this section to reflect more broadly on the promise of a legal culture focus for our understanding of climate change adaptation. First, building on the discussion in Section 4, we suggest some ways in which an examination of legal culture may enrich two themes that form central concerns within climate change adaptation research. Our aim here is not to offer an exhaustive list of the connections between legal culture and climate change adaptation research, but rather to focus on two themes (sources of climate vulnerability; barriers to adaptation) as an illustration of how the different dimensions of legal culture may contribute to and deepen existing adaptation research. Second, we sketch out a research agenda for the field, synthesizing our findings and reflections to offer a set of research questions that may structure the future examination of legal culture within climate change adaptation research.

5.1 | Connecting legal culture to climate change adaptation research

5.1.1 | Sources of climate vulnerability

A number of the studies identified in our scoping review point to the role of legal culture in shaping people's vulnerabilities to climate change, where vulnerability is understood as dynamic and shaped by mainly social factors around resource access, governance, culture and knowledge (Thomas et al., 2019). A legal culture focus may assist our understanding of these sources of vulnerability in three key respects.

First, examinations of everyday practices of circumventing or “breaking” law in communities affected by climate can shed light on how vulnerability can become entrenched through processes of social differentiation and changing relations between households (Mosberg and Eriksen, 2015). Research examined in this review has begun the task of identifying the social mechanisms that connect law-breaking and vulnerability, including the influence of punitive measures such as fines, imprisonment and corporal punishment. When legal orders confer socially meaningful categories such as “criminal,” “desperate” or “immoral” onto particular individuals and groups, social stigma and loss of standing within a community may follow. Such mechanisms remain understudied, however. Mosberg and Eriksen (2015) call for researchers to consider how coping strategies become defined as “illicit” or “illegal” and how definitions may change over time or under particular conditions (Chan, 2013; Owuor et al., 2012).

Second, examining “abuses” of the legal system by more powerful actors and in settings of corruption can shed light on the way vulnerability may be accentuated when legal orders become subject to elite capture. As studied elsewhere (Borras Jr & Ross, 2007; Decker et al., 2005; Franco & Carranza, 2014), elite capture may figure within wider processes of governance capture, allowing elite actors to mobilize law for a variety of ends and to different effects that enhance others' vulnerability. Elite actors may mobilize law to harass marginalized groups and/or dispossess them of land and the resources needed to cope with change (Franco & Carranza, 2014). For example, in respect to climate vulnerability, Coirolo and Rahman (2014) reveal resource grabbing by elites, connecting heightened vulnerability with “false court cases.” Such work can be expanded further by, for example, addressing how elite capture amplifies power differentials among societal groups and within processes of governance, and further circumscribing people's limited influence “within the political economy that shapes entitlements” (Ribot, 2014).

Finally, the exploration of socio-legal sources of vulnerability should also focus on the everyday practices of key legal officials, such as judges, public officials, and customary authorities. Key officials' sympathies for the immediate economic needs of local people might authorize practices that undermine environmental systems over time (Betzold & Mohamed, 2017; Lau et al., 2021). Equally, the normative or political preferences of such officials may encourage or strengthen social differentiation or changing relations between households, defining patterns of vulnerability within communities, permitting, for instance, some groups to evade sanction. More privileged groups may find ways of acting in contravention of laws because their law-breaking is tolerated.

5.1.2 | Barriers to community adaptation

Studies identified in this review point also to the role of legal culture in shaping barriers to adaptation (Moser & Ekstrom, 2010), understood here in social terms as the institutional and normative factors that shape how people respond to climate hazard and risk (Jones & Boyd, 2011). There are three key respects in which this is so.

First, legal culture, as a feature of institutional and governance processes and contexts, will play a role in shaping barriers to access and entitlement around resources needed to adapt to change. In contrast to much of the legal literature on adaptation referenced in Section 2, the emphasis here is less on law as a body of rules and principles that, for example, place constraints on adaptive capacities (Ebbesson & Hey, 2013), and more on a cultural understanding of how law and legal systems operate in practice and within wider institutional fields. This approach is sensitive to discrepancies between what law and legal actors say or “ought to” do and what happens in practice. For example, for some groups, such as women, legal culture may present barriers when they find themselves deterred from accessing legal remedies because of their group status (Nchu et al., 2019). Legal culture may be embedded in and reflect wider cultural norms around gender. As such, ideas about the appropriateness of such groups participating in legal processes may restrict their access to adaptation resources. Equally, elite capture of legal systems, as discussed above in relation to vulnerability, may undermine legal entitlements and facilitate diminished adaptation opportunities for already marginalized groups. Informal land markets or widespread falsification of land titles may rely on judicial corruption or organizational cultures of complicity and operate as barriers to adaptation (e.g., Calmon, 2022; Fairbairn, 2013; McDonnell, 2017). As such, legal culture represents, we suggest, an under-examined source of institutional barriers to adaptation which can usefully widen analysis beyond “unsound regulations and laws” (Mu et al., 2020, p. 2) to include a focus on “law in action” as revealed in the routines and practices of key legal actors.

Second, deeper understanding of the normative barriers to adaptation among marginalized groups can follow when legal culture is understood as part of communities’ wider “normative universe.” It seems that, within the adaptation literature, there is scope for greater emphasis on legality as a particular form of normativity. Thus, attention to legal culture may provide insight into a new category of normative barrier to adaptation and its sources. We can expect ideas about legality to play a role in prescribing, for example, what is considered an appropriate response to climate hazards and risk, who takes that action, and how acceptable it is (Few et al., 2021; Jones & Boyd, 2011). Within legal geography, for example, emerging work is demonstrating how the strength of rights consciousness in relation to issues of private property can lead to legal mobilization as a form of resistance to potential climate adaptation initiatives (O'Donnell, 2019a, 2019b). Here, adaptation research is building on similar work within the broader environmental field. In relation to conservation, for example, it has been shown that ideas about community needs can be framed by legal consciousness, such as where historical customary rights and practices in conservation settings provide communities with a baseline for measuring the impacts on their wellbeing of external interventions. Such ideas, in turn, shape decisions about whether to resist the laws associated with the intervention (Raycraft, 2020; see also Pieraccini & Cardwell, 2015).

Third, legal culture can be intimately bound up with senses of identity. People's sense of self may inform how far they view the law as appropriate for problem solving, and vice versa. Thus, identity work in some settings may be significant for improvements in access and control over resources and services for adaptation (Ensor et al., 2015). For example, the deliberate promotion of a new rights consciousness (the conviction that one is a rights-bearing individual or group) seeks to reinterpret the social relationships that constrain capacities to adapt (Cornwall, 2017). Yet, equally, in other contexts rights consciousness may be more negative, associated with a “victim” identity (Bumiller, 1992; Chua & Engel, 2019). In this way, legal consciousness may, in other settings, neutralize the promise of law in bringing about social change.

5.2 | An agenda for future research

5.2.1 | Embracing legal pluralism

Having demonstrated the analytical purchase of a legal culture focus and its capacity to enrich some key concerns of the climate change adaptation field, in this section we briefly sketch out a research agenda for the field. We list a set of key questions below. However, before doing so, it is important to stress that this research agenda must be underpinned by a recognition of the inevitability of legal pluralism within societies. Thus, not only should researchers search for perceptions of legality within broader social normativity, but they must also recognize that such legality relates to more

than one legal order. As we noted in Section 1, legality exists at local, national, and international levels, and focuses not just on state authorities, but also to nonstate entities such as customary, community, and religious institutions.

Legal pluralism research has demonstrated the potential for competition between legal orders, permitting people to “forum shop” whereby they harness the rules or processes of one legal order in order to bypass or offset the effects of another (e.g., von Benda-Beckmann, 1981). Yet, at the same time, researchers should be open to the ways in which apparently separate legal orders inter-penetrate (what Santos has described as “interlegality”: Santos, 1987). Actors who mobilize law in a nonstate legal order may draw inspiration from other legal orders, such as state law or international human rights law (e.g., Nchu et al., 2019).

A legal pluralist perspective in climate change adaptation will build on and connect well with existing work in the broader environmental social sciences. Work in this regard has considered, for example, both the tensions generated through competing legal orders in the management of natural resources and governance (e.g., Bavinck & Gupta, 2014; Gupta & Bavinck, 2014; Jentoft, 2011), as well as the positive influence of legal pluralism in assisting adaptation to ecological and livelihood uncertainty (Meinzen-Dick & Pradhan, 2016; Sutawan, 2000; Techera, 2010).

5.2.2 | Research questions

Legal culture research can significantly deepen our understanding of climate change adaptation. Yet, currently, as our scoping review suggests, legal culture's contribution remains under-developed. We acknowledge, of course, that our review is limited and indicative only, focusing on roughly one quarter of potentially relevant studies, published in the journals that carry the most climate change adaptation content. Clearly, there are studies that, by virtue of our methodology, have been overlooked. We are aware, for example, of emerging work within legal geography (e.g., O'Donnell, 2019a, 2019b; O'Donnell, 2021). Yet, the fact that such studies were not identified in our review suggests that the developing corpus of work may be scattered quite thinly across the social sciences, no doubt facilitated by the resilience of disciplinary silos. It seems to lack, as yet, the sense of a coherent field that comes with a shared language for and understanding of overarching research questions. If, as a research community, we could develop such, we will be better equipped to take advantage of legal culture's promise for the understanding of climate change adaptation.

To that end, we suggest broad research questions as a starting point in delineating this field, while recognizing that future research will further refine and develop our understanding of the relationship between legal culture and adaptation. We adopt Merry's disaggregation to structure our questions, while reiterating that it is an analytical rather than empirical reality. As illustrated in Section 5.1, the categories will inevitably cut across lived experiences of adaptation.

On legal practices

- In what ways and to what extent does the “law in action” in adaptation processes, such as in urban planning, zoning, and enforcement, represent a distortion of the “law in books”?
- Do legal practices discriminate against some adaptation actors (e.g., women, caste groups)?
- Are legal practices contested (internally or externally): for example, by adaptation actors or those resisting adaptation interventions or regulation and enforcement?

On legal mobilization

- How is law mobilized in the context of legal pluralism?
- How far can nonstate legality can be harnessed for securing adaptation related outcomes?
- In what ways is nonstate law being mobilized, symbolically or in practice, to resist change or in ways that undermine adaptation opportunities for others?
- In what ways are ideas from one legal order invoked in another for the purposes of climate change adaptation?

On legal attitudes

- What are the prevailing attitudes within a given society toward particular legal orders?
- To what extent do prevailing legal attitudes represent a barrier to the potential effectiveness of adaptation strategies that rely on the use of law?
- How might adaptation strategies that rely on the use of law be more sensitive to legal attitudes?

On legal consciousness

- How do individuals and groups appraise the institutions, actors, rules, and processes that govern adaptation responses and interventions (external or internal to communities)?
- How far does legal consciousness explain behavior, such as cooperation and resistance to adaptation?
- How can understandings of legal consciousness in particular settings assist with the design and delivery of adaptation interventions?

6 | CONCLUSION

This article suggests that the subject of legal culture holds significant promise for a deeper understanding of climate change adaptation. Yet its significance for climate change adaptation seems largely to have been overlooked. We have suggested a research agenda for the adaptation field. The proposed research questions offer an explicitly cultural focus on legality, bringing into focus a fundamental dimension of the lived realities of climate change adaptation and furthering recent work on the role of culture in shaping adaptation processes and outcomes.

AUTHOR CONTRIBUTIONS

Eric Hoddy: Conceptualization (equal); methodology (equal); writing – original draft (equal). **Simon Halliday:** Conceptualization (equal); writing – original draft (equal). **Jonathan Ensor:** Conceptualization (equal); methodology (supporting); writing – review and editing (lead). **Christine Wamsler:** Conceptualization (equal); methodology (equal); writing – review and editing (equal). **Emily Boyd:** Conceptualization (equal); supervision (lead); writing – review and editing (supporting).

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CONFLICT OF INTEREST

The authors have declared no conflicts of interest for this article.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

ORCID

Eric Hoddy  <https://orcid.org/0000-0003-0549-8285>

Simon Halliday  <https://orcid.org/0000-0001-5107-6783>

Jonathan Ensor  <https://orcid.org/0000-0003-2402-5491>

Emily Boyd  <https://orcid.org/0000-0002-1643-9718>

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ENDNOTE

- ¹ Indeed, a number of typologies of legal research exist, offering ways of capturing or ordering this variation. See, for example, MacCormick (1994) and McCrudden (2006).

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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