The Legitimacy of Judicial Climate Engagement

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Courts in key climate change cases have abdicated their constitutional responsibility to protect a prejudiced and disenfranchised group (nonvoting minors and future generations) and remedy an insidious pathology in public discourse and the political process: the industry-funded climate disinformation campaign. This Article posits that this abdication results from courts' uneasiness about displacing the prerogatives of democratically elected bodies. This uneasiness is misplaced. Court engagement with climate cases would strengthen democracy in accord with widely accepted justifications for countermajoritarian judicial review. This Article first describes in detail how courts exhibit a frustrating reticence to accept jurisdiction over cases that present questions relating to core climate policy, such as whether large emitters or fossil fuel producers have common law liability for climate harms and whether the government has a common law or constitutional duty to address climate change. In not a single case raising such claims (and they number well over thirty) has a court permitted the case to proceed to trial. Courts dismiss these claims under the mantle of a variety of justiciability doctrines (standing, political question doctrine, displacement); these doctrines often serve as vessels for courts to exercise judicial restraint, and courts' language and reasoning in the climate cases confirms that the courts are, indeed, motivated by concerns of judicial overreach. The Article then offers a positive account for why judicial engagement in the climate cases is consistent with our system of democracy, even as understood by seminal scholars who define relatively narrow boundaries for countermajoritarian judicial review. In particular, the Article will situate arguments for judicial review in climate cases within the work of John Hart Ely, Jurgen Habermas, and Frank Michelman.

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Introduction

Legal issues related to climate change can often be comfortably navigated within existing legal systems and processes, as when courts analyze an Environmental Impact Statement to determine whether its attention to climate change satisfies the commands of the National Environmental Policy Act (NEPA). In some contexts, however, climate change stresses legal doctrines and norms and surfaces difficult questions about the legitimacy and role of courts. Decisions in climate litigation brought under the common law of nuisance and the public trust doctrine reveal the judiciary's deep unease about its role in developing a societal response to climate change; this uncertainty undergirds the judiciary's largely hands-off approach. To date, courts have almost uniformly invoked threshold doctrines like standing, the political question doctrine, and displacement or preemption to avoid reaching the merits of common law and constitutional claims. As lamented by R. Henry Weaver and Douglas A. Kysar,

^{1.} See, e.g., Idaho Rivers United v. U.S. Army Corps of Eng'rs, No. C14-1800 JLR, 2016 WL 498911, at *17 (W.D. Wash. Feb. 9, 2016) (rejecting the plaintiffs' argument that the Corps had violated NEPA by failing to incorporate the impacts of climate change on sediment deposition in its decision making).

^{2.} E.g., Am. Elec. Power Co., Inc. v. Connecticut, 564 U.S. 410, 424 (2011) (dismissing climate nuisance case as displaced by Clean Air Act); Native Vill. of Kivalina v. ExxonMobil Corp., 663 F. Supp. 2d 863, 877, 883 (N D. Cal. 2009) (dismissing climate nuisance suit seeking damages for lack of standing and as presenting a nonjusticiable political question), aff'd, 696 F.3d 849 (9th Cir. 2012) (affirming dismissal on the grounds that climate nuisance suit was displaced by Clean Air Act); California v. Gen. Motors Corp., C06-05755 MJJ, 2007 WL 2726871, at *14 (N.D. Cal. Sept. 17, 2007) (dismissing climate nuisance suit as presenting a nonjusticiable political question); Alec L. v. Jackson, 863 F. Supp. 2d 11, 15–17 (D.D.C. 2012) (dismissing climate trust case), aff'd sub nom., Alec L. ex rel. Loorz v. McCarthy, 561 F. App'x 7 (D.C. Cir. 2014); City of Oakland v. BP P.L.C., 325 F. Supp. 3d 1017, 1024–25 (N D. Cal. 2018), appeal docketed, No. 18-16663 (9th Cir. Sept. 4, 2018); City of New York v. BP P.L.C., 325 F. Supp. 3d 466, 468–72 (S.D.N.Y. 2018), appeal docketed, No. 18-2188 (2d. Cir. July 26, 2018). See also R. Henry Weaver & Douglas A. Kysar, Courting Disaster Climate Change and the Adjudication of

"[b]y hook or by crook, judges have found ways to decline jurisdiction over extraordinary claims for relief" because of "jurisdictional anxieties provoked by climate change litigation." While courts do reach the merits of many climate-related suits (indeed, the volume of climate-related litigation is extraordinary), most of the issues presented reside at the periphery of climate policy. Recall that even the blockbuster climate case, *Massachusetts v. EPA*, in the end merely required the Environmental Protection Agency (EPA) to provide a "reasoned explanation for its refusal to decide whether greenhouse gases cause or contribute to climate change." Ultimately, that decision and the authority that it located for EPA in the Clean Air Act, stands as a roadblock to common law climate relief. In *AEP v. Connecticut*, the Supreme Court used this precedent to conclude that the Clean Air Act displaces at least some substantial portion of federal common law climate suits.8

Catastrophe, 93 NOTRE DAME L. REV. 295, 323, 356 (2017). The notable exception is Juliana v. United States, which survived a motion to dismiss and a mandamus petition and is discussed in greater detail below. See 217 F. Supp. 3d 1224, 1276 (D. Or. 2016). However, motions for judgment on the pleadings and summary judgment are pending in that case and any decision will likely be appealed. See also David Markell & J.B. Ruhl, An Empirical Assessment of Climate Change in the Courts A New Jurisprudence or Business as Usual?, 64 FLA. L. REV. 15, 22, 25 (2012) (reporting on the results of an empirical study of climate change litigation that "reveals strong indications of judicial restraint" and observing that "much litigation has led to little more than incremental development of law through the courts").

- 3. Weaver & Kysar, supra note 2, at 356.
- 4. *Id.* at 325 (commenting on the "evasiveness [that] has characterized most judicial responses to climate change torts").
- 5. The Sabin Center for Climate Change Law at Columbia University maintains a comprehensive database of U.S. climate change case law: as of June 13, 2018, it included over one thousand actions. U.S. CLIMATE CHANGE LITIGATION, SABIN CENTER FOR CLIMATE CHANGE LAW AT COLUMBIA UNIVERSITY AND ARNOLD & PORTER LLP, http://columbiaclimatelaw.com/resources/u-s-litigation-database/ (last visited June 13, 2018) [hereinafter The Sabin Center].
- 6. As of June 13, 2018, of the 1,004 cases listed in the Sabin Center database, nearly half involve important but ancillary (at least to core climate policy) questions arising with respect to environmental review, securities disclosure, and the Freedom of Information Act (FOIA) or other public records requests. *Id.* For a thorough empirical assessment of climate change litigation published in 2012, *see* Markell & Ruhl, *supra* note 2. That most of the substantial volume of climate litigation does not speak directly to core questions of climate policy does not mean that it is without effect or sometimes important:

it is evident at all levels of inquiry that courts have generally resisted litigants' attempts to make courts a locus of direct policymaking. Nevertheless, the imprint of the courts on climate policy is substantial, as courts have engaged and decided many important questions. Some decisions have opened doors to policy making by other institutions, and others have slammed them shut. Courts may not have established climate change policy directly, but they have influenced its content and institutional contours dramatically, even as climate change remains in its infancy.

Id. at 25-26.

- 7. 549 U.S. 497, 534–35 (2007) (declining to "reach the question whether on remand EPA must make an endangerment finding, or whether policy concerns can inform EPA's actions in the event that it makes such a finding").
- 8. 564 U.S. 410, 424 (2011) (holding "that the Clean Air Act and the EPA actions it authorizes displace any federal common-law right to seek abatement of carbon-dioxide emissions from fossil-fuel fired power plants. *Massachusetts* made plain that emissions of carbon dioxide qualify as air pollution subject to regulation under the Act.... And we think it equally plain that the Act 'speaks directly' to emissions of carbon dioxide from the defendants' plants.") (citation omitted).

This Article argues that courts possess strong claims to democratic legitimacy in the climate litigation cases as a result of their institutional capacity to weigh intergenerational harms and responsibly assess scientific claims. Courts should thus be more willing to engage with central questions of climate policy. At minimum, they should better and more completely explain and defend their repeated assertions that the Constitution and democracy demand the judicial restraint presently exercised. Part II provides a descriptive overview of climate litigation that (1) demonstrates how courts have sidestepped the core questions of climate policy and (2) illustrates that this judicial climate avoidance is often grounded in uneasiness about the legitimacy of judicial engagement. Part III then challenges the reflexive judicial restraint undergirding judicial climate avoidance by arguing that climate change presents a circumstance where judicial review is not only consistent with democratic values, but actually enhances our democracy. The Article concludes with an exhortation to judges to recognize and more deeply examine the propriety of judicial engagement on core questions of climate policy and add the judiciary's much-needed voice as our democracy struggles to respond to this existential challenge.

I. JUDICIAL CLIMATE AVOIDANCE

Climate litigation that intersects with core climate policy advances two primary theories: (1) that greenhouse gas (GHG)-producing conduct constitutes a nuisance (or other similar common law tort) by contributing to climate change; and (2) that governments have a duty under the public trust doctrine and/or the Constitution to address climate change. Suits grounded in these theories have been brought by state governments, local governments, land trusts, environmental groups and other public interest organizations, children, future generations (represented by a living guardian), trade groups representing impacted industries, and individuals harmed by climate change. The suits have been brought against large corporations responsible for significant volumes of GHG emissions or against governments for failing to regulate or outright encouraging dangerous fossil fuel use. In terms of relief, the suits have sought money damages or injunctions against large corporations, or injunctions requiring federal or state governments to act to reduce GHG emissions. While these thirty or so cases⁹ differ greatly in terms of venue, legal theory, and the identity of the parties, the outcomes are remarkably uniform—to date, no case has been tried on the merits. Courts have usually dismissed these cases on threshold grounds, most often based on the concern that courts should not make decisions about core climate policy, as that task properly rests with more democratically accountable institutions, such as elected legislatures.

A review of some of the most important decisions where courts have invoked threshold doctrines to avoid reaching the merits in cases that concern core questions of climate policy reveals similarities in reasoning and language across courts, claims, and jurisdictions. These decisions can be grouped into first-generation climate nuisance cases (advancing primarily federal common law nuisance claims), second-generation nuisance cases (styled primarily as state common law nuisance claims), and constitutional or public trust claims.

A. First-Generation Nuisance Cases

Three of the most notable first-generation climate nuisance cases were dismissed at the district court level as presenting a political question.

In *California v. General Motors*, California brought suit seeking damages from six major automakers, contending that the GHG tailpipe emissions from their vehicle fleets contributed to a public nuisance: climate change. ¹⁰ The district court dismissed the case as presenting a nonjusticiable political question, expressly asserting that the issues raised by the case must be decided by legislatures and not courts:

[T]he adjudication of Plaintiff's claim would require the Court to balance the competing interests of reducing global warming emissions and the interests of advancing and preserving economic and industrial development. . . . The balancing of those competing interests is the type of initial policy determination to be made by the political branches, and not this Court. 11

The California Attorney General's Office voluntarily dropped its appeal to the Ninth Circuit, 12 so the district court's dismissal of the case as presenting a political question stands.

In *AEP v. Connecticut*, six states, the City of New York, and a collection of land trusts sued large power companies collectively responsible for 10 percent of U.S. GHG emissions.¹³ The plaintiffs argued that the companies' emissions contributed to a public nuisance—climate change—and sought injunctive relief via an order requiring the companies to reduce their GHG emissions. The district court likewise dismissed the case as presenting a nonjusticiable political question, citing EPA statements that it claimed put to rest "any doubt as to the complexity of the 'initial policy determination[s]' that must be made by the elected branches before a non-elected court can properly adjudicate a global warming nuisance claim."¹⁴ The district court went on to reason:

Because resolution of the issues presented here requires identification and balancing of economic, environmental, foreign policy, and national security interests, "an initial policy determination of a kind clearly for non-judicial

^{10.} See California v. Gen. Motors Corp., C06-05755 MJJ, 2007 WL 2726871, at *5 (N.D. Cal. Sept. 17, 2007).

^{11.} *Id.* at *8.

^{12.} See generally Unopposed Mot. to Dismiss Appeal, 3, California v. General Motors, Corp., No. 07-16908 (9th Cir. June 19, 2009) (moving for an order to dismiss a motion to appeal).

^{13. 564} U.S. 410 (2011).

^{14.} Connecticut v. Am. Elec. Power Co., Inc., 406 F. Supp. 2d 265, 273 (S.D.N.Y. 2005) (internal citations omitted), *vacated and remanded*, 582 F.3d 309 (2d Cir. 2009), *rev'd*, 564 U.S. 410 (2011).

discretion" is required.... Indeed, the questions presented here "uniquely demand single-voiced statement of the Government's views."... Thus, these actions present non-justiciable political questions that are consigned to the political branches, not the Judiciary. 15

The Second Circuit reversed the district court, holding that the case did not present a political question. ¹⁶ However, the Supreme Court ultimately dismissed the action, finding that the Clean Air Act had displaced the federal common law of nuisance in this context. ¹⁷ While the Court's decision rested on the displacement doctrine, it also endorsed the propriety of agencies (implementing legislative commands) as the "first decider" with respect to core climate policy, in part because of judicial inferiority in navigating "questions of national or international policy":

[T]his prescribed order of decision[]making—the first decider under the [Clean Air] Act is the expert administrative agency, the second, federal judges—is yet another reason to resist setting emissions standards by judicial decree under federal tort law. The appropriate amount of regulation in any particular greenhouse gas-producing sector cannot be prescribed in a vacuum: As with other questions of national or international policy, informed assessment of competing interests is required. Along with the environmental benefit potentially achievable, our Nation's energy needs and the possibility of economic disruption must weigh in the balance. ¹⁸

The plaintiffs in *Kivalina v. Exxon Mobil* likewise found no relief in court.¹⁹ Kivalina is a remote Alaskan village located on a barrier island eighty miles above the Arctic Circle that will likely not be inhabitable for much longer because sea ice that previously protected the peninsula from erosion and winter storms has dissipated, leaving the island unprotected.²⁰ The U.S. Army Corps of Engineers concluded that the sea is taking over the island, requiring relocation of its inhabitants.²¹ The villagers of Kivalina sought to recover the costs of their climate-forced relocation from large energy companies on the grounds that their emissions contributed to the public nuisance of climate change. And, again, the district court dismissed the case, this time on standing and nonjusticiable political

^{15.} Am. Elec. Power, 406 F. Supp. 2d at 274.

^{16.} Connecticut v. Am. Elec. Power Co., Inc., 582 F.3d 309, 390–92 (2d Cir. 2009), rev'd, 564 U.S. 410 (2011).

^{17.} Connecticut v. Am. Elec. Power Co., Inc , 564 U.S. 410, 421–23 (2011).

^{18.} Id. at 427.

^{19.} See 696 F 3d 849, 858 (9th Cir. 2012).

^{20.} U.S. ARMY CORPS OF ENGINEERS ALASKA DISTRICT, RELOCATION PLANNING PROJECT MASTER PLAN ES-1 (2006).

^{21.} *Id.* (noting "[a]n increase in the frequency and intensity of sea storms, degradation and melting of permafrost, and accelerated erosion of the shoreline have recently forced the village into a state of emergency. Sea storms have eroded the shoreline out from underneath several structures and threatens the airstrip. Emergency erosion control measures are in place, but will only slow the sea's inevitable reclamation of the island. The relocation effort is now critical to the survival of the community.").

question grounds.²² In holding the case was inappropriate for judicial review, the court asserted that, "Plaintiffs ignore that the allocation of fault—and cost—of global warming is a matter appropriately left for determination by the executive or legislative branch in the first instance."²³ The Ninth Circuit, applying the Supreme Court's ruling in *AEP v. Connecticut*, then held that the action by the Native Villagers of Kivalina was displaced. In affirming the district court's dismissal, the Ninth Circuit underscored that its displacement analysis likewise rested in part on a preference for legislative as opposed to judicial resolution of climate issues:

In sum, the Supreme Court has held that federal common law addressing domestic greenhouse gas emissions has been displaced by Congressional action. That determination displaces federal common law public nuisance actions seeking damages, as well as those actions seeking injunctive relief. . . . Our conclusion obviously does not aid Kivalina, which itself is being displaced by the rising sea. But the solution to Kivalina's dire circumstance must rest in the hands of the legislative and executive branches of our government, not the federal common law.²⁴

The first generation of common law climate nuisance cases were all dismissed by preliminary dispositive rulings prior to reaching discovery or the merits.²⁵ These dismissals amount to a precedential minefield for common law redress of climate harms, but one that a second generation of common law (primarily nuisance) cases is beginning to navigate.

B. Second-Generation Nuisance Cases

In an effort to avoid displacement under *AEP v. Connecticut*, the second-generation common law cases are grounded in state common law, as it remains unclear whether the federal Clean Air Act preempts state common law claims. In addition, the cases have been brought against fossil fuel producers, as opposed to GHG emitters because the Clean Air Act—and hence *AEP's* displacement holding—arguably do not reach this conduct. Several local governments, ²⁶ one

^{22.} See Native Vill. of Kivalina v. Exxon Mobil Corp., 663 F. Supp. 2d 863, 877–83 (N.D. Cal. 2009), aff'd, 696 F.3d 849 (9th Cir. 2012).

^{23.} *Id.* at 877.

^{24.} Native Vill. of Kivalina, 696 F.3d at 858.

^{25.} See also Comer v. Murphy Oil USA, Inc., 839 F. Supp. 2d 849, 852 (S.D. Miss. 2012), aff'd, 718 F.3d 460 (5th Cir. 2013).

^{26.} See generally Cty. of San Mateo v. Chevron Corp., 294 F. Supp. 3d 934 (N.D. Cal. 2018), appeal docketed sub nom., consol. appeal granted, Nos. 18-15499, 18-15502, 18-15503 (9th Cir.); City of New York v. BP, P.L.C., 325 F. Supp. 3d 466 (S.D.N.Y. 2018), appeal docketed, No. 18-2188 (2d Cir. July 26, 2018); Notice of Removal, King Cty. v. BP, P.L.C., No. 2:18-cv-00758-RSL, 2018 WL 2440729 (W.D. Wash. May 9, 2018); Bd. of Cty. Commr's of Boulder Cty. v. Suncor Energy (U.S.A.), Inc., No. 18-cv-01672-WJM-SKC, 2019 U.S. Dist. LEXIS 151578 (D. Colo. Sept. 5, 2019), application for stay denied (U.S. Oct. 22, 2019); Rhode Island v. Chevron Corp., 393 F. Supp. 3d 142 (D.R.I. 2019), application for stay denied (U.S. Oct. 22, 2019); City of Oakland v. BP P.L.C., 325 F. Supp. 3d 1017 (N.D. Cal. 2018), appeal docketed, No. 18-16663 (9th Cir. Sept. 4, 2018); City of Imperial Beach v. Chevron Corp., No. 17-cv-4934 (N.D. Cal.); Cty. of Santa Cruz v. Chevron Corp., No. 18-cv-450 (N.D.

state,²⁷ and a trade association representing fishermen²⁸ have filed suits against large energy companies seeking compensation for damages relating to climate change. These second-generation common law suits allege a number of common law causes of action but are centered on nuisance claims. Whether these claims are justiciable remains a hotly contested question. One key threshold question that has emerged is whether the claims must be understood to sound in federal common law with important consequences for venue (federal versus state court) and application of preemption and displacement analysis. District court decisions have diverged, with two district courts treating the claims as federal common law claims²⁹ and four district courts treating the claims as state claims;³⁰ appeals are pending before multiple Circuit Courts of Appeal. As explained below, questions about the need for judicial restraint and deference to legislative prerogative feature prominently in analysis of the issue.

The first district court decision in this line of cases, issued on June 25, 2018, in *City of Oakland v. BP P.L.C.*, resulted in a dismissal that illustrates the continued reluctance of courts to reach the merits of core climate claims.³¹ Although the plaintiffs in *City of Oakland* filed suit in state court alleging violations of California public nuisance law, the defendants successfully removed the case to federal court, where it was dismissed.³² The district court understood the cause of action as necessarily sounding in the federal common law of nuisance and dismissed the suit on the grounds that the case presented questions better fit for resolution by legislative bodies:

Although the scope of plaintiffs' claims is determined by federal law, there are sound reasons why regulation of the worldwide problem of global warming should be determined by our political branches, not by our judiciary. . . . While it remains true that our federal courts have authority to fashion common law remedies for claims based on global warming, courts must also respect and defer to the other co-equal branches of government when the problem at hand clearly deserves a solution best addressed by those

Cal. 2018), appeal docketed, No. 18-16376 (9th Cir. Aug. 20, 2018); City of Santa Cruz v. Chevron Corp., No. 18-cv-458 (N.D. Cal.); City of Richmond v. Chevron Corp., No. 18-cv-732 (N.D. Cal.); Mayor & City Council of Baltimore v. BP P.L.C., 388 F. Supp. 3d 538 (D. Md. 2019), appeal docketed No. 19-644 (4th Cir. June 19, 2019), application for stay denied (U.S. Oct. 22, 2019). New cases continue to be filed; for an up-to-date compilation, see The Sabin Center, supra note 5.

^{27.} See generally Plaintiff's Complaint, Rhode Island v. Chevron Corp., No. PC-2018-4716 (R.I. Sup. Ct. July 2, 2018) (No. PC-2018-4716) (arguing that the fossil fuel industry knew "for nearly a half century that unrestricted production and use of their fossil fuel products create greenhouse gas pollution that warms the planet and changes our climate").

^{28.} Notice of Removal by Defendants, Pac. Coast Fed'n of Fishermen's Ass'n, Inc. v. Chevron Corp., No. 18-cv-07477 (N.D. Cal. Dec. 12, 2018) (No. 18-cv-07477).

^{29.} *City of Oakland*, 325 F. Supp. 3d at 1019; *City of New York*, 325 F. Supp. at 468–72.

^{30.} See, e.g., County of San Mateo, 294 F. Supp. 3d at 937; Board of County Commissioners of Boulder County, 2019 U.S. Dist. LEXIS 151578; Rhode Island v. Chevron Corp, 393 F. Supp. 3d at 142; Mayor & City Council of Baltimore, 388 F. Supp. 3d at 556.

^{31.} See City of Oakland, 325 F. Supp. 3d at 1019.

^{32.} *Id.* at 1021, 1029.

branches. The Court will stay its hand in favor of solutions by the legislative and executive branches.³³

Likewise, in *City of New York v. BP P.L.C.*, *et al.*, a federal district court dismissed New York City's action against a number of fossil fuel companies, holding that the City's claims sound in federal common law nuisance and are displaced by the Clean Air Act.³⁴ To the extent that the action sought to recover for foreign GHG emissions, the district court held that the claims were barred by the presumption against extraterritoriality and as an interference with the separation of powers and foreign policy, reasoning:

[T]he immense and complicated problem of global warming requires a comprehensive solution that weighs the global benefits of fossil fuel use with the gravity of the impending harms. To litigate such an action for injuries from foreign greenhouse gas emissions in federal court would severely infringe upon the foreign-policy decisions that are squarely within the purview of the political branches of the U.S. Government. Accordingly, the Court will exercise appropriate caution and decline to recognize such a cause of action.³⁵

In *County of San Mateo v. Chevron Corp.*, which presents claims very similar to those in *City of Oakland v. BP*, a district court held that the plaintiffs' alleged state common law claims were not displaced and should be remanded to state court.³⁶ However, that decision is presently on appeal to the Ninth Circuit Court of Appeals. The defendants continue to argue on appeal inter alia that the case should be removed to federal court and then dismissed, either because federal common law necessarily governs the local governments' climate change nuisance claims (and the federal common law has been displaced), or because the claims, even if understood to present claims sounding in state law, are completely preempted by the Clean Air Act.³⁷

So far, the second-generation common law nuisance suits are struggling, as their predecessors did, to convince courts to open their doors to the merits of

^{33.} Id. at 1029.

^{34.} See City of New York v. BP, P.L.C., 325 F. Supp. 3d 466, 468–72 (S.D.N.Y. 2018), appeal docketed, No. 18-2188 (2d Cir. July 26, 2018). In both cases, local governments seek damages from fossil fuel companies in part for contributing to the public nuisance of climate change, although County of San Mateo also raises claims under products liability, private nuisance, negligence, and trespass. Notably, three more recent district court decisions in similar cases parallel that of the district court in County of San Mateo. See Board of County Commissioners of Boulder County, 2019 U.S. Dist. LEXIS 151578; Rhode Island v. Chevron Corp, 393 F. Supp. 3d at 142; Mayor & City Council of Baltimore, 388 F. Supp. 3d at 556.

^{35.} Id. at 475-76

^{36.} Cty. of San Mateo v. Chevron Corp., 294 F. Supp. 3d 934, 937 (N.D. Cal. 2018) ("[b]ecause federal common law does not govern the plaintiffs' claims, it also does not preclude them from asserting the state law claims in these lawsuits. Simply put, these cases should not have been removed to federal court on the basis of federal common law that no longer exists"), *consol. appeal granted*, Nos. 18-15499, 18-15502, 18-15503 (9th Cir.).

^{37.} Appellants' Opening Brief, at 13–18, Cty. of San Mateo v. Chevron Corp., Nos. 18-15499, 18-15502, 18-15503, 18-16376 (9th Cir. Nov. 21, 2018) (Nos. 18-15499, 18-15502, 18-15503, 18-16376).

their claims. These decisions make it clear that courts remain uneasy about the propriety of judicial engagement in this field.

C. Public Trust and Constitutional Cases

Suits against the government seeking to compel more aggressive action on climate change grounded in the public trust doctrine and constitutional due process constitute another set of cases that intersect with core climate policy. These suits have also most often been dismissed on threshold grounds.

A nonprofit organization, Our Children's Trust, organizes and brings atmospheric trust suits on behalf of children in courts around the world. Rathough the precise claims have varied by jurisdiction, they are anchored in the argument that the government, by failing to adequately respond to climate change and thus allowing the destruction of the environment necessary to support and sustain human life, is violating its duty as a trustee of natural resources. The atmospheric trust plaintiffs have filed and lost too many suits to relate in detail but, as with the common law climate nuisance actions, these cases are typically dismissed on threshold grounds without considering the merits of the claims.

For example, in *Sanders-Reed ex rel. Sanders-Reed v. Martinez*, Our Children's Trust partner attorneys, with WildEarth Guardians and a minor, brought a claim in state court against the State of New Mexico, seeking a declaration that the state has a duty to regulate GHG emissions under the common law public trust doctrine. Although the New Mexico Environmental Improvement Board had adopted GHG regulations under the state Air Quality Control Act, which the complaint alleged were not sufficiently stringent, the regulations were subsequently repealed while the case was pending.⁴⁰ At the behest of the energy industry, the state environmental agency determined that "regulating [GHG] emissions in New Mexico 'will have no perceptible impact on climate change."⁴¹ Despite this deregulatory move, the court nonetheless granted summary judgment to the state, ruling that the issues in the case demanded a political, not a judicial, decision:

We conclude that the courts cannot independently intervene to impose a common law public trust duty upon the State to regulate greenhouse gases in the atmosphere. . . . [V]oters have the opportunity to exercise their desire for political change regarding complex environmental issues at the ballot box during each election cycle. Therefore, where the State has a duty to protect

 $^{38. \}quad \textit{See Global Legal Actions}, \text{ OUR CHILDREN'S TRUST, https://www.ourchildrenstrust.org/global-legal-actions (last visited Aug. 17, 2019).}$

^{39.} *See*, *e.g.*, Chernaik v. Brown, 295 Or. App. 584, 586 (2019) (arguing that the State of Oregon failed to "take sufficient steps to protect the state's public-trust resources from the effects of climate change.").

Sanders-Reed ex rel. Sanders-Reed v. Martinez, 350 P.3d 1221, 1222, 1223–24 (N.M. Ct. App. 2015).

^{41.} Id. at 1223.

the atmosphere under Article XX, Section 21 of the New Mexico Constitution, the courts cannot independently regulate greenhouse gas emissions in the atmosphere as Plaintiffs have proposed, based solely upon a common law duty established under the public trust doctrine as a separate cause of action. 42

Similarly, in *Alec L. ex rel. Loorz v. McCarthy*, the federal District Court for the District of Columbia dismissed a suit brought by youth plaintiffs (partnering with Our Children's Trust) against the U.S. government under the public trust doctrine seeking to compel the government to take stronger action to reduce GHG emissions. The court held that there is no federal public trust doctrine and, even if it existed, it would be displaced by the Clean Air Act. In so doing, it underscored that legislatures, not courts, should set climate policy:

And, in *Kanuk v. State Department of Natural Resources*, the Alaska Supreme Court joined the chorus, dismissing a children's atmospheric trust suit after concluding that the "limited institutional role of the judiciary supports a conclusion that the science- and policy-based inquiry here is better reserved for executive-branch agencies or the legislature."⁴⁴

However, *Juliana v. United States* and other recent cases like it may signal an increased judicial willingness to adjudicate climate suits.⁴⁵ Our Children's

^{42.} Id. at 1227.

^{43.} Alec L. v. Jackson, 863 F. Supp. 2d 11, 12, 17 (D.D.C. 2012), aff'd sub nom. Alec L. ex rel. Loorz v. McCarthy, 561 F. App'x 7. (D.C. Cir. 2014).

^{44. 335} P.3d 1088, 1099 (Alaska 2014).

^{45.} See Kain v. Mass. Dep't of Envtl. Prot., 479 Mass. 278, 300 (2016); see also Randall S. Abate, Atmospheric Trust Litigation in the United States Pipe Dream or Pipeline to Justice for Future Generations?, CLIMATE JUSTICE: CASE STUDIES IN GLOBAL AND REGIONAL GOVERNANCE CHALLENGES 542, 557 (Randall S. Abate ed., 2016) (noting "several state courts have embraced the concept of ATL as a potential strategy to address climate change regulation in the courts, and it is rapidly gaining support."); Michael C. Blumm & Mary Christina Wood, "No Ordinary Lawsuit" Climate Change, Due Process, and the Public Trust Doctrine, 67 Am. U.L. REV. 1, 68–69 (2017) (reasoning that "[p]erhaps spurred by growing evidence of the severity of the climate crisis and the government's clear lack of appropriate response, courts have begun to discard the displacement, preemption, and political question arguments.") The outcome in the most notable of these decisions, the Juliana case, remains highly uncertain, as discussed infra.

Trust has won an initial lower court victory that held out hope that the plaintiffs might finally get their day in court. In *Juliana v. United States*, environmental groups, youths and future generations (with Dr. James Hansen⁴⁶ named as guardian) sued the U.S. government in federal court, seeking injunctive relief to require the government and its agencies to take action to reduce atmospheric carbon dioxide concentrations to no more than 350 parts per million.⁴⁷ The plaintiffs grounded their claims in the Fifth Amendment's due process and equal protection clauses, the Ninth Amendment, and common law public trust doctrine.⁴⁸ The district court denied the government's motion to dismiss, holding inter alia that plaintiffs had adequately alleged violation of their fundamental right to a stable climate system, protected under substantive due process and informed by the public trust doctrine, and set the case for trial.⁴⁹

The government, however, responded with a barrage of motions and petitions in a dogged effort to avoid a trial. The United States succeeded shortly before the trial was set to begin in obtaining a stay and an interlocutory appeal to the Ninth Circuit.⁵⁰ The arguments offered by the government in its repeated salvos should by now sound familiar, grounded as they are in the limited jurisdiction of the courts to set climate policy. From its initial petition for mandamus:

This suit is plainly not "consistent with a system of separated powers" . . . as it seeks to have a federal court decide broad matters of national energy and environmental policy that are reserved to the elected branches of government, at the behest of plaintiffs who assert highly generalized injuries purportedly resulting from a decades-long failure of Congress and the Executive Branch to adequately address the buildup of CO2 in the global atmosphere.⁵¹

And from its motion for judgment on the pleadings:

Defendants are... entitled to judgment on the pleadings because adjudicating Plaintiffs' claims would violate the separation of powers. At its most basic level, Plaintiffs' suit is an improper attempt to make and impose environmental and energy policy writ large through constitutional litigation under a clause of the Bill of Rights designed to protect true individual liberties, not the general interests of the citizenry at large. Because adjudicating Plaintiffs' claims, as currently formulated, would effectively

^{46.} James Hansen has long been a leading climate researcher and advocate. *See*, *e.g.*, Green Mtn. Chrysler Plymouth Dodge Jeep v. Crombie, 508 F. Supp. 2d 295, 312–13 (D. Vt. 2007) (reviewing Dr. Hansen's resume and certifying him as a climate expert).

^{47.} Juliana v. United States, 217 F. Supp. 3d 1224, 1248 (D. Or. 2016), mot. to certify appeal denied, 6:15-CV-01517-TC, 2017 WL 2483705 (D. Or. June 8, 2017).

^{48.} Id. at 1261.

^{49.} Id. at 1276.

^{50.} Order granting petition for permission to appeal at 335, Juliana v. United States, No. 18-80176 (9th Cir. Dec. 26, 2018) (No. 18-80176).

^{51.} Petition for Writ of Mandamus to the United States District Court for the District of Oregon and Request for Stay of Proceedings in District Court at 12, Juliana v. United States, No. 18-73014 (9th Cir. June 9, 2017) (No. 18-73014) (citation omitted).

place this Court in the position of the President or Congress, those claims should be dismissed. 52

From its motion for summary judgment, challenging plaintiffs' standing and, again, arguing that climate policy issues cannot be decided by courts:

At its most basic level, Plaintiffs' suit is not a Case or Controversy cognizable under Article III. It is instead an attempt to make energy and environmental policy through the courts rather than through the political Branches entrusted by the Constitution with policy making authority.⁵³

And, most recently, from its opening brief in the interlocutory appeal challenging the district court's denial of its motion for judgment on the pleadings and summary judgment:

No federal court, nor the courts at Westminster, has ever purported to use the "judicial Power" to perform such a sweeping policy review — and for good reason: the Constitution commits to *Congress* the power to enact comprehensive government-wide measures of the sort sought by Plaintiffs. And it commits to the *President* the power to oversee the Executive Branch in its administration of existing law and to draw on its expertise to formulate policy proposals for changing that law. Such functions are not the province of Article III courts: "the Constitution's central mechanism of separation of powers depends largely upon common understanding of what activities are appropriate to legislatures, to executives, and to courts.". . . The actions that Plaintiffs' seek to compel are appropriately considered by the legislature and the executive, not by the courts.⁵⁴

Both the Ninth Circuit and the Supreme Court, in resolving the government's applications for stays and petitions for mandamus, signaled concerns about the case's justiciability. Although the Ninth Circuit denied the government's application for a writ of mandamus, it observed that it was "mindful that some of the plaintiffs' claims as currently pleaded are quite broad, and some of the remedies the plaintiffs seek may not be available as redress." And the Supreme Court commented that "[t]he breadth of respondents' claims is striking . . . and the justiciability of those claims presents substantial grounds for difference of opinion." Thus, as with the climate nuisance actions, the question of the propriety of judicial review relating to core climate policy remains central and unresolved in the public trust doctrine (due process) litigation.

Thus far, however, courts have avoided engaging core questions of climate policy by invoking a range of threshold procedural and jurisdictional rationales

^{52.} Defendants' Motion for Judgment on the Pleadings at 22, Juliana v. United States, 6:15-cv-01517-TC (D. Or. May 9, 2018) (No. 6:15-cv-01517-TC).

^{53.} Defendants' Motion for Summary Judgment at 20, Juliana v. United States, No. 6:15-cv-01517-TC (D. Or. May 22, 2018) (No. 6:15-cv-01517-TC).

^{54.} Appellant's Opening Brief at 25, Juliana v. United States, No. 18-36082 (9th Cir. Feb. 1, 2019) (citation omitted)

^{55.} In re United States, 884 F 3d 830, 837–38 (9th Cir. 2018).

^{56.} Order Denying Application for Stay, United States et al. v. USDC Or., No. 18A65 (U.S. July 30, 2018).

grounded wholly or substantially in concerns about the proper and legitimate role of the judiciary in constitutional democracy. In short, they felt compelled to exercise judicial restraint.⁵⁷ This is evidenced by not only the doctrines used to dispose of the climate cases—standing, the political question doctrine, and related doctrines are recognized as "methods of substance-avoidance" to weaken and "render judicial review compatible with democratic theory"⁵⁸—but also the language and reasoning used in explaining how courts believe those doctrines should apply (e.g., "[t]he balancing of those competing interests is the type of initial policy determination to be made by the political branches, and not this Court."⁵⁹). Courts are thus not only dismissing these cases, but evidencing—regardless of the specific doctrine applied—a uniform orientation and conviction that these cases demand judicial restraint.

II. DEMOCRACY-ENHANCING JUDICIAL CLIMATE ENGAGEMENT

Surveying the climate litigation reveals courts' unease about the propriety of judicial influence on climate policy, an unease arising from complex questions about the legitimacy of judicial review itself. Yet courts are not directly or deeply engaging this question, thereby overlooking important nuance and factors that support the exercise of judicial review. These decisions echo broader contemplations about the propriety of judicial review in a constitutional democracy in light of the countermajoritarian difficulty, which presents "far and away, the most famous and influential [argument for judicial restraint] in modern scholarship."60

The "difficulty" is that nine, unelected judges possess the power, by declaring legislation unconstitutional, to override majoritarian will. The judicial restraint exercised in the climate litigation, as well as the myriad asides about the proper role of courts in climate policy, track closely the concerns about the proper distribution of judicial and legislative authority that animate the

^{57.} Blumm & Wood, *supra* note 45, at 68 (noting "[i]n the context of the ATL campaign, the early cases demonstrated that some courts were uncomfortable with a role in the climate crisis, particularly in light of the complex regulatory schemes available to the agencies to regulate greenhouse gas pollution. As a result, several earlier decisions were dismissed on displacement, preemption, or political question grounds.") (citations omitted).

^{58.} Nimer Sultany, *The State of Progressive Constitutional Theory The Paradox of Constitutional Democracy and the Project of Political Justification*, 47 HARV. C R.-C.L. L. REV. 371, 409, 415 (2012) (describing this as "the minimalism of scholars such as Alexander Bickel and Cass Sunstein") (citing ALEXANDER M. BICKEL, THE LEAST DANGEROUS BRANCH: THE SUPREME COURT AT THE BAR OF POLITICS 18, 116, 183–98 (2d ed. 1986)).

 $^{59.\;}$ California v. Gen. Motors Corp., C06-05755 MJJ, 2007 WL 2726871, at *8 (N.D. Cal. Sept. 17, 2007).

^{60.} Matthew D. Adler, *Judicial Restraint in the Administrative State Beyond the Countermajoritarian Difficulty*, 145 U. PA. L. REV. 759, 785 (1997). It is important to note that the common law nuisance climate cases do not present a true "countermajoritarian difficulty" as decisions flowing therefrom would not be constitutional and could be reversed by the legislature; the public trust doctrine cases, in particular when invoked in conjunction with substantive due process, do present a circumstance of true countermajoritarian difficulty.

countermajoritarian difficulty. Importantly, however, debates about the legitimacy and scope of judicial review are enormously complex and remain contested and unresolved.⁶¹ Moreover, within that complex and unresolved theoretical debate reside powerful arguments *for* judicial review that have particular salience in the context of climate change. Namely, as argued below, the judiciary's superior capacity to cognize and respect intergenerational interests and to appropriately weigh public relations-driven scientific posturing support the understanding that courts are well-positioned, both as a matter of institutional competence and constitutional authority, to engage climate disputes.

Courts' uneasiness about their claim to democratic legitimacy to engage core questions of climate policy influences their assessment of threshold questions (standing, displacement and preemption, political question) and leads to some unfortunate consequences. Concerns about judicial aggrandizement and the need for judicial restraint are not fully developed, as they are only engaged in the context of applying doctrinal tests for standing or displacement. In so doing, courts avoid careful exploration of their constitutional authority and institutional capacities, thus obscuring central questions relating to law and climate change.⁶²

Indeed, this obscuring is not limited to the climate context. One scholar observes that labeling judicial actions as countermajoritarian judicial activism proves "detrimental to the examination of specific legal questions" and "[f]ar from clarifying the real issues at stake in specific cases, . . . merely obscures them." And while courts typically have avoided direct and thorough examination of the fear of undue judicial aggrandizement, the concern nonetheless infuses the relevant doctrinal analysis, contributing to premature dismissal as courts overweigh the need for judicial restraint in this context. 64 As

^{61.} Sultany, *supra* note 58, at 454 ("no single theory has hitherto achieved consensus or gained wide acceptance, and the debate thus far has been inconclusive").

^{62.} In AEP v. Connecticut, for example, the Supreme Court briefly and cursorily lists some aspects of institutional capacity that suggest agencies are better equipped than courts to set climate policy without fully exploring the question of institutional competence in this context:

The expert agency is surely better equipped to do the job than individual district judges issuing ad hoc, case-by-case injunctions. Federal judges lack the scientific, economic, and technological resources an agency can utilize in coping with issues of this order.... Judges may not commission scientific studies or convene groups of experts for advice, or issue rules under notice-and-comment procedures inviting input by any interested person, or seek the counsel of regulators in the States where the defendants are located. Rather, judges are confined by a record comprising the evidence the parties present. Moreover, federal district judges, sitting as sole adjudicators, lack authority to render precedential decisions binding other judges, even members of the same court.

⁵⁶⁴ U.S. 410, 428 (2011) (internal citations omitted).

^{63.} Sultany, *supra* note 58, at 454; *see also* Adler, *supra* note 60, at 854–55, 874–92 (critiquing the unthinking application of democracy- and legislative-centric evaluations of legitimacy grounded in debates over the countermajoritarian difficulty to the evaluation of court review of agency action and suggesting the need for more transparency about other institutional rationales for judicial restraint).

^{64.} Undemocratic judicial aggrandizement is highly unlikely in the common law nuisance cases, as these cases do not present constitutional questions and any judicial decision could be overturned by a

described below, strong arguments can be offered for judicial engagement—both as a matter of democratic legitimacy and institutional competence—in cases presenting questions of core climate policy.⁶⁵

Core concerns about the need for judicial restraint simply are not presented in many climate cases. 66 But even when they are, many theorists who advocate for restraints on judicial review in light of the countermajoritarian difficulty nonetheless recognize that judicial review is warranted (A) to afford representation and participation to groups with characteristics similar to those of minors and future generations vis-à-vis climate change; and (B) to correct for political process pathologies arguably akin to those that have plagued climate policy. Together, these considerations support the claim that courts act within their constitutional authority and in a democracy-enhancing manner when they engage, rather than sidestep, cases that intersect with climate policy.

A. Cognizance of Intergenerational Equity

Capacity to attend to the interests of nonvoting minors and future generations, key stakeholders not represented by present-day majoritarian policies, supports judicial engagement in core questions of climate policy. There are strong legal and normative bases for recognizing and respecting intergenerational equity in the context of climate change. Edith Brown Weiss famously situated climate change within principles of intergenerational equity in 1987, reasoning that "conservation of options (defined as conserving the diversity of the natural and cultural resources base), conservation of quality (defined as leaving the planet no worse off than received), and conservation of access (defined as equitable access to the use and benefits of the legacy)" require

legislature; the cases are not constitutional, are reversible, and do not directly present a countermajoritarian difficulty in the traditional sense. See Jonathan Zasloff, The Judicial Carbon Tax Reconstructing Public Nuisance and Climate Change, 55 U.C.L.A. L. REV. 1827, 1866 (2008) (arguing that climate nuisance suits are legitimate and observing that "because public nuisance litigation derives from the common law, the legislature can overturn it whenever it wishes...."). Moreover, common law tort can also be understood as a majoritarian device. See Weaver & Kysar, supra note 2, at 312, 314 (noting "[t]he pronouncements of tort law are majoritarian because tort understands itself to enforce collective standards of conduct, even if courts are not directly responsive to electoral results" and "the democratic privilege of the legislature is not so profound as it might initially seem. Though less directly representative, courts deploying tort law nevertheless express majoritarian commitments.").

65. Of note, some scholars argue that judicial restraint is warranted in climate litigation, invoking different theories about the role of courts in democracy. Donald G. Gifford, *Climate Change and the Public Law Model of Torts Reinvigorating Judicial Restraint Doctrines*, 62 S. CAL. L. Rev. 201, 231 (2010) (invoking Peter Schuck's work on the role of courts to argue that "[c]limate change and the other public health problems prompting public interest tort actions are the society-wide harms our constitutional structures suggest the political branches should handle."). The analysis that follows does not claim that *all* theories offered for resolving the countermajoritarian difficulty support judicial climate engagement. The analysis instead shows that some core justifications for judicial review within the large body of theory contemplating the countermajoritarian difficulty support court engagement, suggesting that further analysis is warranted before courts reflexively exercise judicial restraint.

66. See supra note 60 and accompanying text. But see Gifford, supra note 65, at 206–07 (arguing for judicial restraint in climate tort actions).

le d: "measures to prevent rapid changes in climate, measures to prevent or mitigate damage from climate change, and measures to assist countries in adapting to climate change."67

The anemic policy response to climate change, coupled with observations revealing that projections about the timing and severity of key climate change impacts have been conservative, 68 suggest that these principles of intergenerational equity will not be respected. Yet the facts, timelines, and mechanics of climate change reveal a uniquely strong imperative to respect intergenerational equity in the climate context. Present levels of emissions pose existential threats if unchecked, delay in reducing emissions locks in statistically certain death, and also exponentially increases the difficulty of achieving future reductions adequate to reign in serious climate harms. 69 That climate change presents an unusually compelling case for valuing intergenerational equity suggests that climate exceptionalism—adopting a legal approach to climate change that is specific to the issue of climate change, thereby defusing to some extent slippery slope arguments—is possible.

Consideration of the interests of future generations in environmental policy, including specifically within the context of climate change, finds ample support within international environmental law, the corpus of U.S. environmental statutes, the common law, and arguably the U.S. Constitution. The United States is a party to the United Nations Framework Convention on Climate Change, which endorses intergenerational equity vis-à-vis climate change, asserting in Article 3, paragraph 1: "The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity. ... "70 Many domestic environmental statutes require the consideration of the interests of future generations, including NEPA, which declares a national policy "to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic and other requirements of present and future generations."71 It further states that it is the "continuing responsibility of the Federal Government to use all practicable means . . . to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may . . . fulfill the responsibilities of each generation as trustee of the environment for succeeding generations."⁷² Numerous courts have held that in some contexts NEPA mandates assessment of an action's

^{67.} Edith Brown Weiss, *Climate Change, Intergenerational Equity and International Law*, 9 VT. J. ENVTL. L. 619, 622–23 (2008).

^{68.} See, e.g., Chelsea Harvey, Oceans are Warming Faster than Predicted, SCIENTIFIC AMERICAN (Jan. 11, 2019), https://www.scientificamerican.com/article/oceans-are-warming-faster-than-predicted/.

^{69.} See generally DAVID WALLACE-WELLS, THE UNINHABITABLE EARTH: LIFE AFTER WARMING (2019) (discussing the impacts of global warming, including food shortages, climate wars, and economic catastrophe).

^{70.} United Nations Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107 art. 3(1).

^{71. 42} U.S.C. § 4331(a) (2019).

^{72.} *Id.* § 4331(b).

contribution to climate change (through, for example, an increase in GHG emissions), even though climate impacts will not be immediate.⁷³

Additionally, climate-specific domestic statutes recognize the need to consider long-term climate impacts most relevant to future generations. For example, while recognizing that "the consequences of the greenhouse effect may not be fully manifest until the next century," the Global Climate Protection Act of 1987 nonetheless exhorts that "[n]ecessary actions must be identified and implemented in time to protect the climate." The Global Change Research Act of 1990 similarly mandates the preparation of a scientific report every four years that "analyzes current trends in global change . . . for the subsequent 25 to 100 years."

Common law doctrines likewise exhibit concern for long-term impacts. The Restatement (Second) of Torts identifies conduct that has "produced a permanent or long-lasting effect" as a circumstance that supports finding an unreasonable interference with a public right (so as to give rise to a public nuisance). ⁷⁶ The Second Circuit in Connecticut v. AEP had no difficulty concluding that allegations that "emissions constitute continuing conduct that may produce a permanent or long[-]lasting effect" stated a public nuisance. 77 And the public trust doctrine clearly imagines both existing and future publics as beneficiaries of those resources held in trust by the sovereign. The Supreme Court has recognized that some "property is held by the state, by virtue of its sovereignty, in trust for the public."78 While the contours and origins of the public trust doctrine are disputed, as is its potential application to climate change, the public trust concept is rooted in the idea of preserving natural resources in trust for future generations.⁷⁹ In Juliana v. United States, Judge Aiken held that public trust concepts are made enforceable through the substantive due process clause, which can be understood to encompass a fundamental right to "a climate system capable of sustaining human life."80

^{73.} Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1217 (9th Cir. 2008) (noting "[t]he impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.").

^{74.} Global Climate Protection Act, Pub. L. 100-204, tit. XI, § 1102(4), 101 Stat. 1407 (1987) (note following 15 U.S.C. § 2901 (2019)).

^{75.} United States Global Change Research Program, Pub. L. 101-606, tit. I, § 106(3), 104 Stat. 3101 (codified at 15 U.S.C. § 2936 (2019)).

^{76.} RESTATEMENT (SECOND) OF TORTS § 821B (AM. L. INST. 1979).

^{77.} Connecticut v. Am. Elec. Power Co, Inc., 582 F.3d 309, 352–53 (2d Cir. 2009), rev'd on other grounds, 564 U.S. 410 (2011) (reasoning that "[t]he States have additionally asserted that the emissions constitute continuing conduct that may produce a permanent or long lasting effect, and that Defendants know or have reason to know that their emissions have a significant effect upon a public right, satisfying § 821B(2)(c). We hold that the States, in their parens patriae and proprietary capacities, have properly alleged public nuisance under Restatement § 821B, and therefore have stated a claim under the federal common law of nuisance as it incorporates the Restatement's definition of public nuisance.").

^{78.} Illinois Cent. R.R. Co. v. Illinois, 146 U.S. 387, 455 (1892).

^{79.} Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law Effective Judicial Intervention*, 68 MICH. L. REV. 471, 475–76 (1970).

^{80.} Juliana v. United States, 217 F. Supp. 3d 1224, 1250 (D. Or. 2016).

The application of intergenerational equity in the context of climate change has been more fully explored by other scholars.⁸¹ It is also quite clear that our body of environmental laws is designed to protect the health and welfare of current children—part of the disenfranchised intergenerational minority with respect to climate change.

In short, it seems reasonable to assert that the future impacts of climate change at minimum *ought* to be considered when evaluating climate law and policy—even when those impacts primarily affect nonvoting minors and future generations. Perhaps the best way to appreciate the force of the argument is to consider the difficulty of defending the opposing position: that decisions today about the combustion of fossil fuels and other GHG-emitting activities need *not* consider the impacts of climate change on future generations

1. Courts are a (relatively) good institutional choice for respecting intergenerational interests.

Just climate policy should cognize and value intergenerational interests. And there are reasons to believe that courts may be better positioned than the more democratically accountable branches to meaningfully weigh these interests in the context of climate change. Courts, as a matter of relative institutional competence, can be expected to more consistently respect intergenerational equity than the legislative or executive branches, who have systematically undervalued intergenerational interests related to climate change in the political process. The claim here is not that courts are particularly *good* at weighing intergenerational climate interests, only that they are likely to be somewhat *better* than the political branches, which we would predict (and experience has borne out) are unlikely to be sufficiently attendant to them.

Political process features, coupled with human cognitive tendencies and sociological biases make it very difficult for our political system to produce equitable climate policy. 82 Climate change demands that the existing voting majority choose to endure certain mitigation costs to prevent uncertain future harms to nonvoting minors and future generations:

^{81.} See, e.g., PETER LAWRENCE, JUSTICE FOR FUTURE GENERATIONS: CLIMATE CHANGE AND INTERNATIONAL LAW (2014) (discussing the issue of intergenerational climate justice); James C. Wood, Intergenerational Equity and Climate Change, 8 GEO. INT'L ENVIL. L. REV. 293, 298–300 (1996) (discussing the norm of intergenerational equity as "fairness across generations, which imposes obligations on living generations to consider the interests of future generations").

^{82.} These difficulties have previously been explained at length elsewhere. See, e.g., Richard J. Lazarus, Super Wicked Problems and Climate Change Restraining the Present to Liberate the Future, 94 CORNELL L. REV. 1153, 1161 (2009) (identifying features of climate change, human nature, and political systems that "present significant obstacles both to the enactment of climate change legislation in the first instance and to its successful implementation over time"); Jedediah Purdy, Climate Change and the Limits of the Possible, 18 DUKE ENVTL. L. & POL'Y F. 289, 289–98 (2008) (noting that "[i]t might seem, then, that climate change is the Achilles heel of modern political economy, a problem whose spatial and temporal scale produces overwhelming externalities and confounds political efforts to address them.").

[T]here will necessarily be a huge lag between the time reductions in greenhouse gas emissions occur and any mitigating effect on climate change. The time lag is at the very least longer than the lifetime of any adult. The upshot is that no one who is asked to curtail activities to reduce greenhouse gas concentrations will be likely to live long enough to enjoy the benefits of that curtailment.⁸³

In other words, the harms we avoid by taking mitigation action now are uncertain. Their extent and form cannot be precisely predicted. Moreover, our mitigation actions may fail to appreciably reduce climate harms if other jurisdictions do not likewise take action. And, of course, these uncertain future harms accrue largely to the benefit of others.⁸⁴ That sacrifices to achieve mitigation now can produce any benefits only far in the future provides little incentive for politicians (whose political careers will by then be long expired) to focus on climate action.⁸⁵

Another factor preventing emissions control from gaining public salience is our weak understanding of the correlation between GHG emissions and specific climate harms. Ref Without the ability to directly attribute climate events to GHG emissions, let alone trace them to specific emissions, individuals lack the motivation to credit and seek to address a risk. The human mind not only struggles to recognize climate change as an urgent risk, but is predisposed to heavily value the here and now over the distant future, a trait that may be related to the fact that "concern about the distant future has had no selective value during human evolution." It is thus an uphill effort to adopt climate policy in light of the above-described mismatches between the attributes of climate change, our political system, and our human cognitive capacities.

Another significant obstacle is the fact that the industries opposed to climate mitigation are among the most well-funded, powerful, and sophisticated in the world.⁸⁹ In addition to using traditional channels of influence to forestall climate regulation, such as campaign contributions and lobbying, fossil fuel interests attack the underlying science to prevent the development of public, and hence political, pressure to address the problem. They successfully exploit yet another human cognitive attribute—the tendency to discount facts that contradict the preferred cultural world view⁹⁰—to orchestrate a climate disinformation

^{83.} Lazarus, *supra* note 82, at 1167.

^{84.} Purdy, *supra* note 82, at 294–95.

^{85.} Id. at 294-95.

^{86.} Jason J. Czarnezki et. al., *Crafting Next Generation Eco-Label Policy*, 48 ENVTL. L. 409, 429 (2018) (discussing the "tendency of the human mind to disregard impalpable concerns, problems that are diffuse in effect and are not directly experienced by our senses").

^{87.} Purdy, *supra* note 82, at 296.

^{88.} Czarnezki, supra note 86, at 429.

^{89.} Lazarus, supra note 82, at 1185.

^{90.} Dan M. Kahan et al., *The Second National Risk and Culture Study Making Sense of—and Making Progress In—The American Culture War of Fact*, 1–6 (2007), http://scholarship.law.gwu.edu/cgi/viewcontent cgi?article=1271&context=faculty_publications.

campaign that has helped to forestall the development of public and political will to adopt climate policy. 91

Thus, the attributes of climate change combine with political process features and human psychology to render present-day, majoritarian political commitment to mitigate unusually difficult. In the words of one scholar, "climate change law is no less than environmental lawmaking's worst nightmare [t]he combination of the science of climate change and human nature perversely triggers obstacle after obstacle."92 Yet, the intergenerational stakes in avoiding or delaying mitigation are unusually high, and "lawmaking delays are costly,"93 perhaps existentially so. Delay inexorably increases the severity of unavoidable climate harms, 94 which "preclude[s] the normal luxury of awaiting serious and immediate adversity before taking action."95 Indeed, inaction and delay increase the risk of catastrophic climate harms that threaten human civilization. There are thus reasons to believe that we are individually and politically hardwired to short the needs of children and future generations, particularly in the context of climate change, even though it is imperative to act now.

While the political process may be uniquely unsuited for addressing intergenerational climate interests, what, if anything, makes courts better? Courts are able to sidestep some of the challenges climate change presents to the political process. Unelected justices and judges are not as sensitive to the here and now demands of the majority and are not subject to the same political pressures and political time horizons as elected officials, arguably freeing them to consider the interests of children and future generations.⁹⁶

^{91.} See, e.g., Riley E. Dunlap & Aaron M. McCright, Challenging Climate Change The Denial Countermovement in CLIMATE CHANGE AND SOCIETY: SOCIOLOGICAL PERSPECTIVES 300–32 (Dunlap & Brulle eds. 2015).

^{92.} Lazarus, supra note 82, at 1184.

^{93.} Id. at 1168.

^{94.} *Id.* at 1164–68 (explaining the stock/flow nature of atmospheric chemistry).

^{95.} *Id*. at 1172.

^{96.} JOHN HART ELY, DEMOCRACY AND DISTRUST: A THEORY OF JUDICIAL REVIEW 88 (1980) (explaining that representation-reinforcing judicial review "involves tasks that courts, as experts on process and (more important) political outsiders, can sensibly claim to be better qualified and situated to perform than political officials"); see also id. at 103 ("Appointed judges . . . are comparative outsiders in our governmental system, and need worry about continuance in office only very obliquely.... [This] put[s] them in a position objectively to assess claims—... that either by clogging the channels of change or by acting as accessories to majority tyranny, our elected representatives in fact are not representing the interests of those whom the system presupposes they are") and 151 (explaining that "[t]he whole point of the approach [allowing countermajoritarian judicial review to benefit certain minority groups] is to identify those groups in society to whose needs and wishes elected officials have no apparent interest in attending. If the approach makes sense, it would not make sense to assign its enforcement to anyone but the courts."); Frank Michelman, Law's Republic, 97 YALE L.J. 1493, 1537 (1988) ("Judges perhaps enjoy a situational advantage over the people at large in listening for voices from the margins. Judges are perhaps better situated to conduct a sympathetic inquiry into how, if at all, the readings of history upon which those voices base their complaint can count as interpretations of that history—interpretations which, however re-collective or even transformative, remain true to that history's informing commitment to the pursuit of political freedom through jurisgenerative politics.") (internal citation omitted).

Some evidence of the judicial capacity to value the interests of future generations may be gleaned from the decisions of state courts that applied state constitutional environmental right or public trust provisions. Notable state court decisions from Pennsylvania, Montana, and Hawai'i show how courts can effectively identify and value the interests of future generations, at least in the context of interpreting and applying these state constitutional provisions (which often explicitly command considering future generations).

For example, Pennsylvania's Environmental Rights Amendment instructs that "Pennsylvania's public natural resources are the common property of all the people, including generations yet to come."97 In Robinson Township v. Commonwealth, the Supreme Court of Pennsylvania, in a plurality decision, invoked the Environmental Rights Amendment in striking down a state law that would have overridden local zoning in order to compel communities to accept oil and gas operations.98 Speaking directly to the difficulty of respecting the interests of future generations, the court acknowledged the democratic bias toward the current generation and chided the state, going forward, to be more mindful of long-term environmental consequences. It observed that "[i]n undertaking its constitutional cross-generational analysis, the Commonwealth trustee should be aware of and attempt to compensate for the inevitable bias toward present consumption of public resources by the current generation, reinforced by a political process characterized by limited terms of office."99 Moreover, in describing the history that led to the adoption of the Environmental Rights Amendment and comparing it to modern-day shale gas exploitation, the court expressly embraced the idea of the judiciary as a backstop, protecting the interests of future generations against a democratically elected legislature bent on short-term extraction. The plurality began by referencing the environmental harms from coal extraction, characterizing them as motivated by the prospect of short-term economic gain:

Pennsylvania has a notable history of what appears retrospectively to have been a shortsighted exploitation of its bounteous environment When coal was "King," there was no Environmental Rights Amendment to constrain exploitation of the resource, to protect the people and the environment, or to impose the sort of specific duty as trustee upon the Commonwealth as is found in the Amendment. Pennsylvania's very real and mixed past is visible today to anyone travelling across Pennsylvania's spectacular, rolling, varied terrain. . . . [T]he landscape bears visible scars . . . as reminders of the past efforts of man to exploit Pennsylvania's natural assets. ¹⁰⁰

It then likened historical, unchecked coal extraction to modern-day fracking. The court characterized these activities as failures of democratic

^{97.} PA. CONST. art. I, § 27.

^{98.} Robinson Twp., Washington Cty. v. Commonwealth, 623 Pa. 564 (2013).

^{99.} Id. at 659 n.46.

^{100.} *Id.* at 686–87.

decision making that prejudice the interests of future generations and (with respect to fracking) are properly corrected by courts under the Environmental Rights Amendment:

The type of constitutional challenge presented today is as unprecedented in Pennsylvania as is the legislation that engendered it. But, the challenge is in response to history seeming to repeat itself: an industry, offering the very real prospect of jobs and other important economic benefits, seeks to exploit a Pennsylvania resource, to supply an energy source much in demand. The political branches have responded with a comprehensive scheme that accommodates the recovery of the resource. By any responsible account, the exploitation of the Marcellus Shale Formation will produce a detrimental effect on the environment, on the people, their children, and future generations, and potentially on the public purse, perhaps rivaling the environmental effects of coal extraction. ¹⁰¹

And, notably, the plurality readily rejected the "Commonwealth's efforts to minimize the import of this litigation by suggesting it is simply a dispute over public policy voiced by a disappointed minority," observing that "Act 13 has the potential to affect the reserved rights of every citizen of this Commonwealth now, and in the future." ¹⁰²

Similarly, in *Montana Environmental Information Center v. Department of Environmental Quality*, the Montana Supreme Court again weighed intergenerational interests when confronting democratic approval for action that would result in short-term financial gain from resource extraction but impose long-term environmental consequences. ¹⁰³ Invoking the environmental rights in Montana's constitution (which include inter alia that "[t]he State and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations" ¹⁰⁴), the Montana Supreme Court voided as unconstitutional a legislative exemption from certain water quality standards as applied to the approval of a massive, proposed gold mine to be located near the Blackfoot River. ¹⁰⁵

And in Hawai'i, where state constitutional environmental rights ¹⁰⁶ are melded with the state's common law public trust doctrine, the Supreme Court interprets these authorities to create "a . . . duty to . . . future generations" ¹⁰⁷ and

^{101.} *Id*.

^{102.} Id. at 976-77.

^{103.} Mont. Envtl. Ctr. v. Dept. Envtl. Quality, 296 Mont. 207, 231 (1999).

^{104.} MONT. CONST. art. IX, § 1.

^{105.} The legislative exemption may have been obtained by mining interests with an eye to obtaining approval for operation of this particular mine. RICHARD MANNING, ONE ROUND RIVER 178 (1996) ("In Montana, mining money had built the corridors of power, and it was no real trick for it to walk the halls again. Industry lobbyists sought and got a relaxation in the state's water quality laws. . . . [T]he changes relaxed standards for arsenic alone, and the McDonald mine, unlike most others, has a specific arsenic problem. The new law had McDonald's [the gold mine proponent] fingerprints on it.").

^{106.} HAW. CONST. art. XI, § 1 ("For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources.").

^{107.} Robinson v. Ariyoshi, 65 Haw. 641, 674 (1982).

insists that agencies act accordingly: "When an agency is confronted with its duty to perform as a public trustee under the public trust doctrine, it must preserve the rights of present and future generations " 108

2. Courts have strong claims to legitimacy when protecting intergenerational interests.

Of course, the same insulation from democratic pressures that frees courts to value the interests of future generations is also the source of concern about the propriety of court intervention. The doctrines that courts use to sidestep engagement with core questions of climate policy (political question doctrine, displacement and preemption, standing) are all doctrines designed in part to ensure that the judiciary does not overstep its constitutionally defined role in our democracy. If courts lack the authority (or should, as an exercise of judicial restraint, decline to assert the authority) to hear cases or render decisions that, directly or indirectly, set climate policy because that is the province of the legislature and executive, then it is perhaps irrelevant that courts would be better at valuing the interests of future generations.

Notably, although courts may make it sound as though these sidestepping doctrines compel them to dismiss a case, the doctrines are largely prudential, or at least the standards for their application are sufficiently flexible that outcomes can be understood to largely reflect a normative assessment of the "proper" role for courts. 109 As shown above, courts in the climate cases have repeatedly evinced uneasiness about the proper role for the judiciary and this uneasiness infuses analysis of whether, when, and how the sidestepping doctrines are applied. Additionally, resolution of the merits of claims in the public trust/due process cases more directly raises questions about judicial restraint as courts are asked to declare government action (or inaction) unconstitutional. 110

It is thus important to directly confront questions about the propriety of judicial review vis-à-vis core climate policy. Explanations as to why judicial review is consistent with constitutional democracy may help to inform normative assessments of the propriety of court engagement under the sidestepping doctrines and more substantive inquiry under the due process clause. Courts invoke the sidestepping doctrines and feel compelled to defer to climate-unfriendly law out of a need to respect majority democratic (legislative) prerogative. It may thus be useful to remind courts of circumstances in which

^{108.} Kauai Springs, Inc. v. Planning Comm'n of Cty. of Kaua'i, 133 Haw. 141, 173 (2014).

^{109.} For example, one scholar (taking the view that courts should not engage on core climate questions because it is inconsistent with judicial competency and separation of powers), exhorts courts to avail themselves of "doctrinal exit ramps" in climate litigation, and observes that "[j]udicial restraint doctrines arose in contexts other than common law tort actions between private parties," but argues that "the avant-garde nature of public interest tort litigation warrants the principled extension of standing and political question doctrines beyond their prior applications." Gifford, *supra* note 65, at 232–33, 259.

^{110.} E.g., Alec L. v. Jackson, 863 F. Supp. 2d 11, 13–15 (D D.C. 2012), aff'd sub nom. Alec L. ex rel. Loorz v. McCarthy, 561 Fed. Appx. 7 (D.C. Cir. 2014).

scholars have argued (and sometimes courts have held) that the judiciary is understood to *enhance* democracy and act *consistent* with its constitutional role even when *contradicting* the majority—and to demonstrate that these circumstances may often be present in the context of climate change. One influential rationale¹¹¹ for why and when judicial override is consistent with representative democracy is when courts act to protect participation and representation in the political process, in particular vis-à-vis a prejudiced minority (children and future generations in the climate context).¹¹²

Professor John Hart Ely posits that judicial review can be consistent with representative democracy, even when judges are engaged in the most countermajoritarian of tasks. As long as courts interpret the Constitution in a representation-reinforcing manner, using open-ended constitutional provisions to strike down a statute as unconstitutional does not run afoul of democratic principles. This is so because the Constitution values participation and representation. Thus when courts interpret the Constitution so as to protect processes that ensure that those values are satisfied, they can do so in a manner consistent with the constitutional text without imposing judicial values on the

^{111.} Scholars and jurists offer numerous justifications for judicial review, as well as claim that there is no tension between democracy and judicial review or, alternatively, that the tension between judicial review and democracy cannot be resolved. *E.g.*, Sultany, *supra* note 58, at 388 (setting out a typology of the debate over constitutionalism and democracy). I seek here to note only that some important theories justifying judicial review that have been widely recognized as significant (even if not definitive) may help build the case for judicial review in the context of core climate policy.

^{112.} See generally ELY, supra note 96, (defending participation-oriented, representation-reinforcing judicial review); United States v. Carolene Products Co., 304 U.S. 144, 152-53 n.4 (1938). Of note, others have asserted, without exploring in-depth, that children and future generations should be afforded special solicitude in climate and constitutional analysis. See Mia Hammersley, The Right to A Healthy and Stable Climate Fundamental or Unfounded?, 7 ARIZ. J. ENVTL. L. & POL'Y 117, 140, 143 (2017) (noting that "children could arguably be considered a suspect class for purposes of the equal protection component of due process in the context of climate change. Children as a class have not been historically persecuted like other classes based on race or sexual orientation. Nevertheless, children are politically vulnerable by definition; they cannot vote. . . . Due to these concerns of intergenerational inequality, the Climate Kids arguably may be a protected class entitled to elevated scrutiny" and "[f]ootnote Four of United States v. Carolene Products Co. states that legislation that restricts political processes, contradicts enumerated fundamental rights, or discriminates against minorities may be subject to greater judicial scrutiny, and that the court system is well equipped to step in to correct prejudice, particularly against minority groups, where the legislative branch fails to do so. Here, the legislative branch has failed to protect future generations from the impacts of climate change."); see also Melissa K. Scanlan, The Role of the Courts in Guarding Against Privatization of Important Public Environmental Resources, 7 MICH. J. ENVTL. & ADMIN. L. 237, 277-79 (2018) (arguing that "in a nature's trust case, the understanding of separation of powers is informed by the judiciary's proper role as supervising the political branches carrying out trust duties; and that role is heightened in the context of youth and future generations who are part of a voteless diffuse majority" and "[i]n cases involving nature's trust, the judicial branch plays a critical role in ensuring the political branch trustees are protecting the beneficiaries' interests. When the rights of future generations are at stake, who of course have no political representation, a bar to the courts based on political question grounds is misplaced."); Lazarus, supra note 82, at 1187 (recommending precommitment strategies for climate legislation that would "limit[] the ability of future legislators and officials to undermine the statute's implementation" and observing that "[c]oncerns one might otherwise have about the antidemocratic effects of such lawmaking restraints should be reduced by the need for those kinds of restraints to preserve options for future generations.").

majority in an unwarranted countermajoritarian fashion. ¹¹³ Courts, on this view, should adopt an approach to constitutional adjudication that "rather than dictate substantive results . . . intervenes when the 'market,' in our case the political market is systematically malfunctioning." ¹¹⁴ As explained by Ely:

[m]alfunction occurs when the *process* is undeserving of trust, when (1) the ins are choking off the channels of political change to ensure that they will stay in and the outs will stay out, or (2) though no one is actually denied a voice or a vote, representatives beholden to an effective majority are systematically disadvantaging some minority out of simple hostility or a prejudiced refusal to recognize commonalities of interest, and thereby denying that minority the protection afforded other groups by a representative system.¹¹⁵

Roughly speaking, both types of malfunction can be said to occur vis-à-vis children and future generations in the context of climate change. First, and most simply, children and future generations cannot vote. Their status can be compared to that of out-of-state residents impacted by in-state economic policies. In explaining and endorsing the Supreme Court's interpretation of the Commerce Clause to bar discrimination against out-of-state residents, Ely observes that this is consistent with the Constitution's concept of representation. According to Ely, the Court uses "virtual representation" (aligning the interests of nonvoting nonresidents with voting in-state residents) to prevent inequalities against nonresidents, "a paradigmatically powerless class politically." 116 While minors and future generations cannot vote on many matters that ultimately impact them, climate change presents an unusual and exceptional case. Climate change presents a lock-in of extraordinary and likely irreversible conditions occasioned by the voting in-generation acting narrowly in its own self-interest without input from the nonvoting out-generations in a manner similar to discrimination against nonresidents.

Second, as in cases where courts have sought to protect politically disadvantaged minorities, children and future generations may be considered to have a unique stake in climate change litigation that warrants judicial protection. Children and future generations likely cannot be understood to constitute a prejudiced or "discrete and insular minority" in the traditional or doctrinally recognized sense.¹¹⁷ However, aspects of their relationship to the political

^{113.} See ELY, supra note 96, at 73–104.

^{114.} *Id.* at 102–03.

^{115.} Id. at 103 (emphasis in original).

^{116.} Id. at 83.

^{117.} William N. Eskridge, Jr., *Is Political Powerlessness A Requirement for Heightened Equal Protection Scrutiny?*, 50 WASHBURN L.J. 1, 10 (2010) ("The U.S. Supreme Court has articulated three requirements for suspect classifications: (1) the class defined by the classifying trait must be a coherent social group, (2) the class must have suffered from a history of state discrimination based upon the classifying trait, and (3) the classifying trait must be a factor that generally does not contribute to legitimate public policies."); *see also* Cunningham v. Beavers, 858 F.2d 269, 273 (5th Cir. 1988) ("No cases have ever held, and we decline to hold, that children are a suspect class."); *see also* Juliana v. United States,

process and their underrepresented climate interests nonetheless resonate with central reasons offered for court intervention to protect more conventionally acknowledged prejudiced minorities. The application of strict scrutiny for suspect classifications has been defended (from a countermajoritarian critique) as a means to make sure that certain groups are not unduly prevented from achieving representation through the political process as a result of prejudice that derails "the ability and willingness of various groups to apprehend those overlapping interests that can bind them into a majority on a given issue," thus constituting "cooperation-blocking prejudice." 118

"The facts that all of us once were young, and most expect one day to be fairly old" has been wrongly assumed to "neutralize whatever suspicion we might otherwise entertain respecting the multitude of laws (enacted by predominately middle-aged legislatures) that comparatively advantage those between, say, 21 and 65, over those who are younger or older." In Massachusetts Board of Retirement v. Murgia, the Supreme Court ruled that age-based classifications are not suspect, in part because all of us look forward to old age; hence, there is no need for the "extraordinary protection" of heightened judicial review:

But even old age does not define a "discrete and insular" group in need of "extraordinary protection from the majoritarian political process." Instead, it marks a stage that each of us will reach if we live out our normal span. Even if the statute could be said to impose a penalty upon a class defined as the aged, it would not impose a distinction sufficiently akin to those classifications that we have found suspect to call for strict judicial scrutiny. 120

This reasoning, however, fails in the context of climate change where the voting in-generation lacks the capacity to comprehend or adequately value the climate change that their decisions lock in for nonvoting minors and future generations. There is ample reason to be suspicious of the in-generation's motives and little basis to trust that they will empathize with the plight of future generations. There is most certainly prejudice that blocks cooperation between the voting in-generation and those to follow. As explained above, a host of

³³⁹ F. Supp. 3d 1062, 1103 (D. Or. 2018) (invoking slippery slope arguments in rejecting *Juliana* plaintiffs' claim that minors and future generations warrant treatment as a suspect class under the Equal Protection Clause: "Holding that 'posterity' or even just minor children are a suspect class would hamstring governmental decision-making, potentially foreclosing even run-of-the mill decisions such as prioritizing construction of a new senior center over construction of a new playground or allocating state money to veterans' healthcare rather than to the public schools. Applying strict scrutiny to every governmental decision that treats young people differently than others is unworkable and unsupported by precedent.").

^{118.} ELY, *supra* note 96, at 161.

^{119.} Id. at 160.

^{120.} Mass. Bd. of Retirement v. Murgia, 427 U.S. 307, 313–14 (1976) (quoting United States v. Carolene Products Co., 304 U.S. 144, 152–53, n.4 (1938)) (citation omitted).

cognitive, psychological, and evolutionary factors ¹²¹ make it extraordinarily difficult for the voting in-generation to cognize, act upon, and cooperate to consider the interests of nonvoting minors and future generations in the context of climate change.

What is perhaps most notable about Ely's participation-representation justification for countermajoritarian judicial review is that it adopts a relatively *narrow* understanding of the appropriate scope of judicial review. ¹²² That powerful arguments *for* judicial review in the context of climate change reside within his theory is thus particularly compelling.

B. Discerning Scientific Posturing

Another claim offered in support of judicial review—that countermajoritarian judicial review supports democracy when used to correct pathologies in the political process—is likewise salient in the context of climate change because courts can help temper dysfunction occasioned by the climate disinformation campaign.

Plaintiffs in climate change cases have alleged (and researchers have documented) purposeful distortions of public communication and, by extension democratic process, by fossil fuel interests intent on deferring or avoiding laws requiring emission reductions. The causes of action in the climate nuisance suits (in particular, the second-generation climate nuisance suits, but the *Kivalina* case as well) are intertwined with allegations about how energy companies strategically manipulated public opinion and political debate through a climate disinformation campaign. ¹²³ That corporate energy interests funded and otherwise supported an involved public relations campaign to spread disinformation and sow doubt about climate science has been well-documented. ¹²⁴ These corporate interests purposefully introduced and promoted (dis)information about climate science into public fora that internal documents

^{121.} The force of these difficulties is usefully illustrated by the fact that climate change struggles to find salience as a threat justifying action even among present-day parents—many of whom would likely jump in front of a bus for their children.

^{122.} Many scholars reject the tension between constitutionalism and democracy in the first instance or offer theories justifying judicial review in light of that tension that rest on broader bases than that offered by Ely. Sultany, *supra* note 58, at 388.

^{123.} See, e.g., Complaint at 47–61, Native Vill. of Kivalina v. ExxonMobil Corp., 696 F.3d 849 (9th Cir. 2012) (No. 09-17490) (setting forth allegations in support of civil conspiracy complaint); Complaint at 34–65, Cty. of San Mateo v. Chevron, 294 F. Supp. 3d 934, 937 (N.D. Cal. 2018) (No. 18-15499) (describing climate disinformation campaign and bringing failure to warn claim), consol. appeal granted, Nos. 18-15499, 18-15502, 18-15503 (9th Cir.).

^{124.} E.g., Dunlap & McCright, supra note 91, at 300–32; UNION OF CONCERNED SCIENTISTS, SMOKE, MIRRORS & HOT AIR: HOW EXXONMOBIL USES BIG TOBACCO'S TACTICS TO MANUFACTURE UNCERTAINTY ON CLIMATE SCIENCE 1 (2007), https://www.ucsusa.org/sites/default/files/legacy/assets/documents/global_warming/exxon_report.pdf; see also NAOMI ORESKES & ERIK M. CONWAY, MERCHANTS OF DOUBT (2010). InsideClimate News also published investigative articles documenting the disinformation campaign in its series. See Neela Banerjee et al., Exxon The Road Not Taken (Sept. 16, 2015), https://insideclimatenews.org/content/Exxon-The-Road-Not-Taken.

reveal they knew to be false or misleading. 125 And this disinformation intersected with human cognitive tendencies to conform facts to cultural worldview and engage in politically motivated reasoning 126 to stoke a stalemating, ideological churn of unproductive public "debate" about climate science.

A 2002 memorandum to Republican candidates prepared by political strategist Frank Luntz illustrates well the nexus between the manufactured debate on climate science "uncertainty" and public and political dialogue. 127 Mr. Luntz recommends that candidates focus on uncertainty in climate science to explain opposition to climate regulation to voters, while simultaneously recognizing that to do so does not accurately portray the state of the science:

Gallup public opinion polling on climate change in the United States shows that Americans grew more skeptical and less concerned about climate change even as scientific understanding deepened. The percentage of Americans believing that global warming is caused by pollution from human activities "dropped sharply in 2010," the number of climate skeptics grew between 2008 and 2010, and public concern about climate change "dampened" from 2009 to 2015. Gallup hypothesizes that these trends are attributable in part to the "well-publicized pushback against global warming science" and to "the high profile 'Climategate' controversy that emerged in late 2009, raising questions about the objectivity of some leading climate science researchers, as well as the legitimacy of some of their findings." 131

It seems likely that the climate disinformation public relations campaign, and the disputes about climate science that it continues to engender, impacted public opinion and political debate, which slowed (if not stymied) the domestic

^{125.} Geoffrey Supran & Naomi Oreskes, *Assessing ExxonMobil's Climate Change Communications* (1977-2014), 12 ENVTL. RES. LETTERS 1, at 12–15 (2017).

^{126.} Kahan, supra note 90, at 3–6.

^{127.} Frank Luntz, *The Environment A Cleaner, Safer, Healthier America*, THE LUNTZ RESEARCH COMPANIES, 131–46 (2002), https://www.motherjones.com/files/LuntzResearch_environment.pdf.

^{128.} *Id.* at 137–38 (emphasis in original).

^{129.} See Lydia Saad, One in Four in U.S. Are Solidly Skeptical of Global Warming, GALLUP (Apr. 22, 2014), http://www.gallup.com/poll/168620/one-four-solidly-skeptical-global-warming.aspx (presenting the results of detailed polling of Americans regarding attitudes toward and beliefs about climate change).

^{130.} Id.

^{131.} *Id*.

political response to climate change. ¹³² The climate disinformation campaign was detailed at length in the *Kivalina* complaint and, in so doing, "the plaintiffs [effectively] asked the court to find that the political branches had been duped, that the defendants' actions had compromised democracy itself." ¹³³

But what does this say about the role for courts? We generally do not view courts as a good institutional fit for evaluating complex scientific claims, tending to view this as the province of expert agencies. Courts are, however, an excellent forum for weeding out pseudoscience that doesn't pass minimum standards of credibility (*Daubert*), like public relations-directed scientific posturing. ¹³⁴ The processes that courts impose on the submission of expert testimony impose minimum standards of scientific reliability and force litigants to "own" the pedigrees and assertions of their experts, shedding light on the relationship between expert and corporate interests. 135 Julia Olson, the lead lawyer in Juliana, put it bluntly: "Facts are facts and alternative facts are perjury." 136 Moreover, the adversarial process provides a useful means to surface and expose politically or profit-motivated scientific spin. 137 And courts' gatekeeping in this regard can be even more subtle, involving not just decisions about the admission of specific experts' testimony, but influencing broader issues in litigation. One insightful interpretation of the Supreme Court's decision in Massachusetts v. EPA explains the decision not to afford deference to the Bush-era EPA as rooted in the Court's suspicion that the agency's representations of the state of climate science were politically motivated and unsupported. 138

^{132.} Dunlap & McCright, *supra* note 91, at 300–01. *See also* Stephan Lewandowsky et al , *Influence and seepage an evidence-resistant minority can affect public opinion and scientific belief formation*, 188 COGNITION 124, 125 (2019) (summarizing social science research into the impacts of the climate disinformation campaign and concluding that "[a]lthough the direction of causality cannot be ascertained . . . one interpretation is that the efforts of conservative think tanks and Exxon had the intended effect of shaping public discourse with denialist talking points, thereby delaying meaningful mitigation efforts.") (citations omitted).

^{133.} Weaver & Kysar, supra note 2, at 329.

^{134.} See Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 589, 592–96 (1993) (providing factors to be considered in determining whether an expert's methodology is valid, including whether the theory or technique used can and has been tested, error rate, etc.).

^{135.} Ryan Hackney, Note, *Flipping Daubert Putting Climate Change Defendants in the Hot Seat*, 40 ENVTL. L. 255, 255–57 (2010) (arguing that application of Daubert standards could prevent admission of testimony by climate skeptics often held up as experts in the public debate and clarify the state of climate science).

^{136. 60} Minutes "This is No Ordinary Lawsuit," Off Track, Cracking the Code (CBS television broadcast Mar. 3, 2019) (including an interview by 60 Minutes with Julia Olson, lead attorney in Juliana v. United States).

^{137.} Thomas O. McGarity, *Proposal for Linking Culpability and Causation to Ensure Corporate Accountability for Toxic Risks*, 26 WM. & MARY ENVIL. L. & POL'Y REV. 1, 60–61 (2001).

^{138.} Jody Freeman & Adrian Vermeule, *Massachusetts v. EPA From Politics to Expertise*, 2007 SUP. CT. REV. 51, 51–54 (2007).

And courts hearing climate-related cases do not appear to be having difficulty discerning what constitutes credible climate science. ¹³⁹ Indeed, in *Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie*, the court demonstrated notable nuance in evaluating claims offered by experts relating to climate change. ¹⁴⁰ The court applied *Daubert* flexibly in the context of emerging climate science to rebuff the automakers' attempt to exclude the testimony of climate scientists presenting emerging theories about the extent of climate harms (including where those scientists' predictions were more dire than those offered by the Intergovernmental Panel on Climate Change). ¹⁴¹ Most tellingly, one of the automakers' climate-skeptic experts purportedly declined to testify at the last moment when it became clear that he might be required to reveal his funding sources. ¹⁴²

Institutionally, courts provide a forum that is inhospitable to public relations scientific posturing and thus a means to counter its conversation-distorting influence. That this is so provides another rationale supporting the need for and legitimacy of judicial review. The majoritarian product of a pathologized political and public process may not be understood to be legitimate and may therefore invite justifiable judicial correction, particularly to fix the pathologized process itself. A number of scholars, building generally from this core concept, recognize that courts may intervene in a democracy-enhancing capacity when doing so corrects pathologies in the political process (including those related to communication and interaction) that prevent the political process from producing legitimate outcomes. Frank Michelman explains that judicial review is legitimate and consistent with democracy when it ensures the communicative and procedural conditions necessary for civic processes to operate in a jurisgenerative fashion (i.e., influence the development of legitimate law). 143 These conditions include that citizens' participation in the political process can change their understanding without being "coercive, or invasive, or otherwise a violation of one's identity or freedom." ¹⁴⁴ As summarized by one scholar, in Michelman's view, "[t]he Court . . . protects the presuppositions of United States

^{139.} Michael Gerrard, Court Rulings Accept Climate Science, 250 N.Y.L.J. (2013); Maria L. Banda & Scott Fulton, Litigating Climate Change in National Courts Recent Trends and Developments in Global Climate Law, 47 ENVTL. L. REP. NEWS & ANALYSIS 10,121, 10,130 (2017).

^{140. 508} F. Supp. 2d 295, 310–35 (D. Vt. 2007) (undertaking detailed *Daubert* analysis of claims offered by climate experts in litigation).

^{141.} *Id.* at 318 (noting "[p]laintiffs argue at length that Hansen's theory is unreliable because it has not been tested by controlled scientific experimentation. It is difficult to imagine a conclusive test for any theory about the future climate effects of the world's current emissions of greenhouse gases.").

^{142.} *Id.* at 336 (referencing the late substitution of the automakers' testifying expert); *see also* Rick Piltz, *Climate contrarian Pat Michaels refused to disclose funding in Vermont court case*, CLIMATE SCIENCE AND POLICY WATCH (Sept. 19, 2007), http://www.climatesciencewatch.org/2007/09/19/climate-contrarian-pat-michaels-refused-to-disclose-funding-in-vermont-court-case/.

^{143.} Frank Michelman, Law's Republic, 97 YALE L.J. 1493, 1494–98 (1988).

^{144.} Id. at 1526–27 (internal citation omitted).

constitutionalism by ensuring that dialogue between participants of the political process is free of coercion and exclusion."¹⁴⁵

Jurgen Habermas similarly posits that public discourse and input is necessary for law to be legitimate. He identifies "presuppositions of communication that undergird legitimate lawmaking," ¹⁴⁶ identifying as "the source of legitimacy" of democratic will-formation "the communicative presuppositions that allow the better arguments to come into play in various forms of deliberation and . . . procedures that secure fair bargaining conditions." ¹⁴⁷ In Habermas's view, a public process produces legitimate law when it consists of "forms of communication" that allow for "filtering reasons and information, topics and contributions in such a way that the outcome of a discourse enjoys a presumption of rational acceptability." ¹⁴⁸ In describing the qualities of the requisite communication, Habermas observes:

[T]he success of public communication is . . . measured by . . . the formal criteria governing how a qualified public opinion comes about. The structures of a power-ridden, oppressed public sphere exclude fruitful and clarifying discussions. The "quality" of public opinion, insofar as it is measured by the procedural properties of its process of generation, is an empirical variable. From a normative perspective, this provides a basis for measuring the legitimacy of the influence that public opinion has on the political process.¹⁴⁹

Notably, while Habermas believes that courts should apply not make law and criticizes constitutional activism generally, ¹⁵⁰ he expressly situates judicial review as important to maintaining the presuppositions of communication necessary to generate legitimate law. In other words, Habermas understands judicial review as providing an important procedural means to insure "conditions for the democratic genesis of laws." ¹⁵¹ Habermas observes that "The Court's exercise of judicial review ensures that majoritarian procedures do not violate communicative presuppositions, and thus secures the 'conditions for the democratic genesis of laws." ¹⁵² He also asserts that "the constitutional court must work within the limits of its authority to ensure that the process of lawmaking takes place under the legitimating conditions of *deliberative politics*." ¹⁵³ He goes so far as to endorse "bold constitutional adjudication" as

^{145.} Sultany, supra note 58, at 408-09.

^{146.} JURGEN HABERMAS, BETWEEN FACTS AND NORMS: CONTRIBUTIONS TO A DISCOURSE THEORY OF LAW AND DEMOCRACY 252 (William Rehg trans., 1998).

^{147.} See id. at 245.

^{148.} Id. at 146.

^{149.} Id. at 310.

^{150.} HUGH BAXTER, HABERMAS: THE DISCOURSE THEORY OF LAW AND DEMOCRACY 12–28 (2011) (explaining Habermas' rejection of values jurisprudence because rather than create law, courts apply constitutional provisions).

^{151.} Id. at 135 (describing Habermas' "proceduralist" account of the court's constitutional role and quoting HABERMAS, supra note 146, at 265).

^{152.} Sultany, supra note 58, at 396 (quoting HABERMAS, supra note 146, at 265).

^{153.} HABERMAS, *supra* note 146, at 242 (emphasis in original).

"required in cases that concern the implementation of democratic procedure and the deliberative form of political opinion- and will-formation." ¹⁵⁴

The climate disinformation campaign's purposeful and effective distortions of public communication and, by extension democratic process, resemble the pathologies identified by Michelman and Habermas. Public relations-oriented scientific posturing created a pathology in our political process. It exploited the scientific complexity of climate change, First Amendment speech rights, the cognitive proclivities of individuals (like politically motivated reasoning), and political expediency (the policy preferences of many politicians who found easy cover behind "uncertain" science instead of debating policy) to derail informed public and political debate. Habermas posited that "[p]ublic opinions that can acquire visibility only because of an undeclared infusion of money or organizational power lose their credibility as soon as these sources of social power are made public."155 Unfortunately, the sprawl, complexity, and nuanced methods of the climate disinformation campaign (including obscuring industry funding and influence through trade associations and other front groups and exploiting misconceptions about the meaning and role of uncertainty in scientific inquiry) have prevented the type of cleansing transparency and public awakening that Habermas predicts.

Yet, while enormously powerful in public fora, public relations-oriented scientific posturing is weakened inside the courtroom. Courts can be a resource to help correct the pathologies of public debate-distorting, industry-funded scientific posturing. This suggests another reason why it is reasonable to view judicial review of climate cases as residing within existing understandings of the judicial role and another way in which courts can add value to the democratic process.

CONCLUSION

The need for judicial engagement on core climate questions does not disappear even if Congress enacts a robust federal decarbonization statute. Many have pointed out the "long tail" aspect of climate change, recognizing that sustained political will is necessary to implement the difficult requirements of climate law over the long timeframes demanded by the scientific realities of the phenomenon. The Therefore, even if climate harms become apparent enough to prompt the voting in-generation to (finally) take meaningful legislative action, a judicial backstop to prevent backsliding and protect interests of future generations remains important. This Article explains that even relatively

^{154.} Id. at 246.

^{155.} Id. at 311.

^{156.} See generally Eric Biber, The Sting of the Long Tail Climate Change, Backlash and the Problem of Delayed Harm (UC Berkeley Public Law Research Paper No. 1292529, 2008) (discussing the "delayed harm" and associated challenges of climate change); Lazarus, supra note 82, at 1185.

constrained theories of the legitimate role of courts contain powerful arguments in favor of the judiciary's engagement on core climate cases.

This is instructive as courts rule on threshold jurisdictional questions in the climate cases, as well as on the merits. Courts evaluating threshold justiciability questions in climate cases—including standing, displacement, preemption, and political question—should thus take care that reflexive intuitions about the need for judicial restraint do not influence the application of those doctrines (or, at minimum, subject such intuitions to searching scrutiny to assess their validity). Courts should take similar care when assessing the viability of merits claims in the climate nuisance cases. A court should not, for example, allow an unexamined conviction about the need for judicial restraint to drive its determination of whether a plaintiff has established that particular conduct constitutes an unreasonable interference with a right common to the general public. And, when courts reach the merits in a constitutional climate case that demands careful consideration of the proper constitutional role for courts—for example, whether courts should recognize a fundamental right to a stable climate system under the due process clause that supersedes legislative will—courts should be mindful of the powerful arguments in favor of judicial review.

Importantly, the arguments offered herein in support of the legitimacy of judicial review are climate-specific, which should provide a source of comfort to courts worried about judicial aggrandizement; courts can engage core climate issues without adopting a new and more generally applicable or expansive model for the proper scope of judicial review. Finally, American courts would not be alone. Recently, in *Urgenda Foundation v. Netherlands*, the Dutch Court of Appeal rejected the Dutch government's attempt to argue that "[t]he *trias politica* prohibits judges" from engaging on core questions of climate policy. ¹⁵⁷ The court ordered the Dutch government to reduce emissions and reasoned that the order respected the relative roles of the legislature and judiciary because it left it to the government to decide exactly how emissions should be reduced. ¹⁵⁸

Judicial engagement with core climate cases is thus consistent with traditional understandings of the role of courts in our constitutional system and arguably less radical than the alternative—judicial disengagement grounded in underexamined concern about the need for judicial restraint as our democracy struggles to survive an existential crisis.

We welcome responses to this Article. If you are interested in submitting a response for our online journal, Ecology Law Currents, please contact cse.elq@law.berkeley.edu. Responses to articles may be viewed at our website, http://www.ecologylawquarterly.org.

^{157.} Urgenda Found. v. Netherlands, 200.178.245/01, Hague Ct. App. (Oct. 9, 2018), https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:GHDHA:2018:2610 (denying appeal). 158. *Id.*