

Disregard and Due Regard

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Can we see the law changing before our eyes? Richard Stewart's classic 1975 article saw the reformation of administrative law toward a new era of judicial review emphasizing representation of all affected groups in the policy process.¹ In the 1980s, he saw the transition of environmental law from command and control to market-based incentives such as emissions trading,² and he was among the earliest to see the merits of market-based incentives to reduce greenhouse gas emissions.³ In 2003 he looked back on the transformation he had predicted, and added the key development of executive oversight through economic analysis as an administrative system of administrative law⁴ – a development he had anticipated in 1975.⁵ He then launched the ambitious project on Global Administrative Law (GAL), seeing the need for administrative procedures to protect affected interests in myriad international institutions.⁶

Can we see the need for law, and the impacts of law, for better or worse? Humans are a remarkably visual species; more than most mammals, we live by sight.⁷ But how well do we really see? Do we see

¹ Richard B. Stewart, "The Reformation of American Administrative Law," 88 Harv. L. Rev. 1667 (1975).

² Richard B. Stewart, "Reconstitutive Law," 46 Md. L. Rev. 86 (1986); Bruce Ackerman & Richard B. Stewart, "Reforming Environmental Law: The Democratic Case for Market Incentives," 13 Colum. J. Env't'l L. 171 (1988); Daniel J. Dudek, Richard B. Stewart & Jonathan B. Wiener, "Environmental Policy for Eastern Europe: Technology-Based versus Market-Based Approaches," 17 Colum. J. Env't'l L. 1 (1992).

³ Richard B. Stewart & Jonathan B. Wiener, "A Comprehensive Approach to Climate Change," American Enterprise 74 (1990); Richard B. Stewart & Jonathan B. Wiener, "The Comprehensive Approach to Global Climate Policy: Issues of Design and Practicality," 9 Arizona J. Int'l and Comparative L. 83 (1992); Richard B. Stewart & Jonathan B. Wiener, *Reconstructing Climate Policy* (AEI Press, 2003).

⁴ Richard B. Stewart, "Administrative Law in the 21st Century," 78 NYU L. Rev. 437, 443-446 (2003).

⁵ Stewart, "Reformation," 88 Harv. L. Rev. at 1690-91 (favoring careful analysis of the benefits and costs of each regulation, rather than wholesale deregulation or re-regulation); id. at 1710-11 & nn.203-204 (anticipating the growth of executive oversight using economic analysis, citing Breyer and Ackerman).

⁶ Benedict Kingsbury, Nico Krisch & Richard B. Stewart, "The Emergence of Global Administrative Law," 68 L. & Contemp. Probs. 15 (2005).

⁷ Jon H. Kaas and Pooja Balaram, "Current research on the organization and function of the visual system in primates," *Eye and Brain* 6 (Supp. 1): 1-4 (2014), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4574956/>.

the suffering of others, the stresses on our world, the opportunities ahead of us, the intended and unintended consequences of our acts? These questions address not only our physical capabilities to see, but our vision, our foresight.⁸ Out of sight, out of mind. If we do not see – or choose not to see – we disregard.⁹

In 2014, Richard Stewart published “Remedying Disregard in Global Regulatory Governance,”¹⁰ another of his magnificent contributions. Here I suggest that in his argument for reforming global governance, Stewart has also brought into view a further aspiration: the potential for the concept of “disregard” to widen our vision and bridge our divides. In this essay, I explore ways that the concept of disregard and its remedies could help embrace such fractious pairs as global and domestic (international and national), efficiency and equity (well-being and fairness), administrative and environmental (humans and nature), private and public, present and future, routine and extreme. Disregard thus offers a candidate concept to integrate across scales, disciplines, cultures, and perspectives. Amidst acute polarization, notably though not only about environmental law and regulation, a shared understanding of disregard may open new avenues of dialogue.

Disregard evinces disrespect, and can do serious damage. Those unseen, invisible to society and institutions, may be unfairly aggrieved and relegated to discrimination, risk and death. Akin to the metaphor of sight and disregard, we often use another sensory metaphor – hearing and voice – to highlight the plight of those unheard.¹¹ Martin Luther King Jr., calling for nonviolent protest, described

⁸ On the power and limitations of foresight in the human brain, see Daniel T. Gilbert and Timothy D. Wilson, “Prospection: Experiencing the Future,” 317 *Science* 1351-1354 (2007).

⁹ Professor Katrina Wyman notes that Rashi (Solomon b. Isaac or Shlomo Yitzhaki; 1040-1105), in his classic Commentary on the Torah, admonished “you should not cover your eyes and pretend not to see.” Rabbi Shawna Brynjegard-Bialik, “Torah portion: Do not look away,” *Jewish Journal*, September 3, 2014, at https://jewishjournal.com/current_edition/132894/.

¹⁰ Richard B. Stewart, “Remedying Disregard in Global Regulatory Governance,” 108 *Amer. J. Int’l L.* 211-270 (2014).

¹¹ We exhort ourselves to be good listeners, to hear others, and we speak of ensuring that all voices be heard in our governance institutions – and the reality that they are not. See Kay L. Schlozman, Henry Brady, and Sidney Verba, *Unequal and Unrepresented: Political Inequality and the People’s Voice in the New Gilded Age* (Princeton University Press, 2018). In administrative and environmental law, “omitted voice” is one key cause of health and environmental risks, see Jonathan B. Wiener and John D. Graham, “Resolving Risk Tradeoffs,” in John D. Graham & Jonathan B. Wiener, eds., *Risk vs. Risk: Tradeoffs in Protecting Health and Environment* 230-233, 265, 270 (Harvard University Press, 1995).

riots as the “language of the unheard.”¹² Advocates for those afflicted by pandemics have charged that “silence = death.”¹³ Risks unseen or unheard may be realized. In some cases, “disregard = death.”

The concept of disregard embraces these metaphors of sight and hearing, and their potential remedies. In a different context of disregard that echoes today, James Baldwin said “Not everything that is faced can be changed. But nothing can be changed until it is faced.”¹⁴ Richard Stewart puts it: “Regard is the antonym and remedy for disregard.”¹⁵ To face disregard is to see those unseen, to hear those unheard, and, perhaps, to change. This essay sees in disregard and its remedy – due regard -- a potential to build better. We could come to see due regard as a core responsibility of good government (and of good citizenship) – to consider impacts on those affected, to care for those afflicted, to think through decisions, to aim the law toward due regard. The last part of this essay examines due regard as a remedy for disregard, with suggestions for policy, structure, and foresight.

I. Global/international and Domestic/national: Bridging scales

Stewart’s article on “Remedying Disregard” focuses on global governance, with its proliferation of fragmented mission-driven institutions lacking mechanisms for participation by affected interests or accountability by decision makers. He describes the “decisional externalities in the form of harms to disregarded third-party interests and concerns” that may arise when specialized international institutions disregard affected interests, and the “structural disregard” that favors powerful states in international

¹² Martin Luther King Jr., “The Other America,” April 14, 1967, at <https://www.crmvet.org/docs/otheram.htm> (“Let me say as I’ve always said, and I will always continue to say, that riots are socially destructive and self-defeating. I’m still convinced that nonviolence is the most potent weapon available to oppressed people in their struggle for freedom and justice. ... So I will continue to condemn riots ... But at the same time, it is as necessary for me to be as vigorous in condemning the conditions which cause persons to feel that they must engage in riotous activities as it is for me to condemn riots. I think America must see that riots do not develop out of thin air. Certain conditions continue to exist in our society which must be condemned as vigorously as we condemn riots. But in the final analysis, a riot is the language of the unheard. And what is it that America has failed to hear? It has failed to hear that the plight of the Negro poor has worsened over the last few years. It has failed to hear that the promises of freedom and justice have not been met. And it has failed to hear that large segments of white society are more concerned about tranquility and the status quo than about justice, equality, and humanity. And so in a real sense our nation’s summers of riots are caused by our nation’s winters of delay. And as long as America postpones justice, we stand in the position of having these recurrences of violence and riots over and over again. Social justice and progress are the absolute guarantors of riot prevention.”). For a contemporary commentary on the “unheard” and street protests after the killing of George Floyd, see Jeffrey C. Billman, “The Language of the Unheard,” *IndyWeek*, June 3, 2020, at <https://indyweek.com/news/northcarolina/the-language-of-the-unheard/>.

¹³ A searing call to hear the voice of the afflicted was the 1980s AIDS activists’ cry “Silence = Death,” see Theodore Kerr, “How Six NYC Activists Changed History With “Silence = Death”: The collective that created the Silence = Death poster is back after thirty years to recall its origins and launch new art,” *The Village Voice*, June 20, 2017, at <https://www.villagevoice.com/2017/06/20/how-six-nyc-activists-changed-history-with-silence-death/>. This call has been echoed to confront white supremacists, see Chris Cormier Maggiano, “Silence = Death,” *Huffington Post*, Sept. 8, 2017, at https://www.huffpost.com/entry/silence-death_b_59b29961e4b0d0c16bb52be3.

¹⁴ James Baldwin, “As Much Truth As One Can Bear,” *New York Times Book Review* (14 January 1962), reprinted in Randall Kenan, ed., *The Cross of Redemption: Uncollected Writings* (2011), see https://en.wikiquote.org/wiki/James_Baldwin.

¹⁵ Stewart, “Remedying Disregard,” at 224. Others using a visual metaphor for regulatory disregard include Howard Margolis, *Dealing with Risk* (U. Chicago Press 1996) (“on-screen vs. off-screen”); Wendy Wagner, “Regulating by the Stars,” in Cary Coglianese ed. *Achieving Regulatory Excellence* (2017) at 45 (“Blind spots in the consideration of important interests”).

governance and leaves gaps on issues of greater interest to weaker states or non-state actors.¹⁶ To illustrate, he notes “The disregarded include, for example, vulnerable poor communities inundated as a result of climate change, developing-country workers in global supply chain factories, sick people lacking access to essential medicines because of international patent-protection regimes, refugee claimants, individuals targeted for UN Security Council sanctions, and Haitians stricken by cholera due to UN peacekeepers’ negligence.”¹⁷ The variety of these examples indicates the wide range of legal subject matter areas and associated myriad institutions.

Stewart recognizes that these problems also occur at the domestic level, notably the decisional externalities associated with specialized mission-driven institutions such as regulatory agencies. But he points out that the checks on such disregard may be stronger nationally and weaker internationally: “In the domestic regulatory context, legislatures and courts often serve to protect the interests and concerns of more weakly organized groups and individuals but are far less able to influence global regulatory decision making. As a result, many of the most important global regulatory bodies are dominated by powerful executives, often in alliance with well-organized economic actors, reinforcing problems of disregard and resulting decisional externalities. No global systems of social insurance or redistribution exist to offset the resulting losses suffered by the disregarded.”¹⁸

That said, the problem of disregard can also be severe at the domestic level (and the national government’s coercive power may be greater than at the international level). In some national legal systems, weaker actors and disfavored or disenfranchised groups suffer serious disregard and harm. Such dysfunctions and discrimination – negligent or intentional disregard – are evident in autocratic regimes, but they can also afflict ostensibly democratic systems with checks and balances,¹⁹ such as when narcissistic leaders disregard the public good.²⁰ Redistributive fiscal mechanisms to compensate those burdened by other laws or losses are often tenuous or absent, as Stewart noted in 1975.²¹ Laws with overall net benefits may go underprovided if their benefits are diffuse (such as environmental quality) and their costs are concentrated on organized interests.²² To be sure, occasional crisis events may open windows for pro-regulatory political momentum, and odd coalitions may sometimes ally to promote regulatory action.²³ But domestic regulatory institutions are often fragmented mission-driven institutions,

¹⁶ Stewart, “Remedying Disregard” at 212-13. See also Peter H. Sand & Jonathan B. Wiener, “Towards a New International Law of the Atmosphere?,” 7 *Göttingen J. Int’l L.* 195-223 (2016) (critiquing fragmentation in international environmental law).

¹⁷ Stewart, “Remedying Disregard,” at 211-12.

¹⁸ Stewart, “Remedying Disregard,” at 212.

¹⁹ See Richard Rothstein, *The Color of Law: A Forgotten History of How Our Government Segregated America* (2017).

²⁰ See Timothy Snyder, *The Road to Unfreedom* 274 (2018) (describing an elected “sadopopulist, whose policies were designed to hurt the most vulnerable part of his own electorate”).

²¹ See Stewart, “Reformation,” *supra* n.1.

²² See Stewart, “Reformation” at 1713-15; James Q. Wilson, *The Politics of Regulation* (1980); William Eskridge, “Politics Without Romance,” 74 *U. Va. L. Rev.* 275-338 (1988); Wendy Wagner, “Regulating by the Stars,” in Cary Coglianese, ed., *Achieving Regulatory Excellence* (2017) at 41-43. Yet “underprovided” is not the same as “unprovided” – we do observe major environmental laws, more than strict public choice theory would predict, though perhaps less protection than optimal, see Richard L. Revesz, “The Race to the Bottom and Federal Environmental Regulation: A Response to Critics,” 82 *Minn. L. Rev.* 535 (1997); Jonathan B. Wiener & Barak Richman, “Mechanism Choice,” in Daniel Farber & Anne Joseph O’Connell, eds, *Public Choice and Public Law* (2010). And regulatory agencies are able to provide significant general benefits, see Steven P. Croley, *Regulation and Public Interests: The Possibility of Good Regulatory Government* (2008).

²³ On crisis events spurring regulation, see Edward Balleisen et al., eds., *Policy Shock* (2017); Wiener & Richman, “Mechanism Choice,” *supra*; Thomas A. Birkland, *Lessons of Disaster: Policy Change after Catastrophic Events*

exhibiting bounded decision making and omitting the voices of underrepresented, marginalized or disenfranchised groups, all contributing to harmful disregard.²⁴ Jurisdictions may also exhibit “regulatory disregard” of the spillover effects on other jurisdictions (interstate externalities).²⁵

These observations are not to suggest that the solution to these dysfunctions is less government or deregulation – rather, the problem is unjustified disregard, and the remedy is due regard, as I discuss in the last part of this essay. Stewart’s emphasis on the greater weakness of global (than domestic) governance is not complacency about the domestic level, but rather adds to the critiques of governance at both scales. The important inference is that the problem of disregard offers a shared perspective for assessing the shortcomings of both global and domestic institutions. The sources of and remedies for disregard, at all scales, may have more in common than we would see if we treat global and domestic as separate types.²⁶ Addressing disregard and due regard as cross-scale issues may offer ways to bridge insights and integrate solutions across seemingly separate bodies of law and institutions. Indeed, Stewart’s article on “Remedying Disregard” stands for this proposition.

II. Efficiency/well-being and Equity/fairness: Bridging externalities and injustice

The economics of overall well-being (sometimes called economic efficiency) and distributional equity (fairness) are often posed as conflicting social goals.²⁷ Executive Orders 12866 and 13563 call for assessing both overall net benefits and distributional equity, but economic analyses of regulation have not always assessed distributional equity, and efforts to incorporate fairness into cost-benefit analysis

(2006); Robert Repetto, ed., *Punctuated Equilibrium and the Dynamics of US Environmental Policy* (2006). But see Matthew E. Kahn, “Environmental Disasters as Risk Regulation Catalysts?” 35 *J. Risk & Uncert.* 17-43 (2007) (observing that crises do not always yield policy change). On odd coalitions for regulation, see Wiener & Richman, “Mechanism Choice,” *supra*.

²⁴ These are among the key factors involved in risk-risk tradeoffs, a manifestation of regulatory externalities. See John D. Graham & Jonathan B. Wiener, eds., *Risk vs. Risk: Tradeoffs in Protecting Health and Environment* (1995), chapter 11. The problem of risk-risk tradeoffs is not regulation, or government, it is the narrow perspective – disregard – that neglects important side effects. See Jonathan B. Wiener, “Learning to Manage the Multirisk World,” 40 *Risk Analysis* 2137-2143 (10 November 2020), at <https://onlinelibrary.wiley.com/doi/10.1111/risa.13629>. Risk-risk tradeoffs can occur from individual as well as governmental actions, and at local, national and international scales, see Graham & Wiener, *Risk vs. Risk*, *supra*. On the comparative imperfections of domestic government and non-government institutions, see Charles Wolf, *Markets or Governments* (1986); Neil Komesar, *Imperfect Alternatives* (1994); Peter Shuck, *Why Government Fails So Often* (2014).

²⁵ Eleanor Fox, “Antitrust, and Regulatory Federalism,” 75 *NYU L. Rev.* 1781, 1800 (2000) (using the phrase “regulatory disregard”); Richard L. Revesz, *Federalism and Interstate Environmental Externalities*, 144 *U. Pa. L. Rev.* 2341 (1996).

²⁶ Significant interactions and “vertical borrowing” occur between national and international law. See Jonathan B. Wiener, “Something Borrowed for Something Blue: Legal Transplants and the Evolution of Global Environmental Law,” 27 *Ecol. L.Q.* 1295 (2001) (analyzing “vertical legal borrowing”); Kingsbury, Krisch & Stewart, *GAL*, *supra* (documenting extensive interactions); Aleksandar Momirov and Andria Naudd Fourie, “Vertical Comparative Law Methods: Tools for Conceptualising the International Rule of Law,” 2 *Erasmus L. Rev.* 291 (2009); Ivano Alogna, “The circulation of legal models: towards the evolution of environmental law,” in V. Sancin & M. KovičDine, eds., *International environmental law: contemporary concerns and challenges* (2014).

²⁷ Arthur Okun, *Equality and Efficiency, the Big Tradeoff* (1975). Recent work by economists associated with the incoming Biden-Harris administration argues that these two goals may be more reinforcing, because, in addition to its own harms, inequity also impairs efficiency, see Lisa D. Cook, “Racism Impoverishes the Whole Economy,” *NY Times*, Nov. 22, 2020, p.BU 12; Heather Boushey, *Unbound: How Inequality Constricts Our Economy and What We Can Do About It* (Harvard University Press, 2019).

continue.²⁸ Critics worry that cost-benefit analysis neglects distributional equity and is at odds with fairness.²⁹ At the macro level, these two goals may be integrated through social welfare functions that incorporate equity.³⁰ At the micro level, the concept of disregard can help bridge this divide.

The standard economic rationale for government regulation such as environmental law is to address market failure, notably externalities – impacts on others who are not parties to a transaction. Negative externalities, such as pollution, impose harms on others, and lead to socially excessive production of the activity generating the externality. So the standard economic remedy is to “internalize the externality” – make producers take the impacts into account – through, potentially, a government policy (depending on its net benefits).³¹ In short, externalities are a kind of disregard of impacts on others.

Meanwhile, addressing distributional equity seeks to avoid unfairness and injustice. Environmental justice seeks fair treatment and remedies for environmental risks in underrepresented, marginalized and disenfranchised communities, notably racial minority communities.³² Racism and xenophobia evince bias against the out-group – the other.³³ Indeed the metaphor of the other being treated as “invisible” (disregarded) or “seen” (regarded) has been powerfully invoked to depict racial oppression.³⁴ Unfairness and injustice are one manifestation of disregard of the other.

Perhaps the concept of disregard could help bridge the divide between economic efficiency for overall well-being, and distributional equity, fairness and justice. From both perspectives, the institutional shortcoming is disregard. Rather than treating externalities and inequity as separate categories, if we address disregard and due regard as a shared project, we may enhance mutual understanding and potentially make more progress on both.³⁵

²⁸ Richard L. Revesz & Michael A. Livermore, *Reviving Rationality* (2020), chapter 2; Richard L. Revesz, “Regulation and Distribution,” 93 *NYU L. Rev.* 1489 (2018); Lisa A. Robinson, James K. Hammitt, and Richard J. Zeckhauser, “Attention to Distribution in U.S. Regulatory Analyses,” 10 *Review of Environmental Economics and Policy* 308–328 (2016); OECD, “Equity and Cost-benefit Analysis”, in *Cost-Benefit Analysis and the Environment: Recent Developments* (2006), at <https://doi.org/10.1787/9789264010055-16-en>.

²⁹ Blake Emerson, “Reconstructing the Administrative State,” LPE Project, Jan. 18, 2018, at <https://lpeproject.org/blog/reconstructing-the-administrative-state/> (“Instead of a cost-benefit state, we need a state that simulates an egalitarian society...”).

³⁰ Matthew Adler, *Measuring Social Welfare: An Introduction* (2019).

³¹ See Stewart, “Reconstitutive Law,” *supra*, at 103-04.

³² See Robert Bullard, *Dumping in Dixie* (1990); Executive Order 12898 (1994). On persisting disregard, see Jill Lindsey Harrison, *From the Inside Out: The Fight for Environmental Justice Within Government Agencies* (MIT Press 2020) (finding that agencies sometimes still treat EJ as an “afterthought”).

³³ On out-group bias and racism, see Henri Tajfel, “Social identity and intergroup behavior,” 13 *Soc. Sci. Info.* 65-93 (April 1, 1974), <https://doi.org/10.1177/053901847401300204>. On how bias can involve disregarding the humanity of the out-group other, and how out-group bias can be overcome, see Brian Hare & Vanessa Woods, *Survival of the Friendliest* (2020).

³⁴ See Alexander Montgomery, “What It's Like to Read Ralph Ellison's *Invisible Man* in 2020,” August 5, 2020, at <https://earlybirdbooks.com/invisible-man-ralph-ellison-2020> (“The nameless protagonist of Ralph Ellison’s seminal 1952 novel *Invisible Man* begins his story after he has fully realized his invisibility—that is, the inability of people around him to see him as a person...” and “The protests going on right now are simply the latest opportunity we, the disenfranchised of the world, have seized to make ourselves known. To make ourselves visible.”)

³⁵ This shared perspective would draw on work that sees racial injustice as invidious disregard, see Lani Guinier & Gerald Torres, *The Miner’s Canary: Enlisting Race, Resisting Power, Transforming Democracy* (Harvard Univ. Press, 2003); Felix S. Cohen, “The Erosion of Indian Rights, 1950-1953: A Case Study in Bureaucracy,” 62 *Yale L.J.* 348, 390 (1953). Cf. Ann Laura Stoler, *Along the Archival Grain* (Oxford: 2009), chapter 7 (critiquing the “politics of disregard” and “imperial disposition of disregard” among colonial settlers). And it could draw on work that sees

As an example, consider cap and trade systems, which are designed to increase the net benefits of environmental protection (internalizing and reducing external harms) by enabling the flexibility to undertake pollution abatement where it is least costly. If the cost of abatement varies across sites (such as for sources with different control options), and if the benefits of abatement are uniform across sites (such as for a widely mixing pollutant that causes harm in the aggregate rather than locally, e.g. CO₂), then the flexibility to trade allowances enables society to attain the aggregate reduction in pollution (the cap) at lower cost.³⁶ This cost-saving feature of allowance trading means resources can be saved for other social goods, and it may enable policy makers to adopt more stringent policies yielding more environmental protection benefits than if they used more costly policy designs.

But concerns may be raised that the locational flexibility of allowance trading could also yield harms associated with distributional equity – concerns about hotspots and about environmental justice – especially if disadvantaged communities were already facing higher exposures than other communities before the policy. As to hotspots, if the environmental impacts and hence the benefits of abatement are not uniform across sites (such as for a pollutant with locally harmful effects), then the flexibility to trade allowances could result in greater added physical harms where allowances end up being held (“hotspots”) than the avoided physical harms where allowances end up being relinquished (these might be called “coolspots”), and these concentrated hotspots might be inequitably distributed. Such a hotspot effect is not inevitable: it depends not only on the amount of emissions allowances that trading ends up yielding at each site (which is a function of the variation in abatement cost), but also on the pattern of wind or other flows that transport emissions to exposures; on the relationship of exposure to harm (the hotspot is “hot” to the degree that an added unit of exposure causes more harm when bunched together with other exposures than when spread out, and if exposures are uniformly equally harmful regardless of bunching, then trading may relocate the exposures but does not increase the net harm); and on the stringency of the cap (a tight cap could benefit all sites even with non-uniform harms).³⁷ Thus, depending on the patterns of abatement, transport, exposures, and harms, a cap and trade policy could actually drive greater abatement at sites that reduce physical harms (including for disadvantaged communities) than is added at other sites, for a distributional improvement.³⁸ Moreover, an allowance trading policy can be combined with ambient limits to help avoid local hotspots.³⁹ But, that said, even if hotspots are not exacerbated compared to the pre-policy situation, and even if the tighter aggregate cap reduces pollution overall, still in some cases the locational flexibility under trading might pose distributional equity concerns if some communities end up exposed to more pollution than others ex post (i.e. if all benefit compared to the situation before the policy, but some benefit less than others because they end up with more residual

externalities as unjust/unfair, see Thomas Lambert, *How to Regulate* (2017) at 22-23 (referring to externality as “injustice to the party bearing the spilled-over cost” and as “unfairness to the bearer of the externalized cost”).

³⁶ Ackerman & Stewart, *supra* n.2.

³⁷ See Jonathan B. Wiener, “Hormesis, Hotspots and Emissions Trading,” 23 *Human & Experimental Toxicology* 289-301 (June 2004). It also matters to which alternative scenario one compares the trading policy: it is unlikely that a cap and trade policy would concentrate emissions at a site more than under no policy, because it is unlikely that a firm would buy allowances to emit even more than it had emitted when it was free to emit (under no policy) (unless other changes in e.g. industry structure or land prices affect concentration). Still, a cap and trade policy could concentrate emissions more than a strict uniform policy without trading (though at higher cost).

³⁸ For evidence of improved distributional equity under allowance trading, see Danae Hernandez-Cortes and Kyle C. Meng, “Do Environmental Markets Cause Environmental Injustice? Evidence from California’s Carbon Market,” NBER Working Paper No. 27205 (May 2020), at <http://www.nber.org/papers/w27205>.

³⁹ Jonathan Remy Nash and Richard L. Revesz, “Markets and Geography: Designing Marketable Permit Schemes to Control Local and Regional Pollutants,” 28 *Ecol. L.Q.* 569-661 (2001).

exposure than others).⁴⁰ Such effects – hotspots compared to the pre-policy situation, or inequities across beneficiaries *ex post* – could be understood as disregard of inequities arising from the relative residual externality. Remedying such disregard could be understood to be part of remedying the overall social losses due to both the pollution and the policy.

III. Administrative, Environmental and Other Systems: Crossing domains

As Stewart shows, disregard may occur in global and domestic administrative institutions. US administrative law has sought to remedy disregard through statutory and judicial requirements for agencies to include participation of affected interests,⁴¹ and to avoid arbitrariness by giving due regard to all important impacts and options.⁴² In US environmental law, the flagship NEPA statute requires impact assessment to prevent disregard.⁴³ Executive oversight calls on agencies to give due regard to regulatory impacts, including benefits, costs, and ancillary impacts (co-benefits and countervailing risks).⁴⁴ These two modes of regard – environmental impact assessment (EIA) and regulatory impact assessment (RIA) – are sometimes posed as rivals, but their shared purpose in avoiding disregard could offer common ground.

⁴⁰ See Hernandez-Cortes and Meng, *supra* n.39 (estimating the relative “EJ gap”); Meredith Fowlie, Stephen P. Holland and Erin T. Mansur, “What Do Emissions Markets Deliver and to Whom? Evidence from Southern California’s NOx Trading Program,” 102 *Am. Econ. Rev.* 965-993 (2012).

⁴¹ Stewart, “Reformation,” *supra*.

⁴² Cass R. Sunstein, “Cost-Benefit Analysis and Arbitrariness Review,” 41 *Harv. Envtl. L. Rev.* 1 (2017); Jonathan S. Masur & Eric A. Posner, “Cost-Benefit Analysis and the Judicial Role,” 85 *U. Chi. L. Rev.* 935 (2018); *Motor Vehicles Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29 (1983) (“failed to consider . . . important aspect[s] of the problem”); *Dept. of Commerce v. NY*, -- S.Ct. – (June 27, 2019) (Breyer, concurring and dissenting) (agency’s disregard of countervailing harm is arbitrary).

⁴³ NEPA, 42 USC 4321 et seq. See *Calvert Cliffs’ Coordinating Committee, Inc. v. US Atomic Energy Commission*, 449 F.2d 1109 (DC Cir. 1971), cert. denied, 404 U.S. 942 (1972) (stressing the function of NEPA in overcoming disregard of environmental impacts). Although later cases limited the substantive weighing of impacts inferred by Judge Skelly Wright in *Calvert Cliffs*, they maintained the procedural requirement to give regard before acting. *Strycker’s Bay Neighborhood Council v. Karlen*, 444 U.S. 223 (1980); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989).

⁴⁴ Executive Order 12866 (1993); Executive Order 13563 (2011); OMB Circular A-4 (2003). See Richard L. Revesz & Michael A. Livermore, *Reviving Rationality* (2020) (critiquing disregard of co-benefits during Trump administration and advocating return to pre-2017 bipartisan consensus supporting full impact analysis); Cass R. Sunstein, “On Neglecting Regulatory Benefits,” 72 *Admin. L. Rev.* 445 (2020) (critiquing cost-only focus of EO 13771 and advocating full attention to benefits); Graham & Wiener, *Risk vs. Risk*, *supra* (advocating full impact assessment, including countervailing risks and coincident benefits); Jonathan B. Wiener, “Risk Regulation and Governance Institutions,” in *Risk and Regulatory Policy: Improving the Governance of Risk* 133-157 (Paris: OECD, April 2010) (advocating “full portfolio” impact assessment including both countervailing harms and co-benefits); John D. Graham, Jonathan B. Wiener & Lisa A. Robinson, “Co-Benefits, Countervailing Risks and CBA” (forthcoming 2020) (advocating full impact analysis including ancillary impacts, subject to net value of information); Jonathan B. Wiener, “Learning to Manage the Multirisk World,” 40 *Risk Analysis* 2137-2143 (10 November 2020), at <https://onlinelibrary.wiley.com/doi/10.1111/risa.13629> (advocating full attention to multiple risks); Daniel C. Esty, “Regulatory Excellence,” in Cary Coglianese ed. *Achieving Regulatory Excellence* (2017) at 133, 137-138 (“Regulators . . . must consider all of the relevant costs and benefits as well as the countervailing risks and impacts.”); Susan E. Dudley & Brian F. Mannix, “Improving Regulatory Benefit-Cost Analysis,” 24 *J. Law & Politics* 1–20 (2018) (“In principle, a benefit-cost analysis should be ‘complete.’ It should include all of the significant consequences of a policy decision: direct and indirect, intended and unintended, beneficial and harmful.”). Cf. Caroline Cecot, “Deregulatory Cost-Benefit Analysis and Regulatory Stability,” 68 *Duke L.J.* 1593 (2019) (arguing that deregulatory actions also require full impact analysis).

Both EIA and RIA are forms of policy foresight – seeking to envision the future consequences of important decisions.⁴⁵

Despite these laws, disregard happens. As noted, agencies may neglect environmental impacts, costs, benefits, co-benefits, countervailing risks, and distributional equity for underrepresented groups.⁴⁶ Humans may neglect impacts on the rest of nature.⁴⁷ Courts can function as one key institution to remedy disregard.⁴⁸ Standing to sue may offer an opportunity to redress disregard – to be heard in court, to be seen in the eyes of the law – but overly restrictive standing doctrine, or high costs of access to court, can exacerbate disregard.⁴⁹ Viewed broadly, the law may seek full regard, but a mission-driven organization with fragmented scope and decision costs may still disregard impacts, groups, and larger systems. Bounded decision making, omitted voice and system neglect are key sources of risk-risk tradeoffs.⁵⁰ Disregard of system dynamics leads to unintended consequences.⁵¹ Indeed many environmental problems (and policy side effects) are arguably not anomalies, but associated with the disregard of interconnected systems.⁵² Likewise, for medical safety, the problem may not be only individual physician error, but

⁴⁵ See Jonathan B. Wiener, “The Diffusion of Regulatory Oversight,” in The Globalization of Cost-Benefit Analysis in Environmental Policy (Michael A. Livermore & Richard L. Revesz, eds., Oxford Univ. Press, 2013); Jonathan B. Wiener & Daniel L. Ribeiro, “Impact Assessment: Diffusion and Integration,” in Francesca Bignami & David Zaring, eds., Comparative Law and Regulation: Understanding the Global Regulatory Process 159-189 (Edward Elgar, 2016).

⁴⁶ As one example, see Joseph Aldy, Matthew Kotchen, Mary Evans, Meredith Fowlie, Arik Levinson and Karen Palmer, “Deep Flaws in a Mercury Regulatory Analysis,” 368 *Science* 247-248 (17 April 2020), at <https://science.sciencemag.org/content/368/6488/247.summary> (critiquing disregard of important impacts in US EPA benefit-cost analysis of proposed rule to relax the Mercury Air Toxics Standard, MATS).

⁴⁷ Christopher D. Stone, *Should Trees Have Standing: Law, Morality and the Environment* (2010).

⁴⁸ Stewart, “Remedying Disregard,” *supra*.

⁴⁹ See *Friends of the Earth v. Laidlaw Environmental Services*, 528 U.S. 167 (2000).

⁵⁰ Graham & Wiener, *Risk vs. Risk*, *supra*, chapter 11; Stewart, “Remedying Disregard,” *supra* (“decisional externalities”).

⁵¹ Graham & Wiener, *Risk vs. Risk*, *supra*, chapter 11 (advocating holistic systems perspective); Robert Baldwin, “Regulatory Excellence and Lucidity,” in Cary Coglianese, ed., *Achieving Regulatory Excellence* (2017), at 115, 126 (regulation often “focus[es] attention on individual ‘silos of risk’ so that systemic or cumulative risks are neglected.”); Angus Corbett, “A Systems Approach to Regulatory Excellence,” in Cary Coglianese, ed., *Achieving Regulatory Excellence* (2017) at 255-270 (systems are complex, dynamic, linked, difficult to see and manage, pp.259-262); Paul T. Anastas and Julie B. Zimmerman, “Environmental Protection through Systems Design, Decision-Making, and Thinking,” in Daniel C. Esty, ed., *Better Planet* (2019) at 101-103 (urging “insight into the interconnections and linkages of the environment as a system, in order to generate more robust and effective solutions. ... the systems in which environmental decision makers work are integrated and complex. ... approaches that did not consider these broader systems resulted in unintended consequences,” and “Through a systems framework ... we can expect progress while minimizing negative trade-offs.”)

⁵² Jianguo Liu, Harold Mooney, Vanessa Hull, Steven J. Davis, Joanne Gaskell, Thomas Hertel, Jane Lubchenco, Karen C. Seto, Peter Gleick, Claire Kremen, and Shuxin Li, “Systems integration for global sustainability,” 347 *Science* 963 (27 Feb. 2015) (full article online), <http://dx.doi.org/10.1126/science.1258832> (“Systems integration—holistic approaches to integrating various components of coupled human and natural systems ... across all dimensions — is necessary to address complex interconnections and identify effective solutions to sustainability challenges.” and online at 1258832-7: “Unfortunately, institutions and regulations have traditionally focused on single issues and often do not have the mandate or infrastructure to address the organizational connections and detrimental spillovers.”).

For example, corn biofuels may reduce vehicle CO₂ emissions compared to petroleum, but may also increase deforestation, nitrogen fertilizer, and water use to grow crops, together increasing net GHG emissions, and may also raise food prices for undernourished populations. See Liu et al, *Science* (2015), *supra*, online at 1258832-4 – 5; Tim Searchinger et al., *Use of U.S. croplands for biofuels increases greenhouse gases through emissions from*

shortcomings in health care systems.⁵³ Financial regulation has moved to address systemic risk since the 2008 crisis.⁵⁴ In criminal justice and law enforcement, police violence against racial minorities is being debated as anomalous (“bad apples”) or as systemic dysfunction.⁵⁵

The concept of disregard and the remedy of due regard help highlight these systemic implications of narrow approaches across many areas of law. Impact assessments in administrative, environmental, and other areas of law are less rivals than allies in ameliorating disregard.⁵⁶ Systemic problems may warrant systemic and adaptive policy approaches. Interconnectedness fosters the spread of risks (e.g. pollution, pandemics, financial crises, terrorism); it also multiplies the ancillary impacts of policy responses; and it links networks of ideas for policy learning – all three heighten the need for due regard.

IV. Private and Public

It bears noting that disregard is also the subject of laws applied to private actors. Tort law and criminal law provide liability for “reckless disregard” and other variations. Yet the deterrence function of such liability may be undermined by immunities to liability to the extent that they amount to a license to disregard.

Public actors – government agencies and officials – may also be held liable for disregard, as one mechanism of accountability; but immunities may shield public actors (for example, the discretionary function exemption to sovereign immunity under the Federal Tort Claims Act and qualified immunity for police officers⁵⁷). One rationale for such shields is to avoid overdetering public actors performing socially desirable tasks.⁵⁸ But when the incidence of disregard and harm grows, so do calls for reform of

land use change, 319 *Science* 1238–1240 (2008), doi: 10.1126/science.1151861; Thomas W. Hertel et al., Effects of US maize ethanol on global land use and greenhouse gas emissions: Estimating market-mediated responses, 60 *Bioscience* 223–231 (2010), doi: 10.1525/bio.2010.60.3.8; F. Taheripour, T. W. Hertel, & J. Liu, The role of irrigation in determining the global land use impacts of biofuels, 3 *Energy Sustain. Soc.* 1 (2013).

⁵³ See Jonathan B. Wiener, “Managing the Iatrogenic Risks of Risk Management,” 9 *Risk* 39 (1998).

⁵⁴ See Balleisen et al., *Policy Shock*, supra.

⁵⁵ See Michelle Alexander, *The New Jim Crow* (2010).

⁵⁶ See Wiener, “Diffusion of Regulatory Oversight,” supra.

⁵⁷ *Harlow v. Fitzgerald*, 457 U.S. 800 (1982); Whitney K. Novak, Congressional Research Service (CRS), “Policing the Police: Qualified Immunity and Considerations for Congress” (Updated June 25, 2020), at <https://crsreports.congress.gov/product/pdf/LSB/LSB10492>.

⁵⁸ Harlow, supra. Empirical research has cast doubt on how effective the doctrine actually is in practice. Joanna C. Schwartz, “How Qualified Immunity Fails,” 127 *Yale L.J.* 1 (2017).

such immunities.⁵⁹ The Court or Congress may eventually respond to calls to revise qualified immunity.⁶⁰ Even if financial liability in litigation serves objectives of compensation and deterrence, patterns of disregard may also undermine public trust in institutions. Movements such as MeToo and Black Lives Matter express distrust of institutions that shield disregard from accountability. Recognizing the shared purpose of holding both private and public actors and institutions accountable for disregard, and comparing the incentive effects of liability, immunity and other accountability mechanisms across these actors, institutions and topics, may help heal these rifts to some degree.

V. Present and Future

A particularly difficult dimension of disregard is neglect of the future. The essence of risk and regulation implies that we need foresight.⁶¹ In the visual metaphor of disregard and regard, humanity could always use a “seer” to see the future. But urgent present needs, as well as heuristics such as availability and optimism bias, may lead decision makers to neglect the future. (Invisibility – disregard of impacts and of groups – is in a sense the converse of the availability heuristic drawing excessive regard.) Present populations may disregard the omitted voices of subsequent generations. In economic analyses, high discount rates can underweight long-term impacts.⁶² People have difficulty envisioning their own future preferences, and how policy decisions taken today may influence their future preferences.⁶³ Even if people recognize that their own preferences have changed significantly in the past, they tend to assume that there will be no change in their own preferences in the future, leading them to make erroneous choices about their own future well-being.⁶⁴ Environmental law and regulatory policies also may blithely assume a static world, but the world will change.⁶⁵ At the extreme, people and institutions may

⁵⁹ Calls for reform have come from diverse sources, e.g. *Kisela v. Hughes*, 584 U.S. –, – (2018) (Sotomayor, dissenting [Part III]) (expressing concern that qualified immunity doctrine has unevenly shielded police and allows increasing abuses); *Ziglar v. Abbasi*, 137 S. Ct. 1843, 1871-72 (2017) (Thomas, J., concurring) (arguing that qualified immunity is judicial policymaking and should be reconsidered); *Thompson v. Clark*, No. 14-CV7349, 2018 WL 2997415 (E.D.N.Y. June 11, 2018) (Weinstein, critiquing doctrine of qualified immunity as shielding abuses), at <https://images.law.com/contrib/content/uploads/documents/389/33643/Larry-Thompson-immunity.pdf>; Jay Schweikert, “Openings in the Front in the Campaign Against Qualified Immunity,” Cato Institute blog (June 12, 2018), at <https://www.cato.org/blog/openings-front-campaign-against-qualified-immunity>; Joanna C. Schwartz, “The Case Against Qualified Immunity,” 93 *Notre Dame L. Rev.* 1797 (2018); Karen Blum, “Qualified Immunity: Time to Change the Message,” 93 *Notre Dame L. Rev.* 1887 (2018); William Baude, “Is Qualified Immunity Unlawful?” 106 *Cal. L. Rev.* 45 (2018). Cf. *Richardson v. McKnight*, 521 U.S. 399, 411 (1997) (Breyer, opinion of the Court) (holding that private prison guards are not entitled to qualified immunity, and observing that concerns that liability could overdeter individual decision making can be addressed through indemnification of individual employees and institutional-level responsibility for policy).

⁶⁰ Novak (CRS), *supra*.

⁶¹ Peter Bernstein, *Against the Gods: The Remarkable Story of Risk* (1996).

⁶² See Revesz & Livermore, *Reviving Rationality* (2020), chapter 8 (discussing discount rates on climate change impacts).

⁶³ See Daniel T. Gilbert, *Stumbling on Happiness* (2006); Gilbert & Wilson, “Prospection,” *supra*; Stewart, “Reformation,” *supra*, at 1704-05 (observing difficulties of incorporating future preferences and policies’ preference-shaping effects into economic analysis of policy decisions); R. Douglas Arnold, *The Logic of Congressional Action* (1990) (successful legislators foresee voters’ potential future preferences, rather than only catering to present preferences).

⁶⁴ See Jordi Quoidbach, Daniel T. Gilbert & Timothy D. Wilson, “The End of History Illusion,” 339 *Science* 96-98 (2013).

⁶⁵ See Daniel Botkin, *Discordant Harmonies* (1990); Jonathan B Wiener, “Law and the New Ecology,” 22 *Ecol. L.Q.* 325 (1995); Jonathan B Wiener, “Beyond the Balance of Nature,” 7 *Duke Envtl. L. & Policy Forum* 1 (1996); P.C.D. Milly et al., “Stationarity is Dead: Whither Water Management,” 319 *Science* 573-574 (2008), <https://science.sciencemag.org/content/319/5863/573>; Robin Craig, “‘Stationarity Is Dead’ —Long live

particularly disregard remote scenarios of catastrophe, as a result of factors such as the availability heuristic (overweighting recent salient experience), psychic numbing of compassion for large numbers of those harmed, and underdeterrence of devastating impacts that would disable ex post remedies.⁶⁶

Disregard of the changing future may, one hopes, be remedied in part by designing law and policy to learn. The emergence and maturation of environmental law itself represents a learning process.⁶⁷ The remedies for disregard advanced by Stewart in 1975 and 2014, including improved participation and accountability for both US and global governance, reflect a learning process as institutions take account of past harms and apply sanctions and other remedies ex post. We can go further by building adaptive learning into the regulatory system, through mechanisms such as ex ante impact assessment, planned monitoring of key variables, ex post retrospective review, ongoing periodic review, safety boards to learn from crises, adaptive licensing, discretionary reviews, and automated adjustment settings.⁶⁸ Some environmental laws already provide for periodic reviews (e.g. EPA reviews of the National Ambient Air Quality Standards [NAAQS] every 5 years). Planned adaptive regulation can be costly (in staff, data collection, and potential policy instability), so it may not be warranted in all cases; it seems especially apt when disregard of significant change would pose serious costs or harms.⁶⁹ Importantly, planned adaptive regulation should take account of full impacts analysis – including benefits, costs, co-benefits, countervailing risks, and distributional equity – and not fall victim to narrow disregard.⁷⁰ We could test different approaches to adaptive regulation to see how they perform in improving due regard of the future.⁷¹

transformation: Five principles for climate change adaptation law,” 34 *Harv. Envtl. L. Rev.* 9-75 (2010); P.C.D. Milly et al., “On Critiques of “Stationarity is Dead: Whither Water Management?” 51 *Water Res. Rsch.* 7785-7789 (2015), <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2015WR017408> .

⁶⁶ Jonathan B. Wiener, “The Tragedy of the Uncommons,” 75 *Global Policy* 67-80 (2016).

⁶⁷ Daniel A. Farber, “Environmental Protection as a Learning Experience,” 27 *Loyola L.A. L. Rev.* 791–807 (1994).

⁶⁸ See Balleisen et al., *Policy Shock*, supra; Lori S. Benneer & Jonathan B. Wiener, “Built to Learn: From Static to Adaptive Environmental Policy,” in Daniel C. Esty, ed., *Better Planet* 353-360 (2019); Wendy Wagner, William West, Thomas McGarity, and Lisa Peters, “Dynamic Rulemaking,” 92 *NYU L. Rev.* 182–266 (2017); David Vogel, “The Role of Policy Learning and Reputation in Regulatory Excellence,” in Cary Coglianese, ed., *Achieving Regulatory Excellence* 207-224 (2017); Justin R. Pidot, “Governance and Uncertainty,” 37 *Cardozo Law Review* 112–84 (2015); Robin Craig and J.B. Ruhl, “Designing Administrative Law for Adaptive Management,” 67 *Vanderbilt Law Review* 1–87 (2014); Lawrence E. McCray, Kenneth A. Oye, and Arthur C. Petersen, “Planned Adaptation in Risk Regulation,” 77 *Technological Forecasting & Social Change* 951–59 (2010).

⁶⁹ See Benneer & Wiener, “Built to Learn,” supra. Adaptability involves tradeoffs. “The law must be stable, and yet it cannot stand still.” 4. Roscoe Pound, *Interpretations of Legal History* (Cambridge: Cambridge University Press, 1923), at 1. Sometimes the need is for very durable law. See John Coffee, “The Political Economy of Dodd-Frank: Why Financial Reform Tends to Be Frustrated and Systemic Risk Perpetuated,” 97 *Cornell Law Review* 1019-82 (2012); Richard J. Lazarus, “Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future,” 94 *Cornell Law Review* 1153–233 (2009); Aaron L. Nielsen, “Sticky Regulations,” 85 *University of Chicago Law Review* 85–143 (2018).

⁷⁰ See Wiener, “Iatrogenic,” supra (critiquing Charles Lindblom’s “incrementalism” for its disregard of side effects). Thus “policy learning” and “adaptive regulation” need not be “closely related to ... incrementalism,” see E. Donald Elliott, book review of Cary Coglianese, ed., *Achieving Regulatory Excellence* (2017), 38 *Risk Analysis* 1758, 1760 (2018). Adaptive regulation can be more comprehensive than incrementalism by including ancillary impacts.

⁷¹ Extreme catastrophic risks, however, may be so rare and so devastating that we cannot learn how to manage them through experience or experimentation, so we must rely on judicious precaution – still accounting for risk-risk tradeoffs and other forms of disregard. See Wiener, “Tragedy of the Uncommons,” supra.

VI. Remedies: From Disregard to Due Regard

I have suggested that the concept of disregard may help bridge and embrace many different issues – including some seen as antagonists in past debates, yet sharing the common purpose of overcoming disregard. Of course, disparate viewpoints might agree that they are all disregarded but disagree on which deserve greater regard, or which reforms are most warranted. As Professor Stewart has said, the remedy for disregard is regard. But attention is not infinite; we cannot watch everything all the time.⁷² As Stewart notes, the problem is unjustified disregard – which implies that the remedy is not total regard but due regard. Disregard evinces disrespect; due regard promises respect, but tempered by the reality that respect for all inevitably involves tradeoffs and judgments.

We have seen some of the serious harms of unjustified disregard and thus the benefits of better regard. There are also costs of better regard. Many of the reasons for unjustified disregard are heuristics and institutional dysfunctions that warrant remedies, including fragmented mission-driven institutions; bounded decisions and heuristic errors such as availability and psychic numbing; the omitted voice of those affected; and out-group bias, including racism, sexism, and xenophobia. Disregard can be intersectional. Beyond these lamentable reasons for disregard, consider the costs of greater regard. These include the costs of attention, such as time and expertise, as well as the potential opportunity cost of other issues given less regard. Government agencies face difficulties in assembling widely dispersed information on social dynamics.⁷³ Excessive regard could lead to delay or even paralysis by analysis.⁷⁴ Total regard for all issues and all persons, whether supervised by government or private actors, could raise the specter of totalitarian regard – an all-seeing eye that intrudes on legitimate privacy and liberty interests.

Thus due regard need not be unlimited or maximum regard, but rather reasonable, appropriate, optimal regard. An insight from decision analysis is that the value of information (VOI) should be balanced against its costs (COI).⁷⁵ Stewart writes that “what constitutes unjustified disregard in particular circumstances is often contestable.”⁷⁶ Likewise there can be reasonable disagreements about justified due regard. As VOI increases (e.g. if avoidable harms of disregard increase) and as COI decreases (e.g. if innovations improve information gathering), the range of justified due regard grows. This implies that if the expected harms of disregard are large, it can be worth making additional efforts and opening additional avenues to take these impacts into account; and if the expected costs of doing so – including in delay – are large, that can warrant more modest regard. Further, as the cost of regard changes over time – plausibly declining as information becomes more accessible – the remedy of regard should become more comprehensive. At each point, the optimal decision would balance the policy improvements from broader analysis with the associated decision costs (including delay).⁷⁷ Adaptive legal systems can promote dynamic improvements that reduce the costs of information thereby warranting broader regard. Given the

⁷² See Gilbert & Wilson, “Prospection,” *supra*.

⁷³ Cass R. Sunstein, “The OIRA: Myths and Realities,” 126 *Harv. L. Rev.* 1838, 1843 (2013).

⁷⁴ Donald T. Hornstein, “Reclaiming Environmental Law: A Normative Critique of Comparative Risk Analysis,” 92 *Colum. L. Rev.* 562 (1992); Wiener, “Iatrogenic,” *supra*.

⁷⁵ See Detlof von Winterfeldt, Robert Kavet, Stephen Peck, Mayank Mohan & Gordon Hazen, “The Value of Environmental Information without Control of Subsequent Decisions,” 32 *Risk Analysis* 2113–2132 (2012).

⁷⁶ Stewart, “Remedying Disregard,” at 211 (emphasis in original).

⁷⁷ See Wiener, “Iatrogenic,” *supra*, at 72-74; Anthony I. Ogus, Information, Error Costs and Regulation, 12 *Int’l Rev. of Law & Econ.* 411, 416 (1992) (“to increase social welfare the legal system should aim at minimizing the sum of information costs and error costs”). Courts sometimes have asked agencies to undertake this kind of analysis, e.g. *Gas Appliance Manufacturers’ Ass’n, Inc. v. Department of Energy*, 998 F.2d 1041, 1047 (D.C. Cir. 1993) (remanding to agency to consider cost of new information compared to benefit of better rule with greater information).

harms of unjustified disregard across many topic areas, better efforts at due regard may make substantial progress.

To remedy omitted voice, to see those who were invisible, to listen to those who were unheard, measures are needed to ensure greater participation of the disregarded. Professor Stewart addresses this issue extensively in his 1975, 2003 and 2014 articles.⁷⁸ It might be helpful to draw a distinction between disregard of groups or individuals, and disregard of impacts, though of course they may overlap. Disregard of impacts seems amenable to the sliding scale of VOI/COI analysis suggested here for due regard. But disregard of people seems to warrant at least some minimum level, or several tiers, of procedural assurances of the right to be heard. These may involve what Stewart calls decisional (e.g. voting) and nondecisional (e.g. commenting) participation. Still, the tiers and types of participation might correspond to stepwise VOI/COI judgments. And greater participation of disregarded people will at times be necessary but not sufficient: in addition to seeing and hearing, decision makers will still need to weigh these interests in policy analyses.

To remedy the decisional externalities that impose harm on the disregarded, further improvements can be made in regulatory decision making. First, cost-benefit analysis (CBA) and judicial arbitrariness review should apply evenhandedly, to cover full target and ancillary impacts (both co-benefits and countervailing harms),⁷⁹ and not only to restrict undesirable regulations but also to promote desirable regulations that improve social well-being.⁸⁰ This might involve renewed use of “prompt” letters by OIRA, a supplementary executive order on maximizing net benefits, or a National Academies panel to identify net beneficial opportunities, as well as judicial or OIRA review of agency inaction and denials of petitions for rulemaking.⁸¹ Second, CBA guidelines and practice should recognize that disregard of a key impact or group can be a larger error than imprecision in estimating the target impacts.⁸² Some of the criticism of CBA for its detailed quantification (and disregard of the unquantified) could be constructively understood as seeking CBA of CBA, i.e., highlighting this point that the omission of an important impact can be a larger error than imprecision in the estimation of included impacts, in which case “better CBA” would better enhance social well-being by giving greater regard to the full scope of impacts rather than to

⁷⁸ See Stewart, “Reformation,” *supra*, at 1712 (“fair representation for all affected interests”); Stewart, “21st Century,” *supra*, at 442 (“‘interest representation’ model that seeks to assure an informed, reasoned exercise of agency discretion that is responsive to the concerns of all affected interests”). Cf. Wendy Wagner, “Regulating by the Stars,” in Cary Coglianese, ed., *Achieving Regulatory Excellence* (2017) at 40-41 (“regulatory excellence” means “the regulator is ever vigilant in locating and accounting for all affected interests.” ... “Ensuring rigorous engagement by all affected groups may best be accomplished by subsidizing participation of underrepresented groups.”).

⁷⁹ See *supra* n. ____ [citing sources on full impact analysis, incl. Revesz & Livermore, Sunstein, Graham Wiener & Robinson, Esty, Dudley & Mannix]

⁸⁰ See Sunstein, “On Neglecting Regulatory Benefits,” *supra*, at 457-458; Jonathan B. Wiener, “Better Regulation in Europe,” 59 *Current Legal Problems* 447-518 (2006).

⁸¹ See Sunstein, “On Neglecting Regulatory Benefits,” *supra*; Michael A. Livermore & Richard L. Revesz, ____ (suggesting OIRA review of agency denials for petitions for rulemaking).

⁸² Graham, Wiener and Robinson, “Co-Benefits, Countervailing Risks and CBA,” *supra*. There is a larger point here, related to the concept of disregard: good decisions must attend to both depth and breadth. The gains from detailed focus and specialized skills are important, but can be compromised by the losses from disregard of broader impacts and neglected communities. To overcome disregard, we need to see both the specific and the general. See Jonathan B. Wiener, “The Rhetoric of Precaution,” in JB Wiener et al., eds., *The Reality of Precaution* 26-27 (RFF Press/Routledge, 2011).

marginal gains in precision.⁸³ Courts should also consider the omission of key impacts – with benefits or harms – on judicial review for arbitrariness.⁸⁴ Third, CBA practitioners and oversight bodies could adopt guidelines and training to heighten attention to disregard, building on the attention to ancillary impacts and distributional equity in past guidance by seeking greater acculturation of holistic system perspectives and other-regarding views.⁸⁵

The information base for environmental and regulatory policy can be an important mechanism for seeing the disregarded. To the extent that we manage what we measure, gathering more data on otherwise omitted groups and impacts can give them added weight in policy decisions. For example, much better exposure assessment data (rather than rough assumptions or models) could come from not only satellites and the internet but also the internet of things, wearable sensors, and other techniques to monitor real-world real-time health and environmental conditions at the local and individual level.⁸⁶ Such methods could help disregarded groups and issues receive more accurate treatment – for example, more accurate and real-time assessments of exposures to pollutants across the population and notably in disadvantaged communities.

Policy design can give greater regard to omitted groups and ancillary impacts, embracing them in systems approaches. Much environmental and other regulation addresses complex interconnected systems but focuses on one risk at a time, in narrow silos, inducing unintended side effects.⁸⁷ Policy design can do better to match the scope of such systems,⁸⁸ in effect internalizing the regulatory externalities that would be spawned by narrow policies, and promoting “risk-superior” solutions that reduce multiple risks in concert.⁸⁹ For example, climate change mitigation policy should comprehensively address all major greenhouse gases (GHGs), not only CO₂, because policies aimed at reducing CO₂ alone may induce unintended increases in other GHGs such as methane (CH₄) from natural gas extraction and distribution and N₂O from nitrogen fertilizers.⁹⁰ More generally, in important cases the lesson of risk-risk tradeoffs and decisional externalities is not less regulation but expanding the scope of regulation to match the system comprehensively and internalize full effects. (As with GHGs, a more comprehensive scope can also be less costly to regulated industries than narrow regulation, by widening the flexibility to select cost-effective compliance options.)

⁸³ See the related arguments for “humanizing CBA” in Cass R. Sunstein, “Humanizing Cost-Benefit Analysis,” 2 *Eur. J. Risk Regulation* 3-7 (2011), and “warm analysis” in Jonathan B. Wiener, “Better Regulation in Europe,” 59 *Current Legal Problems* 447-518 (2006).

⁸⁴ See *State Farm*, *supra*; *Dept. of Commerce v. NY*, *supra* (Breyer opinion).

⁸⁵ Graham & Wiener, *Risk vs. Risk*, *supra*, ch. 11; Liu et al., in *Science*, *supra*.

⁸⁶ See Daniel C. Esty, “Environmental Protection in the Information Age,” 79 *NYU L. Rev.* 115 (2004). New remote sensing technologies are also improving the monitoring of pollution with both local and global impacts, e.g. Paul Tullis, “New Space Technology May Help Curb Even Small Methane Leaks,” *NY Times*, Nov. 12, 2020, p.A25. Monitoring of individual environmental exposures might elicit concerns about privacy and consent (although tracking of cellphone data and personal health/fitness monitoring are already widespread).

⁸⁷ See *supra* nn.37-38 [citing e.g. Baldwin, Anastas & Zimmerman, and Liu, on systems].

⁸⁸ See James Buchanan & Gordon Tullock, *The Calculus of Consent* (1975) (the scale of regulatory jurisdiction should match the scale of externalities).

⁸⁹ See Graham & Wiener, *Risk vs. Risk*, *supra*, ch. 1 and ch.11.

⁹⁰ This was a key argument of Stewart & Wiener, “The Comprehensive Approach ...,” *Ariz. J.* (1992), *supra*; Stewart & Wiener, *Reconstructing Climate Policy*, *supra*. We worked to cover all GHGs in the UN Framework Convention on Climate Change (FCCC) (1992). These issues arise again today in debates on fracking natural gas, biofuels, and other mitigation options. The prospect of solar geoengineering raises new risk-risk tradeoffs, potential disregard of impacts and affected groups, and governance challenges, see Khara D. Grieger, Tyler Felgenhauer, Ortwin Renn, Jonathan Wiener, and Mark Borsuk, “Emerging risk governance for stratospheric aerosol injection as a climate management technology,” 103 (46) *Environ. Systems Decisions* 1-12 (2019), DOI: 10.1007/s10669-019-09730-6 .

Structural reforms may also be needed, as Stewart observes,⁹¹ to fill gaps that omit disregarded issues and to overcome fragmentation. Remedying disregard can benefit from oversight bodies that promote better regard. OIRA and its counterparts in other legal systems can play an important role in ensuring that disregarded groups, distributional equity, and ancillary impacts (both co-benefits and countervailing harms) are included in regulatory analyses. In addition, remedying disregard may require better coordination across agencies and jurisdictions to avoid cross-domain and interstate externalities. Structural reforms could include integrating or merging agencies to reduce fragmentation and better match institutions with the systems they address.⁹² The proliferation of multiple international environmental regimes could also benefit from greater coordination and coherence.⁹³

Disregard takes on a new and urgent light after 2020 – a year of deep disregard: pandemic disease, climate crisis, economic crisis, racist violence, and threats to democracy. In 2020 we faced multiple intersecting risks which were unduly disregarded. Some of these may be healed by enlightened political leadership and constructive community conversations. And the US government has several expert bodies ostensibly overseeing key areas of risk, such as national security, climate, public health, and economic policy. But these regulatory bodies do not always adequately scan ahead for emerging risks, help set national priorities, fill gaps, resolve tradeoffs, or prepare to learn. Systemic crises evoke systemic responses that go beyond this essay – such as revamping our public health system, transforming our energy and agricultural systems, combating systemic racism, and rehabilitating our democracy.

For health, safety, environmental and security risks, we need a national risk strategy, building from disregard to comprehensive regard. The US (and other countries) should establish a “National Risk Board” to advise forward-thinking leaders on high-level risk assessment and policy issues.⁹⁴ Such a board, well-staffed and interacting with experts in diverse disciplines (including in government, at the national academies, and at universities) on the best risk analysis methods, could for example:

- scan the horizon for emerging risks,
- advise on national priority-setting among risks facing the country,
- identify disregarded gaps and distributional inequities that deserve new policies or institutions,
- help overcome fragmentation, reconcile risk-risk tradeoffs and develop risk-superior solutions,
- develop a national risk strategy for laws, policies, institutional structures, and civic action, and
- prepare to learn from unexpected disasters and assess precautions for extreme catastrophic risks.⁹⁵

Seeing our shared disregard may help open constructive dialogue, even if people differ on which disregards deserve to be remedied. Richard Stewart’s decades of insight and foresight have helped us see the problems and the path ahead. We see farther on the shoulders of Stewart.⁹⁶ Per James Baldwin, if we

⁹¹ Stewart, “Remedying Disregard,” *supra*, at 212-13.

⁹² See Graham & Wiener, *Risk vs. Risk*, *supra*, ch 11; Alejandro E. Camacho & Robert L. Glicksman. *Reorganizing Government* (2019); Emily Broad Lieb & Margot Pollans, “The New Food Safety,” 107 *Cal. L. Rev.* 1173 (2019).

⁹³ Sand & Wiener, “Towards a New International Law of the Atmosphere?,” *supra*.

⁹⁴ See World Bank, “Risk and Opportunity—Managing Risk for Development,” *World Development Report 2014*, at 278-279, <https://openknowledge.worldbank.org/handle/10986/16092> (Reform #1, “national risk boards”); Graham & Wiener, *Risk vs. Risk*, *supra*, ch. 11 (“council of risk analysts”). At the international level, a “Global Risk Panel” could undertake similar functions globally, akin to the IPCC and more fully staffed than the World Economic Forum’s Global Risks Report team; it could interact with National Risk Boards around the world.

⁹⁵ See Balleisen et al., *Policy Shock*, *supra*; Wiener, “Tragedy of the Uncommons,” *supra*.

⁹⁶ In a classic visionary metaphor, Isaac Newton said “If I have seen further it is by standing on the shoulders of giants,” see “Letter from Sir Isaac Newton to Robert Hooke” (1675), *Historical Society of Pennsylvania* (visited Dec. 18, 2020), <https://discover.hsp.org/Record/dc-9792/Description#tabnav>.

face, we may change: if we see who and what have been disregarded, we could come to see due regard as a core responsibility of good government and of good citizenship – to consider impacts on those affected, to care for those afflicted, to think through decisions, to aim the law toward due regard. Seeing the shared experience of disregard may enhance the opportunity to build better.