

The Obligation to Know: Information and the Burdens of Citizenship

Steve Vanderheiden^{1,2}

Accepted: 21 June 2015

© Springer Science+Business Media Dordrecht 2015

Abstract Contemporary persons are daily confronted with enormous quantities of information, some of which reveal causal connections between their actions and harm that is visited upon distant others. Given their limited cognitive and information processing capacities, persons cannot reasonably be expected to respond to every cry for help or call to action, but neither can they defensibly refuse to hear and reflect upon any of them. Persons have a limited obligation to know, I argue, which requires that they inform themselves and others about their role in harmful social practices, with a view toward challenging the norms that sustain such practices. In this paper, I explore this obligation to know, and the related idea of excusable ignorance, offering accounts of the epistemic burden that it entails for persons in their capacities as citizens and in the context of global climate change and of reproach as a potentially effective tool for rectifying rather than excusing ignorance.

Keywords Excusable ignorance · Information · Citizenship · Reproach · Climate ethics

Moral agents are typically assumed to be culpable only for harm that they could have reasonably been expected to anticipate causing, with ignorance below some threshold of expected knowledge being culpable but further ignorance above it excusable. In addition to the duty to avoid knowingly causing harm, then, agents have an obligation to close the gap between their extant knowledge and this threshold, rectifying their culpable ignorance in order to avoid acting upon it. But how is this threshold for what agents can reasonably be expected to know set, and what (if anything) causes it to rise or fall? Standard analyses view this burden as being limited by available information along with the costs associated with acquiring it, as no agent can reasonably be expected to know more than what is accessible (Rescher 2009). Such

✉ Steve Vanderheiden
vanders@colorado.edu

¹ Centre for Applied Philosophy and Public Ethics (CAPPE), Charles Sturt University, Canberra, Australia

² Department of Political Science, University of Colorado at Boulder, Ketchum 106, 333 UCB, Boulder, CO 80309-0333, USA

a view assumes a world in which information is scarce, with excusable ignorance marking that threshold beyond which further knowledge acquisition costs exceed what is required by precautionary obligations of due care. But abundance of information, rather than its scarcity, characterizes our world.

In world of abundant information, most small bits of knowledge are accessible to many persons at relatively low acquisition costs. But its totality exceeds anyone's cognitive capacities to effectively acquire and process, making some ignorance concerning facts relevant to harm prevention inevitable. Some ignorance of morally relevant facts may therefore be excusable even when these are readily accessible, given the vast array of other morally relevant facts from which these must be culled, insofar as none can reasonably be expected to know them all. If not set by which particular facts are accessible to agents at a given time, but rather by limits on the cognitive capacity to assimilate accessible facts, how is the threshold that demarcates excusable from culpable ignorance to be identified in a world of informational abundance? How much are agents in such a world obligated to know—that is, how can they identify which of their existing areas of ignorance are culpable and thus in need of rectification and which can be faultlessly maintain—and what factors determine the extent and content of such obligations?

Despite the temptation to retreat into willful ignorance in the face of such abundant and therefore epistemically overwhelming information, refusing to acknowledge its contradictions with one's view of the world, I shall argue for robust obligations to know, which can be differentiated between individual and collective agents and which require more extensive learning efforts in cases where more is at stake. Even with mundane everyday actions that make relatively small contributions toward distant harm through pollution or resource depletion, about which many maintain a willful ignorance in order to avoid recognizing and action upon conservation imperatives, I shall argue that some such responsibility exists. Moreover, I argue that collectives have greater obligations to know than do individuals, given their higher capacity for processing available information and the higher stakes that often accompany their decisions.

Drawing upon several analyses of excusable ignorance as well as efforts to rectify culpable ignorance, I defend an obligation to rectify one's own ignorance as well as that of others as a form of civic responsibility by which agents can take responsibility for the actions only by acting to acquire relevant knowledge where it is reasonable and prudent to do so. Our personal complicity in distant and often disregarded but not unknowable harm entails a burden of citizenship, which concerns what we know as much as what we do. Recognizing this burden, I argue, requires the revision of some contemporary applications of excusable ignorance to the assessment or responsibility for environmental harm, based in an account of the burden of citizenship that applies to persons in their capacities as citizens, rather than to states.

1 Information Overload and the Obligation to Know

Daniel Dennett describes the “obligation to know” as a “burden of guilt” that afflicts those living in societies where science and technology have made information readily available to all. As he notes, those living in past generations could limit the scope of their moral concern to the local and immediate, about which they had some knowledge, easing the burdens of a citizenship defined in far more limited terms than are common today.

Our ancestors were, relative to us, epistemically impoverished: there were few means of finding out much about non-local, non-immediate effects and problems, so they could plan and act with a clear conscience on the basis of a more limited, manageable stock of local knowledge. They were thus *capable* of living lives of virtue—of a virtue that *depended* on unavoidable ignorance (1986, 144).

As Dennett argues, these epistemic limitations absolved most persons of any moral obligations to distant others, about whom they could have scarcely been aware. “Even well into the nineteenth century, few people had the knowledge and power to have any clear obligations to anyone or anything beyond their local communities,” he notes, emphasizing the roles of both knowing and affecting. “The average person could not reasonably expect to have much effect on the lives of those in distant lands, and hence was absolved from worrying about them” (147).

Today, such limitations in both power and knowledge no longer obtain, as many persons are capable of affecting distant others through their everyday activities and able to ascertain this fact. “Modern technology has robbed us of the sorts of virtue that depend on such ignorance, for ignorance is all too avoidable today,” Dennett argues. “Information technology has multiplied our *opportunities to know*, and our traditional ethical doctrines overwhelm us by turning these opportunities into newfound *obligations to know*” (144). With our exponentially increased access to information about distant others comes a comparably heightened set of obligations, for as we are occasionally reminded, we now need to extend our concern beyond the immediate and local effects of our actions if we are to avoid complicity in harming through the indirect effects of our everyday actions. As Dennett notes, we now need to worry not only about “whether someone is standing behind our car when we back up,” but must also “wonder about the effects of our personal auto-driving (and auto-buying) activities on air pollution, acid rain, the local and global economy, and so forth” (145).

Dennett finds conventional ethical theories to be ill-equipped to address questions of how to act under the epistemic constraints that persons face in the real world, relying upon idealized analyses of what ought to be done *all things considered*. With the technological capacity to consider so much, but facing cognitive constraints that allow persons to access only a tiny fraction of the information that is both accessible and relevant to them, ethical theories that expect agents to have considered *everything* are simply unrealistic. As Dennett writes:

Information technology...helps expose the weakness of much that has passed for sound in ethics. For instance, a bench test that most ethical theories pass with ease is the problem: what should you do if you are walking along, minding your own business, and you hear a cry for help from a drowning man? But almost no one faces predicaments with that logical form anymore; instead we hear, every day, while desperately trying to mind our own business, a thousand cries for help, complete with volumes of information on how we might oblige. On this ubiquitous problem, traditional ethical systems are essentially reduced to silence or transparent handwaving (149).

Being in possession of “all of the available facts” that might connect one’s daily activities with their distant and indirect impacts in the world can in some contexts constitute an unmanageable burden, if it means that persons must sift through torrential streams of information to identify and act upon all those facts relevant to activities in which they daily engage.

While Dennett generally laments these new and overwhelming obligations to know, and finds them to be particularly damning for consequentialist ethical theories, his analysis also

raises the important question of how persons can possibly meet such obligations (to say nothing of the actions that might be required of them in response). Are we now required to listen to these “thousand cries for help” each day, and if so, how do we sift through the “volumes of information on how we might oblige” that also constitute our obligations as citizens in an information age? As Dennett notes, we now have the “daunting luxury” of information and power to “undertake a broader purpose than merely staying alive and keeping our immediate kin in the same condition,” but in wondering “which priority should engage our best efforts, we drown in the available information, unable to make truly principled decisions” (147–48).

Surely the tempting responses of ignoring or adopting an unfounded skepticism about such information cannot be justified. If true that our obligations to others have expanded as we have become global citizens in an information age, we cannot simply absolve ourselves of these new civic duties by refusing either to hear or to believe facts about our connections to them. We might try to reduce our newfound power to affect distant others along with our new knowledge about their conditions, as with efforts to withdraw from the global economy and to adopt carbon neutral lifestyles that aim to avoid complicity in harms associated with economic or ecological globalization. But the willful refusal to hear about the plight of the global disadvantaged does not obviously remove our obligations to come to their aid for reasons of humanity and based on our capacity to do so, if not our complicity in their plight. Leaving aside the changes Dennett notes about our power to affect distant others, the fact that we now have readily accessible (if also impossible to coherently and comprehensively process) information about the plight of the disadvantaged irretrievably changes what was once an excusable ignorance into a culpable one.

If persons cannot now be excused for their willful ignorance, but can neither process the “volumes of information” to which Dennett refers, how extensive is this obligation to know? At what point does our inevitable ignorance about some facts become excusable, if it does, and how as persons with projects and life plans of our own do we decide “which priority should engage our best efforts” among the many options presented daily to us, or which of the “thousand cries for help” warrants our response? Indeed, what must we do as part of this obligation to know, and how do we as citizens respond to the civic demands that it entails, including not only in our relationships with the world’s disadvantaged but also in relation to our fellow affluent citizens?

2 Excusable Ignorance

Central to the obligation to know is its extent: at what point can persons be excused for acts or omissions committed from ignorance? With regard to harmful acts, culpability for harm is often thought to be defeasible by excusable ignorance, where agents are unaware of any potential for harm at the time that they engage in the harmful action and so are excused from fault for the resulting outcome. Mere lack of awareness of likely consequences may not be sufficient to excuse acts committed from ignorance, however, as judgment is made regarding what the agent ought to have known and considered at the time of the action. Legal negligence, for example, involves ignorance about (and lack of intention with respect to) likely consequences, but also a faulty indifference to the welfare of others, and does not excuse harmful acts from culpability or liability when committed from negligent ignorance (Feinberg 1962). Under a fault-based standard of liability, excusable ignorance is nonetheless available as an

option, if the agent's ignorance can be shown to be reasonable, but no such option exists under a strict liability standard, for which an agent's knowledge and intentions are irrelevant. An obligation to know is therefore compatible only with fault-based liability, or non-overlapping causal and moral responsibility, for it carves out epistemic terrain that it expects agents to assimilate and act upon, bounding this obligatory knowledge (which agents could be faulted for not acquiring) with epistemic terrain within which ignorance is viewed as reasonable and therefore excusable.

As Nicholas Rescher notes, excusable ignorance "prevails in circumstances where there is a plausible excuse of the individual's being ignorant," while culpable ignorance "obtains when the requisite information is available, but insufficient, incompetent, or inadequate efforts are made to obtain it" (2009, 11). At issue therefore is the *difficulty* involved in rectifying existing ignorance along with the agent's effort at such rectification, and for Rescher the moral demands to rectify ignorance depend on context. Specifically, the burden depends upon the weight of what persons might ignorantly cause, according to Rescher, and the expected level of effort at ignorance abatement must be proportional to the expected consequences of acting from the initial ignorant position. Those more dangerously ignorant must assume greater costs in rectifying their own ignorance, as Rescher notes: "If something significant is at stake—either *prudentially* in affecting a person's well-being or *morally* in affecting the well-being of others—we would expect people to devote duly proportionate efforts to remove vincible ignorance ["that which an individual can overcome with a reasonable amount of effort"] and would fault them (prudentially or morally) for not doing so" (12). Since culpable ignorance is "ignorance where we have every right and reason to expect that there should not be any," prevailing standards for distinguishing excusable from culpable ignorance involve reasonability, or what persons could reasonably be expected to have known under the circumstances.

One way of expressing the moral failure in negligence is to hold the offender responsible for exercising some threshold of care for the welfare of others, where care entails some duty to mind causal connections between one's actions and their effects upon others, assessing negligence as exhibiting willful disregard of that welfare. Negligent acts involve some set of facts or moral rules that the offender did not cognitively recognize: they may for example have failed to account for the risks of harm to others generated by their negligence, whether in terms of factual ignorance about their role in causing that risk or moral ignorance about the wrongness of its imposition. By stipulating that a reasonable person would have cognitively recognized these moral rules and empirical facts, judgments about negligence are likewise assessments of what persons have a responsibility to know, as it involves a culpable ignorance by which agents fall short of this standard, and thus under what circumstances the wrongful harming of others warrants *ex ante* or *post hoc* state interference. The duties of care entailed by this obligation are therefore in part epistemic responsibilities: the wrongness of these offenses postulates a responsibility to know and act upon some set of facts or moral rules, where those facts or rules demarcate excusable ignorance from negligence. Since ignorance of those rules or of the actions that violate them prevents any intentional obedience to their moral prescriptions, moral duties to avoid harming entail corresponding duties to make oneself aware of applicable moral rules and of the manner in which any of our voluntary actions might run afoul of them, shedding both the factual and moral ignorance that allow culpable if unintended harming. While charges of negligence typically arise only when harm results from the negligent action, whereas its wrongness lies in this epistemic failure rather than its consequences, the duty of care associated with the obligation to know can be violated even without harm resulting from the breach. Agents can therefore be culpably ignorant without causing

culpable harm, as when negligently exposing others to elevated risk that but for luck fails to cause injury.

3 Factual and Moral Ignorance

As noted above, ignorance concerning either facts or moral rules can potentially excuse harm that results from either. Gideon Rosen illustrates moral ignorance by asking whether Smith, a “run of the mill American sexist circa (say) 1952,” might be blamed for the “moral ignorance” that leads him to treat his daughters in a way that is, unbeknownst to him, “unfair and therefore wrong” (2003, 66). As a “complacent sexist,” the basis of Smith’s differential treatment of his male and female offspring is simply “an undefended axiom of common sense” (67). While Smith might be blamed were he actually complacent about his beliefs, Rosen supposes that he is aware of and critically reflects upon opposing views concerning gender equality, but these fail to “dislodge his own sense of what is evidently correct.” Smith’s ignorance cannot be faulted unless “arguments against his view were readily available and manifestly compelling” (which is “unlikely”), Rosen suggests, and he cannot be blamed for failing “to see through a pervasive and well-protected ideology.” Smith would in this case be wrong for harming his daughters but blameless for his sexist acts, he argues, as the moral ignorance from which he acted would have been a sign of “ordinariness” rather than “culpable negligence or recklessness” (67–8). Rosen notes that it would be “unseemly” for Smith to “do anything but ‘accept responsibility’ for his behavior” (68) when later disabused of his sexism, but his excusable ignorance would defeat any responsibility for his actions while he remained morally ignorant. His proper response to his later awareness of the moral facts would be one of “agent regret” rather than “guilt or self-reproach,” which implies culpable ignorance, and others could not “hold the bad consequence against him in the manner characteristic of blame” (68).

In Rosen’s example, Smith knowingly engages in differential treatment of his sons and daughters, but is ignorant of the wrongness of doing so. This form of ignorance—about moral rules or precepts of justice—is rooted in unjust social norms that Smith cannot reasonably be expected to transcend, according to Rosen, given how pervasive and entrenched they were in Smith’s time. While this kind of ignorance cannot *justify* Smith’s actions, which are still wrong, it can justify the withholding of externally-imposed blame. Smith may later blame himself for his sexist actions (or for the sexism itself), and may *take* responsibility for his wrongful past actions by seeking to rectify them later on, but the kind of ignorance involved here concerns a standard of fairness which in Smith’s time would not have been accessible to Smith as a public norm, according to Rosen, much less one that others could tenably blame Smith for not rejecting. Smith and others around him lived in a sexist society in which defensible norms of gender equality and equal treatment were not yet widely held, while sexist beliefs and behavior were reinforced by widely held public norms. While Smith would deserve commendation for transcending and challenging such norms, had he done so, Rosen denies that he should be blamed for failing to do what nearly all of his fellows likewise failed in recognizing. His moral ignorance was not his alone, but was part and parcel of the society in which he lived. Any blame for the sexism that it embraced would be collective, not assigned to its members individually.

While Smith cannot be blamed for his moral ignorance, neither is he excused by it, since his acts toward his daughters are still wrong. In withholding blame and reproach for his sexism—though Rosen argues that Smith can and should blame himself for his past actions once he

sheds his moral ignorance about gender equality—Rosen suggests that such ignorance can mitigate moral transgressions, if not excuse them. Rosen’s assessment that a reasonable male person residing in a deeply sexist society could not be expected to transcend ignorant public norms suggests that moral ignorance mitigates but cannot fully excuse acts committed from it in the way that factual ignorance can, despite errors of both kinds leading to the same conclusion that the act in question is morally permitted. Whether or not actions warrant external blame and reproach when justified by widely held forms of moral ignorance shall be considered further below, but note for now that Rosen’s claim is that Smith cleared a low bar in his obligation to know by adopting sexist attitudes and beliefs that would have been common in his time but not the high bar of recognizing the moral error in those attitudes and beliefs or challenging those prevailing but harmful public norms.

4 Responsibility for Ignorance

Understood as factual or moral ignorance for which persons can be faulted, the notion of excusable ignorance introduces a puzzle: persons are held culpable for certain kinds of omissions (failures to learn or know) over which they are presumed to have control (else they could not be faulted for them), but their ignorance often undermines the cognitive mechanism of that control. If, as Rescher claims, we must expend greater effort in rectifying our more potentially harmful ignorance, then we must be able to estimate the harmful effects of something about which we are ignorant. But harmful factual ignorance is not typically detachable from ignorance about consequences of that factual ignorance. Someone might, from factual ignorance about wastewater treatment systems, not realize that pouring some poison down the drain would contaminate a local lake, and could be faulted for doing so only if the information about this harmful consequence of improper disposal was reasonably accessible. If it was not, and they were genuinely rather than willfully ignorant about their action having this consequence, the agent would most likely also be ignorant *about* their ignorance, and therefore also its effects. Deliberate efforts to glean facts like “this action causes harm” may depend upon some prior recognition that such facts are something that ought to be discovered, but ignorance about them may prevent their discovery by providing no motivation for any search.

For example, suppose that I through my culpable ignorance inadvertently support an unjust labor practice by purchasing a garment that was produced through slave labor, when that fact could have been obtained through online research of NGO reports on slave labor camps connected to separate research into the origin of my garment’s production. While I try to be a conscious consumer and find slavery to be evil, my awareness of its existence in the manufacture of garments for sale in my country is dim, having read or heard nothing about it from the media that I follow or human rights NGOs to which I subscribe. In this case, not only would I have failed to know that *this* garment bore that taint (i.e., I failed to check on the garment-slavery connection before my purchase), but I would also have failed to know that *any* garments were tainted in this way (i.e., I would not have know to check for this in the first place). While I may strictly speaking be in control of my ignorance in this case, and so could be held responsible for failing to disabuse myself of it, the difficulty in ascertaining the pertinent information would be compounded by my ignorance of the bases for supposing that I should be looking for it.

Where persons willfully disregard facts about their potential causation of harm, the element of control remains and the culpability of their ignorance can be more clearly shown. When, on the other hand, they are ignorant about their own ignorance—as in my ignorance about the role of slavery in garment production—the control and basis for culpability is less clear, and the reasonableness of the harmful ignorance is greater. As the amount of information that could potentially link our consumption choices with distant harm increases, the more likely it becomes that a reasonably prudent person might remain ignorant about some way in which their own actions lead indirectly to that distant harm. Excusable ignorance, that is, can result from too much as well as too little information being available.

Given epistemic conditions for exercising moral agency that hold agents responsible only for what they could have reasonably anticipated might result from their actions, one might wonder how persons could be expected to rectify their own harmful ignorance in cases where that harm is not apparent to the senses and information linking our actions to it is not readily accessible. As Michael Zimmerman notes, this could undermine blame for wrongful actions entirely, as nobody is fully in control of their own ignorance. Since, he argues, “one is culpable for behaving ignorantly only if one is culpable for being ignorant” (1997, 423), excusable ignorance would seem to prevail so long as persons are (as is often the case) ignorant of their own ignorance. Zimmerman claims that agents must be “cognitively connected” to outcomes for which persons can be held culpable in order to be held responsible for them, requiring not merely the existence of pertinent information linking one’s individual actions to morally bad outcomes, but also the agent’s awareness of this information and its cognitive assimilation if not necessarily its incorporation into values or behavior. According to Zimmerman’s analysis, culpability for harm is thus quite rare and difficult to establish where ignorance of any kind is concerned, for it requires a culpable neglect to disabuse oneself of ignorance with the knowledge that such complacent ignorance might lead to wrongful harm. One must foresee that one’s latent ignorance *could* result in some wrongful harm—a causal connection that is often obscured by the original ignorance—and then opt to maintain that ignorance against countervailing precautionary duties, in order to be culpable for actions that follow from factual ignorance.

The control condition that Zimmerman stipulates therefore risks creating an overly expansive view of excusable ignorance with correspondingly narrow obligations to know, with the moral hazard that follows. Absent a substantial obligation to seek out knowledge that could potentially reveal one’s complicity in harmful actions or omissions, culpable ignorance would be rare or impossible, thereby encouraging ignorance and the harmful acts that result from it rather than the informed precaution that the obligation commends. To illustrate, suppose that the same cloud of ignorance about climate change simultaneously made me ignorant about its harmful effects upon others *and* my potential role in contributing to it, as I take little notice of my role in contributing toward problems that I don’t know to exist. I could not in this case, according to Zimmerman’s analysis, be culpable for my harmful acts committed from ignorance about their causal role in climate-related harm, since I would lack the requisite cognitive connection to the outcomes to which I contribute. Nor would I be culpable for my ignorance itself, since I would lack any basis for anticipating harm to result from it, given the lack of any observable impacts from my carbon-emitting actions.

In such cases, even willful ignorance would seem to be able to excuse harmful actions of mine, as one kind of ignorance fortifies another against blame, serving as a buffer against culpability as well as other knowledge acquisition costs. It is only through being involuntarily disabused of my factual ignorance that I could ever become culpable for my future harmful

actions. With regard to skepticism toward the facts of climate science, to which many cling with tenacity, Zimmerman's standard is too permissive, countenancing as it does all but the most direct and obvious forms of harming so long as persons ignore widely disseminated facts like those confirming human drivers of dangerous climate change. Insofar as precautionary duties require agents to attend to harmful consequences of their actions, the higher-order ignorance that Zimmerman allows to exonerate ignorant actions can and should be faulted.

An effective obligation to know would require that reasonable efforts be made to acquire and cognitively recognize facts that are potentially relevant to one's future action, prior to the recognition that such facts are indeed relevant (or the discovery that they are not), defeating the temptations toward willful ignorance described above but also expanding the search terms for those ignorant about which of their current areas of ignorance are most dangerous and thus most in need of rectification. While such a requirement reignites worries about the expansive nature of the obligation similar to those expressed by Dennett, no coherent obligation to know can apply only to those already knowledgeable and be defeated by ignorance so profound that it cannot recognize its own existence. It must, in other words, reject Zimmerman's claim that ignorance resulting from ignorance be excused, holding all persons to a higher epistemic standard. Only ignorance *of* moral or empirical facts, where persons make sufficient efforts to obtain those facts but remain ignorant of them, and not ignorance *about* their existence of the kind that would prevent such efforts from being initiated, can excused ignorantly-caused harm, lest the appeal of ignorance as an all-purpose antidote to culpability for harming be heightened.

5 Information Quantity and Processing Capacity

In addition to being too narrowly conceived, the obligation to know also cannot be made too broad, for reasons noted by Dennett. The mere *availability* of information cannot in itself mark the boundary between excusable and culpable ignorance, even if that information is readily available (for example, in published journals or scientific reports that can be accessed online or through libraries), since the volume of readily available information now far exceeds any person's ability to assimilate more than a small fraction of it. Following Rescher, the sufficiency or adequacy of efforts to obtain information relevant to a given act prior to its commission divides excusable from culpable ignorance, with greater efforts required in cases of more serious consequences. Agents making adequate efforts to rectify their latent ignorance could thus be excused for their failure to do so, with greater efforts expected in cases involving more serious consequences. It would not be reasonable to expect all citizens to possess the knowledge held by a specialist in some area, or to devote as much time to learning about that area as someone with an economic or professional stake in it. But just as persons might be expected for prudential reasons to become more informed about threats to which they are particularly vulnerable, so also should they for moral reasons inform themselves about threats to others toward which they contribute as a kind of precautionary obligation. These threats may vary among persons based upon their lifestyle, geography, and other contingent facts about them, but provide part of the content to an obligation to know. For example, while all persons might be expected to know about ways that racial and gender oppression can be reinforced in racist actions and expressions, only those working in a food service capacity might be expected to know about how to comply with dietary restrictions practiced by minority ethnic or religious communities in their area, since only they could harm by ignorantly violating those restrictions.

While cognitive limits on the ability to know must allow for some excusable ignorance in the case of persons, states and other large-scale organizations have a much greater ability to process information than do individual persons, and are as a result more circumscribed in their claims to excusable ignorance. In the context of climate change, for example, states face a much higher threshold of expected information processing before they can validly claim to have been reasonably ignorant about their contributions toward climate-related harm. Given their power to affect domestic greenhouse pollution as well as their command of scientific expertise in the service of environmental protection, states in their corporate capacities ought by Rescher's standard to exercise far greater efforts to avoid factual ignorance about anthropogenic harms like climate change than would apply to individual persons, and would as a result no longer be able to reasonably claim ignorance once scientific consensus identified anthropogenic drivers to climate-related harm. After all, states sponsor scientific research into phenomena like climate change, employ scientists in administrative or regulatory institutions through which scientific knowledge is collectively produced, and can call upon the scientific community through such organizations as the National Academies of Science and National Research Council to advise on matters of state importance. Their professional responsibility for diagnosing anthropogenic environmental threats like climate change is therefore typically far greater than that of the average citizen, as is their knowledge of climate science and access to information about climatic risk and harm.

Debates within climate ethics about whether to count a nation's full historical emissions or only those occurring after some date by which it would no longer be reasonable to plead ignorance about the role of greenhouse gases in climate-related harm typically assume that the dissemination of scientific reports like the Intergovernmental Panel on Climate Change's first assessment report in 1990 was sufficient to rule out subsequent ignorance claims (Caney 2010; Bell 2011). That report, which was commissioned by states 2 years earlier, represented scientific consensus and clearly identified anthropogenic drivers to climate-related harm. While an argument could be made that earlier scientific work should have sufficed to ground a precautionary stance on greenhouse pollution that would initiate culpable ignorance earlier than 1990, the dissemination of that first IPCC report to policymakers should have made the requisite knowledge about causes and effects of climate change adequately available to states, ending all further claims of excusable ignorance on their behalf. One might expect and thus excuse more ignorance concerning complex scientific issues from individual persons than from large organizations like states, yet scholars of climate ethics tend to write about excusable climate-related ignorance as applied to individuals, or related to what reasonable non-expert persons might be expected to know.

For example, Derek Bell and Simon Caney both explore excusable ignorance in the context of international liability for climate-related harm, invoking individualistic language to describe the responsibility to know as if describing the obligations of persons, rather than casting its obligations in terms of the epistemic faculties of collectives like states. Perhaps in order to avoid the ascription of collective agency to states or peoples in order to avoid objections to an implicit account collective responsibility, Bell describes "excusably ignorant emitters" as moral agents that "could not be expected to know that (some of) their emissions-generating acts were wrong" but who "could be expected to recognize their own fallibility" and "should not want to take advantage of benefits derived from their own (excusable) mistakes about right and wrong" (2011, 404). Similarly, Caney describes "duty bearers" that are capable of cognitive deficiencies like ignorance about the causal links between their actions and "dangerous climate change," variously referring to "people" in the collective and "persons"

individually in articulating his modified strict liability principle (2010, 209–10). At no point does either question whether policymakers informed by leading scientific bodies and experts within regulatory agencies, acting in a capacity of public trust to affect an entire nation's emissions trajectory, have a greater responsibility to know than do ordinary citizens. Both shift back and forth between levels of analysis in which states are parties to climate treaties and therefore the agents whose liability for climate-related harm is in question and individuals whose personal knowledge about the causes and effects of climate change is relevant to what states may be required to do under an international climate treaty.

Describing the knowledge-acquisition obligations of states in the context of climate policy by reference to what individual persons ought to know at a given time appears to commit a kind of category mistake, conflating expectations for individual persons with no specialized training in climate science or professional commitment to environmental protection with states, with their collective capacity to process information and role responsibility to track environmental threats. States are different from individual persons, and do not suffer from the same cognitive constraints that afflict individuals, and ought therefore to have a higher epistemic burden than do persons. Apart from lacking the institutionalized capacity to process information possessed by states, individual persons also lack control over the kinds of decisions that might significantly alter the emissions trajectories of its residents that states maintain. If, as Bell and Caney maintain, my ignorance about climate change became inexcusable in 1990, despite my not having read an IPCC report until years later, then it follows that the liability for my post-1990 emissions issues from fault for not doing as I ought along with a judgment that reasonable persons would have read that report in the year of its publication. Whether defended in terms of a consequentialist or deontological ethical framework, assessments of fault-based liability typically presume that agents could have acted otherwise but failed to do so (Feinberg 1962). But is my fault for ignoring scientific reports designed for policymakers akin to that of states that refuse to act to reduce greenhouse emissions after 1990, despite having been advised by empanelled experts to do so?

Apart from their far more limited cognitive or information processing capacity, which constrains their ability to know in comparison to collective entities like states, persons also possess far less capacity to alter their personal environmental impacts than do states. While knowledge may indeed be a form of power, its capacity to affect change is surely greater when attached to other more conventional forms of power, like that associated with the legislative and regulatory apparatuses of states. If Rescher is correct, and the stakes involved determine the extent of any obligation to rectify ignorance, then states surely have far greater requirements for what they must come to know and assimilate into their policy streams than do individuals. Such is not to claim that persons cannot be liable for climate-related harm, or that they could not claim excusable ignorance for some of their personal emissions, but it is to circumscribe the debate over excusable ignorance in the context of international climate policy architecture to what states in their corporate capacities rather than any or all of their resident persons could or should have known about the causes and effects of climate change at any given time.

Writing about potentially toxic chemicals rather than climate change, Talbot Page weighs the respective merits of strict and fault-based liability for environmental harm from perspectives of fairness and efficiency. His analysis therefore focuses upon the firm, which also has a higher epistemic capacity to process information about danger from chemical toxicity than do individual persons, with a corresponding role responsibility to assimilate all available knowledge (perhaps also to create new knowledge) about potentially toxic chemicals they produce.

Page therefore argues for strict rather than fault-based liability in such cases, obviating excusable ignorance.

To put the matter bluntly, when a chemical firm decides to produce a chemical involving some risk of toxicity, it is gambling with the health of its workers, its customers, and/or the public at large... And when a firm bets on the wrong horse (the chemical turns out to be more toxic than predicted) this outcome is not by itself blameworthy—the firm simply bet on the wrong horse. Where there is uncertainty, mistakes are inevitable. Nonetheless, when a firm bets on the wrong horse, it pays for the consequences—partly as a matter of fairness and responsibility as own cost bearing and partly to provide incentives for efficiency in research and in precautionary behavior and to avoid incentives to misrepresent (1986, 256).

Key to Page's analysis are these incentive effects, which encourage precautionary actions that anticipate and seek to prevent harm to the public rather than cultivating what Calhoun terms motivated ignorance. A strict liability standard would hold firms liable for the full amount of damages for harm that they cause—or for Page, for the increased risk of harm that they impose through their chemical emissions—while a negligence standard allows for excusable ignorance to absolve firms of liability for harm altogether. The former therefore creates incentives for firms to become eager collectors and processors of relevant information, while the latter has the opposite effect, encouraging shoddy information collection and disclosure, and ultimately the imposition of greater risk of harm to the public.

Page acknowledges that this standard applies to collective agents like firms in a way that it cannot for individual ones like private citizens, who might also unknowingly cause harm to others and might be absolved from liability through negligence laws that allow for excusable ignorance. His reasons have partly to do with the higher stakes involved in decisions by firms like the one in his example; as he writes, it concerns “potentially grave harms” in which “there is often no possibility of restoring” the health and welfare of those harmed (245). For such reasons, he argues, “it is especially important to get the decisions of adequate precaution right in the first place” rather than seeking to redress an avoidable harm through tort liability and compensation for damages. Even in cases where no relevant knowledge about a potential chemical's toxicity yet exists, the high stakes involved along with the scientific expertise commanded by and role responsibility ascribed to the chemical firm requires that they take precautionary action, not emitting the potentially toxic chemical until tests demonstrate it to be safe. Their obligation to know, in other words, extends beyond what is already known to what their own research might discover, and so warrants the highest bar. Significant also is the firm's capacity to assess risks of harm under conditions of uncertainty, where factual rather than moral knowledge is deficient. The issue is not whether imposition of risk through the release of toxic chemicals is wrong, but whether or not a given chemical is indeed toxic. Factual ignorance does not impugn or obscure this moral knowledge, even if it impairs the firm's ability to consistently act on that knowledge.

6 Conclusion: Rectifying Ignorance from Civic Responsibility

Insofar as ignorance itself is responsible for some wrongful harm, with persons acting on its failed commands, its rectification becomes a moral imperative. Those in a position to correct mistakes of fact that lead others to commit wrongful harm may be obligated to do their part in

challenging prevailing social norms that reinforce factual or moral ignorance, and others may be similarly responsible for critically reflecting upon the mix of value judgments and empirical claims that comprise social norms. As Iris Young writes of the political responsibility that she views as necessary for challenging structural injustices inherent in sweatshop labor, rectification of harm rooted in political economic structures and embedded in public norms often “involves joining with others in public discourse where we try to persuade one another about sources of collective action that will contribute to ameliorating the problem” (2004, 380). Information offers an important first step is combating pervasive ignorance about sweatshop labor practices, identifying them as harmful, and assists persons in withdrawing their support of such conditions by boycotting products or manufacturers identified with them, but as Young argues its objective need not be limited to individual conscious-raising and consumer action. Collective and political action may be needed in order to challenge the norms and structures that support and enable sweatshop labor, preventing recurring ignorance from contributing to the problem in the future.

Young aims to “make sense” of “claims of responsibility that members of a society might be said to have toward harms and injustices of distant strangers” (366), and is concerned with wrongs that “have no isolatable perpetrator, but rather result from the participation of millions of people in institutions and practices that result in harms” (377). In such cases, like Dennett’s many “cries for help,” Young argues for a form of responsibility that “seeks not to reckon debts, but aims rather to bring about results” (379), and is discharged through a civic commitment to “enjoin others to reflect on and acknowledge their participation in the structural processes, and to listen to their account of how they work and our role in them” (380), through which they can together take action to rectify such injustice. The obligation to know is here part of a larger duty to act in active prevention of harm, not just through personal withdrawal from harmful structures or practices but in the exposure and critique of their basis in social norms. Ignorance is thus an obstacle to political action, and excusable ignorance a kind of acquiescence to its quiescent force.

Like the structural injustices with which Young is concerned, ignorance concerning the environmental impact of many individual and collective actions falls into the category of what Cheshire Calhoun terms an “abnormal moral context,” in which “social acceptance of a practice impedes the individual’s awareness of wrongdoing” (1989, 389). In normal contexts, Calhoun argues, moral rules are well and widely known within society, so excusable ignorance of those rules is “necessarily exceptional” (395). Even in abnormal contexts, in which moral ignorance is widespread and normalized, Calhoun is reluctant to allow it to function as an excuse.

Self-interest can motivate the suppression of moral reflection. Business executives, for example, may suppress moral reflection about their business practices because they tacitly recognize that ethics and profit maximization rarely coincide. And people can certainly take advantage of abnormal contexts, pretending or cultivating ignorance when prudent to do so. One of the points stressed by feminists is that men’s benefiting from oppressive social practices provides them with a motive for resisting critical reflection and for exercising self-deception about their own motives and about the consequences for women of their actions. This possibility of *motivated* ignorance makes excuses suspect (399).

For Calhoun, excuses are suspect even where ignorance prevails because excusing forecloses the option of reproach for transgression of rules, where public expressions of disapprobation may call attention to such rules and in so doing reduce the pervasive ignorance about

them, breaking the silence in which widespread violation undermines their force. In abnormal contexts, she argues, “not pointing out wrongdoing” is “automatically” interpreted as “sanctioning” the actions in question, since failing to reproach transgressions amounts to excusing them, and “an excusing response to individuals who participate in harmful social practices sanctions those social practices by obscuring the individual's role in sustaining and, potentially, disrupting them” (402).

A similar form of “motivated ignorance” threatens to obscure the knowledge and moral reflection that could be prompted by information about the environmental impacts of common actions, where harmful actions are likewise so common that they constitute an accepted social practice. Permissive public norms protect polluting or resource depleting activities by casting them as private and apolitical, obscuring their harmful effects upon others, and provide cover for persons to continue participating in harmful practices without calling those practices or their consequences into question. Insofar as excusable ignorance offers a shield against liability for environmental harm and deflects the sort of critique with which Calhoun is concerned, the motivation for maintaining or cultivating such ignorance about the environmental impacts of common actions is at least as insidious as with the patriarchal privilege described above. Given that polluting and resource-depleting behaviors are so common, and commonly unquestioned, this kind of collective self-reproach and reflection resembles what Young refers to as political responsibility, which “involves recognizing a shared responsibility, persuading others that they share it as well, and organizing forms of collective action designed to change” it (383).

However it is best promoted, the burden that a robust obligation to know commends may be essential to the sort of normative critique and social change that both Young and Calhoun see as necessary for avoiding serious injustice. Knowing and its related mental activities—wondering, learning, reflecting, and revising—form the foundation of progressive social change, allowing for and resulting from moral critique. As Young writes, such critique “consists to a significant extent in bringing to consciousness the assumptions about others that agents make in their activities, and exposing the inconsistency between these assumptions and the denials of connection” (372). Our first step in bringing about awareness of our social connection to others is “to acquire more specific knowledge” (372) about our role in harmful social processes, she argues. Indeed, informing ourselves about the distant impacts of our everyday actions such that we can become more conscientious and therefore more responsible consumers and citizens asks us first to know, and only upon this knowledge therefore to act.

If obligations to know are only collective and vested in the state, as those applying excusable ignorance for climate-related harm only to states imply, the basis for moral critique of the state or society may be compromised, for as Chandran Kukathas argues: “If the only agent which takes responsibility is the state, or if all responsibility ultimately goes to the state, the capacity of other associations to practice responsibility will wither and the idea of responsibility will be eroded” (2003, 186). Only if persons are also expected to know about and to act in remedy of problems to which they together contribute—as I have argued they are—can they hope to dislodge the pervasive ignorance that prevents many from ascertaining their connections to others and the further moral obligations in which those connections are bound.

References

- Bell D (2011) Global climate justice, historic emissions, and excusable ignorance. *Monist* 94(3):391–411
 Calhoun C (1989) Responsibility and reproach. *Ethics* 99(2):389–406

- Caney S (2010) Climate change and the duties of the advantaged. *Crit Rev Int Soc Political Philos* 13(1):203–28
- Dennett DC (1986) Information, technology, and the virtues of ignorance. *Daedalus* 115(3):135–53
- Feinberg J (1962) Problematic responsibility in law and morals. *Philos Rev* 71(3):340–51
- Kukathas C (2003) Responsibility for past injustice: how to shift the burden. *Politics Philos Econ* 2(2):165–90
- Page T (1986) Responsibility, liability, and incentive compatibility. *Ethics* 97(1):240–62
- Rescher N (2009) *Ignorance: On the wider implications of deficient knowledge*. University of Pittsburgh Press
- Rosen G (2003) Culpability and ignorance. *Proc Aristot Soc* 103:61–84, New Series
- Young IM (2004) Responsibility and global labor justice. *J Political Philos* 12(4):365–88
- Zimmerman MJ (1997) Moral responsibility and ignorance. *Ethics* 107(3):410–26