

Climate Change Adaptation: Existential Threat, Welfare States and Legal Management

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Abstract

This paper contrasts knowledge frames for climate change and displacement. First the paper explains the abstract human rights arguments about displacement in climate change and disaster. In contrast, management and claims under lawsuits about climate change and displacement are place-based. The paper then draws on data about knowledge and management strategies in a particular place in the United States, and on a close reading of legal reasoning in a post-disaster domestic housing case in the United States. The paper relies on interpretive methods. Although legal reasoning is often represented as distinctive in how it transforms stories into decisions, it shares characteristics with other forms of policy reasoning. Institutional reasoning transforms the “existential threat” of climate change into managed parts. The paper argues that intervening concerning climate change and displacement requires shifting from broad claims in the drama of climate change and rights to following tactics logical within particular institutions.

Key words

Disaster; sea level rise; social welfare; institutional logics

Resumen

Este artículo realiza un contraste entre marcos de conocimiento para el cambio climático y el desplazamiento de la población. Primero, explica los argumentos abstractos sobre derechos humanos; por contra, la gestión y las reclamaciones judiciales sobre cambio climático y desplazamiento se basan en el lugar. A continuación, se parte de datos sobre estrategias de conocimiento y gestión en un lugar concreto, y de una cuidadosa lectura del razonamiento jurídico en un caso sobre vivienda post-desastre. Nos basamos en métodos interpretativos. A pesar de que a menudo se presenta como rasgo distintivo del razonamiento jurídico el transformar historias en decisiones, comparte características con otros tipos de razonamiento de

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políticas. El razonamiento institucional transforma la "amenaza existencial" del cambio climático en partes gestionadas. Se argumenta que, para intervenir sobre el cambio climático y el desplazamiento, es necesario pasar de reclamaciones generales a tácticas lógicas dentro de instituciones concretas.

Palabras claves

Desastre; subida del nivel del mar; bienestar social; lógica institucional

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1. Adaptation and governing: law, management and existential threat

Law turns diffuse, shattering, public problems into management problems, not only for lawyers, but also for planners, citizens, engineers, and others. Groups of experts and citizens define what to do. Law has been studied in social movements and how it inspires, how law frames the claims people make of each other, and the discourses of law in its ritual enactments, such as trials. International human rights inspire movements, and the movements are essential to making rights useful in communities around the world. Not all of law is inspiring, nor does it always directly evoke human rights. Organizations also transform legal rights into bureaucratic or problem solving processes informed by other problems. That transformation of a problem from something inspiring and terrifying to a management problem is nowhere more evident than in climate change, particularly where causation is not up for discussion. In framing climate change as a problem, law changes a global, unplaced existential threat (Beck 1992) into a problem with pieces to manage.

Manageable pieces include environmental law governing land use (Hilson 2015, 2016), green house gas emissions and controlling them (Vanhala 2013, Vanhala and Hilson 2013, Peel and Osofsky 2015), and protection of species (Camacho 2010, Vanhala 2017). Laws are often domestic, and they can appear in planning documents or in issues before courts. Supranationally, the United Nations also brings nations together to negotiate compensation for harm. In the key United Nations document, negotiations over the bases of compensatory claims included liability, compensation, risk, and insurance (Vanhala and Hestbaek 2016).

This paper will interpret climate change as a management problem requiring governance through existing welfare state law, including support for housing. Climate change litigation concerning greenhouse gas emissions ascribes causation to oil companies and responsibility for disaster response to governments. Meanwhile, storms damage, and governments rely on existing law. In welfare state claims, governments are responsible because they are responsible for care of those who live there. Their role in causing climate change is not at issue in these claims. Instead, the courts govern via administrative procedure, due process rights, and obligations under statutes. Climate justice claims extending existing programs engage ordinary legal reasoning practices. By following the example of the reasoning in a housing case post-Katrina, the paper will discuss how legal reasoning assimilates rights claims concerning housing and displacement to welfare and administrative state reasoning. It will contrast legal reasoning with the solution frames in planning documents from Norfolk, Virginia, a major US military installation that faces recurrent flooding now.

Next, I will turn to contrasting causation and blame with management through responding to need. The latter has, been a contested ground for social welfare assistance in the United States.

2. Climate Change, Existential Threats, Social Drama, and Need

Managers aim to manage uncertainty, transforming existential threats into problems where expertise can, reassuringly, help (Clarke 1999). How does expert knowledge change an existential threat? The nearest analogy for transforming climate change is the transformation of the threat of nuclear annihilation during the cold war into a manageable problem. In the hands of defense intellectuals, the threats of nuclear war turn into something for government agencies to problem solve. In nuclear war, though, the government officials did not contest the threat itself. The threat, which never came to pass, became more real in the steps taken to manage the event that didn't happen, in case it did. Everything from drills in schools, to theories of response based in mutually assured destruction and game theoretic models, to nuclear fallout shelters made an abstract threat into a real event.

In climate change, the threat is contested in the United States. As destruction from wildfires and storms multiplies, the damage is real even while officials contest one of

the causes. Where law allocates blame for causing climate change, legal cases feed the 'social drama' embedded in public stories of climate change, mobilizing contests of what people believe and who is to blame. Maybe that's appropriate, given the enormity of the threat. However, allocating blame to particular companies or activities does little to build social solidarity, or a belief in an ability to act (Smith and Howe 2015). It is not management or legal language. In contrast, language relying on responsibility for communities as well as national security has proven more persuasive than frames that allocate blame, or terrify by stating existential threats (Myers *et al.* 2012). While Ulrich Beck argued that new globalization of risk of climate change makes existing models of risk untenable, that answer will not work for local governments. Governance processes transform what Ulrich Beck (1992) named the globalization of problems, and their unpredictability into something local, state, and national agencies must predict enough to define how to act.

Lawsuits over causation feed into blame (Gloppen and St. Clair 2012). They also transform problems into the language of the law, just as defense intellectuals used reports and scenarios to make nuclear annihilation manageable. Cases concerning greenhouse gas emissions, including cases with fossil energy companies as defendants, can feed into the social drama, amplified by press or academic discussion. Failed lawsuits in Alaskan villages sought to hold the oil companies responsible for sea level rise. They tell a story of responsibility for large-scale change localized to a place (Bronen and Chapin 2013, Kolbert 2015). However, these cases failed. As judges decide them, cases appeal to the language of the law, which is often not the language of social drama. Cases to mitigate greenhouse gas emissions under environmental laws, or to compensate for the harm emissions have done, rely on familiar frameworks in environmental law. Alternatively, they fit within the compensatory framework of the UN documents.

Climate change also requires adapting to change already here, so cases concerning adaptation are also part of climate change. These cases, or government planning documents, are less likely to play into the social drama because blaming an agent causing climate change is not built in. What's more, government planning documents invoke law, but politically often cannot place blame because some states as well as the current federal presidential administration do not invite discussion of climate change. Strategies to avoid discussing climate change have varied, from legislative declarations concerning what science government organizations can take into account, to what schools can teach (see, e.g., Plumer 2015). Alternative language for government officials along the US eastern seaboard has included "sea level rise" and "recurrent flooding" (see, e.g., Virginia Governor's Commission 2008).

Climate change is not one problem, so blame can be diffuse; it is an environmental, infrastructure, and housing problem. The kind of problem it is shapes the evidence that is relevant and the management required. Cities decide having inherited legacies of intertwined policies. Therefore, problems are unlikely to have a single, agreed upon definition. A housing problem intertwines with longstanding problems of segregation, inequality, differential property rights, and land use. Reports recommend mitigating greenhouse gas emissions. They also present sea level rise as requiring adaptation now. Maps demonstrate that the seas are expected to rise in the coming years in Norfolk, VA, Philadelphia, and in Washington DC. Experience teaches people if maps are too abstract. In cities on the East Coast of the United States, increasing nuisance flooding and sea level rises, have made the housing problem increasingly evident in planning documents (Esnard and Sapat 2014).

Payments to people who are affected by disaster make environmental governance into welfare state governance, as well. In the United States, welfare rights claims are domestic. Supranational organizations develop guidelines and discussion documents relevant to loss and to familiar domestic legal concepts. The United Nations has developed documents about compensation, risk, insurance and liability (Vanhalala and Hestbaek 2016). Though these documents can inform high-level talks about what

principles should be, planners and lawyers and civil servants within nation states will domesticate claims of need to domestic law. Some of these claims will be claims to payments after disaster, which have a long standing in the United States.

In the 1930s New Deal officials tried to expand welfare state claims by drawing upon “sympathy” for those who had been harmed by disaster (Dauber 2013). Films, documents and photographs stretched the disaster from the immediate, short term, and physical to long-term poverty afflicting people in the South. Those who had been harmed by disaster were deserving. The legal historian Michele Dauber has argued that this grounding is fundamental to the United States welfare state. The language of emergency constitutionalized the federal government’s ability to meet need. After that, though, meeting need was a matter for statutes.

The language of need is familiar in worldwide humanitarianism. Disasters rely on a logic of humanitarian governance, or flexibly meeting immediate need, rather than blaming or attributing causes to long-term problems (Ali 2017). As Shahala Ali argues, governments and international nongovernmental organizations rely on local workers and volunteers to deliver services (Ali 2017). In the midst of disaster, legal frameworks help to define problems or how to manage them. Organizations including nonprofits draw upon law, or even a proliferating “hyperlegality” of tactical administrative orders, changing rules, and internal guidance (Massoud 2013, Lokaneeta 2018, 17, quoting Hussain 2007).

The need for care can include housing. In the United States, insurance compensates homeowners. For those who don’t own, assistance is either disaster-specific, or provided through already existing housing programs. Like other daily realities experienced by poor people in the United States (Strolovitch 2013), existing homelessness does not usually get incorporated into interpretations of need after disaster. Payments to relocate entire communities are rare. Compensating people for losing a home is haphazard for renters. If governments consider housing people who are homeless for one set of reasons – loss of shelter in Puerto Rico – and not another – rising rents in cities around the United States – the humanitarian logic of disaster assistance runs headlong into long term needs federal, state, and local governments have not committed to meeting. Most people do not live in areas distinctive enough to be moved or named. Therefore, ordinary housing law or welfare state benefits will apply when renters’ homes flood.

Welfare state cases interpreting responsibility under statutes do not analyze cause and responsibility beyond the statute at hand. Liability fits into the social drama Smith and Howe (2015) name. Extensions of housing assistance after disaster, or grants to move public housing, do not. Who is deserving and who is not can inform the design of statutes as well as the decision in principle that disasters merit. It can also inform the administration of statutes, including how long benefits are extended, what assistance people get in accessing benefits, how Congress implements its power to spend money for improved infrastructure. Case level extensions that do not gain public debate do not feed a social drama. They do matter in what people get.

Displacement became imaginable in the United States after Katrina and later after Hurricane Maria in Puerto Rico, which has led to the long-term relocation of people to the mainland of the United States. Displacement in the United States comes in a global context of risk (Tierney 2012) and rights (Kromm and Sturgis 2008, Esnard and Sapat 2014, Atapattu 2015). If places become less inhabitable, more people will have challenges in housing (Castles 2010). Organizations can mobilize around ordinary social welfare statutes, trying to extend benefits as individual payments, preservation of housing, or provision of temporary housing. Federal government response to disaster, and local governments’ planning, works through existing legal obligations.

Next the paper will explain the importance of integrating legal frameworks, both in lawsuits and planning documents, into environmental governance scholarship.

3. Law and environmental governance

Environmental governance is “coproduced through the involvement of a range of actors”, and governing involves “multilevel processes (...) operating in diverse and overlapping spheres of authority” (Newell *et al.* 2012, 366, 369). Global legalization in environmental governance (Newell *et al.* 2012, 373) matters in climate litigation or documents, and varies cross-nationally and across fields of law. Transnational activists or businesses unevenly mobilize law, and businesses and organizations remake legal opportunities. Environmental organizations have given supranational instruments and domestic law local meaning, leading to local variation in their effectiveness (Vanhala 2017). Domestic actors in the United States have often not seen supranational documents as relevant either to political claims or to law, though they are significant frameworks elsewhere (Merry 2006).

Co-production includes courts, and the experts, activists and scholars they rely upon to mobilize the law. Courts play a significant role in governing greenhouse gases; looking beyond the courts leads to the significance of regional governance and multiple forms of expertise (Vanhala and Hilson 2013). Judges have largely not proven eager to expand social welfare programs (Hirschl 2004). An answer would be collective claims, or what sociolegal scholarship has analyzed as social movements mobilizing the law (Vanhala 2017). Mobilizing for renters and public housing inhabitants potentially displaced by disaster, or climate change related events, requires mitigating potential harm. The benefits to doing so are speculative and diffuse across a broad swathe of people, until floods or wildfires displace many people. Those conditions of harm and dispersal do not foster mobilizing people to make broad collective claims, particularly when legal aid is difficult to find. Once people have been flooded, the harm is acute, but displaced people with few resources cannot readily mobilize the law.

However, legal mobilization includes the knowledge claims embedded in the documents and practices of legal bureaucratic accountability (Riles 2006), a subject of study in policing, and insurance (Rose *et al.* 2006). In turning to alternative forms of knowledge, the paper follows Nikolas Rose, Pat O'Malley and Mariana Valverde (2006), who argue that law and social sciences can address “the role of the gray sciences” “in the business of governing everyday economic and social life, in the shaping of governable domains and governable persons” (Rose *et al.* 2006, 107). Rose, O'Malley and Valverde argue for “an empirical mapping of governmental rationalities and techniques” (Rose *et al.* 2006, 99). Litigation has only been one way of addressing a complex, multi-dimensional problem. Organizations have taken on litigation for broad scale change when other political pathways have been blocked, and when the resources and allies for litigation as a strategy for change have been available. Law in planning documents also mobilizes law, describing how a multidimensional threat makes coastlines, floods, hurricanes and sea level rise into “governable domains”. Contextual studies of governance (Rose *et al.* 2006) including how law and legal responsibility are practiced, illuminate how law and other knowledge intertwine.

Local, regional and national governance, including in courts, need never evoke supranational instruments. Climate change law and litigation can include laws concerning disasters and management to avoid disaster. Broadening the scope of climate change litigation to include ordinary claims under statutes and the government documents to manage flooding also lead to concluding that climate-relevant law need never blame. Sometimes the longer-term threat is named, depending on the state and how state government understands climate change. The state of California names climate change, for example, in responding to wildfires. The state of North Carolina prohibits taking sea level rise into account in planning. When planning documents have a reason to name a more crabbed, contained cause than climate change, documents will describe how to care for people rather than focus on the social drama of causation or even a drama of loss or regret.

The social drama Smith and Howe (2015) describe is a contest in part over facts, which is one reason legal cases attributing blame gain outsized glamor. Law mobilizes facts, and has an official to adjudicate them. Law is significant enough in constituting some facts – where they are brought to bear, how they are explained, how they are embedded in daily life – that Susan Silbey and Ann Cavicchi have called facts about the world constituted through law “legalfacts” (Silbey and Cavicchi 2005, 556) where the law and the facts are inextricable. In welfare, compensation and disaster, an excellent example comes from Kai Erikson’s moving documentation of harm to community after the Buffalo Creek disaster. He developed his legendary analysis of the loss of community that people in West Virginia suffered after the Buffalo Creek flood from the affidavits that people produced for the lawsuit (Erikson 1976, Morris 2011). People produced stories of loss as evidence under the law firm’s claim for damages. The law firm claimed citizens suffered emotional and psychic harm from loss of community, and that loss should be legally compensable. The stories were told because legal officials asked for them, to support making a new legal claim that blamed the company for harm (Erikson 1976). The facts and law constitute each other.

Legal claims in court and the planning documents governments use in multi-level environmental governance can mobilize different kinds of facts. Facts can include facts of recurrent flooding, and of uncertainty concerning the extent of flooding. Alternatively, the facts in law of social welfare claims can include previous decisions, or statutes and evidence of their meaning, or of violations of statutes based in constitutional duties or crosscutting statutory requirements. Blame for causing harm, or responsibility for taking care point toward reading different kinds of lawsuits, and reading them for different reasons. Blame links with contests over claims to factual truths: whether sea levels are rising and whether human beings have caused it and who believes either point. Blame points to the lawsuit that asks for remedies from particular defendants for not protecting people, whether the oil companies for refusing to acknowledge harm, or governments that did not stop oil companies from emitting greenhouse gases. In contrast, responsibility for taking care under existing statutes turns legal decisions to the already dense network of legal rules and decisions about welfare state practices. Reading social welfare decisions about housing related to disaster that may be related to climate change requires reading in the dense network of legal decisions that advocates and courts argue are relevant. The evidence, then, is not evidence about physical facts, already contested in the United States, but about how previous cases in multiple administrative state fields describe responsibility.

Losing cases mobilize law and the processes of legal reasoning too. The process itself takes governance time and actors, reframes arguments, and sometimes gains publicity. Government planning documents, including local, national and supranational, rely on law as a framework for governing (Vanhala and Hestbaek 2016). Therefore, states and local governments embed claims concerning law as management and what to do about flooding in documents, not only in the lawsuits that are the common material for studies of legal mobilization. Where a dominant political coalition has not agreed on climate change as a reason for problems, or where states have legislated against that reason for acting, governments have little reason to mobilize the contentious drama of climate change, with blame or dire warnings of doom. Timelines and responsibility would be extended and diffuse. Managing housing when rain and flooding threaten has no political constituency for mobilizing facts about causation, or timelines focusing on greenhouse gas emissions.

Next, the paper will explain the evidence used in legal reasoning to resolve responsibility in a case for housing brought under statutes, or existing programs. The paper will describe how legal reasoning changes an existential threat, and a loss of home, into a problem assimilated to ordinary statutory and constitutional law. The paper will conclude by describing the more diffuse definition of housing problems and their solutions in planning documents for Norfolk, Virginia.

The case I use as an example was a class action suit concerning the loss of public housing in post-Katrina New Orleans. The case was eventually dismissed. It did play into social drama by making claims for displaced people based in international guidelines, claims that were wholly untenable. They did not, however, bring up climate change. Processes in the lower courts raised the profile of complaints. This paper takes no position on the longstanding debate in political science concerning whether investing in lawsuits is a sensible political strategy. Instead, the focus is on how legal reasoning transforms claims, turning a disaster where advocates invoked international guidelines concerning displacement to into a case of domestic administrative law.

4. Institutional Thinking: legal reasoning, blame, welfare state, climate change adaptation

Multiple cases were part of the political field of welfare state claims after Katrina, though they did not result in groundbreaking precedent. The example here is a case contesting the closure of public housing in New Orleans after Katrina (*Anderson v Jackson*, 2009). *Anderson* was dismissed by the district court, and the 5th Circuit Court of Appeals affirmed the dismissal (2009), almost four years after Katrina. Legal processes take time, something that is not the focus of research focused on outcomes and United States Supreme Court cases.

The legal anthropologist Elizabeth Mertz has explained how professional practice imbues cases with meaning across policy fields within United States common law reasoning. Legal reasoning “collapses historical time and social context in the service of a new legal framework whose organizing principle is a genealogy of texts” (Mertz 2007, 64). Mertz explains judicial decisions as a matter of warrants derived from “layers of legal authority” (Mertz 2007, 67), which she argues are very different from the warrants in everyday life to claim authority for a story. People tell stories to each other making moral claims upon each other and explaining the emotional context of wrongs. The blame attached to legal responsibility is in precedent; so are layered citations of authority, referring back and forth across time and texts, as Mertz explains. Whether one has been legally wronged is a different question, and lawyers in post-disaster housing assistance cases turn to legal authorities that cross social welfare fields, cross time, and cross jurisdictions. They are not explained wholly on the basis of the pain and misery in the immediate aftermath of a specific disaster. Facts are not in contest once a judge articulates them: “this [the story told in a judicial opinion] is the version of what occurred that has been declared to be legally accepted” (Mertz 2007, 67). The need that people have is not contestable in law once an appellate court has decided it. Although each case is about a particular story of need, judges and advocates use cases to articulate general principles, which allows lawyers and judges to make them travel across time and space. Although part of the popular attraction of legal reasoning is that it invites pronouncements concerning fairness or right, learning legal reasoning involves teaching “submission to layers of legal authority discernable in the text” (Mertz 2007, 76). It exactly takes out the moral weight of an issue.

Judges use the reasoning Mertz describes in ordinary cases interpreting statutes. Some features of legal reasoning make judges’ decisions especially opaque. The expectation that law will moralize by allocating blame and appealing to justice and need fits with moralism in environmental politics and the social drama Smith and Howe worry does not contribute to building capacity among citizens to act. Ordinary cases do not always reveal moralizing, either in blaming for causing a problem or a failure in responsibility to citizens.

The structure of a case can build in the moral weight of a story. So how can people make cases meaningful outside of court? Court cases allocate blame only across the parties before them, containing causation for a problem. News coverage and subsequent academic analysis blames FEMA (Federal Emergency Management

Agency) or does not for its response to disaster, rather than assessing all the institutions that contributed to vulnerability – the banks that redlined and limited poorer homeowners to living in some few neighborhoods, and the levee boards that had little incentive to keep up levees. People live in settings where they are likely to get flooded for multiple reasons. Cities could develop better protection rather than individual protection or requiring that people move.

Legal reasoning invites advocates to take cases out of the particular problem where they originate and make them relevant to a new problem. The context is a context of legal texts, not problems, and cases from multiple problems can be drawn together under one legal doctrine. The name is the name of the two parties in the particular case, with a citation that states where in the legal hierarchy the case rests, but only to those who know the cases or where to look them up. The story is not in the citation and neither it nor the hierarchy is clear to newcomers. Judges refer to previous cases by name in their decisions to authorize what they are doing. The precedent on which a decision rests can stem from wholly different policy fields. An opinion might refer to a decision by a fragmentary phrase summing up the part that is relevant to the judge. It makes the decisions appear settled, or if they are not settled, how one can argue about them depends on knowing the layers of legal authority and the guidelines for contesting meaning. Citations of judicial decisions do not have visible authors; they are abstracted from human agency, except when they are not. Only occasionally is a fragment of a judge's decision quoted, and the judge who wrote the quotation cited. Then decisions are individual.

Stating the presuppositions of case law points to other public policy documents that share some of these features; they are not as unfamiliar as they first seem. Legal cases are peculiar in telling stories by warranting authorities that decided things in the past more than by characters in everyday actions. They layer authority, where a judge grants more authority or greater weight to a decision because an appellate court rather than a trial court decided it, or because an appellate court in the right jurisdiction decided a case. A case is not better because it takes better care of people, or rewards work, or otherwise fits with fundamental justifications of welfare states in the United States. Comparing court decisions with stories told in everyday life, which Mertz does, makes their peculiarity stark. Comparing court decisions to other professional documents for their literary qualities makes judicial decisions less peculiar. The layers of authority and the citations of previous documents and the status of decisions as intertextual, or a conversation among texts, is shared by public policy documents. Judicial decisions imply they will have an effect in the world outside the text, just as public policy documents do. Both do so through words, and scholars assume the connection between text and the world outside the decision are the subject of much analysis.

Legal reasoning makes claims to distinctiveness from other forms of reasoning, including within public policy. However, once policy documents are read as texts, similarities are apparent. Other policy documents are not wholly distinctive, and both law and other policy documents, often created under law, create what, Rose, O'Malley and Valverde (2006) call "governable domains" and "governable subjects". The policy analysis scholar Emery Roe (1994) argues for reading budgets as texts. They share many characteristics with judicial decisions as Mertz interprets them. Roe argues that budgets are fictional, without an author, writerly rather than readerly, and intertextual, or referring to other texts that came before and anticipating texts that will come later (Roe 1994, 22-27).

First, budgets are fictional in that they simplify "a reality that revolts against such reductionism" (Roe 1994, 23). They quantify what is often not amenable to quantification and they only roughly describe what will be spent and how it will be spent. Next, they have no author in a very straightforward sense: the budget in any governing system is not the end result of one person's decision, and one person cannot enforce its prescriptions. By "writerly", Roe means that people responsible for

different sections or advocating for different programs will revise sections. Meanings in budgets are not fixed. Organizations will move money around, or spend too much or too little, often justifying reallocations through reinterpreting what the budget said. A budget document is not final. Multiple people and organizations remake a budget for their own purposes.

Similarly, judges simplify. They tell stories that ascribe responsibility for wrongs to the parties before them. They drop out parts of a story that trial courts decided were irrelevant. Advocates also simplify, and they use cases to simplify. An appellate court then reviews not to find new facts, but to evaluate how the trial court applied law to facts. By separating the fact finding from the appeal, courts treat facts not as though the law organizes them, but as something settled and separate from the law. However, law mobilizes particular kinds of stories. Legal decisions, then, are fictional in the sense that the stories are simplified and elaborated with characters and clear wrongs that are mobilized by the law. A judge's storytelling or even an advocate's erases law's mobilization, leaving the story and its simplified facts.

The role of authorship differs between judicial decisions and the analysis of budgets as Roe following the public policy scholar Aaron Wildavsky sees them. Roe (1994, 24) argues budgets have no authors. In the common-law system that the United States follows, judges sign their opinions. They claim authorship. However, judges write decisions implying inevitability; the web of legal authority, and the facts as they were found, led them to make the decision they made. They could not have made another decision. In that sense, judges are not the sole authors of what they decide. They are deciding because the weight of previous decisions, properly understood, leads them to the one conclusion they could make. Even when judges disagree vigorously or even as they choose one advocate's interpretation rather than another, the implication of a written decision is that they disagree because another judge got the law wrong, or the facts are different enough they require a different outcome. Arguments about how to interpret the law that animate American public debate over flashpoint issues also imply there are better and worse answers, and that a judge's job is to give the answers that are most true to the law. Individual judges decide cases and they sign the cases; decisions have an author in a way the budgets Roe discusses do not. However, decisions also transcend their author.

Judges embed a decision in a web of decisions and, as Mertz argues, layers of legal authority. Different layers of legal authority are not equally binding or persuasive. A post-Hurricane Katrina lawsuit contested closing public housing in New Orleans (*Anderson v Jackson*, 2009); advocates included private firm lawyers and public interests advocates, as post-Katrina cases did. The district court's preliminary ruling cited statutes Congress had enacted, including sections of the Fair Housing Act, housing cases from Chicago, a case concerning due process from a university in Washington state, Congress's Administrative Procedure Act, and cases from district courts throughout the country, in addition to cases from the United States Supreme Court. The judge also cited statutes about what constitutes a violation of civil rights that would make a housing authority responsible for compensating people. The judge explained what would constitute race discrimination. He described both categories of race discrimination in law, intent and disparate impact. Finally, he dispensed with the international guidelines in internal displacement, which the advocates had cited. He organized his decision according to legal categories of wrongs, the authority of cited texts for the case at hand, the responsibility of officials and judges to remedy harms, and whether the decisions were preliminary or not. He appealed to how each statute or a legally constituted body authorized judicial decision. That approach contrasts starkly with how people ordinarily make justice claims, in normative theory.

Human rights claims for those displaced in part by sea level rise or disasters have drawn on the United Nations Guiding Principles on Internal Displacement (Kálin 2010, Atapattu 2015). In the *Jackson* case, the judge analyzed them as legal authority in the hierarchy of legal authorities, and authorized his decision by citing introductory

commentary to the guidelines. He held that the guidelines are not a treaty and not binding law, so they did not apply to the question of whether New Orleans could close public housing. He held that since national states did not abide by the guiding principles, they were not binding law. That criterion in turn drew from a federal appellate court decision from several years earlier against a Peruvian copper corporation. Because that appellate court had not held that international law was binding in a case against a copper corporation for human rights, it would not be binding in the housing case either. The case concerned legal authority unmoored from disaster or displacement problems. It did not concern internal displacement (*Anderson v Jackson*, 2009: decision on motions, p. 22). Officials justify decisions by referring to authorities rather than to individuals, most of the time, and argue with each other by arguing how to interpret authorities. As Lisa Vanhala and Chris Hilson (2013) have argued, local, regional and national legal responsibility and reasoning are integral to the global governance of climate change. Reasoning by assimilating to existing cases means excluding the supranational instruments that frame broad justice claims.

Legal reasoning dismissing claims about closing public housing as a violation of human rights against displacement contributes to transforming climate change from an existential threat without a place, or placed globally, to one with a locale, and institutions, and domestic law.

Decisions are intertextual. They do not have one author in part because judges explain their decisions by citing what others have done, across time, context and policy field. In the American common law system, scholars' and newspapers' discussions sometimes recognize an individual author. While Emery Roe describes budgets as texts that are open to re-interpretation, he calls that re-interpretation misreading. The original budget as the groups that issued it interpret it, from the point of the view of those who issued it, is the correct reading. Every deviation is a misreading. Judicial decisions are also subject to rereading. Rereading and reinterpreting, and making texts useful in a new context of texts is central to the advocacy work of lawyering. Reinterpreting through advocacy is not misreading, but the job of lawyers. Still, budgets as Roe interprets them and judicial decisions as Mertz explains them share the characteristics of being open to new interpretation by multiple actors whose positions carry different kinds of responsibility for budgeting, or for legal decision-making. Legal decisions are "by definition intertextual", just as Roe has described budgets. The claims before courts and the judicial decisions concerning them are organized around previous legal claims. Judges cite these previous claims. Roe cites literary theorists to argue there is no one original, pure text in budgeting. The statutory texts are themselves open to contests over interpretation (Melnick 1983, 1994). Sometimes Congress has chosen not to make difficult choices. Alternatively, provisions may seem specific, but advocates raise questions and judges decide between competing meanings. Examples from the Clean Air Act of 1970 included "emissions limitations" in state implementation plans; industry, the Environmental Protection Agency and environmental advocates argued about whether that meant states had to continue to reduce emissions, or whether states had flexibility concerning rules for industries within the state (Melnick 1983, 116).

To build the analogies that allow judges to say one case is useful in deciding another, judges and the lawyers before them identify a legal issue, use the legal concepts, and select out the facts relevant to the issue. That makes housing after Katrina not about climate change, or environmental governance, and certainly not about displacement, but about termination of benefits created by statutes, based in cases concerning other benefits, including disability, that were decided in the 1960s and 1970s.

Primary problems for housing may be less judicial reluctance to blame a party before the court and more the decline of low-income rentals and the rise in rents in cities,

flat wages, and the disappearance of work accompanied by mass incarceration. None of that is amenable to fixes by the courts. However, the texts of the earlier cases concerning the process that is due in distributing social welfare is available many years later for courts to mobilize in a new circumstance. Supporting organizations and courts use cases in a wholly new context, as a case about government responsibility in housing after disaster linked to reasoning about international law and copper mining in Peru. Courts only reluctantly expand social welfare rights, and the organizations that would mobilize rights have limited ability to make claims. Sometimes statutes allow fee recovery by lawyers' organizations from a favorable judgment.

The layers of authority and style of reasoning, where judges can distinguish one case from another, allows judges to find for complainants while also limiting the decision to the case before the courts. Trial courts can find due process rights violations, require that statutes be read to protect people, and hold FEMA accountable for interpretation and implementation of statutes. FEMA can concede, or expand benefits, without ever stating they are conceding they had to do something differently. An appeal becomes irrelevant. Alternatively, courts of appeal can vacate a decision, while the trial court judge was able to lecture FEMA and publicize a wrong.

Cases that ended in a settlement, or in a dismissal, or in a district court verdict that is vacated on appeal, mix constitutional rights to due process, concessions that may be based in statutes, and claims under statutes. They do not link a disaster to climate change because any one disaster, or any flood, is difficult to link to broad causation. Holding the state responsible happens under statutes concerning programs the state had already created, and intertwines with interpretations of state responsibility for citizens not facing flooding.

Blame beyond the agency before the court is invisible in welfare state claims under statutes and due process. Relevant legal facts are facts about what the law is, and what the harm is in housing. They are not facts about whether the sea is rising, or whether floods are more common. Evidence is evidence of what past decisions about administrative responsibility were once the state created the duty to provide.

In contrast, planning documents for the city of Norfolk, Virginia concerning housing also do not blame a distant cause, such as climate change or the human role in it. Nor does it reference international guidelines or rights. Instead, documents try multiple strategies concerning how to protect housing from recurrent flooding. Problems of uncertainty plague the legal facts of sea level rise. Even if justice requires that governments care for citizens in disaster, uncertainty that is difficult to explain, and easy to exploit in the social drama of climate change, make responsibility for citizens diffuse. Responsibility can rest in care in disaster, or remedying long-term discrimination, or the need for a naval base the US government sees as essential to national security. These frames – care for people, and national security – are more persuasive than one based in the drama of causation, as Smith and Howe argue.

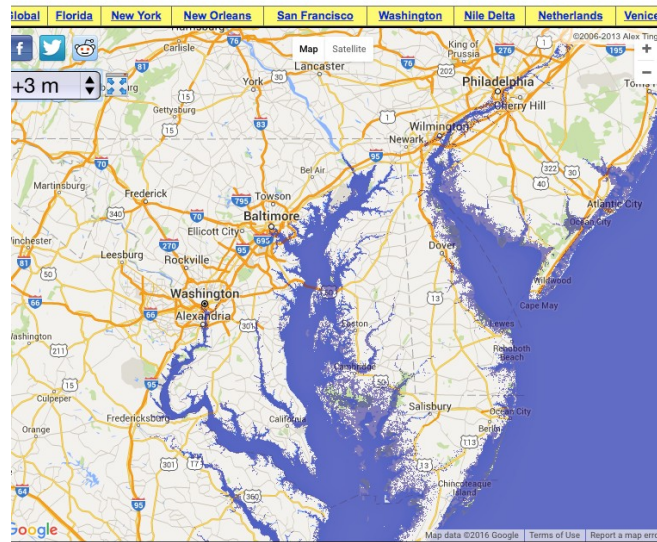
5. Localizing climate change: Norfolk, Virginia

Models of projections of sea level rise proliferate on the web. The authoritative model in the United States is from the National Oceanic and Atmospheric Administration (NOAA). Cities like Norfolk have their own maps since the NOAA maps are not fine grained enough. Since NOAA published the map printed below, it has updated its interactive viewer (NOAA 2018):

MAP 1

Washington - Baltimore - Philadelphia - Sea Level Rise Map

Use the window in the top left of the map frame to change the amount of sea level rise.



Map 1. National Oceanic and Atmospheric Administration map for sea level rise.

The NOAA map includes a disclaimer about the levels of uncertainty in the model.

SCREENSHOT 1

Sea Level Rise and Coastal Flooding Impacts ^{v2.0}

Disclaimer

Data Updates

The purpose of this data viewer is to provide coastal managers and scientists with a preliminary look at sea level rise and coastal flooding impacts. The viewer is a screening-level tool that uses nationally consistent data sets and analyses. Data and maps provided can be used at several scales to help gauge trends and prioritize actions for different scenarios.

Use the five tabs at the top of the legend (ex. "Marsh") to explore visualizations of sea level rise. The slider bar in each tab can be used to examine the impacts of multiple sea level rise scenarios. The overview text directly below the legend describes individual impacts. Additional documents and links provide further detail.

Disclaimer

The data and maps in this tool illustrate the scale of potential flooding, not the exact location, and do not account for erosion, subsidence, or future construction. Water levels are shown as they would appear during the highest high tides (excludes wind driven tides). The data, maps, and information provided should be used only as a screening-level tool for management

Screenshot 1. NOAA description of uncertainty (retrieved April 8, 2016).

Deciding on the basis of data requires recognizing the limits of models, as data analysts argue. Data about the earth do not lead to one clear recommendation, given

uncertainty and multiplicity in goals. Local governments may aim to improve inequitable policies, or housing segregation, while also mitigating sea level rise. The analytics promise a wholly new form of governing; the belief in analysis of data as revealing self-evident action harkens back to the rise of statistics as promising new ways of knowing people and answering questions in the nineteenth century, also promising to know populations in the wake of disasters, including epidemics (Ambrose 2014, Beer 2016).

The United States National Climate Assessment (2013) has called the US plan for adapting to climate change on the coasts one of “unplanned retreat”, and that retreat from the coasts will be necessary. News coverage amplifies limited planned relocation. The United States has agreed to move the inhabitants of an island (Davenport and Robertson 2016), and has made a large Housing and Urban Development grant to assist with housing in areas hard hit by disaster; the grant is framed in terms of (HUD Exchange 2016). The “unplanned” means sometimes people move because environmental events, such as hurricanes and storms, have forced the decision, though sorting out why people move and stay away is notoriously difficult. The Hampton Roads region in Virginia is central to shipping, the United States Navy, and tourism. The “Roads” is a large natural harbor, one of the first places settled in North America by Europeans, and today includes more than 1.5 million people. It is a coastal planning district comprising low-lying cities affected by water. Cities within it include Norfolk, a city with a major naval installation, Virginia Beach, a popular beach vacation spot, and Newport News, a predominantly African American community that does not have the benefit of being either of national military concern or of great tourism interest.

Norfolk, Virginia has been called a “canary in the coal mine” with respect to sea level rise related to climate change. Norfolk has recognized this threat and has mustered nonprofit and government grants, as well as urban planning and community engagement, to address the complex problem of recurrent flooding. The problem in turn is tied to 400 years of building on an archipelago, racial segregation, and storms. The city addresses community concerns about adaptation via discussion fora, organized around questions community organizations raise.

Causes for Norfolk’s recurrent flooding are multiple. Much of the city is built on infilled land. This infilled land is sinking while seas are rising. Storms and tides erode the city’s land. Vulnerable land includes predominantly African American historic neighborhoods of single-family homes, with homeowners and renters of modest incomes. Individual level solutions are infeasible, even if they were affordable to these residents.

Norfolk is a major military installation of great strategic importance to the United States; as city representatives have argued, they are not relocating inland. The naval installation brings shipping and ship repair as a significant industry, in addition to a large influx of naval personnel. The city also has a long history of racial inequality. School desegregation from the 1950s onward, which the Commonwealth of Virginia resisted, heightened separation between nearby Virginia Beach and Norfolk. Assessing how best to rebuild to respect stream flow and protect people requires working with people’s attachment to home. Norfolk won a Rockefeller 100 Resilient Cities grant. As a result the city employs a full-time resilience officer to coordinate its efforts to adapt to a changing environment. Its 2015 plan issued under the Rockefeller stamp emphasized multiplicity, long history and response in challenges to people’s well-being. Norfolk relies on multiple actors, including nonprofits and educational institutions, and has the advantage of federal government interest in ensuring that national assets still work.

City officials have worked on reconciling priorities by engaging the community. Norfolk’s historic Chesterfield Heights neighborhood experiences recurrent flooding. After a design competition run by the Virginia nonprofit Wetlands Watch, the area was chosen for flooding mitigation efforts. Students designed permeable pavers and

underground cisterns to catch water. This project brought together students at Hampton University, a historically black private university, as well as students at Old Dominion University, a state university. Norfolk included the student work in its application to the Housing and Urban Development's National Disaster Resilience Design Competition for which Virginia received a \$120 million grant in 2016. The city of Norfolk has planned to implement the students' design for the Ohio Creek Watershed. The City has also held *Retain your Rain* parties, teaching people to collect rain in rain barrels. Governance techniques that draw upon improving water collection and allowing rivers to spread take sea-level rise (rather than poverty, or limited housing choices) as the problem, and physical infrastructure as the solution. The relevant data are about sea level rise, as well as how people understand and respond to risk. Efforts bring students and communities into adaptation, celebrate learning and design, and imply the problem is one that evokes hope, action and improvement of lives now. Managing responses to sea level rise includes processes governed by legal traces in government documents, such as plans and reports.

The city of Norfolk moved public housing for low-income people because the housing was flooding, which it discusses in its resilience plan. The city explained the housing had been built on an historic streambed. Moving people out of the way of flooding was also an opportunity to move people who were poor throughout the city. *Deconcentrating poverty* is part of Norfolk's 2015 strategic plan for resilience (City of Norfolk 2015). Experts in the United States have agreed that people do better when many poor people do not live all together. However, people objected to dispersion and the city clustered people in rebuilt public housing as it had before. The historic streambed, and building on an archipelago, accounted for recurrent flooding, not climate change. The legal facts (Silbey and Cavicchi 2005, 556) invoked in planning documents are artifacts that embed decisions about land use, infill, housing, segregation, and longstanding inequality. In climate change, much of the work of law is accomplished in government documents. Court cases that play into a social drama do not exhaust the cases concerning planning, disaster, and housing, and the organizations that mobilize legal rights.

6. Conclusion: Knowing, assimilating, imagining

Climate change has been called an existential threat. That large-scale language takes small-scale institutional actions to change into something officials claim to manage. The city of Norfolk has worked on governing recurrent flooding made worse by climate change by resiting public housing, partnering on information sessions, and holding competitions about ideas for managing flooding. Courts and advocates have managed climate change-related disaster and housing problems by dismissing the international guidelines advocates invoke, and assimilating claims to administrative legal frameworks. These institutions work within the scope of familiar institutional logics because that is what is available to them.

The writer Amitav Ghosh has called climate change and refusal to engage with it *The Great Derangement* (Ghosh 2016). He has argued that something so unimaginable as the loss of our sea ice and massive displacement calls out for fiction as a response, as a way of imagining what our politics look like. Authors of climate change fiction imagine displacement of masses of people, and how people will rebuild. These imaginings are more than government documents offer. As the popular novelist Kim Stanley Robinson argued, discussing his book *New York 2140* (Robinson 2017) on the radio show *Science Friday* (2017), people will rebuild lives as storms become more extreme and seas rise; writers and others need to imagine how (see also Rich and Munday 2013, Lepucki 2014). They are unlikely to rebuild following well-thought out and executed plans. Following how processes of governing define issues, allocate responsibility, and what forms of governing mean makes globalized risk and imagined futures possible. Assimilating an existential threat to housing law, or planning law changes it into something officials manage and where they can invite citizens to act.

Existential threats without hope discourage people from acting. Alternatively, turning annihilation into a problem managers address can feed into a belief that policy is practiced without people (Hajer 2003). Transforming contexts from the contexts of people and physical problems to the contexts of texts that cross time, space, and subject area, contribute to a sense of governing without people. The competitions around retaining rain or learning about recurrent flooding do not. Stories that could recognize grief and loss would recognize an existential threat and how people live with it. Government documents could gather those stories. Lawsuits concerning losses and compensation rather than fossil fuels and causation sometimes do by gathering legally relevant versions of plaintiffs' stories.

Deep skepticism about the potential of law, particularly in what was the traditional form of a command, to change what people do in the United States has met with declining numbers of transformative cases in the United States Supreme Court. Law as an oppressive force in mass incarceration and in mass processing of immigration claims, has become overwhelmingly evident. As a result, legal strategies that make themselves less evident, such as through structuring information, structuring choices, and other behavioral "nudges" have gained advocates. Advocacy for evidence-based policy in the previous United States presidential administration has also promoted data as an alternative knowledge. The alternative in data analytics could assist decision-making, so that the data mobilized are the data law has made legally relevant, or meant to be a determinant of decision-making. In either case, tracing what governing officials do leads quickly to alternative knowledge frames.

Broadening the definition of the problem, as Norfolk is doing, locates the problem in a particular place with a complex history, including a history of segregation and public housing placing people in easily flooded areas. Politically it is impossible to place blame, and the city does not, just as state documents do not. Lawsuits and planning documents turn it into a housing issue. Even the danger of flooding does not mean moving; city documents imagine managing water, with the threat of long-term displacement from a hurricane all undiscussed. Housing problems for renters, or when infrastructure is not rebuilt, that Puerto Rico, the Sonoma County fires of 2017, and housing cases after Katrina all revealed what other locales might see when a large storm strikes. Turning from an attack on values to building reports, resilience officers, maps and data, strategic plans and public engagement can contribute to building the civil solidarity lacking in debates focused on causation (Smith and Howe 2015).

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