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MARGINAL PARTICIPATION, COMPLICITY, AND AGNOTOLOGY: WHAT CLIMATE CHANGE CAN TEACH US ABOUT INDIVIDUAL AND COLLECTIVE RESPONSIBILITY

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Marginal participation, complicity, and agnotology: What climate change can teach us about individual and collective responsibility

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Abstract

Although the basic mechanism is simple — we burn too much fossil fuels — the result, climate change, is a very complex phenomenon. The science is complex, the implications are complex, and the number of agents involved in creating the harm is simply vast.

I argue that climate change is not a problem just for states and international bodies, but also for individuals as they are members and constituents of collectives and groups of different types. Despite the complexity of the situation, there are three different possible sources of moral responsibility for individuals in relation to climate change harms: direct responsibility (individuals *qua* individuals), shared responsibility as members (individuals *qua* members of collective agents), and shared responsibility as constituents (individuals *qua* constituents of unorganised collectives). No individual will be responsible for climate change as such, but they can be responsible for increasing the risk of serious harm to others, for example.

Accounts that deny individual responsibility fail to either take our interdependent reality seriously or fail to understand marginal participation (or in the case direct responsibility, fail to appreciate the nature of the climate change phenomenon). I argue that we must take complicity into account to understand climate change as an ethical problem. Complicity is a form of liability, but not necessarily culpability: it can be blameworthy or partially blameworthy, sometimes coming under just agent-regret. Most of our emissions take place within certain structures. Individual responsibility cannot be discussed in isolation from the collective settings that we are all embedded in.

Individuals can be complicit in climate change harms, either as members of collective agents (e.g. as citizens of states or employees of a corporation) or as constituents of unorganised collectives (e.g. as consumers or polluters). With collective agents the link between the individual and the collective outcome is a participatory intention, and in unorganised collectives it is a quasi-participatory intention. The potential of individual actions to help bring about an outcome gives an additional reason to take action in cases of marginal participation.

I deny that you can place obligations, putative or actual, on unorganised collectives, although you can hold the constituents of unorganised collectives blameworthy in the backward-looking sense under certain conditions. However, I grant that it can be useful to discuss unorganised collectives in some cases, as it can help us to appreciate the different structures and systems that we are part of, and how we are complicit in upholding and recreating these.

Although I focus on individual complicity, I do not deny the obligations of collective agents. However, nation-states, governments, and international bodies are not the only relevant collective

agents in climate ethics: other collective agents, such as corporations, matter also and can have obligations concerning making sure that their activities are as carbon-neutral as possible.

Climate change presents a challenge to our moral psychology and information processing capacities. Institutional collective agents with the capacity to process a lot of information have greater obligations to know about climate change than individuals. Institutions can affect the information and knowledge that we have, which in turn affects our control and our options, and thus can act as an excusing condition for blame.

An example of the above, manufacturing doubt, is an important issue and some corporations are implicated in this. The corporations that have engaged in lobbying against climate regulation through creating and disseminating misleading information have acquired themselves additional obligations to mitigate climate change and compensate for the harm they have caused.

Even so, the ethical claims can only be understood by individual members of these collective agents because only they can feel the pull of moral claims. In cases involving collective agents we could distinguish between what one must possess in order to be capable of making moral claims (i.e. moral agency conditions), and what it means to have the ability to exhibit such claims through one's conduct. I argue that while only individual moral agents can do both, collective agents can do the latter. The moral claims collective agents can exhibit through their conduct is an emergent property of the moral claims that the (key) members of the collective make in their roles, combined with the ethos of the organisation.

Individual direct responsibility is limited to relatively wealthy individuals and their luxury emissions. This individual direct responsibility or duty is to not to increase the probable risk of serious harm – deprivation of fundamental capabilities – to other people, at least as long as we can do so at a less than significant cost to ourselves. Offsetting is not a reliable way to meet this duty, but rather we need to look at the emissions from our lifestyle choices (within the available infrastructure), in contrast to questioning each individual purchase and consumer choice.

Individual direct duties related to avoiding climate change harms are not prior to our shared duties, i.e. the duties we have as members or constituents of collectives. Solutions aimed purely at the individual level will be both insufficient and inefficient. Climate change cannot be solved without collective entities stepping up to their obligations, and collective entities will not do so unless enough of their members push for it (or another collective entity makes them comply through legislation, for example). Shared responsibility *qua* members of collective agents is thus the key individual responsibility, and it presses especially on those occupying key positions within key collective agents. Saying that, our shared responsibility *qua* constituents of unorganised collectives has the potential to be decisive in whether some action is taken or not, either through a set of actions that can signal certain acceptance or support, or as a form of political support from the grass roots.

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workshops, and conferences with, both in Finland and abroad. There are simply too many names to mention, but you know who you are and I appreciate you all.

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Chapter 1 – Introduction: Responsibility in an age of global interdependence

> Our inability to live entirely in the present (like most animals do) combined with our inability to see very far into the future makes us strange in-between creatures, neither beast nor prophet. Our amazing intelligence seems to have outstripped our instinct for survival.
>
> - Arundhati Roy, 'Listening to Grasshoppers' (2009: x)

> [P]oorly-understood feedback processes make us vulnerable to surprises. Some of these processes could be very powerful. The arctic methane hydrates, for instance, form a vast reservoir of methane, and if a significant fraction of them was to be released, the earth might become uninhabitable. Human-induced global warming, then, could possibly start a chain of events that could lead to the extinction of civilization or even of humanity. This is a remote possibility, but it exists.
>
> - John Broome (1992, pp. 15-16)

The topic of my thesis is individual and collective responsibility for collectively caused systemic harms, with climate change as the case study. Can an individual be responsible for these harms, and if so, how? Furthermore, what does it mean to say that a collective is responsible? A related question, and the second main theme, is how ignorance and knowledge affect our responsibility. I will discuss uncertainties and introduce the concept of agnotology,[1] explaining the different ways these are important for climate change responsibility. My aim is to show that despite the various complexities involved, an individual can have responsibility to address climate change, and that there are three potential sources for such responsibility.

I believe that looking at climate change within this framework brings new insights into the current lively discussions on climate ethics, and could also take forward the debate over what exactly collective responsibility amounts to. I will position my own work mainly in juxtaposition with four recent works: Christopher Kutz (2000) *Complicity: Ethics and Law for a Collective Age*, Iris Marion Young (2011) *Responsibility for Justice*, Tracy Isaacs (2011) *Moral Responsibility in Collective Contexts*, and Elizabeth Cripps (2013) *Climate Change and the Moral Agent: Individual Duties in an Interdependent World.*

Collectives come in all shapes, sizes and shades. At the micro level, where the basic dynamics of joint action are discussed, we have two people going out for a walk together. At the other end of

[1] The term originates from Robert N. Proctor's work in the 1990s. He (in Proctor and Schiebinger 2008) describes agnotology as "[a] missing term to describe the cultural production of ignorance (and its study)". David Magnus (2008, p. 250) describes it as "the construction of ignorance" and "a strategy that can be utilized". I discuss corporate-funded agnotology campaigns against climate change science in chapter three.

the spectrum, we have the collective of humanity (or even of earthlings). Philosophers have written about the responsibilities of both of these and everything in between. Large collectives play a greater role in our lives than ever before, making moral questions about collective responsibility urgent. Collectives can be cut up in many ways, but the distinction between *collective agents* and *unorganised collectives* is the crucial one when it comes to this thesis.

With *collective agents* I refer to integrated, structured, organised collectives that have a shared goal or purpose, a mission, an ethos, and which often also come with differentiated roles and hierarchy. *Unorganised collectives*, on the other hand, are a set of people who are picked out by some factor. The question I will ask is: can an individual be responsible for climate change harms, and if so, how? The answer will be very different depending on which collectives the individual can be argued to be a member or a constituent of, and if these collectives are collective agents or not. To highlight how the responsibility of individuals in agential groups is different from those in unorganised ones I will use *members* to refer to individuals within collective agents and *constituents* to refer to individuals that make up unorganised collectives.

Throughout, I will defend an account of moral responsibility where relationships form the basis for morality. This account balances between individualism and communitarism, succumbing to neither extreme. While our relationships are brought to the ethical fore, acknowledging the essentially social basis of morality does not erase individual agency. What we as individuals are responsible for can have two meanings: what we as individuals *qua* individuals are responsible for, and what we as individuals *qua* members or constituents of collectives are responsible for. The first sense I will call *direct responsibility* and the second *shared responsibility*. In addition, collective agents can have collective obligations or *collective responsibility* regarding climate change.

In this thesis I will defend the view that despite the complexity of climate change, individuals can bear responsibility for climate change harms, and that there are three potential sources for this responsibility: direct responsibility (individuals *qua* individuals), shared responsibility as members (individuals *qua* members of collective agents), and shared responsibility as constituents (individuals *qua* constituents of unorganised collectives).[2] No individual is responsible for climate change as such, but they can be responsible for things like increasing the risk of serious harm to others. With some individuals all three sources will apply, while with others none will apply. For relatively wealthy individuals (regardless of whether they live in the Global North or the Global South) at least one — but more often all sources — apply. I will argue that most of our responsibility flows from the shared sources, i.e. from collective action within collective agents and social structures.

[2] I do not mean to employ 'source' as a technical term in this context, rather, it is employed as a heuristic term.

Complicity is an association, participation, or involvement in a wrongful act or a collectively caused harm. While traditionally the focus of complicity literature has been on what counts as contributing to another agent's wrongful act, I will follow Kutz (2000) in extending it to mean harms we bring about together. Complicity can arise from our cultural and legal practices that link agents to harm caused by other agents, or from unintended harms caused together. Kutz (pp. 1-3) observes that we live in a morally complicated world, where we are associated with regrettable, sometimes reproachable, things through our social, economic and political associations and institutions. His examples include buying a table made out of timber from a rainforest, owning stock in a company that does business in a country where political opposition is not tolerated, or being a citizen of a nation which is happy to launch reckless bombing attacks against terrorists in another country. Our reactions to these relations to harms mediated by other agents range from discomfort to guilt.

I will argue that most people in the Global North and some in the Global South are complicit in climate change harms *qua* constituents of unorganised collectives, as well as very often also *qua* members of collective agents. Both of these sources come under shared responsibility, which I will argue is the primary source our climate change responsibility (although many of us also bear direct responsibility). My main arguments are:

- Climate change is not a problem just for states and international bodies, but also for individuals as members and constituents of collectives and groups of different types
- We must take complicity into account to understand climate change as an ethical problem
- There are three potential sources for individual responsibility for climate change harms: direct responsibility (individuals *qua* individuals), shared responsibility as members (individuals *qua* members of collective agents), and shared responsibility as constituents (individuals *qua* constituents of unorganised collectives)
- States and international bodies are not the only relevant collectives in climate ethics: other collective agents, such as corporations, matter also
- In cases involving collective agents we could distinguish between what one must possess in order to be capable of making moral claims (i.e. moral agency conditions), and what it means to have the ability to exhibit such claims through one's conduct. While only individual moral agents can do both, collective agents can do the latter. The moral claims collective agents can exhibit through their conduct is an emergent property of the moral claims that the (key) members of the collective make in their roles, combined with the ethos of the organisation
- Institutions can affect the information and knowledge that we have, which in turn affects our control and our options, and thus can act as an excusing condition for blame

- An example of the above, manufacturing doubt, is an important responsibility issue regarding climate change and some corporations are implicated in this
- Risk affects our climate change responsibility: while the risks are probabilistic, our responsibility is based on likelihoods along with the expected value of an outcome
- Moral responsibility is always relational and positional, and it can be either individual or shared.

I will argue throughout this thesis that moral complicity should not be ignored and that it is the key to unlocking some of the moral mysteries around responsibility in the global interconnected world. The actions of individuals matter even in *overdetermined*[3] outcomes where our participation is marginal, and they can be deemed morally praiseworthy or blameworthy. While complicity is all about individuals caught in complicated institutional structures and social patterns, collective responsibility also has a much more robust sense. At the other end of the spectrum we have the collective responsibility of collective agents. Corporations are the standard example of these collective agents, and I will argue that they should also be brought into climate ethics debates.

What we need to concentrate on is the relational nature of morality and human activity. Due to our complicated social and economic structures, we might be involved in collective actions that we do not approve or even know of. Therefore the line between what we are and are not responsible for is not always clear, and that it can further be blurred by institutional and social practices. Questions of responsibility cannot be resolved without reference to our relations to others, or to the institutions that are part of our social world that is more interconnected and interdependent than it has ever been. While the importance of the local and regional should never be underestimated (which by itself is already relational), a lot of human activities are deeply international or have international aspects, be it in science, trade, finance, politics, culture, information, or sports.[4]

[3] I use overdetermined here in a looser sense than the traditional definition of causal overdetermination where a single observed effect is determined by multiple causes at once, out of which any alone could be enough to account for the effect. My use of the term draws from Derek Parfit's (1986[1984]) and Kutz's (2000) use of the term in cases where an individual's action makes no difference to the normative properties of an event, for example, when 1,000 people cause some harm, but it would have had the same end result if just 950 had participated.

[4] The vast majority of humanity is organised into nation-states that co-operate together bilaterally, or through various multinational or international organisations such as the United Nations and its numerous affiliated programmes, funds, and specialised agencies; or the European Union or the African Union. In addition there are international trade agreements, the World Trade Organization, IMF, World Bank, global brands, multinational corporations like ExxonMobil and Komatsu Limited, outsourced manufacturing in countries with cheaper labour, currency transactions, international banking and investments, international aid flows and cash transfers. Other examples include large international non-governmental agencies such as Médecins Sans Frontières or Save the Children, news channels that are watched around the world, globally popular internet sites. There are also globally recognised musicians and actors, artists whose paintings travel around the world, books like *Pinocchio* and *The Little Prince* that get translated to over 250 languages; Olympic Games, world championships, boxing matches watched by millions; innovations or viral videos that cross borders within days or hours; international scientific journals and conferences, research visits, the high mobility of researchers; joint projects between nations, the International Space Station, and so on and so forth.

Communication technology makes international engagement easier and human co-operation has taken radically new forms and dimensions in the past century, especially in recent years. With the invention of the internet and mobile technology many of us are connected in ways not even thought possible just a lifetime ago.[5] Climate change is not just international, it is inescapably global. That is one of the reasons why it is so problematic as a harm that requires an urgent solution and response.

The purpose of this chapter is to introduce the reader to the problems posed by climate change and other collectively caused harms, as well as to offer some background for how individual and collective responsibility have been traditionally conceptualised in ethics, and what questions these concepts give rise to. The chapter begins with an overview of climate change as a harm (section 1.1), before discussing the literature on individual moral responsibility (section 1.2), followed by collective responsibility (section 1.3). What uncertainties mean for climate ethics and moral philosophy is discussed next (section 1.4). I will wrap the introductory chapter with a summary of the central arguments of the coming chapters (section 1.5).

1.1 The perfect moral storm

The earth's climate is changing at an unprecedented pace. We are witnessing temperature changes that used to take thousands of years now taking place within mere decades. These rapid changes are caused by us humans. The word *anthropogenic* used in conjunction with climate change signals that climatic changes, such as rising global temperatures and increased extreme weather events, result from human activities. The expert consensus on the role of humans as the driving force behind

[5] While it took approximately twelve days to send a message from London to New York in 1852 and 73 days to Sydney, with the international postal service itself a marvel of human co-operation, the invention of the telegram reduced the time to mere minutes some twenty years later (Roberts 2012). In the early 1990s telefaxes were the cutting edge way to send images and messages across distances, but they were soon overtaken by the expansion of the internet. Video calls and instant messaging have revolutionised the ways in which many of us can now stay in touch with distant relatives and friends, and the ways in which we can work with people across oceans. It is not uncommon anymore that one's colleagues are located in another town or country or even continent, with technology enabling daily communications regardless of the physical distance. Saying this, it is important to note that some of us are much more interconnected than others: there are vast gaps between the urban rich and the rural poor in most countries in terms of travel and other international opportunities, and the gaps are even wider internationally. Access to technology varies also: while 88.1% of people in North America use the internet, only 31.2% of the people in Africa have access to it (Internet World Stats 2017). While internet penetration varies widely worldwide, the trend is clearly towards a more technologically interconnected world. The internet has also in many ways shortened the gap between urban and rural, both in good and in bad. New opportunities have opened up for people to connect with like-minded people regardless of their geographical location, and the internet has brought new opportunities for participation in politics and civil society, sometimes also in job markets. Readily available images of wealth can give the rural poor in the Global South unrealistic expectations about higher standards of living if only they would leave their villages for towns, cities, or foreign countries. Extremists and constructive grass-roots civil society organisations alike have an easier time to get organised thanks to social media.

climate change is overwhelming (Cook et al. 2013).[6] Human influence concerns both the changes that are already noticeable, such as shrinking glaciers and rising sea levels, as well as changes projected far into the future. The Arctic is melting in front of our eyes and satellites. Rapidly rising Arctic temperatures are very likely already linked to recent extreme weather events around North America, Europe and Asia (Carrington 2016). According to the latest Intergovernmental Panel on Climate Change (IPCC) report, in large parts of Europe, Asia and Australia the probability of heatwaves has already more than doubled due to human influence on the climate, while the number of cold days and nights has decreased on the global scale (IPCC 2013, p. 5). All of this can have devastating consequences on food security.

While scientists have reached a consensus over the anthropogenic cause of climate change and awareness of the problem has permeated media and policy discussions, emissions continue to rise. Progress in mitigation has been painstakingly slow.[7] Even the modest advances originating from the Paris Agreement are now looking less promising with the possibility of the USA pulling out of the treaty under the new administration, or at least not taking any action to support it.[8] In general, hostility towards climate science is visible in the USA, the biggest polluter in the world in historical terms, and currently the second biggest polluter after China.[9] As we still do not fully understand all feedback mechanisms or know all the tipping points, our climate might become unstable much sooner than previously thought. The longer meaningful mitigation action is delayed, the less likely it is that catastrophic consequences can be averted.

Very worryingly, climate scientists are nearly unanimously now saying that unless we see significant changes in policy, we are on course for a world that is four degrees warmer by the end of this century (World Bank 2012). Meanwhile, a two degree increase is still the standard in political debates. Two additional degrees might not sound like much, but the difference could decide the survival of human civilization as we know it.[10] To give some examples (from Marshall 2014, pp. 239-

[6] 97% or more of actively publishing climate scientists agree that global warming over the past century is extremely likely due to human activities. The greater the climate expertise among those surveyed, the higher the consensus on human-caused global warming, going up as far as 100% (Cook et al. 2016).

[7] Although it should be noted that there are over 1,200 climate change or climate change-relevant laws worldwide, which represents a twentyfold increase in the number of climate laws and policies within the last twenty years; in 1997 there were just 60 such laws in place (Nachmany et al. 2017).

[8] McKinnon (2016, p. 212) notes that even if all countries abided by the Paris Agreement and achieved the reductions laid out in the intended nationally determined contributions, average temperatures are likely to rise 2.7—3.5% by the end of this century. This will damage food production and security, as well as increase conflict and disease.

[9] The USA is arguably still the biggest polluter, as it consumes many of the products that China produces, so the emissions from a lot of manufacturing is outsourced to China.

[10] Professor John Schellnhuber, founding director of the Potsdam Institute for Climate Impact Research and chair of the German Advisory Council on Global Change, said in a conference in 2013 held on the risks of a four-degree warmer climate to Australia that "the difference between two and four degrees is human civilization" (quoted in Marshall 2014, p. 241). Another example is cryo-scientist Lonnie Thompson who studies melting glaciers. He included the following sentences as his first paragraph in a 2010 paper (p. 153): "Climatologists, like other scientists, tend to be a stolid group. We are not given to theatrical rantings about falling skies. Most of us are far more comfortable in our laboratories or gathering data in the field than we are giving interviews to journalists or speaking before Congressional

242) the four degrees is a global average, so July in the Mediterranean region could be up to nine degrees warmer than today. There would be a high risk that forests, including the Amazon, could burn down. Crop yields would be severely affected. The Greenland ice sheet, and most likely also the Western Antarctic ice sheet, would melt completely leaving two thirds of the world's major cities covered by water due to rising sea levels. Not only that, the changes could happen faster than previously predicted: we could reach the four-degree point by the 2070s (although as early as by mid-century is also a possibility), making climate change not a problem mainly for future generations but also for many of us alive today. Moreover, there is no guarantee that temperatures would level off at this point due to further powerful feedback mechanisms and tipping points. The World Bank (2012), among many others, has concluded that even with a four degree warmer world there is so much uncertainty that we cannot assume that human societies could adapt sufficiently and in time, and thus such an increase in temperature must be avoided.

Climate ethics tries to illuminate and provide answers to the moral questions and dilemmas that anthropogenic climate change gives rise to. Stephen M. Gardiner (2006, 2011, 2016) has described climate change as "a perfect moral storm". The components of this storm are four-fold: global, intergenerational, ecological, and theoretical.[11] Gardiner's central concern is that unless we understand exactly what kind of a problem climate change is, and the many complexities involved, we will not be able to find any real solutions to it. He argues that what we are dealing with is essentially an ethical failure: anthropogenic climate change is a profoundly moral problem, despite it usually being framed in mainly scientific or economic terms in the dominant discourses.

While climate change impacts are *global*, the power imbalances between rich and poor nations mean that the polluters might not pay: emissions are largely due to the activities of a handful of industrialised nations that have been largely successful in delaying action. Climate change is an inherently *intergenerational* issue, because even if all carbon dioxide emissions were to be stopped today, most aspects of climate change would persist for hundreds of years.

To give some examples, due to cumulative emission, seas will continue to warm for centuries, and 15 to 40 per cent of emitted CO_2 will continue to contribute to warming for more than a millennium (IPCC 2013, pp. 25-26). If an enormous alien ship would swipe up all humans (and our roughly one billion cows) tomorrow and take us to a galaxy far, far away — therefore effectively putting a stop to our emitting actions — the impacts of climate change would continue to unfold

committees. Why then are climatologists speaking out about the dangers of global warming? The answer is that virtually all of us are now convinced that global warming poses a clear and present danger to civilization". Thompson cited the joint letter from 255 members of the National Academy of Sciences published in *Scienc*e magazine on 7 May 2010, calling for the integrity of science to be respected after political assaults on climate scientists.

[11] The ecological storm was added to the metaphor as an independent storm only recently when Gardiner (in Gardiner and Weisbach 2016) split the theoretical storm into two separate storms (ecological and theoretical); in earlier works (2006, 2011) he spoke of three storms.

and feedback mechanisms would still kick in. In *ecological* terms the impacts go far beyond the human species, as other animals and plants are affected by changing habitats. Entire ecosystems are put in jeopardy. Finally, the storm is also *theoretical*, as many of our existing theories (whether philosophical, political, or economic) are not set up to deal with issues that span over hundreds of generations, involve major scientific uncertainties, or affect the entire Earth.

I would like to argue that an additional important aspect of the theoretical storm is that climate change is an *overdetermined* problem in the sense that the actions of any one individual do not causally determine the outcome or make a difference to its normative properties; no individual action is necessary or sufficient for global average temperatures to increase, or for the effects that this will have on agriculture or human habitation, for example. In fact, in an overdetermined situation a person's contribution to the outcome can be causally minuscule, even completely negligible.[12] Marginal participation is problematic for traditional accounts of attributing responsibility in which an agent's causal contribution forms the basis of their responsibility: if an individual does not make a difference to the outcome of an act, then she is not responsible for the outcome. Some philosophers thereby argue that it is wrong to ascribe responsibility for climate change to individuals: there is no basis for individual moral obligations because our individual acts are neither necessary nor sufficient for climate change to proceed, nor are our mundane carbon-emitting acts intended to cause harm. They conclude that only states can have obligations to do something about climate change. This line of argumentation is interesting not just from the point of view of climate ethics, but also when we look into other collectively caused harms and discuss what principles we can employ to ascribe moral responsibility for them. I will start by describing causal and normative responsibility, concentrating on individual moral responsibility in the next section, before turning to collectives in section 1.3.

Before proceeding, it should be noted that although it is clear that climate change is harmful, the concept of what constitutes a harm is far from simple. Harm is an impairment, but of what? If we adopt a counterfactual account of harm, someone is harmed if their level of well-being becomes lower than it otherwise would have been.[13] Seana Shiffrin (2012) argues that standard models of harm that rely on making either counterfactual or historical comparisons are unsatisfactory, and that we should instead adopt a more will-oriented account of harm. She (p. 361) suggests that an account of harm should encompass at least physical injuries, many physical and mental disabilities, incidents of pain, death, the failure or ruin of certain sorts of important projects and relationships, some

[12] Although there is debate on this in relation to climate change, see the discussion in section 2.4. I discuss marginal participation at length in chapter five.

[13] We therefore would need to determine the level of well-being someone would have had had the harmful event not taken place. A big problem for this kind of purely counterfactual understanding of harm is presented by the non-identity problem, see end of section 2.4.

losses, and some material inabilities, as well as things such as reasonable fear and grief, or rendering one passive to a mentally or physically intimate experience.

With climate change, defining harm is difficult both at the individual level and at the policy level. For example, Katie McShane (2017, p. 137) gives the example that salinity intrusion in the Sathkira district of Bangladesh is not just about the economic loss of diminished rice production and increased costs of healthcare due to disease, things that policy-makers and researchers usually concentrate on. What should also matter for our assessment is "how it is affecting people's ability to look after their neighbours and families, their anxiety about the future for their children and their communities, the social cohesion of and justice within communities, and so on".[14] In general, we need to distinguish between suffering harm and mere loss in order to give priority to harm (Francis 2017, p. 142). However, I will not attempt to contribute to this important debate in this thesis. Instead, I will utilise a broad concept of harm where to suffer harm is to have your interests affected in a negative manner. Serious harm is such an effect on your fundamental interests and capabilities (see section 2.3). Climate change puts ecosystems under severe stress and threatens basic life-supporting functions. It is a threat to agriculture through increased climate-extremes such as heatwaves, droughts, and floods, while increasing sea levels can make many currently populous areas uninhabitable. These are just a few examples of how climate change is a serious risk to human survival itself.

1.2 The concept of responsibility

What I am after in this section is to clarify what we mean by responsibility and associated notions, and to defend an idea of blame as protest. To lay groundwork for the arguments to come, I will first separate causal and legal responsibility from moral responsibility. I then discuss classic aspects of responsibility, namely voluntariness and control (ignorance is reserved for chapter seven). I will take a look at what moral judgements are by discussing deliberation and reactive attitudes, before explicating the account of blame that I will utilise in the thesis. I will round off the section by offering some terminological clarifications that are helpful in understanding the notion of complicity employed in chapters five and six.

The idea of moral responsibility assumes moral agency: a hurricane or a tsunami cannot be held morally responsible for the destruction it causes, although human beings can be held morally responsible for the socio-political, economic, and cultural factors behind why so many people died

[14] Her overall argument is that we should adopt a broader understanding of loss and damage when it comes to climate policy, as it should encompass both loss of or damage to something that is valuable, and losses and damages that are relevant when considering harmfulness.

when the hurricane or tsunami hit (e.g. poor local infrastructure). While our causal power and intentions are central to how we view our own actions, putting too much emphasis on individual causal linkages can derail the discussion on responsibility for climate change and other such complex harms. After all, "causal responsibility has no necessary normative implications" (Isaacs 2011, p. 14).

A causal relationship holds between something that happens (or exists) and the thing that gave rise to it. A cause is partly or wholly responsible for the occurrence of an effect that depends on it. Causal responsibility does not need to come with an attached ascription of moral responsibility. To use Fischer and Ravizza's (1993, p. 5) famous example, when your kitten accidentally breaks a vase, she is causally responsible for the event just as much as your human guest who broke the vase on purpose. Both played a causal role in shattering the vase. Yet while animals and humans both can be held causally responsible, only human behaviour can be morally blameworthy or praiseworthy.[15] The same distinction holds for robots that assemble cars and the human workers in the same factory (although animals are absolutely nothing like robots and too many philosophical accounts have treated them as machines). While the industrial robot, or a bird that flew through the open window and broke the vase, can be causal agents, they cannot be moral agents. Causation does not even need agency: dissolved volatile gases in the magma chamber start the process that causes a Plinian volcanic eruption (like the one that in turn caused the destruction of Pompeii). Yet it would not make sense to talk about the volatile gases as agents in any philosophically meaningful sense connected to moral responsibility. Thus, causal responsibility is clearly not sufficient for moral responsibility, but in the standard understanding of moral responsibility it is considered necessary. This view is challenged by cases of overdetermination, which I will discuss in detail in later chapters.

Moral and legal responsibility are both normative responsibility. Although our legal practices tend to track moral practices, the two can come apart. A classic example is a bad friend, one that for example tells his friend's secret to others. While being a bad friend is not illegal and we do not send people to prison for it, it is considered morally wrong, or at least socially undesirable, depending on the context. On the other side of the coin, not all laws can withstand ethical scrutiny, but rather reflect the prevalent norms and prejudices of a society at a given time, like laws that try to ban and criminalise consensual sex between adult men. Still, at the heart of legal arguments lay fundamentally ethical claims that the courts and judges try to weigh. Laws are constantly tested and interpreted in different ways by lawyers and their parameters are explored in controversial cases. Laws are also rewritten from time to time, as they change with the times and the legislators, although progress is

[15] I accept the general idea of animals not being moral agents, but with some reservations: many people accept pets as part of their families and also expect good behaviour from them, using not just carrots and sticks, but emotional appeals also. Importantly, animals do reciprocate, and act with guilt or shame when they know they have done something they should not have. Animals obviously have inner lives and respond to emotional reasons. A bird that flew in through the open window and broke the vase would perhaps work better in the example instead of the kitten.

usually slow. This slowness also protects laws from being just a whim of the moment, the deliberation required tends to eliminate the worst injustices, in democracies with active civil society at least. This is not to deny the impact that money and power can have on the law, for example, in the form of corporate lobbying. In addition, even the best laws cannot on their own prevent injustices from taking place at the law enforcement level.

Normative responsibility covers also responsibility for self and social norms such as etiquette and role responsibility. This kind of social responsibility can overlap with moral and legal responsibility. Take the bad friend, again. Telling a secret is breaking a promise and going against behaviour that is usually socially sanctioned (gossiping can also be encouraged, but usually breaking the trust of your best friend, for example, is frowned upon, so there are always lines to be crossed). Legal practices are influenced by social norms. Juridically, responsibility relationships can be created through contracts, promises, appointments, assignments, and so forth. Obligations in the social realm are created by promises and role expectations. Special duties or obligations, whichever one prefers to call them, are owed to some person or a subset of persons, in contrast to natural duties that are argued to be owed to all persons simply because they are persons (Jeske 2014). Special duties include duties we have as family members, friends and citizens, or duties towards those people to who we have made some sort of commitments or promises. We owe special duties to someone (individual or collective) because of who they are and the relationship we have with them. For example, a parent owes special duties of care towards their child.

Aristotle set out the classic conditions for responsibility in Book III of *Nicomachean Ethics*. A virtuous character shows through in the agent's conception of good and in the ways he is disposed to behave in particular circumstances: the agent decides the appropriate course of action based on the circumstances. The agent is blameworthy or praiseworthy for an action (or a character trait) if and only if the action (and/or disposition) is voluntary. For an action or a trait to count as voluntary it must originate from the agent and the agent must not be ignorant about what he is doing or causing. In contrast, involuntary actions that excuse from responsibility take place under compulsion or are done due to ignorance. I will discuss the epistemic condition, i.e. acting under ignorance, in chapter seven. Here I focus on the control condition: what does it mean that something originates from the agent and is not done under compulsion?

If an action originates from an external cause and the agent does not contribute anything to it, it counts as compulsory. Aristotle likens it to being carried by the wind.[16] Truly involuntary acts in this sense are therefore limited and rare. The distinction between voluntary and involuntary is more

[16] "[T]hat is compulsory of which the moving principle is outside, being a principle in which nothing is contributed by the person who is acting or is feeling the passion, e.g. if he were to be carried somewhere by a wind, or by men who had him in their power." *Nicomachean Ethics* III.1 1110a1-4.

subtle than just seeing if the action is done because of coercion, an external force of some kind, like somebody wielding a weapon or blackmailing you. Aristotle argues that whether an act is voluntary or involuntary ultimately depends on the context. If the circumstances are such that an agent has to choose between bad alternatives, i.e. they compel him to do something he would otherwise not do, the action is mixed: it is voluntary in the sense that the agent chose to do the act and his body put the causal chain in motion, but involuntary in the sense that in the abstract he would not have chosen to do it.[17] In other words, he realises that the action was not ideal, there would have been counterfactually better alternatives, but under the circumstances it was the best choice.

But what does it mean to say that an agent was in control of his action, i.e. that it was not done under compulsion? An addict could be thought to be not in control of their behaviour in a relevant way to be held responsible for their actions. What counts as compulsion: when an alcoholic drinks, can they stop; when a drug addict robs a store to get his next fix, is he responsible for his actions? The control condition of moral responsibility could be argued to be about being reason-responsive, and addicts are frequently offered as paradigm cases of humans who lack this, along with psychopaths. Addicts and psychopaths differ in their agency: while psychopaths lack the capacity to respond to moral emotions, addicts are responsive to moral reasons, but their addiction makes them weak-willed (Uusitalo 2015, p. 87).[18] The control condition could be blocked by mind control via drugs or hypnosis, far-fetched examples that philosophers love to utilise. Psychopaths, on the other hand, could be argued to not be in control in the relevant way, or they could be argued to not be moral agents in the relevant sense.[19] I lean towards the latter option, as moral reasoning does not work without moral emotions (Haidt 2012). Fischer and Ravizza (1998) make a distinction between regulative control (alternative possibilities, i.e. other actions are available to the agent) and guidance control (what actually happens in the causal sequence leading to an agent's action). When an agent

[17] "But with regard to the things that are done from fear of greater evils or for some noble object (e.g. if a tyrant were to order one to do something base, having one's parents and children in his power, and if one did the action they were to be saved, but otherwise would be put to death), it may be debated whether such actions are involuntary or voluntary. Something of the sort happens also with regard to the throwing of goods overboard in a storm; for in the abstract no one throws goods away voluntarily, but on condition of its securing the safety of himself and his crew any sensible man does so. Such actions, then, are mixed, but are more like voluntary actions; for they are worthy of choice at the time when they are done, and the end of an action is relative to the occasion. Both the terms, then, 'voluntary' and 'involuntary', must be used with reference to the moment of action. Now the man acts voluntarily; for the principle that moves the instrumental parts of the body in such actions is in him, and the things of which the moving principle is in a man himself are in his power to do or not to do. Such actions, therefore, are voluntary, but in the abstract perhaps involuntary; for no one would choose any such act in itself." *Nicomachean Ethics* III.1 1110a4-19.

[18] Susanne Uusitalo argues that addictive action is not compulsive in the sense that addicts simply lose control over their action. An addict getting his fix is not akin to someone coercing someone else by force. Instead, feeding your addiction involves planning, even when the behaviour is habitual, as you need to settle the how, where and when of getting your desire for a given substance fulfilled. Deliberately undergoing withdrawal in order to lower tolerance is common, and Uusitalo argues that this is a clear example of deliberation and being able to carry out your intentions, i.e. being reason-responsive. Alfred Mele (1995) distinguished between degrees of compulsion.

[19] Julie Driver (2015) has recently argued that while psychopaths might not be moral agents and are not morally responsible, they can nonetheless be morally appraisable or answerable to others.

has alternative actions available to her, she has regulative control over her action, whereas for guidance control you do not need to have other actions available. According to Fischer and Ravizza, guidance control is what is required for moral responsibility. Moral responsibility thus results from what *actually* happens in the causal sequence leading to an action, not what *could* have happened, but did not take place (Yaffe 2000). As we can see, there are no simple answers to what it means to be in control of one's actions, and the debates are ongoing in the moral responsibility literature.

Bernard Williams (1993, p. 55) identified four basic elements of any conception of responsibility: *cause* (bringing about a state of affairs), *intention* (whether or not it was intended), *state* (whether the agent was in a normal state of mind at the time), and *response* (what the agent should do in response). He argued that we need different conceptions of responsibility in different circumstances, and we do this by varying the emphasis we give to each of the four elements and the interpretation we give of them. The four follow "from some universal banalities" (pp. 55-56):

> Everywhere, human beings act, and their actions cause things to happen, and sometimes they intend those things, and sometimes they do not; everywhere, what is brought about is sometimes to be regretted or deplored, by the agent or by others who suffer from it or by both; and when that is so, there may be a demand for some response from that agent, a demand made by himself, by others, or by both. Wherever all this is possible, there must be some interest in the agent's intentions, if only to understand what has happened [---] it must be a possible question how the intentions and actions of an agent at a given time fit in with, or fail to fit in with, his intentions and actions at other times. Under any social circumstances at all, that is a question for other people who have to live with him.

What is interesting to note for the present purposes is that he (pp. 63-64) argues that in current moral philosophy there is a tendency to over-emphasise our intentions and the quality of our wills, even though "the responsibilities we have to recognise extend in many ways beyond [--] what we intentionally do" (p. 74). It is a familiar fact that if you acted unintentionally that does not "in itself, dissociate that action from yourself" (p. 54). Climate change is, of course, a harm that people did not intend to cause. This is part of the reason why some authors want to discuss only prospective collective obligations that are free from blame, but I will resist this move.

While it has become quite common these days to separate responsibility that has a backward-looking sense associated with praise and blame, and a forward-looking one that is associated with duties and obligations, my thesis is interested in both retrospective and prospective responsibility.[20]

[20] Neuhäuser (2014) traces the concept of forward-looking (collective) responsibility back to Max Weber, Hans Jonas, Hannah Arendt, Larry May, Iris Marion Young, and David Miller. Miller (2007) distinguishes between the responsibility we bear for our actions and decisions (*outcome responsibility*), which is essentially backward-looking responsibility, and the responsibility we could have to aid those in need (*remedial responsibility*), essentially forward-looking. Outcome responsibility asks how far agents can reasonably be appraised or blamed for creating a certain outcome, whereas remedial responsibility begins with victims and asks who should help them, without the latter necessarily having any causal links to bringing the harm about.

When we look into the past to see how something came to be, we are not doing this just to assign praise or blame (guilt, fault), but also to just understand how it came to be. In cases of accidents, for example, trying to piece the causal puzzle together helps us to see how such things might be avoided in the future. By understanding the reasons that led to the accident and by assigning responsibility, we are looking to see if there are things that could be done differently to prevent such things happening again. We might not want to blame anyone, but we need to try to understand the things that led to the unwanted state of affairs if we hope to reduce the chances of it happening again (or to reduce the negative impacts). Conversely, when something has produced good results and outcomes, it is also useful to try to recognise the causes and to duplicate best practises or maintain and strengthen existing good practices through praise and adequate resource allocation. Here again the directions blend together. Of course, it can be illuminating sometimes to discuss the directions separately. Even so, I think we need both past and future responsibility if we are to make sense of climate change responsibility. This is a point I will discuss in detail in chapter six.

The standard line of argument is that to qualify as a moral agent, one must be able to deliberate between actions and possible outcomes and then choose between them. Agents must not only have the ability to make choices, but also to act in the world (Peeters et a. 2015, p. 124). A prominent recent moral theory, contractualism, suggests that "moral judgments apply to people considered as possible participants in a system of codeliberation" (Scanlon 1988, p. 167).[21] Conditions and stages that make participation of this kind impossible can therefore render moral praise and blame inapplicable, for example "for people acting in their sleep, victims of hypnosis, young children, people suffering from mental illness, and so on" (p. 173). He elaborates (p. 174):

> This general capacity for critically reflective, rational self-governance is not specifically moral, and someone could have it who was entirely unconcerned with morality. Morality does not tell one to have this capacity, and failing to have it in general or on a particular occasion is not a moral fault. Rather, morality is addressed to people who are assumed to have this general capacity, and it tells them how the capacity should be exercised. The most general moral demand is that we exercise our capacity for self-governance in ways that others could reasonably be expected to authorize. More specific moral requirements follow from this.

Thus when my one-year-old hits me painfully on the head with a toy, I do not express any anger or resentment towards him, and I do not start questioning if he bears ill will towards me. A toddler that young is still learning about the reactions of other and what hurts. This is not to deny that

[21] One of the advantages that I find Scanlon's theory has over other contractualist theories is that we are not imagining ourselves having to defend our principles purely in the abstract, but instead to other individuals. These individuals can be particular others (even if they are imaginary); they do not need to be completely abstract people within universal claims.

children can manifest attitudes of good or ill will, but we take an objective view of their attitude, rather than a participant's view. Because we are aware of the cognitive and affective limitations of small children, we prevent them from participating in characteristically adult relationships in society. A toddler is not expected to be the best friend or confidant of an adult, any more than he is expected to be able to exercise good judgement in a public role.[22]

Children and adults with intellectual disabilities are standardly cited as examples of agents who nevertheless do not qualify as moral agents: they do not lack moral standing, but we do not evaluate them the same way we do moral agents, and we do not expect as much of them (Erskine 2003, p. 6). Naturally there are differences in degree involved; a ten-year-old can be expected to act with much more deliberation than a one-year-old, and some intellectual disabilities are less severe than others. If morality is addressed to people who have the general capacity of critically reflective, rational self-governance, we should exercise this capacity in moral decision-making. This is why it cannot be mechanical; it cannot involve simply following some moral guidebook. If you follow any ethical text to a t, you are side-lining your moral agency, you are making a decision not to use it: you are following a moral guidebook blindly and thus your morality is mechanical.[23] Mechanical morality is not exempt from blame: if you have the capacity for morality, you should exercise it.

But what does it mean that we blame or praise someone? Peter Strawson (1962, p. 66) argued very influentially in his essay *Freedom and Resentment* that reactive attitudes such as blame, resentment, gratitude, guilt, love and forgiveness are manifestations of morality itself: "What *is* wrong to forget is that these practices, and their reception, the reactions to them, really *are* expressions of our moral attitudes and not merely devices we calculatingly employ for regulative purposes. Our practices do not merely exploit our natures, they express them." He (pp. 48-55) underlines that our reactive attitudes are natural human reactions towards the good or ill will (or indifference) of others towards us as displayed in their actions and attitudes. They are important for us, as they help to constitute our relationships with others: what we demand and expect of others in terms of their intentions and

[22] Kutz (2000, p. 28) writes that "our attribution of an incompetent will to such agents is just the projection of ourselves into a certain type of relationship with them. We see them not as accountable subjects but as the objects of understanding, treatment, or education." He rejects Scanlon's (1988) reading of Strawson's theory as one where accountability rests only on the internal will of an agent (similar reading is also offered by Yaffe 2000). Instead Kutz argues that external affiliations of the agent matter also: warranted responses depend on "a certain understanding of the nature of the relationship between agent and respondent" (p. 29). Strawson makes a distinction between participant and objective views and Kutz (2000, p. 28) argues that our attitudes towards children are a blend of these. Therefore although children can manifest attitudes of both good will and hostility, our objective view includes awareness of the cognitive and affective limitations of children, and "our attribution of an incompetent will to such agents is just the projection of ourselves into a certain type of relationship with them." I will discuss Kutz's use of Strawson in chapter five.

[23] Mechanical morality is also involved when self-driving cars are presented with a dilemma over who to try to save: the child who ran into the road or the passengers in the car. The to-swerve-or-not-to-swerve decision is, of course, not taken after deliberation by the car (which is not a moral agent); it is programmed into the software, and the moral agency and the deliberation that went into the programme code can be traced back to the engineers. The rules have been chosen beforehand, although the system does not need to follow them blindly, as there can be learning algorithms involved, thus complicating the question of agency (thank you to Pekka Mäkelä for pointing this out).

attitudes towards us.[24] An action is viewed differently depending on if it was meant maliciously or if it was an accident.[25] I touch upon the possible origins of moral intuitions and feelings in the appendix. But for now I want to explore a little bit more what blame is. The debate on what blame amounts to is very much alive in moral philosophy and there is no consensus on the matter, with cognitive, emotional, conative, and functional accounts of blame all on offer (Tognazzini and Coates 2016). How to judge when a response is appropriate is yet another matter (Clarke, McKenna and Smith 2015). I will make no attempt to cover this literature here, but will introduce an account that is helpful for understanding the later chapters of the thesis.

The standard reading of Strawson is that blame is an emotional response. In contrast, T. M. Scanlon (2008) has influentially argued that blame should be understood as a form of moral judgement. According to him, blame is more than an evaluation of someone's character. It should also not be construed as a disapproval, as a mild form of sanction. Rather, to blame someone, "is to take that action to indicate something about the person that impairs one's relationship with him or her, and to understand that relationship in a way that reflects this impairment" (pp. 122-123). Our relations with other people are at the centre of this account, but in a different way than in Strawson's. Scanlon (p. 128) applauds Strawson for understanding blame and other reactive attitudes as essential components of relationships, and for being able to account for why the content of blame can vary, i.e. different standards in different relationships. However, he argues that Strawson's view fails to explain why blame can vary depending on the actual outcome in cases of moral outcome luck. With moral outcome luck, Scanlon (pp. 125-126) refers to situations where there is only some degree of negligence on the part of an individual, but if they have bad luck with the circumstances (like a child runs in front of their car), the end result can turn out to be disastrous.

While in Strawson's account the blame is a reaction to the attitude to others that is manifested in the blameworthy agent's conduct, in Scanlon's it is "a revised understanding of our relations with a person, given what he or she has done" (p. 150), a judgement that one's relationship with the blameworthy person has been impaired, that the attitudes one holds toward that person have changed. He (p. 128) thus proposes that "to claim that a person is *blameworthy* for an action is to claim that the action shows something about the agent's attitudes toward others that impairs the relations that others can have with him or her." Viewing blame only as attitudinal responses would

[24] Note that in arguing that reactive attitudes help to constitute our relationships with others, Strawson does not argue that they somehow constitute moral responsibility itself, or even the practice of holding people responsible.

[25] Similar to Strawson, for Émile Durkheim (in Pickering 2014, p. 79), moral judgements are spontaneous: "[Moral] judgments are imprinted on the conscience of the normal adult. We find them ready-made within us, and in most cases without our being aware of having actually formed them in a conscious, let alone scientific or methodical way. Man's reaction, when confronted with a moral or immoral act, is spontaneous, even unconscious, apparently stemming from the very depths of his nature. It is a type of instinct which causes us to praise or blame, without there being any other possible alternative. This is why moral conscience is so often envisaged as a kind of voice which is heard within us, even though we are for the most part unable to say what it is or whence it derives its authority."

leave our account of blame too thin, as blame also "involves a suspension, in varying degrees and in varying ways, of one's readiness to enter into these more specific relations, and suspension also of the friendly attitudes that signal a readiness to do so" (p. 143).

As blame is not simply a negative evaluation of a person, but instead "a particular understanding of our relations with him or her", praise is not the opposite of blame, but rather gratitude is (p. 151). Anyone can make a judgement of blameworthiness, but the content of blame depends essentially on the relations between the agents (p. 145).[26] What is an appropriate response in a given situation therefore depends "on the person's exact relation to the blameworthy action and the attitudes it reveals" (p. 146). Hence, in cases of moral luck, the causal outcome, i.e. the bad outcome that was partly down to luck and partly down to fault, "multiplies the significance of his fault" (p. 150). In other words, the significance of the blameworthy person's negligence is increased for those people affected by it through bad luck.

While philosophers such as Scanlon and Sher (2006) have criticised the notion of blame as an emotional response,[27] Angela M. Smith (2013) argues that these accounts leave out what is essential to blame, namely its function as a moral protest. In doing so, she invokes Pamela Hieronymi's (2001) understanding of resentment as a protest. Hieronymi's (p. 546) suggestion is that

> [A] past wrong against you, standing in your history without apology, atonement, retribution, punishment, restitution, condemnation, or anything else that might recognize it as a *wrong*, makes a claim. It says, in effect, that you can be treated in this way, and that such treatment is acceptable. That—that claim—is what you resent. It poses a threat. In resenting it, you challenge it. If there is nothing else that would mark out that event as wrong, there is at least your resentment.

Blame as protest means that you resent the way you have been treated by someone, and challenge the claim that is implicit in the wrongdoer's behaviour, namely that you, the person who has been wronged, is not deserving of moral respect (Smith 2013, p. 42). Blame thus "embodies a disposition to repudiate, to take some kind of stand against, a certain presumption implicit in the wrongdoer's

[26] Scanlon (2008, p. 145) makes the following distinction between *blame* and *being blameworthy*. To claim that a person is blameworthy "is to claim that his action indicates something about that agent's attitudes toward others that impairs his relations with them." To blame someone, on the other hand, "is to hold attitudes toward him that differ, in ways that reflect this impairment, from the attitudes required by the relationship one would otherwise have with the person." The more distant we are from a person, the more detached and impartial our point of view becomes, meaning that blame can amount to a mere attitude of disapproval or a negative evaluation (p. 146), i.e. without emphasis on the effect on our relations.

[27] In fact, Sher argues that emotional responses are not even required for blame, as we can blame someone we love without feeling any negative emotions towards them. In his view, blame is based on a desire-belief pair. Scanlon, on the other hand, concentrates on how the judgement of blame centres on the meaning of what someone did and how this impairs your relationship with them. For a concise treatment on the differences between the accounts, see Tognazzini and Coates 2016.

behaviour: the presumption that he or she has a right to treat others in objectionable ways" (p. 36).[28] Smith therefore suggests a modified version of Scanlon's account of blame, one that makes use of Scanlon's interpretation of what is involved in judging someone blameworthy (having attitudes that impair the agent's relations with others), but that adds an explanation of how blaming someone is an additional step.[29] To blame someone is thus not only to hold them blameworthy, but also to challenge the false moral claim in their conduct and to register one's protest towards it by modifying one's intentions, attitudes, and expectations towards them (pp. 42-43).

On Smith's (p. 41) account, while reactive attitudes are probably by far the most common way of registering moral protest and demanding moral acknowledgement from others, they do not exhaust the ways of morally protesting.[30] An interesting feature of this account is that while the primary target is "the false moral claim implicit in the behavior of a wrongdoer", and the aim is that the wrongdoer recognises this, there can also be a secondary aim of gaining moral recognition of the false claim from the wider moral community (p. 44). A blame towards past wrongdoers, now already dead, can make sense as a protest understood in this way. The example that Smith offers is holding southern slaveholders blameworthy for historical wrongs committed in the United States, and how this "current blame embodies a desire for moral acknowledgement or recognition". She writes (pp. 44-45):

> When we blame antebellum slaveholders, then, I think we should say that the desire in this case is for a continued acknowledgement, on the part of the moral community, of the horrible wrongs that were committed against particular members of our community in the past. By continuing to blame these distant wrongdoers rather than simply judging them blameworthy, we, as it were, sustain and reiterate our moral protest of this treatment of our fellow citizens.

I think this idea captures something important about collective responsibility for past wrongdoings. Active blame as protest seems especially salient when the wrong committed continues to reverberate to the present day, like in how the effects of slavery are still being felt today. The situation will be more complicated with climate change, but we will get to that later. In addition, I will suggest in section 3.1 that the concept of blame as moral protest can also be applied to collective agents.

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[28] She suggests (p. 42, fn.7) that Adam Smith gestures towards this kind of view in *Theory of Moral Sentiments* (1759, II.iii.11).

[29] "**The Moral Protest Account:** To *blame* another is to judge that she is blameworthy (i.e., to judge that she has attitudes that impair her relations with others) and to modify one's own attitudes, intentions, and expectations toward that person as a way of *protesting* (i.e., registering and challenging) the moral claim implicit in her conduct, where such protest implicitly seeks some kind of moral acknowledgement on the part of the blameworthy agent and/or on the part of others in the moral community." (Smith 2013, p. 43).

[30] "After repeated disappointments, for example, I may have lost my ability to feel anger towards an unreliable friend, yet I may still protest his treatment of me by cutting off relations with him. In doing this, and doing this *in protest* of his latest let-down, I make clear that I blame him, even if my predominant feeling is one of sadness." (Smith 2013, p. 41).

A few more clarifications regarding terminology are required before we move on. *Culpability* is about being at fault. It is an important notion especially in legal theory, as it describes the degree of a guilty agent's blameworthiness. In moral philosophy it means that the agent deserves blame and is guilty. Although I employ the term "culpable ignorance" in chapter seven, I will use *blameworthy* in my thesis when referring to culpability. In contrast, *liability* is a legal term that does not necessarily imply blameworthiness, and it is also employed in moral philosophy. An agent can be held liable for something that was outside their control or done by someone else, for example, a parent could be held liable for the negligent damage caused by their underage child. The way Kutz employs *complicity* could be classified as a version of liability.

While some authors make a distinction between responsibility and accountability (for example referring to accountability as liability and responsibility as culpability), I do not employ the terms in this way. I do not imply that they are interchangeable, however. Responsibility is about praise and blame both, and can have backward- and forward-looking meanings (see section 6.3). Accountability, on the other hand, encompasses blameworthy and complicit-without-blame meanings of backward-looking responsibility. Accountability thus is not about forward-looking responsibility, nor is it about praise. I do utilise the term accountability quite a lot in later chapters because one of my main sources uses it: Kutz (2000, pp. 17-18) distinguishes between an internal and an external sense of responsibility, and terms the external sense accountability. The internal sense is about agency conditions for moral responsibility and refers to the psychological competencies one must have to be able to qualify as a moral agent (i.e. the kitten or the industrial robot would not qualify). The external sense (accountability) refers to the normative affiliations and duties of the agent to other surrounding agents. A responsible agent (in the sense of qualifying as a moral agent) is only a suitable *candidate* for accountability, but not necessarily accountable. Kutz's example is a bank teller who has to empty the cash drawer while being held at gunpoint: the teller is a responsible agent, but not accountable. Accountability therefore is a narrower term than responsibility, and it is fundamentally relational (see section 5.2). I discuss moral agency conditions separately, most notably in section 3.1. I use both responsibility and accountability to refer to backward-looking responsibility, with blameworthiness a separate issue. I will argue in chapter five that climate change makes us susceptible to *inhabited evil* in relation to future generations, as well as those already vulnerable to climate risks.

I will argue in later chapters that while a lot of our responsibility in relation to climate change is based on responsiveness to *structural injustices*, blame and other reactive attitudes also have their role to play. However, complicity is not akin to culpability, but rather liability, so all our responsibility in relation to climate change is not blameworthy.

1.3 Ethics for a collective age

The notion of collective responsibility does not sit easily with standard accounts of individual responsibility. As a group-based construct, it places both causal responsibility and ascriptions of praise and blame at the group level, with the source of moral responsibility located in group actions. Smiley (2011) divides the main controversies around the topic into three categories: can collective responsibility be sensibly understood as moral responsibility, how does collective responsibility distribute to individual members, and what is the practical value of ascribing collective responsibility? Classic methodological individualism denies that groups could form intentions, or that groups could be understood as morally blameworthy in the sense required by moral responsibility. More contemporary writers who criticise collective responsibility as a moral construct (along the lines of methodological individualism) acknowledge how collective responsibility can be a useful construct in some cases, but worry about the impact of the lack of full blown mental lives of collectives' on the whole concept (Smiley 2011, pp. 4-7).

I wish to separate two lines of debate, as I do not wish to make any deep ontological commitments in this thesis when it comes to collective agency. Namely, I want to divorce the question "does it make sense to discuss collective agents in a holistic manner?" from the question "does it make sense to discuss collectives as *moral* agents?" (French 1984, Hess 2014). What this means is that there are collective agents, yet moral agency belongs to individuals only. I will discuss this in detail in chapter three.

Collective responsibility as a term is given different meanings in the literature. I will defend a hybrid-theory in section 3.1, one that allows that collective agents are real agents, but denies that they are moral agents. They can accrue moral responsibility through their actions and omissions, but moral agency belongs to beings that can reason morally. Therefore, moral responsibility also belongs to the agents, although it can be shared. While collectives can act in a moral way and incorporate moral reasons into their decision-making structure, I maintain that they cannot as collective agents adequately respond to reasons for accepting or rejecting moral principles under particular conditions.[31] This is always left to the individual moral agents within these collectives. Thus collective responsibility does not let the individual off the hook: individual responsibility is not a separate or competing notion, rather the two are interlinked. According to the hybrid-view that I will defend, in addition to (or instead of) direct moral responsibility, individuals can have shared moral

[31] Moral reasons for action are, of course, different from moral reasons for accepting moral principles. I argue that while collective agents can have the former, they cannot adequately respond to the latter; only individuals can. Therefore collective agents cannot be moral agents, although they can incorporate moral reasons into their decision-making and can be praised or blamed accordingly.

responsibility *qua* members or constituents of collectives, whether the latter is agential or unorganised. This does not mean, though, that my account is reductionist. The myriad ways in which the real (non-moral) agency of the collective affects the options and thinking of the individuals within the collective make the two types of moral responsibility quite different. The way these two interlink and differ forms the core part of my thesis.

Collective responsibility is often theorised via collective action or individual action in a collective setting.[32] Collective action comes in many varieties. A gang robs a bank. Two people engage in a long passionate kiss. A group of people practice tai chi in a park. Four hotel chefs prepare a meal that is delivered to the guests' room. An army invades a city. NASA sends a shuttle into space. People exit and enter a subway carriage. A group of researchers plan a project that never materialised, as it fails to attract funding. In all these examples a set of people are either acting together or engaged in action that has a collective context or meaning. In most of these cases, with the possible exception of the commuters entering and exiting the subway, the people engaged in the collective action share a goal that can only be obtained through acting together. This is why these kinds of groups could be labelled as goal-oriented collectives (Isaacs 2011, p. 25). When people embrace something as their collective goal, they understand their own contributions and individual actions in the context of the collective goal (p. 38). They might or might not be organised, but in all these cases the people are involved in collective action in order to bring about some shared goal.[33]

Highly organised groups are the most obvious examples of collective agents. They have decision-making procedures in place and have a core of some kind that can be identified as representing the collective, for example, a board of trustees. Legally recognised organised collectives include corporations, nation-states, governments, non-governmental organisations, sports clubs and professional sports teams, educational institutions, political parties, and art establishments such as theatre groups, among countless other examples. While all these collectives have a structure, they

[32] Action is bodily movements: waving a hand, writing a note, running for a bus, singing a song, lifting someone up, saying something. Intentional action differs from unintentional in that it has an end goal. When I wave my hand I do so to attract your attention, but when my eyelid twitches due to a tic I have no end goal that can explain the movement. My act was involuntary and unintended. The movement of the eyelid can be causally explained by myokymia: the involuntary and spontaneous localised muscle contractions that can be brought about by stress, eye strain or allergies, among other things. But you cannot give an explanation for eyelid tics in terms of goals or aims: the movement has none. Intentionality is something that is deliberate: you aim at something, your actions are directed at something, they are about something. Intentional action is often bodily movements in a particular context: I can only high five you in a social context where the gesture means something, otherwise the action is only the palms of our hands touching roughly around the height of our heads, and the meaning and intention would be something else.

[33] Kutz (2000, p. 105) distinguishes between *ephemeral* and *institutional* groups, only the latter of which "have identity criteria that do not wholly consist in the presence of overlapping participatory intentions" (I will discuss participatory intentions in chapter five). Thus, while it is enough to make me a member of an ephemeral group such as the one that pushes a car out of a snow bank, "I cannot make myself a member [--] of the U.S. Senate by intentionally participating in its deliberations". Not only do the other Senators have to recognise me as a member, I also have to have to have won a majority of the vote in the elections.

will diverge in terms of the legal protection they enjoy and the extent to which their activities are regulated by the law. By this, I refer to the extent to which corporations and political parties must conform to regulations in comparison to sports clubs or theatre groups, for example. The latter will, of course, also be subject to certain laws and regulations, but their activities will not usually be as affected by the legal and legislative institutions as corporations are, nor are they given the same protections as corporations are (for example, being given the status of persons in the U.S. law under corporate personhood). A collective can, of course, be highly organised and at the same time without any legal protection, like criminal organisations. *Organisation* is therefore a good word to refer to groups that are at the most organised end of the collective spectrum and are always collective agents.

Collectives that are not organisations but are nonetheless organised groups in a looser sense include families, groups of friends, hobby groups, and such. They have a membership that is more or less defined, and they have some kind of a system for decision-making, although in most cases not systematic in the sense of following a certain set of procedures (it could be as simple as "Mum and Dad decide", or "we will follow Abigail's lead unless Anna has other ideas"). Hierarchies and roles can and do exist within these collectives also but the roles are usually subject to ongoing renegotiation between the members, however unofficially or even unconsciously this process takes place. What these organised collectives have in common is that they usually evolve around personal relationships and often also around common interests. If urgent action was required, this kind of a group should be able to act fast due to the familiarity and overlapping relationships between the members.

In contrast, the roles and rules of an organisation are much stricter, which means that when a person acts within such a role, they act differently than they would at home, as they need to take different things into consideration. The more organised the collective, the easier it is to identify it separately from any cohort of its members (Isaacs 2011, p. 24). Isaacs distinguishes between organisations (institutional collectives) and goal-oriented collectives. When a harm is caused where no organised collective entity is the culprit, the perpetrator might still be described as a goal-oriented collective: all that is needed is that there is "a joint goal around the achievement of which a group comes together in solidarity" (Isaacs 2011, p. 25). To give an example of my own, we could have three homophobic individuals who meet each other for the first time while each is angrily watching a pride parade passing by. They end up deciding to beat up a participant and thus share a goal that they regrettably succeed in attaining. They could be described as a goal-oriented collective, even though they just came together. The participants of the pride parade are not an organisation either (although they might for a large part comprise of several overlapping organised collectives, such as activists groups), but they too could be described as a goal-oriented collective: they are involved in joint action (march, parade) to bring about a joint goal (furthering LGBT rights). These kinds of

goal-oriented collectives in most cases fall somewhere near the middle of the organised-unorganised spectrum, as it takes advance planning to come together in large numbers.

Towards the more unorganised end of the spectrum, the goal could be as simple as making a wave in a stadium when watching a game. Isaacs (2011, p. 40) nicely illustrates how in this kind of a goal-oriented collective, the intentions of members "play an important analytical role in the intentions of the whole":

> When we intend to do something together, then each of us individually has a commitment to the collective goal and an intention concerning his part of what we intend to do. The intention of each is not, however, a collective intention. It is an individual intention with collective content. These individual intentions with collective content are components of the collective intention. If, for example, we intend to take part in the wave, then each of us intends to take part, namely, when the wave gets to our section, each of us intends to jump up, throw our arms in the air, cheer, and then sit down. And we intend to do this in a coordinated fashion, based on our observations of when it is our turn. Our reason for doing this is to participate in the collective goal of producing a strong wave. If you were attending the game with me and I jumped up, threw my hands in the air, cheered, and then quickly sat down, you would have reason—in the absence of a wave or of the supposition that I was trying to get one started—to wonder what on earth I was doing. In the context of a wave, however, it is quite clear that I intend to participate in the collective action.

What is important to note at this point is that collectives come in all shapes and sizes, just as the notion of collectivity comes in degrees. According to Isaacs (2011, p. 48) the greatest gain from acknowledging this is that we get a concept that reflects the range of collective activity and is able to capture a variety of real-life examples, while at the same time being able to be clear about the differences between them with respect to their intentional character. She explains:

> On one end of the continuum is full collectivity and on the other end is parallel action. At and near the end where there is full collectivity, the combination of factors—much like the structures and mechanisms in organizations—produces a collective intention. No such intention arises in parallel action. The collective intention is neither a simple aggregate of individual intentions nor an individual intention with an irreducibly collective orientation. Rather, it is a state of affairs in which agents understand themselves as members of a collective and in relation to others, aiming as a group for the achievement of a collective goal, intend individually to do their part in the achievement of the collective goal, and mutually understand one another as doing the same. These conditions set the intention for the collective.

The organisations and goal-oriented collectives –distinction is not the only one she wants to make, however, as Isaacs (p. 41) also discusses some collectives being *tighter* on the continuum than others, with the tightness reflected in the strength of the collective intention. When the collective intentions are completely transparent to each participant, we have a tight collective: each participant is aware of the intentions of others (pp. 44-45). In her example (p. 46), two people have a dinner together;

"each participant in the collective act has the appropriate understanding of the quite specific collective goal, her respective contributions toward the goal, her intention as contributor to contribute, the intention of her coparticipant to do the same. Under these conditions, they pursue the goal as a unit." These two people are a tight collective. She contrasts this with a looser collective, a group who have a monthly potluck dinner while discussing a book. There is no effort to co-ordinate what each brings, so the end result varies from one meeting to another. Isaacs labels the group a moderate collectivity: "The lack of specificity of the goal and lack of knowledge about what others will do loosens the collectivity." Collective intention does exist, as the book group intends to have a potluck dinner, although how balanced the selection of foods turns out to be is anyone's guess. Instead, "The outcome is much more the satisfaction of a collective hope than the achievement of a collective goal." Schmid (2009) sets the basic dilemma of collective agency in terms of plural action: actions require agents and so for somebody to qualify as an agent, "there has to be a description under which she *intended* to do what she did" (p. xiv). But how can we intend anything other than our own actions? I will return to this in chapter five when I discuss Kutz's account.

There are also collectives all around us in the wider sense of the term that encompasses various interest groups and people bound together through causal links to something. While these latter groups are not collective agents, they are unorganised collectives that some argue can also bear collective duties and obligations. The collectives that I will discuss for the rest of this section are on the unorganised end of the collective spectrum. What makes these cases collective is context: while the individuals might act independently, they do not act in isolation. That is to say, the individual acts take part in a collective context and their meaning and significance can only be fully captured by analysing the collective level, such as is the case with both climate change and systemic injustices. Thereby collective contexts are also important in affecting and shaping individual moral responsibility in these kinds of cases, even when no collective agents as such are involved.

Unorganised collectives are a set of individuals who lack any established group structure, but are nevertheless connected by some common feature, weather that feature is persisting or temporary. Examples of unorganised collectives include different kinds of interest groups and social movements, sets of people who happen to be at a certain place at a certain time, but also groups of people that together cause harm in aggregate. After all, many of the most serious harms brought about collectively are not "the products of concerted action" but rather "the results of a confluence of individual behavior" (Kutz 2000, p. 166). Climate change is the most pressing example of this, but environmental damage that results "from an aggregate of marginal individual contributions" more generally presents the paradigm examples of what Kutz labels "unstructured collective harms" (p. 166). This term can be confusing, though, as although the collectives responsible are unstructured in the sense of being unorganised, the harms are often traceable to structural and systemic issues. I

will return to these harms in chapter five, labelling them either *structural harms* or *systemic harms by unorganised collectives*, and discuss how Kutz suggests that they can be rooted in individual accountability, either through systemic forms of collective action, or by symbolic considerations of character. In chapter six I discuss structural injustices and how we can be complicit for them.

The existing literature on the responsibility of unorganised collectives has centred on the ability of individuals to form a group agent capable of undertaking the action that the situation requires. Debates on this date back to Virginia Held's 1970 article "Can a Random Collection of Individuals Be Morally Responsible", where she argues that passengers on a train carriage (or pedestrians on a street etc.) can be held morally responsible for an omission such as a failure to help the victim of an assault, as long as the action called for is obvious for a reasonable person. Cripps (2013, pp. 49-61) discusses classic beach rescue scenarios (inspired by Held), presenting a continuum of circumstances where individuals who do not necessarily know each other — and have no established decision-making mechanism — regardless should co-operate to prevent children from drowning. Isaacs (2011, p. 141) offers an account of Bystander Cases where "there is at least one person suffering a harm and at least one person in a position to assist." The person(s) in a position to assist are not responsible in the backward-looking sense for the plight of those in need, so any obligation to assist "does not turn on any prior share in bringing the unfortunate circumstances about."

What is common across these kinds of random collectives is that the individuals find themselves in the situation due to nothing more than (bad) luck. The composition of the collection of individuals in these kinds of cases is therefore purely down to matters of geography and timing. I agree with Held, Cripps and Isaacs that their acts and omissions become a question of moral responsibility when there is a pressing need and they are in a position to help someone. However, actions that predictably cause harm in aggregation (like the emissions that cause anthropogenic climate change) take place within a system and things get more complicated then, as I will argue in chapters four and five. Applying the logic of random collectives to climate change does not hold. I will return to this in chapter four when I discuss random and other unorganised collectives.

1.4 Uncertainties and risks

Climate change is fertile ground for attacks on science because of the scale of the problem and the uncertainties involved. While the science is clear on the cause of the changes (human activity), it is far less clear about the outcomes of the changes in the climatic system. While this is largely due to our inability to predict what will happen (as that depends mostly on the kinds of mitigation policies we will have), some of it is also down to the vast scale and time-frame of the problem, and the amount of data and knowledge about climate mechanisms that climate models require. The IPCC

uses probabilistic estimates to indicate the assessed likelihood of an outcome or a result.[34] This is part of what good science is: you do not claim to know for certain something that there is simply not enough evidence about. The Earth's climate is a very complex system, so getting to grips with all, or even most, of its different mechanisms will take time. Therefore, while climate change is an undisputed fact, there is a lot of uncertainty around how the climate responds to these large and rapid changes. This uncertainty has many implications. It is difficult to make policy-decisions related to climate change: the timescale is beyond what we can predict and the science deals in probabilities.[35] Not only is it hard to sell the complicated science to a public that is already pushed towards either passive apathy by psychological defence mechanisms, or suspending ignorance by highly misleading campaigns by powerful business elites (see section 3.3), it is also hard to make sense of exactly how much to invest in mitigation and with what measures. This is especially so when the standard economic tools are not fully up to the task (see section 2.2).

How to capture uncertainty in scientific models is one issue, how to convey the probabilities to policy makers (Parker 2010) is yet another. These are important topics in their own right, but they fall outside the scope of this thesis. What I am concerned with is how should uncertainty factor in our ethical arguments? As climate ethics is for the most part not about what we as individuals should do, but what we as collectives should do, my question is closely tied with how uncertainty should factor in political debates, with politics understood broadly. One aspect in any political discussion is invariably the economy, how we organise sustaining ourselves and others. Uncertainty and risk is not a topic alien to economists. John Broome (1992, p. 17) illustrates the importance of risk in economic theory when he argues that "what really matters is not the riskiness of the project considered in isolation, but the effect it has on the overall risk we are exposed to." When we reduce the variance in what might happen by reducing our emissions, mitigation acts like an insurance as the future becomes a bit less unsure, and insurance is worthwhile even if the risk does not materialise (1992, pp. 17-18). Broome writes (p. 18):

> Uncertainty is an inherent part of the problem. Intuitively, it strongly conditions the nature of the problem. In particular, the small chance that global warming might lead to disaster seems, intuitively, to be one thing we ought never to lose sight of. More than anything else,

[34] Virtually certain (99–100% probability), very likely (90–100%), likely (66–100%), about as likely as not (33–66%), unlikely (0–33%), very unlikely (0–10%), and exceptionally unlikely (0–1%). They also employ additional terms when required: extremely likely: (95–100%), more likely than not (>50–100%), and extremely unlikely (0–5%). In addition, the IPCC uses the terms limited, medium, or robust to describe the available evidence; and low, medium, or high for the degree of agreement. Furthermore, different confidence levels can be assigned for a given evidence and agreement statement, but when levels of evidence and degrees of agreement increase, they correlate with increasing confidence, which is expressed using qualifiers very low, low, medium, high, and very high.

[35] In general, I find that these things have much more to do with political inaction around climate change than assumptions found in game-theoretical models that have been widely used in climate ethics literature. However, I will not defend this view here. For a critique of applying the logic of the Prisoner's Dilemma to climate change, see Amadae (2016, pp. 224-244).

> most people are worried by the thought that we are interfering with the natural working of the entire globe, without properly understanding what we are doing. Our lack of knowledge has to be granted a recognized place within the decision-making process.

The role of uncertainty is not properly reflected in the political process, however. In a similar vein to Broome, Gardiner (2011, p. 190) observes that "perhaps our greatest uncertainty at the moment concerns how good we are at identifying catastrophic risks. In other words, it is reasonable to believe that our current grasp of the possibilities is seriously incomplete", meaning we have not yet identified all tipping elements that are relevant from the point of view of policy-making. As we are probably ignorant about some major threshold phenomena, and do not know enough about the ones already identified (such as ice sheet disintegration, or the vast methane reserves currently frozen under the seas being released), we could be much closer to experiencing abrupt climate change effects than what is reflected in public knowledge and political agenda.

This level of uncertainty has serious implications for the way that politics should be done, but it also points to a worrying thought. Could our great intelligence and scientific prowess have made us too reckless in relation to the vast amount of things that are still unknown to us? Perhaps we have been lulled into a completely false sense of security with regards to climate change and science: instead of it being an incremental and gradually worsening problem, one mainly for future generations, we have already set off a chain of events that will be catastrophic to us as well as them. We could already be past the tipping point. The possibility of a disaster, even if the chance is small (and especially if we cannot really say with much confidence what the chances really are), matters a great deal ethically. I find this to be one of the most underutilised arguments in climate ethics and politics alike.

Every year, progress is made in climate science. As the models used by climate scientists have become ever more sophisticated, so have the predictions become more confident with each successive IPCC Report. No doubt many major advances will still be made. Despite this, there will always be an element of uncertainty involved in climate change, no matter how sophisticated climate science will become. This is purely because of the timescale involved. Broome (1992, pp. 10-11) observes how we cannot be expected to be able to imagine what the future looks like with any relevant certainty due to what he terms as "historical uncertainties". Consider all the things that have changed in the past 30 years alone: the internet connected the world, mobile devices became widespread, and social media changed the way we communicate. And these are just the major technological innovations that have changed the way we connect and organise our daily lives. Political changes have been just as significant and far-reaching: the collapse of the Soviet Union, the spread of the neo-liberal free market economy, and the aftermath of the Arab Spring are just some of the recent events that continue to shape our realities. Historical uncertainties make it impossible

to predict with any accuracy what human lives will be like in 200 years' time. But it is not only because we do not know how our societies will evolve that making predictions about the effects of climate change on our lives is challenging. As Broome (1992, p. 11) notes, the climate also helps shape history:

> A feature of historical uncertainty is that it may never be resolved. Not only are we now unable to predict what the effects of climate will be, but historians in the future will never know what many of its effects have been. No doubt the Little Ice Age had a vast influence on human history. But we do not know what would have happened if it had not occurred. So we do not know what its influence was, and we have no idea whether it was for good or harm.

Far from this uncertainty being a reason for not making policy recommendations, Broome argues that the uncertainties involved mean that we should tread carefully and err on the side of caution. There are general predictions that we can make fairly safely:

> The first is simply that the effects of human-induced global warming are very uncertain. [--] this by itself has important consequences for the work that needs to be done. But, more than that, we can say that the effects will certainly be long lived, almost certainly large, probably bad, and possibly disastrous. (Broome 1992, p. 12)

When there is a risk of a catastrophe, we should err on the side of caution. Even a small risk of a large catastrophe has more moral significance than a large risk of a small harm. One possible trigger for an all-out catastrophe that we already know about would be the release of methane reservoirs under the artic regions that would make the world uninhabitable (Broome 1992, pp. 15-16). Methane is a far less well-known and discussed greenhouse gas when compared to carbon dioxide, but it is also far more powerful. The likelihood of these kinds of scenarios need not be too great to still give us plenty of reasons to take them very seriously indeed.

Broome's words of caution from 25 years ago are given new urgency by the latest research on methane. Unlike the very long cycle of carbon emissions, methane only lasts in the atmosphere for about 12 years. Methane has been responsible for about a fifth of global warming thus far, but it holds the seed for catastrophe, as methane molecules warm the planet roughly 30 times more than CO_2.[36] While microbial sources are the main culprit (including agriculture, especially rice patties) totalling almost 400 million tons of methane emissions a year, fossil-fuel sources are almost twice as big as previously estimated (about 200 million tons). Climate change has already caused the

[36] *Global warming* refers to how average global temperature rises as a result of greenhouse gas emissions, while *climate change* refers to the changes in the global climactic system, i.e. to global climate patterns, caused by the increased temperature.

conditions on Earth to become wetter and warmer. The truly troubling finding is that this is accelerating the processes that release methane into the atmosphere. (Pearce 2016).

What we are facing then is the possibility of a positive feedback loop in which warming leads to the release of more methane and even more warming. With methane molecules being a greenhouse gas 30 times more powerful than carbon dioxide, the potential effects of this feedback loop are truly terrifying. Global warming could be accelerated to a degree previously thought impossible if the vast amounts of methane currently trapped around the Arctic in permafrost on land and under the sea would be released.[37] When outcomes like this loom ominously on the horizon of possibility, there is absolutely no defensible reason to wait. If we wait any longer, it might be too late (it might already be too late). We already have very credible scientific evidence that changes are happening at a scale and speed previously unthinkable and we know many of the mechanisms behind these changes. We are the culprits; any appeals to uncertainty are only a tactic for those with economic interests tied to fossil fuels to delay action (I will discuss this in section 3.3).

1.5 Central arguments

What is our duty or obligation in given circumstances is a standard question in moral philosophy. It is also a recurring question in climate ethics: what is the duty of an individual in the face of the collectively caused harm of climate change? This is far from the only salient question to ask, however, or indeed even the most important, as I will argue. My main concern could be captured with a plural formulation of the Socratic question 'How should one live?' which Bernard Williams argued is the best place for moral philosophy to start (1985, pp. 4-5).[38] I will not aim to give a detailed prescription of anyone's duties related to responding to climate change. I will not aim to even give a prescription of any exact collective obligations. What I aim to do, instead, is to convince the reader that it is warranted to hold most of us in the Global North responsible for climate change, even with all the various complexities involved.

When noting how little has been written about the principle of "ought implies can" in relation to collective obligations, Holly Lawford-Smith (2012, p. 453) excuses moral philosophers from their

[37] If we are already past the tipping point, our emissions will make no difference in the long run, catastrophe will happen regardless. Broome acknowledged this, but points out that our emissions are still not harmless: they accelerate the speed at which the catastrophe draws closer, and this is harmful. He concludes (2012, p. 78): "If there is to be a catastrophe, the later the better. So even fatalism does not give you a good reason to doubt that your emissions are harmful." Broome's harm argument will be discussed in more detail in chapter two.

[38] In the view that I will defend, morality is not socially constructed: it is part of who we are and forever evolving. While my approach is not based on moral facts that are somehow outside the human realm, it is not relativist either: there is a hard core to morality that is formed by the kind of creatures that we are. That is, humans are social creatures that rely on co-operation to survive and on love to flourish. We need each other and we want each other in various ways. While we can nourish each other, we also have the capacity to hurt and oppress each other, and human history - as well as the present time - has plentiful examples of both.

silence because "after all, they deal in individuals and actions", unlike political philosophers who encompass collectives and outcomes. Throughout this thesis, I will take a less lenient view on moral philosophers: I believe our musings should likewise cover collectives and outcomes. The world today is too interconnected to limit the scope of moral philosophy to individual actions and agents alone. I will argue that we cannot get the full picture of individual responsibility unless we look into things we do together and things we cause together.

Philosophically the thesis draws from a wide range of literature and brings together some areas of philosophy that previously might have had little cross-pollination, such as collective responsibility and culpable ignorance. I find this inevitable, as the topic at hand demands it.

Chapter two begins with a discussion of the different aspects of climate ethics and introduces the main debates within the field. It also critically discusses Walter Sinnott-Armstrong's (2005) argument against assigning individual responsibility for climate change and explains why the argument fails. The possibility of direct responsibility for climate change is the concern for the rest of the chapter. I will deny that individual emissions resulting from our one-off daily choices cause harm, but will argue that individual *lifestyle emissions* might. I will argue that we can have direct responsibility to mitigate, although this will not be our exclusive, or even (for the vast majority of us) our most important responsibility regarding climate change. I will suggest that our individual direct duty in relation to climate change is to not to increase the probable risk of serious harm – deprivation of fundamental capabilities – to other people, at least as long as we can do so at a less than significant cost to ourselves. The discussion on the complications of talking about direct duties sets the scene for the exploration of individual complicity for collective harms that follows later.

Chapter three discusses collective responsibility and collective agents. My view is that certain organised, institutional collectives can be thought of as collective agents, although they are not moral agents. I will suggest that collective obligations distribute to individual members, but often this is not in any straightforward way. I will also argue that nation-states and governments are not the only relevant collective agents when we look at climate change responsibility, but that corporations also have obligations concerning making sure that their activities are as carbon-neutral as possible. Furthermore, corporations that have engaged in lobbying against climate regulation through creating and disseminating misleading information have acquired themselves additional obligations to mitigate climate change and compensate for the harm they have caused.

Chapter four discusses unorganised collectives and highlights the problems that we face when we try to discuss their responsibility. The discussion centres on texts by Cripps (2013) and Isaacs (2011). While I agree with Cripps (p. 38) that in situations like climate change there is "an ineliminable collective significance to what we do", I disagree that this can be best explored through the logic of random collectives. I also deny that you can place obligations, putative or actual, on

unorganised collectives, although you can hold the constituents of unorganised collectives blameworthy in the backward-looking sense under certain conditions. However, I grant that it can be useful to discuss unorganised collectives in some cases, as it can help us to make better sense of our complicity for collectively caused harms where our participation is marginal. More specifically, it can make us appreciate the different structures and systems that we are part of, and how we are complicit in upholding and recreating these.

Chapter five focuses on complicity and offers it as a solution to the problems of the responsibility of unorganised collectives and marginal participation, referring to cases where individual contribution is overdetermined in the sense that no individual's action or omission is necessary or sufficient for the normative properties of a collective outcome. While Isaacs's and Cripps's models offer new ways of looking at collectively caused harms, I find Kutz's (2000) participatory intentions a more fruitful way of trying to get to grips with responsibility for genuinely large-scale, structural problems like climate change. I will argue that not only can we have responsibility in relation to climate change both directly and as members of collective agents, we can also have it as constituents of unorganised collectives.

Chapter six answers criticism that has been levelled against Kutz's account and adds two more pieces to the complicity puzzle. I discuss the potential of individual actions to help bring about an outcome, arguing that this will give us an additional reason to take action in cases of marginal participation. An important aspect of climate change responsibility is forward-looking responsibility without blame, something that Young (2011, p. 106) discusses: "Those who participate by their actions in producing and reproducing structural injustice are usually minding their own business and acting within accepted norms and rules. They bear responsibility for unjust outcomes, which they may regret, without being specifically at fault." I therefore suggest that we should combine Young's account on structural injustices with Kutz's account on complicity to get a full picture of climate change responsibility.

Chapter seven looks at responsibility and ignorance, including psychological and institutional factors, which have been used to explain inaction. I will argue that institutional collective agents have a lower threshold for culpable ignorance than individual agents. By this I mean that those collective agents with the capacity to process a lot of information have greater obligations to know about climate change than individuals do. I will also argue that when it comes to climate change, there are several obstacles for us assessing the situation in an objective manner.

Although the scope of my concerns is wide, I make no claims to offer some definitive account of these issues that will settle ongoing debates. While I believe that there is a lot philosophers can contribute to public debates on ethical issues — and furthermore that they definitely should attempt to do so — philosophers cannot claim any exclusive rights over ethical knowledge (nor can anyone

else). Besides, research has shown that the diversity of the cognitive tools and abilities of different people outperform groups of experts in accord (Page 2007). Collective wisdom trumps individual excellence, even when the latter is interconnected. More than ever, we need to think and act together to solve not just climate change, but also other structural collective problems that pose real threats to human flourishing, perhaps even to our survival as a species.

What, then, can philosophical inquiry contribute to society and to the social sciences, what is it that separates a philosophical inquiry from other sciences and narratives? As Williams observed, "modern life is so pervasively reflective, and a high degree of self-consciousness is so basic to its institutions, that these qualities cannot be what mainly distinguishes philosophy from other activities", citing law, medicine, and fiction as examples (1985, p. 2-3). He does allow, however, that philosophy might be able to make a special use of reflectiveness (p. 2): "What makes an inquiry a philosophical one is reflective generality and a style of argument that claims to be rationally persuasive." My thesis is in the tradition of analytical philosophy which "involves argument, distinctions, and, so far as it remembers to try to achieve it and succeeds, moderately plain speech" (p. xi). G.E.M. Anscombe defined philosophy as "thinking about the most difficult and ultimate questions" (Anscombe et al. 2005, p. ix). If you combine this with reflective generality and arguments that aim to be rationally persuasive, I think you are close to an answer to the kind of contribution philosophy can aim towards. Philosophers these days can draw on a rich literature of thoughts and ideas built over two thousand years. In its own way, philosophy is also group thinking: the ideas of individuals are continuously scrutinised, tested, and improved upon by other philosophers. I am happy to be part of this tradition.

I hope to present a coherent argument that is sensitive to both existing philosophical literature and findings from other sciences. In the age of information overflow, insurmountable complexity, and great interconnectivity it is no wonder if truth sometimes seems too plural and facts too multi-faceted for anyone to be able to say anything of real importance in moral matters. Despite this, I think the common core of humanity makes ethics and moral philosophy both possible and essential, and issues of individual and shared responsibility urgent. I hope that this thesis adds in its own modest way to the public discourse on how we should live with each other.

Chapter 2 – The complexity of climate change and assigning direct individual responsibility

> The carbon cycle is being perturbed, a warming is occurring, and people will die – but the enormous complexity of the social and physical systems that mediate between the perturbation, the warming, and the deaths makes causal knowledge or attribution extremely difficult or even practically impossible.
>
> - Dale Jamieson (2015, p. 23)

> My fundamental point has been that global warming is such a large problem that it is not individuals who cause it or who need to fix it. Instead, governments need to fix it, and quickly.
>
> - Walter Sinnott-Armstrong (2005, pp. 343-344)

> Suppose that it is true that humanity currently lacks the appropriate institutions to deal with global environmental change. What follows? [---] If the attempt to delegate effectively has failed, then the responsibility falls back on citizens again—either to solve the problems themselves, or else, if this is not possible, to create new institutions to do the job. If they fail to do so, then they are subject to moral criticism, for having failed to discharge their original responsibilities.
>
> - Stephen M. Gardiner (2011, p. 433)

Climate change presents us with a cluster of ethical dilemmas. Although there are no easy technical solutions, what we should do is quite clear in view of the science: reduce emissions rapidly (mitigation) and adjust to the changing environment (adaptation). When neither of the two no longer applies, we should arguably try to recompense for the harm (compensation). Mitigation should be the main goal.

How exactly to do any of this is, of course, the big question, unsolved both at the realpolitik level as well as at the theoretical level. Distribution of burdens between nations is a major issue in international negotiations and in ethics. However, the distribution of responsibilities presents an even wider ethical challenge when considered from the viewpoint of the responsibility of individuals and collectives, of the responsibility of present and future generations. To give two more examples of some of the main issues related to meeting the climate change challenge, the technology with which we should change our energy production to carbon neutral is a contested issue, as is the extent to which we need to rein in and change our consumption patterns and the way we currently structure our societies in economic terms.

Climate ethics looks for answers to moral questions and dilemmas that anthropogenic climate change gives rise to. As a field of practical philosophy it is relatively new, mirroring the timeline the issue entered public consciousness. The pioneers of climate ethics John Broome, Dale Jamieson, and Henry Shue all began publishing on the topic in the 1990s. As a distinct field of philosophical enquiry, climate ethics started to come into its own only around the beginning of this decade.[1] The increase in related articles and books has been exponential in the past few years.

This chapter explores climate change as an ethical issue and argues that we have a direct responsibility to mitigate, although this will not be our exclusive, or even our most important responsibility regarding climate change. The discussion on the complications of talking about direct duties sets the scene for the detailed exploration of individual complicity for collective harms that follows in later chapters. There, I will argue that not only can we have responsibility in relation to climate change both directly and as members of collective agents, we can also have it as constituents of unorganised collectives. Collective agents and responsibility *qua* their membership is the topic of chapter three, while unorganised collectives and complicity in structural harms are discussed in chapters four, five and six. But before we get to that, this chapter argues the case for direct responsibility. This responsibility is linked to the kinds of choices and activities that lead to harmful emissions and to how essential they are for human survival and flourishing. Shue (1993) has influentially argued that there is a moral difference between luxury emissions and subsistence emissions, i.e. emissions that are required to satisfy basic human needs.[2] Consequently there is a difference between the permissibility of our emissions in terms of the categories they fall under.[3]

This chapter is organised as follows. Section 2.1 present a rough typology of the different branches of climate ethics, along with a brief overview of the main questions in each, to clarify which debates I seek to contribute to with this thesis. Section 2.2 aims to dissect the problem that anthropogenic climate change presents to the world, utilising Gardiner's perfect moral storm metaphor. Section 2.3 critically evaluates Sinnott-Armstrong's argument against individual moral responsibility for climate change. Section 2.4 looks at arguments for ascribing responsibility for harm to individuals *as* individuals, concentrating on Broome's work. Section 2.5 argues that we can have direct responsibility, but that this is in relation to our *lifestyle emissions*. Individuals can be held

[1] One reason for this could be that philosophers (as many others) hoped that the issue would have generated more political action by now in terms of actual mitigation. For example, Gardiner (2011, p. xv) explicitly states as much: he writes that one of the reasons he resisted making climate ethics his focus at the beginning of his career was that for a long time he "hoped that humanity would quickly rise to the ethical challenge it uncovers", thereby rendering the central message of his philosophical work less urgent. The slowness of (political) progress on the issue has been stupendous even by pessimistic standards. Ideally the need for climate ethics would have been temporary, but sadly this no longer looks feasible.

[2] Shue (2014) credits the idea to Anil Agarwal and Sunita Narain (1991) who distinguish between 'survival emissions' and 'luxury emissions'.

[3] What counts as justifiable emissions is naturally a contested issue, but there are some rather obvious candidates for luxury emissions as I will argue in section 2.5.

responsible as individuals, i.e. we can bear direct responsibility for climate change harms. I deny Broome's assertion that offsetting suffices for us to dispense with our duties of justice. Instead, I suggest that accepting individual direct responsibility means that we should make appropriate changes to our lifestyle emissions.

2.1 The five main branches of climate ethics

Before we begin, I will separate those active debates in climate ethics that I will be seeking to contribute to in my thesis from those that I will not. To do this, I will present a rough typology of the different branches of climate ethics (along with a brief overview of the main questions in each). Within climate ethics at least five philosophical branches are emerging, each drawing from existing literature, be it in political theory, environmental philosophy, economics, psychology, or collective responsibility. My thesis touches upon all of the categories to some degree, although I do not attempt discuss all of the issues included in them. These categories naturally overlap, and most philosophers contribute to more than one active discourse, with the approaches not necessarily being that distinct.[4] Still, I believe that these five branches illustrate the main strands of debate within climate ethics, and therefore help me to set aside those questions that I do not plan to discuss.

Questions within the political branch of climate ethics, the first out of the five branches, include the distribution of burdens between nations and international justice (Caney 2005, Moellendorf 2009, Shue 1993, Vanderheiden 2011), human rights (Bell 2011, Caney 2008; 2010, Shue 1996), the role of justice in climate negotiations (Shue 1992, Kortetmäki 2016), intergenerational justice (Gosseries and Meyer 2009, Meyer and Roser 2012), climate change as a tragedy of the commons[5] (Johnson 2003), climate justice in a non-ideal world (Heyward and Roser 2016), the role of civil disobedience (Kyllönen 2014), and the distribution of emissions rights (Caney 2012a). Apart from issues directly related with the duties of a citizen in cases of collectively-caused harm, I will not engage with most of the debates in any deep manner (although I touch on intra-generational and intergenerational justice issues). This might seem surprising as I am interested in collective responsibility. Surely nation states are among the most relevant collectives when discussing climate change? I do not deny this, but my interest lies in the interplay of individual and collective

[4] There also exists issues that do not necessarily fall into these categories, such as the question mark over current moral philosophy being fit for the purpose of dealing with the climate change challenge (Gardiner 2011, Mulgan 2011): are our theories and tools adequate and enough to deal with climate change responsibility (see section 2.2)? Climate change also concerns other branches of philosophy, such as philosophy of science, and some of those debates, too, have an ethical and/or political dimension, for example, how the uncertainty inherent in climate change science and models should best be conveyed to decision-makers (Parker 2010).

[5] Questions around tragedy of the commons form a very wide literature by now and could also come under the other categories.

responsibility, not in questions to do with the distribution of burdens or democratic justification (although I will be talking about the need for more participatory and inclusive democracy towards the end of the thesis). The importance of getting corporations on board in mitigation (Hormio 2017a) could come under this category also, but it is something that climate ethics has hardly dealt with so far. I will discuss this in chapter three.

The second branch, environmental philosophy, is an obvious branch of climate ethics, with issues including the non-instrumental value of non-human animals (Cripps 2013, Palmer 2011), cultivating environmental virtues (Jamieson 2007), the need for a holistic approach towards climate change (Callicott 2011), deep ecology (Baard 2015), the interplay of social and environmental justice (Vanderheiden 2008), and sustainability (Attfield 2015). Out of the five branches, my thesis contributes the least to this one.[6]

In climate ethics and economics, the third branch, some of the main themes are discounting rates and the appropriateness of using cost-benefit analysis (Broome 1992, Caney 2009, Davidson 2017, Stern 2007), sustainability and substitutability (O'Neill 2014), the cost of taking mitigation action (Broome 2010), borrowing from the future (Broome 2017, Maltais 2015), carbon trading and offsetting (Spash 2010, Spiekermann 2014a), and the role of ethics in climate policy and economics (Gardiner and Weisbach 2016; Walsh, Hormio and Purves 2017). I have earlier written about substitutability and mitigation (Hormio 2017b) and will recap some of my main points in this chapter (section 2.2).

When it comes to psychology and climate ethics, the fourth branch, philosophers have written about individual defence mechanisms (Gardiner 2011, Peeters et al. 2015), can the limits of our cognitive capacities affect our responsibility (Vanderheiden 2016), marring choices (Cripps 2013, Gardiner 2011), and the psychological cost of climate activism (Shahar 2016). Authors from other disciplines have also contributed to the discussion on the psychology of our collective climate denial (Marshall 2014, Stoknes 2015) and the complicated power structures that muddle up the debate (Hansen 2009, Klein 2014). Some of this material will be discussed in chapter seven in relation to complicity and ignorance.

The fifth branch, collective responsibility and marginal contributions to climate change, is what this thesis falls under. Many puzzles in climate ethics are about collective responsibility; what it is,

[6] The framing of climate change seems to me bit skewed in many public discourses. For example, in media it is often reported under environmental news. Undoubtedly our climate is part of our environment, and furthermore anthropogenic climate change is probably the most serious and wide-ranging environmental harm we are facing today. But the old-fashioned "man versus nature" frameworks do not apply, as the question is not so much about exploiting nature, but effectively undermining the conditions that sustain human life on Earth. We have set in motion global processes that we will not be able to control and which could make a lot of the areas currently populated inhabitable, resulting in millions of climate refugees. We are also jeopardising our ability to produce food, as agriculture could become a guessing game as we lose the stability of our climatic system. These are not the worst-case scenarios either: this is the path we are already on.

how we should theorise it, what it means for the individual moral agent. A closely related question is how we should understand responsibility claims stemming from marginal contributions where an individual might not have made a difference. Scholars contributing to these discussions include Broome (2016), Cripps (2013), and Lawford-Smith (2016a). Although operating around moral and political responsibility, many of the questions are ontological at heart: on what can we pinpoint the agency of those collectives that are responsible for emissions, and what does this mean for our practices of holding people and collective entities responsible? Social ontology constructed in a very broad sense also includes questions about the responsibility of these agents, and I draw from this literature. I debate climate change responsibility from the point of view of both collectives and individuals. As my framing is not political, my concern is not with issues such as how to combine climate change action with liberal priorities (Calder and McKinnon 2012). Rather, I am interested in the different collectives that are relevant when looking at climate change and, relatedly, if and how an individual can be said to be responsible for climate change. I will introduce some of the main complexities involved in discussing climate change responsibility in the next section by taking another look at the perfect storm.

2.2 The storm rages on

Imagine a philosopher giving lectures on the history of ethics sometime in the near future where the world looks very different from now. Climate change has devastated much of the ecosystems, global average temperatures have risen by some 5 degrees and sea levels by 20 metres. The weather is unpredictable, as is food production, which results in survival bottlenecks. The remaining people are winners in a survival lottery: resources are scarce. Societies function, but the choices people have to make are stark and about life and death. The age of affluence — when philosophers could start with the assumption that that everyone could survive — seems positively utopian. This is the set-up of Tim Mulgan's (2011) book *Ethics for a Broken World: Imagining Philosophy After Catastrophe*. Our current age represents the age of the affluent and Mulgan's piercing criticism centres around people's failure to take action, but also on the failures of philosophers to even properly criticise what went wrong. In current philosophy the good of the individual is sharply separated from the common good. The future philosopher also disappointedly remarks on our failure to translate new theoretical knowledge about climate change into changes in individual behaviour, effectively and fast enough, something that was not even challenged by the affluent age philosophers. (Mulgan 2011, pp. 1-10). In criticising the current way philosophy is practiced, Mulgan wants to draw our attention to how principles of morality are connected to the actual real-life circumstances they are theorised in: only

in a world of plenty, however unequally that plenty is distributed, can we afford some of the basic assumptions we currently have.

For Gardiner climate change is an ethical tragedy that the global affluent are implicated in. Tragedy seems to be an apt word, as calling climate change something neutral along the lines of "a multifaceted problem" would be a severe understatement that fails to capture what is at stake. In the introduction I noted how Gardiner terms the current situation a "perfect moral storm." He elaborates (2011, pp. 6-7) that a perfect storm involves "the unusual intersection of a number of serious, and mutually reinforcing, problems, which creates an unusual and perhaps unprecedented challenge." The perfect storm of climate change is fundamentally ethical, as without invoking ethical considerations we cannot get very far in discussing why it poses a problem for us, let alone discuss policy options (p. 20). Gardiner, though, is not interested necessarily in blaming anyone. Rather, his goal is to identify the problem as clearly as possible, as only when the problem is spelled out in ethical terms, can we hope to understand the predicament we are in and try to find solutions to making it right. He thus aims for a thorough presentation of the dilemmas involved, with focus on four especially salient aspects of the perfect storm, the main storms that converge to create the perfect storm.[7] These four storms are global, intergenerational, theoretical, and ecological.

As noted, the first storm is *global*: compared to poor nations (and poor individuals), affluent nations (and affluent individuals) have an unfair advantage when it comes to deciding what is to be done. This asymmetry of power is made even more jarring due to the fact that the poor are hit disproportionately with the loss of climatic stability (at least in the short- to medium-term projections), while the rich are the cause behind most of the emissions. This global storm has three important characteristics: *dispersion of causes and effects* (the impact of any particular emission is not felt just at its source but is geographically dispersed), *fragmentation of agency* (caused by a vast number of individual and collective agents), and *institutional inadequacy* (a lack of effective system of global governance). (Gardiner 2011, pp. 24-29). As the bulk of this thesis is concerned with fragmentation of agency, I will not discuss it within this section, but will concentrate on the other two characteristics of the global storm. Institutional inadequacy is directly linked to the dispersion of causes and effects. I already noted how climate change mirrors existing global inequalities and taking action on it means having to acknowledge this. Gardiner explains (p. 31):

> [A]ction on climate change creates a moral risk for the developed nations. Implicitly, it embodies a recognition that there are international norms of ethics and responsibility, and reinforces the idea that international cooperation on issues involving such norms is both possible and necessary. Hence, it may encourage attention to other moral defects of the current global system, such as global poverty and inequality, human rights violations, and so

[7] As noted in chapter one, Gardiner (2006, 2011) used to conceptualise the metaphor as three storms, but in his latest work (2016) the ecological storm was added as a separate storm.

on. If the developed nations are not ready to engage on such topics, this creates a further reason to avoid action on climate change.

In a related vein of argument, according to journalist and author Naomi Klein (2014), what really holds us back from taking action on climate change is that addressing it means that our economic system should be transformed: corporate power needs to be reined in, local economies should be rebuilt, and democracies reclaimed. What both authors share is the view that tackling climate change requires much more than piecemeal solutions. I agree, and that is part of the reason why I discuss climate change responsibility from different angles: collective, individual, and complicity.

The second storm is *intergenerational*: just as there is a serious asymmetry of power between the affluent and poor, there is an even more pronounced asymmetry when it comes to the generations alive today and the generations yet to be born. Gardiner sees this as the most conspicuous of the storms: future generations will be most affected by climate change, yet they cannot influence what is taking place. Carbon dioxide emitted today will take thousands of years to completely neutralise, so the impact of our current emissions will be felt far into the future. This lagging effect means that climate change is a resilient phenomenon not easily reversed, so long-term advance planning is required if we are to stabilise and reduce the amount of carbon dioxide in the atmosphere. As our emissions stay around long after we are gone, climate change is a deferred phenomenon: current observable changes are the result of past emissions. Due to the build-up of greenhouse gases in the atmosphere, even if by magic all energy was turned green overnight, we have already caused rising temperatures in the future. Sustained action over many generations is needed to combat the problem, but because the costs are felt in the present, with the benefits somewhere far in the future, there is the temptation to delay action and procrastinate. This results in intergenerational buck-passing, where each new generation does not "cooperate" by taking action, as it does not gain from it. The generation initiating the indirect reciprocity required to get the mitigation ball rolling would have to make a sacrifice without compensation[8] (although the latest research about us being on the trajectory for a four-degree global temperature increase, as discussed in section 1.1, could make this worry obsolete). Gardiner observes that the relatively short timeframes between cycles of democratic elections makes the incentive to invest in mitigation less likely, as substantially deferred impacts and pay-offs are harder to sell to the electorate. Even more worrying is that each year spent doing little or nothing not only passes the problem to future generations, but also makes the problem significantly worse. Mitigation becomes costlier as time goes by and effects accumulate. To give just one example, inaction raises transition costs from carbon-intensive to clean energy, as infrastructure

[8] A comparable existing example could be Norway's massive Government Pension Fund (more commonly known as the Oil Fund), where surplus wealth generated from Norway's oil wealth has been deposited since the 1990s, although the fund is not set up for climate change mitigation purposes.

choices made today affect the choices of future generations. (Gardiner 2011, pp. 32-39). I will argue later on in this chapter that the intergenerational nature of the problem affects our direct responsibility.

For Gardiner the intergenerational storm is the most striking of all. It is in large part what makes climate change such a problem for ethical theories created before modern technology: they are not equipped to deal with the possibility of harms that span over centuries and beyond. The scale of the intergenerational storm is both broad and previously unheard of. Some other issues, most notably nuclear energy, have aspects that are deeply intergenerational (what to do with lethal waste that lasts for hundreds of thousands of years). Also, most forms of oppression could be argued to have long intergenerational effects.[9] However, no previous human-generated harm has had such a wide reach so far into the future, compounded by the fundamentally life-threatening nature of the problem. Broome (1992, p. 12) observes: "The effects on climate and sea level, indeed, may fairly be said to be irreversible on the time scale of human history. And this is just the effects on the natural world. The effects on human life, like the effects of the Little Ice Age, will persist through the rest of human history." We are facing a peculiarly new and modern harm: never before have we had to look into intergenerational effects to such an extent. This leads us to the third storm.

The third storm is *theoretical*: we have no robust general theories to guide us in the storm, whether ethical, political, or economic. Our existing theories are underdeveloped in many areas central to tackling climate change, including questions of intergenerational ethics, global justice, and scientific uncertainty. Gardiner argues that we are theoretically inept: we lack the skills and tools required for the task. One example is the use of cost-benefit analysis in deciding between different policy scenarios. Gardiner points out how economic analysis enjoys a predominant position in policy discourse, even though using cost-benefit analysis amounts to self-deception in the context of climate change (Gardiner 2011, pp. 41-42). In this he refers to Broome (1992, p. 19):

> Since governments must act, research on intergenerational relations must be aimed ultimately at providing guidance on how to act. Nevertheless, I believe it would be wrong to adopt the narrow aim of developing some formula for cost-benefit analysis, which governments could simply apply. I shall not confine myself to deriving a discount rate from current economic theory. The uncertainties of the problem are enough to make that exercise pointless. Cost-benefit analysis, when faced with uncertainties as big as these, would simply be self-deception. And in any case, it could not be a successful exercise, because the issue of our responsibility to future generations is too poorly understood, and too little accommodated in the current economic theory.

[9] Examples of the long-lasting effects of past oppression are not hard to come by: differing gender expectations for boys and girls, the events leading to the inception of the Black Lives Matter movement, Māori land issues, to name but a few. In all these examples the oppression took a more severe form in the past but still extends to the current day. The historical roots of the oppression continue to reverberate to this day and have often become embedded in society's structures, which makes them even harder to emancipate from.

Broome is right to caution us against looking for some simple formula that would tell us what to do. Discounting presupposes substitutability of natural capital (for example, ecosystem services such as clean drinking water) with other forms of capital (from various material goods to things like education), as well as continuing economic growth. I have argued that therefore as a tool its usefulness is very limited in climate economics due to the timescale and uncertainties involved:

> [T]he ethical assumptions and normative choices made in the calculations that compare different mitigation options should be made transparent. Policymakers and those who use cost-benefit analyses to guide their decision-making should be made fully aware of what they are comparing. In any case, discretion is required in using cost-benefit analyses. They should never be viewed as neutral tools for policymakers, as normative considerations always come into choosing the discount rate and in deciding whether this can be uniform across different types of capital. (Hormio 2017b, p. 117).

Instead of formulas, what is required is public deliberation and democratic decision-making, and we need to be honest about the normative nature of things like setting a discount rate. No one person (or even a few) is qualified to make such value judgements, not even experts. Therefore, when it comes to big public policy decisions with long-term intergenerational consequences, like the ones to do with climate change, I believe that the discount rate should be deliberated publicly. Economists and philosophers can play their part in spelling out the costs and benefits of different mitigation scenarios, including discussing the appropriate moral weight of the risks and uncertainties facing us, but the gains and losses to societies should be debated publicly.[10] As Sen (2007, p. 29) cautions, it is "crucial not to reduce important issues of human evaluation, which demand reflection and deliberative social assessment, into narrowly technocratic matters of formulaic calculation." He reminds us that what is really at stake in the debates around discount rates is "social evaluation of gains and losses over time," and that at bottom this is "a deeply reflective exercise and a matter for public deliberation, rather than one for some kind of a mechanical resolution on the basis of some simple formula."

[10] Now, how to actually go about this is the big question and I do not have a definite answer. A plausible solution would probably run along the lines of putting together a focus group consisting of experts, policymakers and members of the general public (how to choose among them is no simple question either, but my view in general is that democracy should be made more inclusive, open and participatory for it to work in the current world). The focus group would first of all cover the basic issues involved: the economists would explain discounting and cost-benefit analyses, the philosophers what value judgements go into them. The policymakers further explain each option from their point of view. The discussions and deliberations that follow could even be made available to anyone interested, for example, by putting a video online etc. The focus group comes up with a suggestion and this is then put to public consultation in some way — there is a period people can submit objections or alternative suggestions. After this, the focus group meets again and comes up with the final rate(s) that will be put forward. This might sound time-consuming, and it would likely be so, but with time best practices would emerge. Note that I am not arguing that we should go through this process for all policy decisions, just the ones that are genuinely large-scale and future-oriented.

To return to Gardiner, the final storm is *ecological*, as animals, plants and ecosystems are affected in different ways (Gardiner 2016, pp. 32-37). The role of nonhuman nature in a flourishing human life is a topic in its own right, while the non-anthropocentric value of nature has been the centre of heated debates for a long time. As human activity now impacts the Earth's climatic stability, new questions about the scope of our responsibility naturally arises. At the same time, existing questions about the relation of humans to the nonhuman world are amplified. Here also our traditional ways of doing ethics can run into problems. For example, as the projected changes will affect different species in different ways (Palmer 2011), any policy or approach adopted could end up aiding some species while harming others, but how should we balance incompatible and incommensurable claims, especially when they encompass the non-human realm (Cripps 2013)? These are important and difficult questions, but I do not attempt to address them in this thesis.

If an ethical argument is to have any hope to convince those who do not yet feel the weight of the responsibility we have towards future generations, it has to appeal to their emotions as well, mostly because so many of the self-interested arguments break down in long-term intergenerational matters. This is what books like Mulgan's are essentially doing: through adopting the imaginary viewpoint of future generations, the book aims to invoke a sense of the anger they are justified in feeling towards those alive today.[11] Anger is, of course, far from the only relevant emotion: compassion, empathy, concern, motivation, and many others also apply. An alternative view is that there is no problem for ethics and moral philosophy, and that climate change is a problem purely for politics, as the next argument implies.

2.3 It is not *my* fault - or is it?

Not everyone accepts that climate change implicates us as individuals in the unfolding ethical tragedy. Sinnott-Armstrong's (2005) argument against individual responsibility for climate change is often quoted in climate ethics, and is possibly the most famous argument against assigning responsibility to individuals (it is discussed by Aufrecht 2011, Cripps 2013, Fragnière 2016, Hiller 2011, Killoren and Williams 2013, Peeters et al. 2015, and Sandberg 2011, among many others). However, while I find that the argument fails on several points, I have not come across any comprehensive accounts presented against it. Therefore I will go through it in some detail in this section as it is directly relevant to my concerns in this thesis.

One of Sinnott-Armstrong's (p. 333) starting assumptions is that "the United States has a special moral obligation to help mitigate and adapt to global warming" because it is the main culprit

[11] Another recent book taking this route is *The Collapse of Western Civilization: A View from the Future* by Naomi Oreskes and Erik M. Conway (2014).

behind the greenhouse gas emissions and "has the scientific expertise to solve technical problems". Moreover, as a wealthy nation it can afford to spend resources in finding a solution without having to sacrifice meeting the basic needs of its people. However, this does not translate as duty for individual citizens in the USA to enable mitigation and adaptation (Sinnott-Armstrong 2005, p. 333): "While I ought to encourage the government to fulfill its obligations, I do not have to take on those obligations myself." The relation of individual duties and obligation to their collective counterparts forms the core of his enquiry.[12] He writes that individual moral obligations are not parallel to government obligations and do not always follow from collective obligations, although sometimes individuals have to fill in when the government fails to do what it should. Sinnott-Armstrong argues that this is not the case with climate change, however.

What is an individual supposed to do if the government fails to act on climate change, could she have an obligation to reduce her emissions? Sinnott-Armstrong's purposefully provocative case study focuses on going for a drive just for fun in your gas-guzzling sports car on a sunny Sunday afternoon.[13] He asks if the individual has a moral obligation to reduce wasteful driving and his answer is no. While his intuition inclines him to answer in the affirmative, Sinnott-Armstrong cannot find a moral principle to support his moral intuitions. He cautions the reader not to put too much trust in our moral intuitions in cases that are "peculiarly modern" like climate change, as "it operates on a much grander scale than my moral intuitions evolved to handle long ago when acts did not have such long-term effects on future generations" (p. 334).

Out of the various moral principles considered and rejected by Sinnott-Armstrong (2005, pp. 334-344), the most relevant ones for my project include three principles about harm and risk.[14] I will start with the two about harm.

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[12] This view seems to share some of its structure with that of David Copp, see chapter 3, section 3.1.

[13] Baylor L. Johnson (2003, p. 272) asked similarly two years earlier can someone who understands the problem of global warming and the contribution that cars make to it drive a large gas guzzler in good conscience? He argues, using the Tragedy of the Commons as his platform, that it would be a mistake to view our primary obligation to be to unilaterally reduce our individual burden on the environment. Instead, we should seek a cooperation scheme to address the problem.

[14] Some of the other basis that Sinnott-Armstrong rejects for individual moral responsibility in the face of collective failure to act on climate change include Kantian obligation not to treat other persons as means only (harm to others is not part of the plan to drive), virtues (wasteful driving is not vicious), and rule-consequentialism (an act is not always morally wrong even if counterfactually it would be disastrous for everyone to know that everyone is allowed to do it: the individual act of burning too much fossil fuel is harmless by itself, and creates an obligation only for the government to pass regulation that prevents too many individuals from acting in that way). Sinnott-Armstrong also rejects Scanlon's contractualism ("I have a moral obligation not to perform an act whenever it violates a general rule that nobody could reasonably reject as a public rule for governing action in society"), arguing that appealing to reasonable rejection only begs the question of why the rejection is unreasonable. What is required is an account of why this is so. He writes (p. 343) that in contractualism "the test of what can be reasonably rejected depends on moral intuitions." In a footnote (fn. 30, p. 345) he grants that while Scanlon's framework cannot show why an act is morally wrong or used to justify moral judgements, it might be useful as a heuristic and as a tool for overcoming partiality. I find that Sinnott-Armstrong is not giving Scanlon a fair reading here, suggesting that all is underpinned by moral intuitionism only.

The harm principle:
We have a moral obligation not to perform an act that causes harm to others. (p. 334)

The group principle:
We have a moral obligation not to perform an action if this action makes us a member of a group whose actions together cause harm. (p. 340)

Sinnott-Armstrong (p. 334) denies that driving a gas guzzler for fun causes harm as the "individual act is neither necessary nor sufficient" for climate change, arguing that "global warming will still occur even if I do not drive just for fun. Moreover, even if I do drive a gas guzzler just for fun for a long time, global warming will not occur unless lots of other people also expel greenhouse gases." The innumerable acts of innumerable people together make up the emissions that make a difference to the global temperatures, so to avoid harm would mean that these other actions would need to be halted also. Many philosophers working on climate ethics have followed Parfit (1986[1984]) in utilising aggregate impacts to ascribe responsibility to individuals (Attfield 2009, Cripps 2013, Dower 2011, Hiller 2011, Nolt 2011). This move, appealing to group impacts (i.e. the group principle above), is denied by Sinnott-Armstrong. He (p. 340) thinks it begs the question to assume that it is morally wrong for an individual to perform an act just because it is bad for a group of people to perform acts of this kind.

In addition to denying that an individual's emissions cause harm, Sinnott-Armstrong (p. 335) emphasises in many places that the Sunday drive is not meant to cause harm, i.e. there is no intention to harm, and that the act of driving a gas guzzler just for fun is not unusual in any way: "It is not unusual to go for joy rides. Such drivers do not intend any harm. Hence, we should not see my act of driving on a sunny Sunday afternoon as a cause for global warming or its harms." Note that Sinnott-Armstrong's argument is not about the imperceptibility of individual harms; he explicit denies this.[15] He admits that some harms can be imperceptible, referring to Parfit's work (in his fn.15). What Sinnott-Armstrong *does* argue against is appeals to group principle as, according to him, it begs the question and works only when there is the intent to do harm.[16]

To argue against this line of thinking, one has to either deny the claim that that no harm is done (i.e. argue that the harm principle applies), or deny the emphasis placed on intending harm and the unusualness of the act. The first move is made by John Nolt and John Broome among others, the

[15] Sinnott-Armstrong (p. 336) writes that "the point is not that the harm I cause is imperceptible. I admit that some harms can be imperceptible because they are too small or for other reasons. Instead, the point is simply that my individual joy ride does not cause global warming, climate change, or any of their resulting harms, at least directly."

[16] Sinnott-Armstrong (in footnote 23, p. 345) references Parfit's *The Harmless Torturers* when he discusses the immorality of individual acts that fall in a group of acts that collectively cause harm. He argues that this logic does not work with climate change or with his own example as "torturers intend to cause harm. That's what makes them torturers. Hence, Parfit's cases cannot show anything wrong with wasteful driving, where there is no intention to cause any harm." I will discuss *The Harmless Torturers* and groups of acts that collectively cause harm in chapter five, section 5.1.

second will be made by me. Nolt (2011, p. 9) questions the assumption that the effects from individual emissions are negligible and attempts to give a rough estimate of the harm each average American causes in their lifetime in order to get "some sense of the moral significance of our own complicity in a greenhouse-gas-intensive economy". He calculates this to be roughly one billionth of current and near-term emissions, which translates as serious suffering or deaths for two future people.[17] Broome's (2012, p. 74) tactic is similar, and he argues that the lifetime emissions of the average individual living in a rich country results in roughly more than six months of healthy human life to be wiped out.[18] I will return to these accounts in section 2.4 where harm arising from (an) individual('s) actions is discussed.

The alternative move, that is, to deny the emphasis placed on the alleged unusualness of the act, is the one that I will make. In addition, I will argue in chapter five that the emphasis Sinnott-Armstrong places on the intention to harm (or rather the lack of it) is mostly irrelevant when discussing structurally caused harms like climate change. Instead, in chapter five I will defend an account of complicity for collectively caused harms, where the relation between an individual act and the collective end is expressive or normative: our individual actions can express what we e.g. support or tolerate. Even without complicity for marginal participation, however, I think Sinnott-Armstrong's argument fails to convince. In short, he places undue emphasis on the explanatory relevance of unusualness. He writes that there are special circumstances in which harm is caused by an act without the act being necessary or sufficient for the harm. I will quote him at some length in what follows, as it will help me to pinpoint where I think he goes astray.

> Imagine that it takes three people to push a car off a cliff with a passenger locked inside, and five people are already pushing. If I join and help them push, then my act of pushing is neither necessary nor sufficient to make the car go off the cliff. Nonetheless, my act of pushing is a cause (or part of the cause) of the harm to the passenger. Why? Because I intend to cause harm to the passenger, and because my act is unusual. When I intend a harm to occur, my intention provides a reason to pick my act out of all the other background circumstances and identify it as a cause. Similarly, when my act is unusual in the sense that

[17] Nolt arrives at this rough figure in the following way. The US accounts for approximately one-fifth of global emissions and that gets divided by the country's population, approximately 300 million. The average American lives to be 80 years old in the time period selected, 1960-2040. The atmospheric CO_2 concentration will increase by 133 ppm during this period, based on IPCC predictions. Assuming three generations are alive at any moment, the average global population of 7.5 billion gives us the figure of 2.5 billion people per generation. CO_2 emissions will continue to contribute to global warming for at least a millennium, which is 40 generations. 2.5 billion times 40 gives us the figure of 100 billion people affected by the current emissions. If even 4% of those people are harmed (as in suffering and/or dying from climate impacts), then the harm proportional to the emissions of the average American alive today is two future people. (Nolt 2011, 7-9) This is meant to be a conservative estimate and does not include outsourced emissions, for example, like the ones caused by Americans consuming products manufactured in China.

[18] Broome's estimate is borrowed from an unpublished paper "Personal and intergenerational carbon footprints" by David J. Frame, where the individual is an average person from a rich country born in 1950 with an estimated 800 tonnes of lifetime emissions. The harm calculation is based on World Health Organization estimates from 2009 regarding disease and death caused by climate change. See Broome 2012, endnotes 1-3 to Chapter 5 on page 195.

> most people would not act in that way, that also provides a reason to pick out my act and call it a cause. (2005, p. 335)[19]

According to this view, the unusualness of an act is important for causality, especially in moral cases where Sinnott-Armstrong alleges that it is counterproductive to hold an agent responsible for harms resulting from acts that are usual. The justification he gives for this is consequentialist:

> If people who are doing no worse than average are condemned, then people who are doing much worse than average will suspect that they will still be subject to condemnation even if they start doing better, and even if they improve enough to bring themselves up to the average. We should distribute blame (and praise) so as to give incentives for the worst offenders to get better. The most efficient and effective way to do this is to reserve our condemnation for those who are well below average. (p. 335)

Not taking a stand on the possible psychological merits of this view, I find it a weak moral argument. A comparison to physical cases is offered (p. 335):

> Why does it matter what is usual? Compare matches. For a match to light up, we need to strike it so as to create friction. There also has to be oxygen. We do not call the oxygen the cause of the fire, since oxygen is usually present. Instead, we say that the friction causes the match to light, since it is unusual for that friction to occur. It happens only once in the life of each match. Thus, what is usual affects ascriptions of causation even in purely physical cases.

Aside from the somewhat clumsy comparison to moral cases (ordinary acts are oxygen, unusual ones friction), the account given of causality does not work even in the physical case. What causally relevant factors you should pick out from all the contributing factors depends on what you are trying to explain.

Unusualness can be a salient factor in causal explanations if you want to explain something in relation to the ordinary, but it is not some sort of a trump card, as usual things can qualify as causes. The unusualness of the friction might be relevant for the explanation in this particular case, but this does not make unusualness automatically a salient factor in causal explanations in all physical cases, let alone moral ones. The explanatory relevance of a causal factor depends on what is being explained.[20] When a light is switched on in a room, the act of flicking on the light switch (and the electric processes it triggers) is the causally relevant factor for explaining the sudden transformation

[19] Aufrecht (2011) suggests that this analogy indicates that Sinnott-Armstrong has in mind a threshold model of harm, where changes to weather patterns require a certain threshold of emissions in order to occur. If the total emissions are above the threshold level that cause a harming weather event, my actions have no effect on reducing the harm that this event causes, i.e. it would have taken place even without me. As changes to my personal emissions neither cause nor mitigate the changes to the climate, Sunday driving is morally permissible. If this was the case, then we are dealing with an overdetermined harm and we can be held responsible for such harms also, see chapter five.

[20] Thank you to Caterina Marchionni for letting me run my argument through with her to test it.

of the room from a dark place into one bathed in light. But this need not be unusual: maybe I am in the habit of continuously switching the lights on and off, on and off, on and off, for hours on end. There is nothing unusual about the flicking in this scenario, yet the flick is still what should be picked out of the causal background if I want to explain the change in the lighting of the room.[21]

On a kinder reading, the idea in Sinnott-Armstrong is that there are more real causal factors than makes sense to cite in causal talk; thus it is normative what we select as causes. Expectations concerning usualness make a difference to what it makes sense to say; one thing can be usual in one setting and unusual in another setting, and nonetheless be a causal factor in both. Thus, what is unusual in a situation is what is relevant when discussing causation.[22] Even so, the direct comparison that is made to moral cases leaves a lot to be desired as far as making for a convincing ethical argument. The usualness or unusualness of an act does not by itself tell us a lot about the warranted responses. It is certainly unusual to push cars with passengers off cliffs (thankfully so), and perhaps it is not unusual for wealthy Americans to go on Sunday joy rides in the present-day USA, although it certainly is unusual on the global scale.[23]

Now, even if the latter holds (I don't know if it does), the usualness of it is dependent on time and place. Violence against women might not be that unusual in certain places and times, but that does not make it less blameworthy. If, for example, sexual violence becomes a standard tactic in a war situation (as it has in some armed conflicts), it is still morally indefensible, however usual the practice. Maybe Sinnott-Armstrong had in mind with "unusual" something more in line with strange or uncommon, rather than exceptional or rare (although the match comparison, with friction being described as a once-in-a-lifetime event for the match, seems to suggest otherwise). But if this was the case, the argument would still not work. The reason why the act would count as strange and uncommon would now have to be filled in: if the normative work is not done by statistical rareness, then what is it that marks some act as unusual?

All our greenhouse gas emissions are contributing causes to climate change. What causes we decide to pick out is, once again, up to what we are trying to explain. The fact that our individual emissions are usual in the sense of being part of the everyday lives of the Global North does not, by itself, tell us anything about the kind of responses that are warranted by those emissions. This is important: just because our individual carbon emitting acts might fall under the mundane end of

[21] When it comes even to fires and matches, the explanation does not have to contain any reference to unusualness. Here is one alternative way to describe the same event, this time only with emphasis on the importance of oxygen being present: Oxygen is part of the causal background of fires. The act of striking the match is what causes the match to light up, friction is what occurs when a match is struck, and when oxygen is also present, this results in fire. If you were to strike a match in a vacuum, it would not catch fire because oxygen is missing.

[22] I thank Arto Laitinen and Pekka Mäkelä for pushing me on this point.

[23] Peeters et al. (2015, pp. 55-56) make a similar observation about the unequal consumption patterns in the world and why Sinnott-Armstrong's consequentialist pragmatic heuristic fails due to this.

luxury emissions and warrant no notice from anyone due to their common occurrence at the present moment in history is in itself not an excusing condition. This point will be looked at in finer detail in the chapters that follow.

Last but not least, Sinnott-Armstrong denies that responsibility to take action on climate change could be based on the increased risk of harms (p. 337):

> *The risk principle:*
> We have a moral obligation not to increase the risk of harms to other people.

In formulating this principle, he refers to Joel Feinberg's argument that fault can exist even without any causal link to the harm if this absence is only a lucky accident. In Feinberg's (1970, pp. 67-69) drunk-driving example, someone is driving under the influence and hits a person with her car. Feinberg argues that while she has caused the harm to the victim, she is not necessarily more at fault with regards to drunk-driving than anyone else who drives after they have drank too much. The people who have driven their cars under the influence, and have not hurt anyone, have simply been luckier than the person who hit the pedestrian. Now, Sinnott-Armstrong grants that even when a drunk driver manages to drive home safely, the behaviour is immoral as it creates a risk of harm to others. There exists therefore a moral obligation not to increase the risk of harm to other people in the drunk driving case. However, he (p. 337) argues that no such responsibility can be ascribed for climate change: "When drunk driving causes harm, it is easy to identify the victim of the particular drunk driver. There is no way to identify any particular victim of my wasteful driving in normal circumstances."

However, this is a problem only if we operate with a purely counterfactual account of harm (recall end of section 1.1) and without taking complicity to account. In the wasteful driving scenario, counterfactually there is no way to identify any particular person who would have been saved had you acted otherwise. In contrast, counterfactually you can easily identify the person who would have been saved had you not hit them while drunk driving. What Sinnott-Armstrong therefore has in mind are question of marginal participation, and I will discuss these in section 5.1. The point of Feinberg's example as I read it is that if some action causes the risk of harm and someone engages in this action, she is at fault regardless of whether her particular actions actually cause harm or not, i.e. whether she was morally lucky or not. What matters is that such behaviour increases the risk and with climate change we know that risks will be increased especially for future generations. Just like with Feinberg's example, the relevant group of people who are at fault are all the people who engage in the behaviour that increases the risk of harm to others, so the relevant group is all the people who drive wastefully. It would be a flawed argument to make that the combined emissions of all wasteful drivers increase the risk of harm to no-one, and in any case it would go against science.

A more general argument against the risk principle is that it would be unbelievably restrictive: a wide array of morally acceptable activities would be ruled out by it. Water vapour is a greenhouse gas so we should not boil water, humans exhale carbon dioxide when they breathe heavily so exercising is out of the question, to use Sinnott-Armstrong's examples. To rule out such ridiculous results, we can specify that the risk is significant. That move alone gets us nowhere, according to Sinnott-Armstrong (p. 337), as he claims "significant" is just a confusing term that masks the need to specify the real reasons:

> Defenders of such principles sometimes respond by distinguishing significant from insignificant risks or increases in risks. That distinction is problematic, at least here. A risk is called significant when it is too much. But then we need to ask what makes this risk too much when other risks are not too much. The reasons for counting a risk as significant are then the real reasons for thinking that there is a moral obligation not to drive wastefully. So we need to specify those reasons directly instead of hiding them under a waffle term like "significant".

I think this is right, because if 'significant' only has a placeholder-function, we do not even know if it is meant to refer to the type of risk or the statistical likelihood of it. After all, whether or not a risk is ethically significant depends not just on how probable it is statistically, but also on how serious it is. Taking causal action always comes with some risks. Every day at the office I work under a statistically significant risk of getting a paper cut, but a risk like this is easily outweighed by other considerations. Broome (2010) argues what matters with risk is not the likelihood of an outcome, but the expected value of an outcome. A low probability of very serious harm thus outweighs a high probability of small harm (like sustaining paper cuts).

The meaning of significance should therefore be spelled out. I will suggest that we could utilise Amartya Sen's (1985, 1999) capabilities approach (that he has developed together with Martha Nussbaum[24]) to conceptualise what we owe to each other, therefore helping us decide when a risk is too great. Capabilities are freedoms: an individual can achieve various lifestyles and pursue functionings that are valuable to her. *Functionings* range from basic life-support ones such as nutrition, water, shelter, and freedom from avoidable diseases, to complex activities and personal states, like being able to have meaningful relationships and expressing yourself through art. What a person values doing or being differs from one individual to another, and sometimes from one setting to another, although the elementary functionings are naturally valuable to all due to our biological set-up. *Capability* refers to the different combinations of functionings that are feasible for an individual to achieve. (Sen 1999, p. 75). What these exactly are is to be debated publicly:

[24] While Nussbaum (2006) has gone on to suggest a list of capabilities, in this work I follow Sen in leaving the list of functionings and corresponding capabilities undecided.

> Those who prefer a mechanical index, without the need to be explicit about what values are being used and why, have a tendency to grumble that the freedom-based approach requires that valuations be explicitly made. Such complaints have frequently been aired. But explicitness [--] is an important asset for a valuational exercise, especially for it to be open to public scrutiny and criticism. Indeed, one of the strongest arguments in favor of political freedom lies precisely in the opportunity it gives citizens to discuss and debate—and to participate in the selection of—values in the choice of priorities (Sen 1999, p. 30).

I will take harm to mean a threat to our basic capabilities by means of undermining our life-supporting functionings.[25] We could thus re-formulate the principle accordingly:

> **The significant risk principle**
>
> We have a moral obligation not to increase the probable risk of serious harm – deprivation of fundamental capabilities – to other people, at least as long as we can do so at a less than significant cost to ourselves.

When formulated like this, the principle does not fall prey to the criticism laid out earlier: the real reason, probable risk of deprivation of fundamental capabilities, is specified. I believe that this formulation captures what goes wrong with our moral calculations if they find nothing objectionable with acts such as Sunday driving with gas guzzlers for fun.

Setting my proposed new principle aside for the moment, Sinnott-Armstrong and I agree that governments have collective moral obligations to fight global warming. Furthermore, even if Sunday drives would violate no moral obligations, he argues (pp. 343-344) somewhat confusingly that it is morally *preferable* for individuals to not to waste gas, and that attempts to do so should be applauded (presumably for consequentialist reasons). I agree with Sinnott-Armstrong that governments should try to fix the situation quickly and also that they are the collective agents upon whom the majority of the climate change responsibility falls on. I do not dispute that they are the main players. He fails to show, however, how this blocks individual responsibility for climate change, and his arguments against principles based on harm and risk fail. He also fails to take into account that there are other collective agents besides nation-states that are relevant for discussing climate change responsibility, such as corporations. I will discuss corporations in the next chapter.

The enduring appeal of Sinnott-Armstrong's example of the Sunday drive is that even though as a philosophical argument it is far from convincing, it captures the essence of the problem that when acting in a certain way seems to make no difference to an outcome, it is hard to see how we might have a reason to refrain from acting in such a way (for such arguments, see Cullity 2015, Hale

[25] Utilising the capabilities account is a move also made by Cripps (2013, pp. 7-10).

2011, or Johnson 2003;[26] for recent accounts that build upon Sinnott-Armstrong's line of argument, see Killoren and Williams 2013, or Sandberg 2011).[27] Or as Avram Hiller (2011, p. 349) puts it, it "encapsulates a lot of common thinking about the effects of small-scale individual actions in a very large world". This is a topic for chapters five and six where I discuss marginal participation at length.

On the flipside of the same coin, it is equally hard to see how there can be any point in taking positive action if we think we make no difference (think of cases of altruistic helping with no discernible difference in outcome). Julia Nefsky (2016) has recently argued that even if my act makes no difference with respect to some outcome, it can still play a significant and non-trivial role in bringing that outcome about. She rejects the assumption that helping to bring about an outcome requires making a difference. Even if an individual act cannot, by itself, make a difference between one outcome and another, the reason to do it, regardless, is that it can make non-trivial progress toward a better outcome, or help prevent a bad outcome. Similarly, if by acting in a certain way you might help to bring about a bad outcome (or help to prevent a good one), this can be a reason to refrain from acting in that way. She thus rejects the implication that there is no reason to do something just because it will not make a difference. I will return to this in chapter six, section 6.2.

At this stage of my thesis it is an open question whether individual responsibility for climate change can exist and if it does, what form it takes, shared or direct. I will argue for shared responsibility in later chapters, but in the next section, I will first argue that we can also have individual direct responsibility.

2.4 Individual harm

While the science is clear about people causing climate change, i.e. it being anthropogenic, it is a contentious issue whether humans can be said to cause harm as individuals, i.e. that they can have

[26] Cullity (2015) suggests that the relation of individuals to climate harms might be that the group acts wrongly, although no individual member does. Hale (2011) suggests that any arguments that individuals ought to change their behaviour with regards to consumption of fossil fuels, due to such changes at the individual level having an impact on climate change, are subject to objections of causal and rational impotence. He argues that instead of focusing strictly on consequences, we should think about our complicity in harms, "whether we are justified in Φ-ing in the face of evidence that we will be complicit in bringing about W" (p. 387). On Johnson's view, see footnote 13.

[27] Killoren and Williams (2013) argue that we could think that members of industrial society constitute a group agent, and this group agent might be morally obligated to reduce its emissions. "How would that group agent go about fulfilling its obligation? It might use governmental means. For instance, we might create laws that restrict the sale or purchase of gas-guzzling cars; or we might hike gasoline taxes; or we might fund research into alternative fuel sources—etc. These types of actions, when taken by democratic governments, might reasonably be regarded as actions performed by a group agent constituted by democratic citizens. If this is right, then the view we are recommending here is not far from the position that Sinnott-Armstrong ultimately defends." (Killoren and Williams 2013, p. 307). Their notion of group agency is much more permissive than the one by Pettit and List (2011), and therefore potentially metaphysically problematic. See chapters three and four for discussion on moral obligations of groups. Sandberg (2011) also employs the notion of collective obligations, but does not explore what it would amount to at the theoretical level, let alone at the practical level.

direct responsibility. We have just seen that Sinnott-Armstrong denies that individual's emissions cause harm. Cripps (2013) agrees with him, although they draw different conclusions from it, and I will discuss her account in chapter four. This section looks at the opposite approach: arguments that ascribe responsibility for climate change harm to individuals *as* individuals, with Nolt (2011) and Broome (2012) already mentioned. Lawford-Smith (2016a, p. 71) also rejects the claim that individuals don't make a difference when it comes to climate change: while "the single actions of a single individual on a single occasion" might not make a difference, there are many micro-thresholds where they just might. Hiller (2011, p. 352) has argued that the expected harm from individual emissions is not insignificant, and that "it is *prima facie* wrong to perform an act which has an expected amount of harm greater than another easily available alternative." However, as he bases his argument on Nolt's calculation, I will not deal with it separately.[28]

Recall Nolt's (2011) calculation that each average American is responsible for the deaths and/or serious suffering of two future people. His motivation for the calculation was to try to tease out the moral significance of individual choices against accounts that assume that individual contributions are negligible. The main criticism against Nolt's approach is that it is too simplistic to calculate the harm caused by an individual by dividing up the total harm, even when we are trying to come up with a crude estimate only. This criticism can take the form of questioning Nolt's assumption that average individual harm is a proportion of the harm caused by all emissions: instead, one would have to compare counterfactually what the total harm would be if one person's emissions would not have been emitted, and the resulting individual impact is likely to be negligible (Sandler 2011). Another approach is to argue for the futility of trying to isolate individual actions from the collective setting they occur in (Schinkel 2011). These arguments are along the lines of complicity and overdetermination discussed in chapter five, where marginal participation will be discussed.

The approach that Broome takes is somewhat different, although it starts from the same premise of individuals' emissions causing harm. His argument is that every reduction in greenhouse gas emissions is beneficial. He (2012, p. 74) is in agreement with Nolt in that the emissions of an individual living in a rich country cause serious harm: roughly more than six months of healthy human life will be wiped out by your lifetime emissions, amounting to a few days of healthy life destroyed every year. We are therefore wrong to think that the effects of our actions are negligible: individuals are causing serious harm. Unlike Nolt who calculates the individual share by dividing up the total emissions of a country amongst its citizens, Broome's figure is based on average lifetime emissions. Broome is aware that many will not be convinced by these kinds of estimates, especially because effects are dispersed across the globe and your personal emissions are insignificant

[28] For a detailed critique of Hiller's argument, see Maltais 2013.

compared to the big picture. The sceptical view runs along these lines (p. 75): "The harm you do to each particular person is minuscule. If you live in a rich country, your contribution over your lifetime to global warming is half a billionth of a degree. Nobody would even notice." Broome's argument is that these harms add up. He asks us to think about the "recipients of harm", i.e. the victims of climate change (pp. 75-76):

> Each one receives harm from the emissions of billions of people. The amount each receives from each emitter is minuscule and imperceptible. Yet some recipients are already suffering serious harm in total. Some are even being killed by global warming. This shows that adding up vast numbers of minuscule amounts can amount to a serious harm. [---] Still, you might think you cannot be absolutely certain that your emissions do harm. It is true that you cannot be absolutely certain, but it is overwhelmingly likely. There is no significant chance that your emissions do no harm.

There is an idea implicit here that from the victim's point of view it is clear that serious harm is being caused, even though to an individual contributor his emissions might seem insignificant.[29] The victim's point of view in cases of overdetermination is also central to Kutz's (2000) arguments. I will introduce his model of positional accountability in chapter five and discuss the importance of the victim's point of view there. The harm done by our individual greenhouse gas emissions is determined through the effect it has on the global concentration of these gases in the atmosphere and its development over time (Broome 2016, p. 159). While it is impossible to say with certainty what actual harm our individual emissions will cause, they contribute to the risk of serious harms, and we should not expose other people to harm if this can be avoided.[30] From the victim's point of view, individuating the component parts of this harm is not important, what is important is that harm is being done, or at least that there is a risk of harm.

[29] This is not to deny that individual emissions lead to actual harms: they do, and Broome (2016, p. 161) is explicit about this: "each person's emissions will lead to actual harm as well as expected harm", although "the actual harm may be only a small part of the expected harm". The various uncertainties involved in climate change makes it impossible for us to say with any certainty which one is bigger, actual or expected harm, so I guess we have to go with the best evidence available and make an educated guess. My point is simply that we cannot hope to pinpoint what kind of harms our individual acts will contribute to, nor do we need to be able to do so for us to be able to assign normative significance to them.

[30] Broome (2016, p. 162) does not argue that a risk of harm is an *actual* harm, as that option seems "plainly false" to him, but that we have a duty not to impose a risk of harm on others (i.e. expected harm). I think his point is mostly terminological here as he (pp. 161-162) does discuss a Feinberg-style case of driving dangerously down a street: luckily you harm no one, but you have imposed a risk on the pedestrians (you have wronged them by putting them in danger). By 'terminological' I mean that it does not seem that Broome wants to deny that expected harm is *real* harm, he just does not want to call it actual harm. For example, if we have a doctor that gives a medicine that kills with 99% probability, and you are given this medicine but survive, the doctor has still harmed you in a real sense (I owe the example to Arto Laitinen).

Note that Broome essentially argues that every action regarding emissions counts.[31] While I agree with Broome that an individual's reduction in emissions can be beneficial (especially at this point in time), and that they can cause harm, I will argue that this is the case with regards to what I call *lifestyle emissions*, rather than every individual choice. Although individuals cannot resolve the climate change challenge by themselves or in isolation, it is in their power nonetheless to do a lot of good. Individual direct duties can thus be derived from the no-harm principle. However, just like Broome, I do not view these as our primary duties, let alone exclusive. After all, most of our emissions are the result of collective ventures or at least take place in a collective context. These are matters to which I will return again and again in the coming chapters.

Here I want to concentrate on a different aspect of what Broome is saying, that is, the uncertainty and probability of our actions causing harm. He (2012, p. 76) writes:

> Greenhouse gas harms people in multifarious ways. Each of them is chancy to some extent. A particular storm will be harmful only if the water rises above the flood defenses. Each increase in the amount of greenhouse gas in the air slightly increases the quantity of rain, but it will be a matter of chance whether the particular quantity of gas you emit this year will be enough to cause a flood on any particular occasion. Your emission increases the likelihood of a flood, but it might not actually cause any particular flood. So it is true that your particular emissions may do no harm in a single event. But during the centuries they are in the air they will have the chance of causing harm on innumerable occasions. It is extraordinarily unlikely that they will do no harm at all. There is no real uncertainty there.

This is important: *in the long run our current individual emissions will almost certainly cause harm*. The very long timeframe is why climate change differs from most other cases of imperceptible effects and moral arguments for difference-making considerations (see for example Kagan 2011 and Harman 2016). My emissions might not make a difference soon, but they almost certainly will make a difference eventually. However, the near certainty of some harm being caused by my emissions is linked to not just the very long timescale involved, but also to the very nature of the changes that are taking place. Climate change is not something that proceeds smoothly and steadily. There are various tipping points involved, such as the melting of glaciers, and once a certain threshold is passed, the effects are accelerated. Therefore, certain emissions can have exponential effects and it is impossible to know when and where those will occur. Because carbon stays in the atmosphere for a long time, it accumulates and the more there is, the more likely it is that tipping points will occur. Evidence point to increase in harm being more than proportional to the increase of greenhouse gases, i.e. the more we emit, the more harm each extra tonne of greenhouse gases causes (Broome

[31] Broome (2016, p. 161) argues that "the morality of climate change is simpler than some philosophers have thought", and the assumption that each individual does no harm by her own emissions, coupled with the thought that we nevertheless ought to reduce our emissions, "is an unnecessary difficulty they have brought on themselves".

2012, pp. 33-34). As Broome (p. 35) notes, this means that "if we reduce emissions, the first reductions will be the most beneficial, and each further reduction less so." He continues:

> I make this point as an antidote to the despair or apathy that descends on some people when they contemplate the horror of climate change. They think that nothing they can do as individuals is worth doing. It seems to them that even an individual country can do nothing worthwhile, unless it is a very big one. Only a global agreement can do any good, and a global agreement seems unattainable.
>
> They are wrong. Every reduction in emissions is beneficial, and the first reductions are more beneficial than the rest. You do *more* good if you reduce your emissions while other people are not reducing theirs.

Our individual emissions are therefore significant in two ways: every reduction is beneficial at the present moment in history at least, and our individual emissions increase the risk of harm.

So far we have discussed the risk of harm, but Broome also discusses actual harm. Cripps (2016, p. 125) has recently argued against Broome that there is "a significant difference between depriving one person of six months of life, and causing the loss of six months of healthy human life spread across so many people that each one loses only the most infinitesimal fraction of a second".[32] Her argument is that as "long as we think only *qua* private individual, there remains the objection that what I do doesn't cause anybody to suffer anything." In response, Broome (2016, p. 162) argues that a "harm is significant when it matters", and that "there is an extremely significant difference between a very small number and zero", as adding up many zeros amounts to nothing, but adding up many small numbers can add up to a big number. I agree with Broome (p. 163) that the imperceptibility of harms can be irrelevant (following Parfit) and is irrelevant from the victim's point of view, but I find that Cripps is right that the reason why this is so has to be spelled out in terms of acting together with others, i.e. in terms of collective action. While I agree with Broome that individual actions to reduce emissions can be beneficial due to the nature of the climate change problem, all our emissions cannot count towards our direct responsibility. This is because many of our emissions are linked to existing infrastructure and/or fall under marginal participation.

So in very crude terms we could say that if the calculation holds that more than six months of healthy human life is wiped out by the average person's emissions, maybe only about, say, one to three months can be explained by direct responsibility and the rest will fall under marginal participation discussed in section 5.1.

[32] Cripps (2013, pp. 120-121) has similarly argued against Nolt that individual actions do not cause harm by themselves, but are more accurately described as *harm ingredients*: they need to be brought together in a certain way to cause the overall result. She does allow that if the argument is reformulated to refer to expected consequences such objection does not apply.

To recap, this section has looked at accounts that argue that individuals do cause harm as individuals and following Broome, it can be argued that this harm mainly comes in the form of increased risk. The special features of climate change, including the extremely long timeframe and various tipping points, mean that individual emissions can have exponential effects and that in the long run they will almost certainly cause harm. Moreover, any individual mitigation action taken now when mitigation efforts are still completely inadequate on the collective scale is beneficial and you have a genuine chance of doing good with these actions. Individuals can thus be held responsible as individuals, i.e. we can bear direct responsibility for climate change harms. This does not exhaust our responsibility for climate change, but it does matter also.[33]

Before moving on, one more thing should be mentioned: the non-identity problem (Kavka 1982; Parfit 1982, 1987; Woodward 1986).[34] Unlike the rest of this section, it is not about the harm that individuals do, but about the individuals to whom the harm is done to. Or, more accurately, about the apparent contradiction that no individual seems to be harmed. Basically, if our public acts and omissions in the long run result in different people being born in the future, even our most egregious failures to address climate change cannot be said to harm any identifiable individuals: the particular future people would not have existed if we had succeeded in mitigation. So even though they might face very harsh conditions in a hostile climate, they still owe their lives to our failures in climate policy. Who then is being harmed?

The non-identity problem in relation to climate change is discussed by Broome (2012, pp. 61-64), Cripps (2013, pp. 15-18), and Gardiner (2011, pp. 179-183) among many others, and I will not attempt to summarise the different conclusions that they draw. Instead, I will refer to a recent account by Rivka Weinberg (2016) who argues that since deontological, contractualist, consequentialist, or virtue ethical theories do not determine moral permissibility on the basis of an act's effects on a particular identifiable individual, the non-identity problem can be avoided simply by adopting any of them (p. 4).[35] She argues that since the non-identity problem is aimed at narrow person-affecting theories (an act is right or wrong only insofar as it affects an identifiable, particular individual), it does not apply to virtue ethics (character development and practice of virtue), consequentialism (effects of an action on the state of affairs), contractualism, or deontology. Contractualism is interested in how actions affect people regardless of their identity, so it is a wide

[33] Broome would agree: he makes no claims that the duty of justice to emit greenhouse gas (private morality) takes any priority over duties of goodness that we have (public morality), see fn. 38.

[34] The problem is usually discussed in relation to future generations in general, i.e. it is applicable to any long-term and large-scale public policy decisions.

[35] Bill Wringe pointed out that if one adopts a counterfactual account of harm (i.e. someone is harmed by an action if they are worse off than they would have been if that action had not taken place), then the non-identity problem cannot be dismissed easily. This is because the counterfactual account presupposes that we are comparing the well-being of the same individual. See end of section 1.1. for some of the complications around the notion of harm.

person-affecting theory.[36] Kantian theories give each individual status as an end in themselves and do not permit sacrificing individuals for the sake of the group, so they are individualistic. Still, while narrow in that sense, they are not person-affecting in the way that the non-identity problem would require, as wrongdoing is not determined based on the effects of an act on an a particular individual. Basing the permissibility of acts on principles is what deontology is concerned with, not on the effects and consequences of an act on a particular person. (pp. 103-105). In general, the whole problem rests on mistakes according to Weinberg; existence in itself is not a benefit, and those that are merely hypothetical entities are of no moral relevance, so we should not try to weight the interests of merely possible people over future people.

What suffices for my purposes is to note that it is not clear that we need to concern ourselves with the non-identity problem when we discuss climate change, at least if our account of harm is not purely counterfactual (see end of section 1.1). For the rest of this thesis I will not.

2.5 What could the direct responsibility of individuals mean in practice?

In the previous section, I introduced Broome's argument for individual direct responsibility concerning climate change harms. In this section, I take the existence of such responsibility as my starting position. My question is: granted that direct responsibility exists, what could it mean in practice for individuals? I will introduce Broome's (2012) argument for offsetting emissions, and look at recent criticism that Lawford-Smith (2016b) has presented against it. I will then discuss a distinction that I find particularly important when it comes to individual responsibility: namely that between lifestyle choices with big impacts in terms of emissions, and individual choices that have a much less certain impact on emissions. I will argue that only the former come under direct individual responsibility, while the latter fall under marginal participation and shared responsibility.[37]

One thing should be made clear from the start: neither Broome nor I treat an individual's direct duties as their *primary* duties with regards to meaningful climate change action. Cripps (2016, p. 123)

[36] Weinberg's discussion on contractualism centres on Rawls's social contract theory (she presents it in more detail in her 2002 paper). Contractualism can also be understood in a more narrow way, to refer to Scanlon's (1998) contractualism, which is concerned with what we owe to each other. Thereby the non-existence of a future person could only be wrong in terms of the reasons an existing person would have to reasonably reject such a principle (Finneron-Burns 2017). According to Finneron-Burns (2016), there is no reason not to include future people in the realm of those to whom we owe justification (merely possible people are not included). Furthermore, a person could reasonably reject a principle that left them with a life barely worth living, even if that principle caused them to exist. Thus the present generations could not justify creating people with lives barely worth living on the grounds that it caused those people to exist. Applying this thought to the climate change scenario, I think we could argue that we could not justify the harsh climate conditions that future people might suffer from by appealing to their existence when their lives could well be barely worth living. Note that Parfit (2011, pp. 217-243) takes a different approach, essentially recommending that Scanlon's contractualism should allow us to appeal to impartial reasons.

[37] I will return to the choices that do not add up at the individual level in chapters five and six, and discuss how they *do* add up at the collective level.

claims that for Broome direct individual duties take priority over any duties we have to promote government action on climate change, but this is not the case.[38] Cripps (2013, pp. 115-139) argues against holding direct individual duties as a solution to climate change, i.e. against the idea that if each individual does her part, then the combined individual actions result in the outcome required at the collective level.[39] "On this reasoning, I should take the train, turn down the central heating, buy local fruit and vegetables, insulate my flat, remain vegetarian, and so on, because what is required (perhaps all that can be asked) of me is that I do what would be my share if we were all doing as we ought." (Cripps 2013, p. 116). In general discussions on what to do to combat climate change, things like heating your home less, taking fewer flights, eating less meat, and switching to cleaner energy sources are often brought up. These actions are not without their merits, as a large part of our emissions come from transportation, food, and housing. What Cripps argues is that instead of measures like these, our primary duty is to try to get our governments and other collective agents to take urgent action on climate change. Broome (2012, pp. 73-74) concurs that it is the duty of us as citizens "to do what you can through political action" in order to get our governments to fulfil their obligation to respond to climate change.

I agree, but with the disclaimer that I want to extend our primary duties to trying to bring about collective action in any meaningful form, not just to get our governments to act. It might be hard to find an account by a philosopher where duties to reduce one's individual carbon footprint take centre stage (although Jamieson 2007 and Peeters et al. 2015 might qualify).[40] If making my everyday life as green as I can is all that is required of me in the face of the collective failure to act on climate change, then the collective end would need to be such that it is (at least theoretically) achievable through aggregated individual actions alone. Cripps (2013, p. 118) argues that while this might theoretically be a possibility when it comes to mitigation, it is not the same with adaptation and compensation. Furthermore, even if mitigation could theoretically be secured by aggregate individual emission cuts, it would be inefficient and demand a lot from an individual. Again I agree: in the

[38] There is no such argument in Broome's work and he explicitly denies such a reading (Broome 2016, p. 163). Broome (2012, p. 66) does, however, discuss why at the individual level duties of goodness could be better promoted by other more cost-effective means such as donating money for treating tuberculosis, while duties of justice require that we must take action to address our individual emissions as they cause harm. But this is not putting individual direct duties above others, it just means that in the private sphere basing duties on promoting goodness might face competing claims: what should I do all things considered? Therefore, the individual sphere is dominated by duties of justice.

[39] Another philosopher who warns against treating individual duties as primary moral duties is Sinnott-Armstrong. According to him (2005, p. 344), focusing on government obligations avoids the mistake made by those who think that living their lives as fossil-free as possible is enough:

> We should not think that we can do enough simply by buying fuel-efficient cars, insulating our houses, and setting up a windmill to make our own electricity. That is all wonderful, but it does little or nothing to stop global warming and also does not fulfill our real moral obligations, which are to get governments to do their job to prevent the disaster of excessive global warming. It is better to enjoy your Sunday driving while working to change the law so as to make it illegal for you to enjoy your Sunday driving.

[40] I include Peeters et al. with more hesitation because at times they seem to discuss individual agency more along the lines of complicity, without evoking the vocabulary or referring to complicity literature apart from Parfit.

absence of collective-level efforts to change the structures and incentives that support fossil fuels, individual efforts will be inefficient.

While Broome (2012, pp. 50-54) argues that an individual's emissions cause harm, he does not base his account of climate change responsibility on this alone, or even for the most part (neither do I). He separates questions about how we should act concerning climate change to the spheres of private morality and public morality, and argues that they are regulated by different principles. Public (government) morality is aimed at making the world a better place and at doing the best thing, so it is regulated principally by duties of goodness (beneficence).[41] On the contrary, private morality is regulated by duties of justice, so that is why we should avoid causing harm to others. Duties of justice are owned to particular people or a person by a person, so when an injustice is committed, it is always done to a particular someone. In contrast, duties of goodness are not owed to particular people: when you fail to give someone your money through charitable causes, for example, that person has no right to your money and you do her no injustice by not giving it to her. Our responsibility flows from both of these sources, and one does not cancel out the other.[42] Furthermore (pp. 13-14), we cannot meet duties of goodness without collective efforts (such as government regulations) as:

> [R]educing emissions is not an effective way for a private person to make the world a better place. True, you can as a private person improve the world significantly by reducing your emissions, because your emissions do significant harm. However, you have more effective ways of using your private resources to improve the world. Money that has been spent on hybrid cars and solar panels in northern climates would have done more good if it had been used instead to save lives by treating tuberculosis, or to save people's sight by cataract treatment, or in a number of other ways.

Thus the argument is not that given our direct individual responsibility, we should aim to deal with climate change by concentrating on the demands of private morality alone. That would be inefficient and inadequate.[43] As Isaacs (2011, p. 140) puts it, with harms like climate change "[i]ndividual solutions fall short, not just because they are akin to attempting to put out a blazing house with a toy water pistol but also because the scale of the issues makes it difficult for an individual to know where to begin to address them."

[41] Governments also have a duty of justice to reduce emissions, but Broome (2012, p. 54) argues that their main duty to reduce emissions comes from the duty of goodness.

[42] When duties of goodness and justice do come into conflict, duties of justice usually win, according to Broome (2012, p. 53). However, in the climate change scenario he argues that they pull in the same direction.

[43] Broome (2016, p. 158) explicitly denies such a reading in a recent paper: "I never thought the world should try to deal with climate change by promoting private morality. That would be hopeless. Far too few of us will respond as we morally should, and those who do will have little effect. An effective response to climate change will have to come from governments, who can use their powers of tax and regulation to influence the behavior of very large numbers of people."

Instead, Broome's argument is that morality is more than just about promoting good: morality does not allow you to harm other people.[44] Money spent on hybrid cars or solar panels is not money wrongly spent, and we do have a moral duty to reduce our emission, but these duties flow from considerations of justice (avoiding harming others), not from duties of goodness (Broome 2012, p. 14). Reducing emissions is thus both a duty of goodness and a duty of justice (p. 53). Furthermore, even if you did fulfil your own duties of justice (i.e. duties flowing from your direct responsibility), the harms caused by climate change will only be alleviated to a small extent (pp. 73-74):

> Significant progress can be achieved only by governments, because only governments have the power to get all their people to change their behavior. Governments have the moral duty to respond to climate change, and you as a citizen have a duty to do what you can through political action to get your government to fulfil them.

Shared responsibility thus matters also. Broome's model therefore seems compatible with the quest to finding a model of responsibility that can encompass both individual and collective sources of responsibility. But for now, let us concentrate on what the duties of justice demand of us, i.e. what could accepting direct responsibility regarding climate change harms mean for an individual?

Climate change harms are caused by our greenhouse gas emissions. These emissions are not accidental, and they are not compensated (at least not currently). The victims are scattered all across the world and, moreover, across numerous generations. Nearly all emission can be categorised into five sectors of economic activity: energy supply systems, transportation, buildings, industry, and AFOLU (agriculture, forestry, and other land use) (IPCC 2014). A significant percentage of all these emissions come from everyday consumption choices: where we live, what we eat, how much we move around, and in what way. Consumption patterns are widely unequal globally: if we were to treat the members of the European Union as a single country, then 70% of world emissions could be accounted for by roughly 10 collective agents (IPCC 2014, p. 113). There are, thus, vast differences between the per capita emissions of an average European, American or Australian, and the average emissions of the average African or Latin American, although we have to remember that there are big differences between these countries also. The rich individuals (and also some of the middle classes) in the Global South are often emitting just as much as the rich individuals and the middle classes in the Global North.

Many of our emissions are tied to the available infrastructure: whether public transportation is available, how energy efficient the buildings we occupy are, and so on. Still, there are easy low-cost or no-cost options available that can dramatically change the emissions of someone who is wealthy by global standards. For example, an average American could potentially reduce their direct energy

[44] Except in special cases, such as accidents, just punishment, or self-defence (Broome 2012, p. 54).

consumption by a quarter through adopting measures such as carpooling to work with another person, maintaining correct tyre pressure, turning down heating, and washing clothes at lower temperatures (Gardner and Stern 2008, p. 20). While acknowledging that every little bit counts when it comes to reducing emissions, measures like these are not what Broome is advocating as part of our duties of justice.

What individuals should do in response to the harm their individual emissions cause, according to Broome (2012, p. 79-80), is to offset their emissions. The general idea in offsetting is that we cancel our own greenhouse gas emissions by paying for projects that reduce emissions somewhere else, such as building renewable energy infrastructure and investing in afforestation or reforestation projects. Each of us has a duty to not harm others without compensating the victims, and we will not be able to compensate all the victims individually (duties of justice are owed to particular people). Collective compensation schemes might work, but we do not know how much harm each of us will cause with our emissions, so how much compensation we will actually owe. However, it is much easier to roughly calculate our individual emissions. We cannot live without causing emissions, but the argument goes that we can cancel these out by offsetting.

In general, Broome's (pp. 85-95) argument is that offsetting is the most efficient way of fulfilling our duty of justice. When we offset, we ensure that every unit of greenhouse gas that we add to the atmosphere is met with a unit that is subtracted from it. Carbon offsetting involves measures such as reducing deforestation by paying countries to leave their forest untouched, as trees absorb carbon. Another popular offset is to finance through commercial organisations projects that diminish emissions somewhere else in the world (for example, create sources of renewable energy, mostly in the Global South, or install efficient cooking stoves to replace cooking with firewood). Broome is not recommending offsetting to governments, only to individuals as a measure to meet their individual duties of justice. He limits the duty to rich people, as poor people who emit little do no injustice in his view as the harm they cause is small and reciprocal, i.e. they are harmed in turn by the rich people's emissions, only a small fraction of which is reciprocated by the poor (p. 58). Broome notes how current voluntary offsetting schemes are very cheap because only a small fraction of consumers participate in them.

The obvious worry with this approach is that the argument for offsetting is empirically vulnerable. As Broome (2016, p. 164) himself notes, his argument is dependent on reputable offsetting companies doing their job, which he can only assume that they do.[45] The "reputable"-specification is meant to set aside the companies that engage in fraudulent practices. While Broome does not specify how reputable companies are to be recognised, we could, for example, say that

[45] I.e. the cost of preventing greenhouse gases getting into the atmosphere being less than the amount of harm it does when it is there.

offsetting should only be done through projects that meet the Gold Standard requirements.[46] Let us assume that the standard meets its aims in that the projects are genuine. Problems still remain for the offsetting to really be an effectual way in offering genuine cuts to overall emissions.

While genuine reductions is one of the Gold Standard's stated aims, it is still difficult to prove that any investments in offsetting really deliver on emission reduction promises, i.e. that the reductions achieved by any given project are *additional* to what would have happened in the absence of the project. To qualify as a genuine carbon offset, the project cannot be one that would have been undertaken in the business-as-usual scenario. In other words, the investment secured through carbon markets must have been the deciding factor in making the project viable. If carbon credits would be awarded to projects that would have materialised in any case, they do not represent any genuine emissions cuts.[47] This all is acknowledged by Gold Standard and the offsetting industry: *additionality* is the key concept in offsetting, as the whole idea relies on it. However, it is hard to assess counterfactual claims about what would have happened without some project getting funding through carbon markets. This is especially so when you factor in any indirect effects that any projects might have, especially the large-scale ones to do with energy infrastructure. Indirect effects are hard to measure, but even harder to assess through counterfactuals. In addition, the economic efficiency of offsetting has also been called into question, with estimates suggesting that up to half of the price paid for an offset can go to administration and publicity costs (Nordhaus 2014, p. 1140). Projects may also fail, no matter how well-intended and planned they are, so in these cases the reductions promised do not materialise and offsetting has again failed to take place. Furthermore, reductions might also be temporary.

The empirical vulnerability goes further than concerns about additionality.[48] There is also uncertainty about what the offset project causes, and what the side effects of the emission action is. For example, say that you offset your flight. While the emissions from the actual flight are neutralized, your indirect emissions might not have been (e.g. your support for the airline industry). Your flight could have also arguably infinitesimally increased the probability that a new runway will

[46] Gold Standard was established in 2003 by World Wildlife Fund and other international NGOs as "a best practice benchmark for energy projects developed under the UN's Clean Development Mechanism". It caters both for the compliance market linked to international treaties and the much smaller voluntary offsetting market that my and Broome's discussions focus on. It aims to ensure that the projects included deliver genuine emission reductions as well as long-term sustainable development, and monitors outcomes through third party auditing. See www.goldstandard.org for more.

[47] With this I refer to projects that would have secured government funding, or funding from private investors, and so would have happened even without the offsetting companies being involved. To give but just one example (from Davies 2007), ClimateCare - an award-winning reputable offsetting company - distributed 10,000 energy-efficient lightbulbs in a South African township as offsets. However, they soon discovered that an energy company was distributing the same kind of lightbulbs free to customers, including the township that ClimateCare had distributed their bulbs to, so the resulting reduction in emissions would have taken place anyway.

[48] Thank you to Kai Spiekermann for pointing this out (personal communication, 2 November 2017). I also owe the examples in the paragraph to him.

be built. In addition, perhaps your offset project leads to development in an under-developed region, leading to more emissions overall. When these assessments need to be made over at least 100 years, it becomes almost impossible to know what the offset purchase causes in the end. As Kai Spiekermann puts it, "apart from additionality (where we have to assess a counterfactual), we even struggle to assess what happens in the actual world if we buy the offset."[49]

If we grant that offsetting is not a reliable way to ensure that every unit of greenhouse gas that we add to the atmosphere is met with a unit that is subtracted from it, could we not just offset our emissions many times over?[50] The approach that Broome advocates already encompasses overestimating your emissions to be on the safe side, but this suggestion would entail that we should maybe triple or quadruple that estimate and then offset that amount. In this way, we could feel much safer in assessing that we really have offset our emissions, despite the possible problems of additionality, temporality, and so on.

Even if we could come up with such a "safe" multiplier for offsetting our emissions (and we could still afford to offset such a figure), the fact that the costs of offsetting are currently very low (as Broome points out), presents a problem in its own right. Noting how the costs of voluntary offsetting are currently barely noticeable, Spiekermann (2014a, p. 914) argues that "it is likely that the current offsetting practice is only functional because just a small minority of people participate in it, and that it would collapse under full compliance because individuals are unlikely to pay the (much higher) full compliance market price." The problem, however, is not that voluntary carbon offsets are so cheap, but rather that many customers probably buy them for reasons that undermine the efficacy of the scheme. To be more precise, as offsetting is used in marketing carbon-intensive products, such as flights and cars, the motivation of many could well be that I offset my excess emissions in order to have a clear conscience regarding these carbon-intensive purchases, but I do so only as long as the sacrifice is small (p. 925). This kind of motivation would be unstable because increasing offsetting compliance would lead to increased costs, because if more people start offsetting their emissions, opportunities for offsetting will become rarer and the low-hanging fruits will have been picked already. Spiekermann (p. 926) writes:

> [T]his does not suggest that some offsetting is worse than no offsetting. Any genuine opportunity to reduce net GHG emissions should be welcome, and partial compliance is often better than no compliance. The concern with the offsetting practice is of a different nature. It creates the mistaken impression that offsetting is all we need to solve the problem of GHG emissions, and it sends the misleading signal that the average Western lifestyle does not need to be reformed to mitigate climate change because buying a few cheap offsets is enough.

[49] Personal communication, 2 November 2017.
[50] I owe thanks to Visa Kurki for suggesting this possibility.

I do not mean to argue that offsetting is pointless or that it does no good. I am sure that despite its problems it does some good, and that many, if not most, of the companies and actors involved in the industry are in it for the right reasons. My argument is that as a solution to meeting our duties of justice to do no harm, offsetting is too unreliable a method, as too many uncertainties are involved. Offsetting is thus not a way of avoiding doing harm, or at least not a reliable way. We should try to meet our duty with other measures also, most importantly by reducing our individual emissions. This also involves complications, and I will come to these soon. However, before that I want to look at if the doing-no-harm line of argument is feasible if we allow that we cannot meet it simply by offsetting.

If doing no harm through our emissions is a duty that we cannot easily dispense with as Broome argued, then does it become too demanding as a moral principle? Lawford-Smith (2016b) argues against Broome that a duty to do no injustice would be implausible, and instead we can at most have a duty to minimise injustice. She (p. 137) lists a variety of ways in which our ordinary acts can cause harm (for example, by buying products that have sweatshop or child labour used in their supply chain) and notes, that some of them can cause "dual harm, both because it contributes to harm to the environment, workers, children, or animals, *and* because it produces GHG emissions which will cause further harms to current persons, future generations, non-human animals, and the environment." While not all of these harms will count as injustices, many of them will. "The bottom line is that there's injustice based on harming just about everywhere we look", and most of the time we cannot avoid doing injustice in these ways (p. 138).[51] She writes (p. 139):

> Offsetting matters, but it's not clear *how much it matters* compared against other duties of justice. Unless we want to throw our hands in the air and concede that when it comes to duties of justice "anything goes," we'll have to offer some moral advice as to what an individual should actually do. In a situation such as many people are currently in, in which they're implicated in many injustices, and in which remedying those injustices is not compossible, or barely compossible, or compossible but only at extraordinarily high cost to the individual which most would judge to be overly demanding, what should they do? The answer is obvious: they should *minimize injustice* (or avoid injustice entirely by minimizing harm).

In response, Broome (2016, p. 165) argues that the fact that we cannot avoiding harming others, to some degree at least, does not affect his conclusion that we should offset our emissions. Broome

[51] Lawford-Smith takes her cue from Judith Lichtenberg (2010), who has argues that not harming people can be as demanding as helping them, sometimes even more so. This is because in living our everyday lives, we cause harm in various ways through our humdrum activities, and most of the time we cannot avoid doing it. She gives examples such as buying clothes made in a sweatshop, contributing to emissions through taking showers and using air-conditioning, or owning stock in a company that exploits its workers.

seems to allow, though, that the aim of doing no harm could be replaced with the aim of minimising harm. At least he offers no arguments against accepting Lawford-Smith's alternative (all his counterarguments are about offsetting as an effective means to avoid harming others). Broome argues that what Lawford-Smith suggests is in essence this: "You ought to do the least harm you can, compatible with a life worth living" (Broome 2016, p. 165).[52] While I am not sure if she would agree with such a formulation, it is certainly more plausible than a duty to commit *no* injustice by harming others. Recall my suggestion for the significant risk principle from section 2.3:

> **The significant risk principle**
>
> We have a moral obligation not to increase the probable risk of serious harm – deprivation of fundamental capabilities – to other people, at least as long as we can do so at a less than significant cost to ourselves.

This is bit more lenient than what Broome suggests, as it gives more leeway to how demanding such a duty would be, and it is also very close (maybe even similar) to what Lawford-Smith proposes. As long as we are discussing direct responsibility, I would like to stick with my original version,[53] as it is formulated as a direct response to Sinnott-Armstrong to show how the principle he rejects could easily be modified to avoid his criticism. In addition, it utilises the language of capabilities that I use when discussing harm.[54]

I noted earlier in this section how a substantial percentage of our emissions come from everyday consumption choices: where we live, what we eat, how much we move around and in what way. Some of these choices are linked to the available infrastructure: if there is no public transportation available, you will have to use other means to get to work. Although I live in a society with a very high carbon footprint, I am lucky enough to live in a city with a good public transportation network, so it is easy for me to not own a car, which, of course, affects my individual carbon footprint. Similarly, while heating my home is a must, as it is cold in the winter time in Helsinki, the heating is efficient due to the way heat and power production are combined in the city, a structural solution that is beyond my individual control.[55] If I lived somewhere else, I could be forced to move around

[52] Formulated by Broome in response to Lawford-Smith's criticism; this is how he sums up what she recommends.

[53] I formulated the significant risk principle before reading the exchange between Broome and Lawford-Smith.

[54] When we come to shared responsibility, a somewhat stronger version might apply, because with shared responsibility for climate change harms it is beyond doubt that we are discussing actual harm, not just increased risk of harm. However, shared responsibility is a complicated phenomenon as we will see in the coming chapters, so I will not attempt to try to formalise what our individual duty as a member of a constituent might be, as these will depend on many things, such as what our role and position is, and what others are doing. Instead, I will defend the Complicity Principle (chapter five).

[55] Combined heat and power production (CHP) is a thermodynamically efficient use of fuel. Most buildings in urban areas in Finland are covered by district heating and about 70–80% of this heat is produced with CHP generation, while cogeneration covers almost 80% of industrial heat in Finland (Tynkkynen 2016, p. 32). I should note that electricity

by car and to heat my home in a less efficient way. As the available infrastructure is not under the individual's control, emissions resulting from transport and housing mostly fall under shared responsibility. Collective agents are the relevant agents that can implement such changes.

However, within the available infrastructure there is still room for manoeuvre. In what follows I will only refer to situations where the individual has more low-carbon alternatives available to her at no significant cost to herself. Some people choose to live in large houses with private pools, while others settle for more modest settings. Not everyone uses public transportation even if the network would be convenient for their commute, preferring to use their own cars instead.[56] There are thus what we could call *lifestyle choices* that have large impacts in terms of emissions, such as in how large a home you and your family live in.[57] The impacts are the cumulative effects that these lifestyle choices have on your overall emissions. While many of our consumption choices do not add up at the level of an individual (like taking a flight or a train on your holiday), they add up collectively and come under shared responsibility of unorganised groups (I return to this in chapter five). However, I want to argue that emissions from our lifestyle choices come under direct individual responsibility and that their combined effects harm others even at the level of an individual emitter.

There are at least three obvious such lifestyle choices that have large combined effects even at the level of individual emissions. These are how spaciously you choose to live (is one room per person enough, and so on), how you organise your travel in your everyday life, and what is the main protein source in your diet. With lifestyle choices, you make a decision that either leads to many little decisions taken daily (such as what you eat, or how you move about), most of them taken without reflection (you jump into your car or on your bike each morning), or you lock yourself into a certain emissions path (like when you buy or rent a home of a certain size and standard of equipment).

Our lifestyle emissions can also act as signals to others as to what norms we are willing to support (when we have the everyday luxury to choose): what in our opinion is the material standard of living that an "average" individual should aspire to? This is naturally stronger with influential people such as celebrities: the material standard of living that many of them advocate on social media, for example, is both unrealistic and unhelpful, even by aspirational standards. But even just among "regular" people, peer pressure is a strong motivator. What is important is that our lifestyle choices affect our overall emissions to a much greater extent than a one-off decision of where to

production in Helsinki is still carbon-intensive due to the use of coal power, although there are plans in place to phase these plants out.

[56] Again, I am talking only about choices that are easily available for the person, not about someone who drives a car to work because their job requires it, like a salesperson who needs to travel around to take samples to clients.

[57] These are to be separated from what Marshall (2014, p. 157) brands as "petty lifestyle changes", such as carrying one's own eco-bags to avoid having to buy plastic bags.

take a rare holiday (unless going on frequent holidays is a lifestyle choice of yours, of course).[58] Our lifestyle emissions should thus be the basis for our direct responsibilities.

To give one detailed example, meat consumption is no insignificant factor in climate change. The livestock sector is estimated to emit 14.5% of all human-induced emissions each year (FAO 2013). Beef and milk account for the majority of emissions, with beef production accounting for 41% of the sector's emissions, and milk production for 19%. The emissions linked to the meat industry comprise mainly of feed production and processing (45%), enteric fermentation i.e. outputs of methane from the animal's digestion process (39%), and manure decomposition (10%). The remainder is attributable to the processing and transportation of animal products. What makes the figure of 14.5% even more important is that approximately 44% of the sector's emissions are methane, the strongest greenhouse gas.[59] In fact, the livestock sector emits 44% of anthropogenic methane emissions.[60] Recall from chapter one, that while methane lasts in the atmosphere for only about 12 years, it warms the planet roughly 30 times more than CO_2. Therefore curbing methane emissions is a powerful way to get more immediate results. Due to this, I will argue that from the point of view of an individual, choosing a vegetarian diet, or reducing meat consumption significantly, is one of the most efficient ways of reducing one's emissions and meeting one's duty of justice.[61] I do not argue that we therefore have a duty to do so, I only offer this as an example of a lifestyle change that has big aggregate impacts.

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[58] For recent arguments that share my general point about the importance of lifestyle choices, see Lawford-Smith (2016a) who argues that we form habits and use heuristics to make decisions in our everyday lives, and Nefsky (2016) who argues that our mitigation obligations might best be described as choosing the low-emission alternative enough over time, rather than view it as an obligation to make such a low-emission choice at every opportunity that one can.

[59] Cattle and other ruminant animals (such as buffalo, sheep, and goat) produce methane as part of their digestive process. Microbial fermentation breaks down carbohydrates in their stomach (rumen) into simple molecules that can then be digested by the animals. Methane is a by-product of this process. Poorly digestible, fibrous food causes higher methane emissions, so what feed the cattle get is important also. Non-ruminant species, such as pigs (and humans), also produce methane during digestion but amounts are much lower by comparison. Methane is also released when faeces decompose. This occurs mostly when animal manure is processed and held in liquid form, such as in deep lagoons or holding tanks commonly used in industrial meat production. Source: FAO (2013, p. 20).

[60] The livestock supply chain emits 2 gigatonnes of CO_2 per annum, which is 5 percent of all anthropogenic carbon dioxide emissions; 3.1 gigatonnes (CO_2-eq) of CO_4 per annum, i.e. 44 percent of anthropogenic methane emissions; and 2 gigatonnes (CO_2 -eq) of N_2O per annum, i.e. 53 percent of anthropogenic nitrous oxide emissions (FAO 2013, p. 15).

[61] Note that I make no claim that lifestyle emissions are completely under your direct influence, I am only discussing the room for manoeuvre. The type of protein you choose to eat will fall under marginal participation (discussed in chapter five) as a one-off decision (at least if you only eat factory-farmed meat), but if you eat meat daily or even several times a week, those decisions will likely increase the risk of serious harms. It is even more so the case if you cook for others and make such decisions on behalf of your family members or have influence over the choices of others in some other way. But the outcome of your decision to turn vegetarian because of the emissions of factory farming is certainly uncertain. Note, however, that my argument about direct mitigation responsibility has centred on responsibility to reduce risks of serious harms. So we should not counterfactually compare the likelihood of making a difference to the emissions of the entire industry through your individual choices, but rather the likelihood of contributing to the sector's methane emissions through eating meat or by not eating meat. By not eating meat such a likelihood is very slim indeed. If you do not eat meat (or dairy products), you do not contribute to the methane emissions from the livestock sector. In any case, there are fewer uncertainties involved when trying to mitigate your emissions through stable lifestyle choices like these, rather than with offsetting.

Note that I am talking about luxury emissions, i.e. emissions that we could easily go without. Like Broome, I limit individual direct responsibility to wealthy individuals. Take as an example a poor family that lives in a poor village. They own a goat that provides them with milk and eventually meat, therefore helping them to meet their protein needs. The emissions produced in this case are not luxury emissions and they bear no direct responsibility for climate change. There is a world of difference between this scenario and someone who lives somewhere where food is readily available and plant-based proteins could satisfy most or all of his protein needs. Choosing to eat meat at every available opportunity despite having other options amounts to easily avoidable emissions.[62]

To recap, I have argued in this section that our individual direct duty in relation to climate change is to not increase the probable risk of serious harm – deprivation of fundamental capabilities – to other people, at least as long as we can do so at a less than significant cost to ourselves. I have also argued that offsetting is too unreliable a method to meet this duty, but that rather we should reduce our individual emissions. More precisely, reducing our lifestyle emissions (in contrast to questioning each individual purchase and consumer choice) is the best way to try to mitigate our emissions. Note that direct duties are not prior to shared duties. The argument so far has only been that we can have direct responsibility also. I turn next to collective agents and shared responsibility we can have as members of these.

[62] Some philosophers might disagree with how easily one can change one's habits. For example, according to Southwood (2016), when an agent is too lazy to do something, it is not feasible to claim that he ought to do that something (other than in a hypothetical sense).

Chapter 3 – Responsibility of collective agents

> The increase in greenhouse gas concentrations in the atmosphere [is] having an effect. Our ability to predict that effect is very limited.
>
> - Rex Tillerson, the former chief executive of ExxonMobil, in his confirmation hearing on 11 January 2017 for US Secretary of State

> Our ability to 'predict' depends on our ability to figure out how fast humans will switch from fossil fuels to renewable sources. Our ability to 'project' the impacts of a given future scenario, however, is based on physics and chemistry that's been understood since the 1850s.
>
> - Climate scientist Katharine Hayhoe in response to Tillerson's statement

In this chapter I will argue that nation-states and governments are not the only relevant collective agents when we look at climate change responsibility, but that corporations also have obligations concerning making sure that their activities are as carbon-neutral as possible. Furthermore, I will argue that the corporations that have engaged in agnotology campaigns and lobbying against climate regulation have acquired themselves additional obligations to mitigate climate change and compensate for the harm they have caused.

What type of knowledge is cultivated and what is suppressed is a factor of many things, including strategies, policies, institutional structures, funding priorities, trade patterns, technologies, and moral and professional imperatives (Schiebinger 2008, pp. 152-158). *Agnotology* is a term recently coined to describe culturally produced ignorance and its study: the creation of ignorance and doubt, as well as the study of lost and forgotten knowledge (Proctor and Schiebinger 2008). Ignorance can be culturally induced when misinformation is deliberately spread to further some end. This is usually done by large organised collectives, like state propaganda during wartime or lobbying campaigns against regulation by the tobacco and sugar industries. As Londa Schiebinger (2008, p. 152) puts it: "Ignorance is often not merely the absence of knowledge but an outcome of cultural struggles." This type of ignorance is directly relevant to climate change responsibility, as there have been corporate efforts to buy the fossil fuel industry more time in the face of mounting scientific evidence that proves fossil fuels are harmful (section 3.3).

Collective agents should be distinguished from other less organised collectives. My view is that certain organised collectives such as nation-states, governments, universities, and corporations can be thought of as collective agents, although they are not moral agents. If we accept the notion of collective responsibility of collective agents, what does this mean for individuals within these

collectives? In this chapter, I will suggest that collective moral responsibility distributes to individual members, but often not in any straightforward way.

This chapter is comprised of three parts. Section 3.1 discusses the responsibility of collective agents and argues that they are not moral agents, because they are not capable of making moral claims. I will, however, argue that they are able to exhibit moral claims through their conduct. Section 3.2 takes a look at the obligations of collective agents: who holds these obligations and how are they distributed? I will finish the chapter by introducing in section 3.3 a case study of corporate responsibility for climate change harms brought on by the agnotology campaigns of corporations such as ExxonMobil.

A brief terminological point before we get started. I will use 'duty' and 'obligation' interchangeably in the text in this and the following chapters, in line with the general tendency in philosophical discourse to do so (Zimmerman 2013). In regular language we often use 'duties' to refer to the responsibilities that arise from our particular roles (be it an official position like a judge or a doctor, or a social role like a parent), and 'obligations' to refer to more general (prospective) responsibility. In philosophy, however, the terms are often synonyms (Zimmerman 2013).[1] While their meaning is the same, I prefer to associate duties with individuals and obligations with collectives. However when discussing a particular philosopher, I will use the terminology employed by them.

3.1 Collective agency and the responsibility of organised collectives

It is not at all controversial to make the claim that nation-states and governments are relevant actors in addressing climate change, although there are differences is scale and degree: some commentators want to place all the responsibility on these agents, while others hold them accountable to only some of the responsibility. But what kind of actors are collective agents and what does this kind of collective responsibility amount to? One of the biggest debates within collective responsibility literature is if organisations can be said to be moral agents, not just collective agents in either some loose or strict sense. In this section I will discuss questions of collective agency and moral responsibility in relation to climate change, building on the introductory section 1.3. I will concentrate on collective agents that I feel are often largely overlooked when we discuss climate change responsibility, namely corporations.

Corporations are subject to legislation, have stated aims (many of which are about turning a profit), codes of conduct, and people within corporations have differentiated roles with usually clear

[1] Although there are, of course, many philosophers who make distinctions with them; for example, natural duties and special obligations.

chains of command. I will discuss corporations for two reasons: first, they are the paradigm examples in the literature on collective agents and collective responsibility. Second, corporations are agents that are usually ignored in climate ethics, yet 63% of worldwide industrial carbon dioxide and methane emissions from 1751 to 2010 can be traced to just 90 entities, with large corporations like Chevron, ExxonMobil, Saudi Aramco, BP, and Gazprom topping the list (Heede 2014). These corporations were and are huge emitters, so I find that it is important that climate ethics include them in debates about mitigation responsibility. In fact, it is striking how few key players are involved in exploration, development, and production of oil, for example: just ten oil companies produce roughly two-thirds of the world's oil, while China and the US together account for two-thirds of global coal production (Marshall 2014, p. 170).

Agents are capable of intentional action, so for a collective to qualify as an agent it needs to have the relevant structure to be able to produce intentional actions (Isaacs 2014, p. 42). An organised collective such as a corporation can be regarded as a unified single agent that involves individual members, constitutive features such as group goals, beliefs, norms, and so on, and sometimes also legal properties and material possessions (Tuomela and Mäkelä 2016, p. 300). Furthermore, corporate intentions and actions are not reducible to the intentions and actions of individual members partly because corporate actions require an appropriate institutional context, as well as "the existence of certain constitutive rules" like an ethos (p. 300). Following Tuomela (2007, p. 15) and Laitinen (2014, p. 218), the ethos consists of the central questions and practical matters that are vital to the purpose of the group (the group's realm of concern) and the answers it has collectively accepted to be its view (intentional horizon). The ethos thus covers the central goals and commitments of the institution. While the ethos determines a group's identity (and is part of what marks its continuation, together with its historical and modal properties), it is in a state of flux to some degree. In any case the ethos of a group is not set in stone, as elements of it may change. Thus a corporation that has a long history of specialising in a particular line of products might change not only what it produces, but also the way it conducts its affairs.

When it comes to moral agency, our practice of holding agents responsible includes conditions about possessing rational powers (applying and understanding moral reasons), and being able to control one's behaviour (Wallace 1996, pp. 154-180). The latter has two aspects. First of all, the ability to grasp and apply moral reasons, including being able to apply principles to a variety of situations, utilising concentration and judgement, and grasping the reasons behind justifications. Second of all, an agent must be able to regulate one's behaviour in the light of these reasons, which includes having some control and being able to translate choices into behaviour. Correspondingly, the exempting conditions of moral agency are satisfied when the powers of reflective self-control are missing or partly missing: to lack the power to grasp and apply moral reason, or to lack the power

to control and self-regulate behaviour in the light of these reasons, along the lines discussed in chapter one. I would like to add to this list 'the ability to make moral claims' and I will return to this shortly.

When it comes to collective responsibility, some argue that a collective can be thought of as a moral agent, while others deny this. The debate is not about collectives being nothing but the sum of their individual parts, but rather about moral agency conditions and the role of intention in this. While I will not discuss collective intentionality, as it is not needed for the purposes of my thesis, I think it is useful to outline some of the main arguments for and against collective moral agency.

Peter French (1984) invites us to view certain large organisations like corporations and universities as moral agents.[2] Because not every corporate action can be reduced to individual actions (e.g. a board decision might not correspond with any of the individual views of the voting members), it is not always fair to blame individuals for the actions of the corporation. He ascribes large organisations with the following three characteristics: internal decision-making procedures, enforced standards of conduct, and defined roles/stations. Corporate decision procedures, then, along with structures and policies, are what form the basis for corporate agency and collective responsibility.[3] The identity of these collectives does not change when individuals join or leave them, and their identities cannot be described simply by an account of all the individuals involved, just as statements ascribing responsibility to them "are not reducible to a conjunction of statements ascribing responsibility to the individuals associated with [them]" (1984, p. 13).[4]

For French (1979, p. 143), what distinguishes collective moral agents from other collectives is that they have established a way to make decisions and convert these into actions; they have a CID Structure: corporation's internal decision structure. It must include two things: the rules regarding company procedures and policies, usually in the form of a corporate policy statement, and an organisational flow chart, which shows the roles and managerial lines in the corporation. When the CID Structure is operational and properly activated, it "subordinates and synthesizes the intentions and acts of various human beings and mechanisms into a corporate decision" (French et al. 1992, p. 17). It also exposes the corporate character of actions performed by individuals in their roles, and

[2] According to French (1984, p. viii), corporations play such a big role in our societies that we must widen our understanding of moral agency to include them: if we do not, we are treating corporations and nations as "mere fictions, figments of the imagination, the moral world's equivalents to the physical world's ghosts and hallucinations."

[3] The intentions or quality of the will of any given individual within a corporation are of secondary consideration in French's view. It does not follow that no individual can be blamed and held morally responsible for the action: this is simply a separate matter that should be justified on its own merits. Correspondingly, members can be innocent of a wrongdoing even when the organisation itself is to blame.

[4] French et al. (1992, p. 15) further argue that a corporation's identity "is not dependent on particular persons being in particular positions in the corporation." I would like to disagree somewhat, as sometimes the departure of a very charismatic leader can change the identity of the corporation to a degree at least, as when Anita Roddick sold The Body Shop to L'Oréal (an example that I also used in my Master's thesis).

allows us to describe why those actions were taken in the first place (French 1979, p. 143).[5] It thus helps to illuminate what the corporation is responsible for, and what individuals are responsible for (French et al. 1992, p. 70). If the action causing the harm was a corporate action by the CID Structure standards, then the accompanying blame belongs to the corporation. If, however, someone acts outside the boundaries of their corporate role, then it is the individual who is to blame.

Philip Pettit (2007) argues that it is the collectivisation of reason that takes place in organisations that makes them moral agents. To qualify as a moral agent, a system or a group "must display a robust pattern of attitudinal and behavioral rationality" (p. 178), meaning that it holds beliefs about its environment and has desires for how it should be.[6] Similarly to French, for Pettit (pp. 177-184) the autonomy of a group agent arises from the fact that sometimes group judgements will be different from the individual judgements of the group members.[7] That group decisions can and do differ from the members' aggregate opinion is necessary to ensure consistency in decision making.[8]

Kirk Ludwig (2016) rejects group agency, and argues that collective agency and collective intentionality can be reduced to interlocking intentions of groups of people.[9] Although shared intentions cannot be reduced to aggregates of individual intentions (he employs we-intentions), all we need to analyse collective action with are concepts of individual intentional action. Ludwig (2017, p. 271) argues that "the surface features of legal discourse about corporate agency are misleading"

[5] Corporations have their own culture, customs, goals, and history, and employees must grasp these to ensure that their actions are actually corporate. Written documents go only so far in helping to find out what the corporation is really about, and what its established procedures are. The CID Structure forms the "character" of a corporation, tending to foster certain kinds of actions and decisions in line with company policies (French et al. 1992, p. 44). The policies are not just what is written down, but also how the people in power react to violations of the stated policy. This reveals which policies are central to the corporation, and which are mere window-dressing, thus illuminating the company's character. For corporations to be moral agents, they must be able to make non-mechanical and un-programmed decisions, and be able to alter their behaviour in the face of criticism or unexpected outcomes (French et al. 1992, pp. 20-23).

[6] An agent has representational states that describe how things are around it, motivational states that identify how it would like things to be, and the capacity to process both of these states so it can intervene when there is a mismatch between the two (List and Pettit 2011).

[7] Copp (2007) is another philosopher who employs the voter's paradox as he argues that claims of collective responsibility should be understood as claims about a collective's responsibility. He (p. 369) defends the collective moral autonomy thesis, according to which "a collective entity such as a corporation or a state [can] have an agential moral property even if no member of it has a relevantly corresponding agential moral property", such as forward-looking obligation or backward-looking responsibility. Copp argues that a collective can have a property even if none of its members has precisely that property (some states are democracies, but no person is a democracy), and that a collective can be blameworthy even if no individual member is. Cases like these might not be likely, but they are possible if, for example, all members voted according to rules, but the result was unfair due to a voting paradox (pp. 379-382). Miller (2007) and Mäkelä (2007) have argued against this position. Seumas Miller's (2007) view is individualistic as he rejects "the ascription of either mental or moral properties to collectives per se" (p. 389), and questions how a collective can have obligations without being an (independent) agent.

[8] Pettit discusses this point in detail with his "discursive dilemma" example on pages 181-183. Hess (2014, pp. 209-210) offers an example of 'distributed decision making' where individual choices by many employees in a corporation result in piecemeal modifications during implementation. While each modification is "innocuous and rational enough within its own limited sphere", the end result changes the original commitment of the corporation.

[9] His account seems very close to that of Bratman's meshing subplans, but for differences, see Ludwig 2016, p. 247-256.

and that, contrary to appearances, it can be reduced to its members. More in detail, he (p. 296) argues that:

> The appearance that corporations are agents in their own right over and above the individual agents who realize them at any time is generated by a number of factors. Corporations are designed for perpetual existence, that is, they are designed so that their organizational forms can persist through changes in the occupiers of the network of status roles through which its activities are sustained. This gives rise to the appearance that corporations must be agents over and above the individuals who realize them at various times. But in fact, at each time, what we say the corporation does is done by those individuals who pull the levers behind the scenes. What persists is a pattern of status roles (which can evolve over time), but this is merely a matter of successive individuals in those roles being brought under the same designation.

Presenting an account of collective agents as agents *qua* individuals, agents that can act but are not agents in the literal sense, Raimo Tuomela and Pekka Mäkelä (2016, p. 300) argue that the "loci of corporate moral responsibility are the group and its members, their attitudes and actions as group members". More precisely, they (p. 304) argue that because even a we-mode group[10]

> [I]s not a full-blown agent with a biological constitution it is not an intrinsically intentional agent (in the relevant sense). As a group, it can only have extrinsically intentional attitudes and mental states, viz. states that have been constructed for and attributed to it, typically by its members, while its members qua private persons normally are capable of intrinsic intentionality. Analogously, we argue that a group qua group cannot, so to speak, be "intrinsically" responsible (in the sense individuals are when acting as private persons) for its activities. The group members are capable of having intrinsically intentional mental states, but, strictly speaking, when functioning as group members they only operate on the basis of their extrinsic mental states deriving from the group's "mental" states that are comparable with role states in a theater play. Note that the latter are attributed to the group by the members—via their proposals that are collectively accepted by the members as the group's states.

In a corporation, power flows downward: the ones higher up in the hierarchy are responsible for the actions at the lower level, while employees at the lower level are answerable for following the orders given. Employees might not be allowed to change the ethos of the organisation directly, although they might induce a change in the corporation's ethos (p. 312).[11] Furthermore (p. 314):

[10] In a we-mode group, the members act and think in the we-mode, meaning that they are committed to their collectively accepted goal (Tuomela 2007, pp. 128-134). "Roughly speaking, the we-mode is concerned with group-involving states and processes that the group itself has at least partly conceptually and ontologically constructed for itself [e.g. building a bridge]. Acting as a group member in the we-mode sense *constitutively* involves acting for a *collectively constructed group reason*—the group gives a group member reasons to think, 'emote,' and act in certain ways." (Tuomela 2007, p. 3).

[11] Even then, the shareholders are responsible for such changes, because as operational members they "generally have the ultimate power in a business company that has a linear top-down power structure" according to Tuomela and Mäkelä (2016, p. 312). They continue that an organisation's decisions are generally constituted by its leaders' joint decisions. When it acts, the organisation "performs its actions in virtue of its authorized operatives' actions. The operative members may vary from one occasion and task to another, and they may also include non-member operatives.

> The ultimate core of an organization is constituted on the one hand by its owners (if it has owners in the legal sense) and on the other hand by the positions that constitute it. The owners determine (often via suitable operative members) the ethos (and thus the general content) of the organization, and the position-holders act to achieve and/or maintain it. Some position-holders may in fact have as their task to reformulate the ethos when that is needed.

According to the authors, while a collective that can determine its ethos might not be an agent in the literal sense, it can be regarded as a group agent based on its capacity to act as a unit (Tuomela and Mäkelä 2016, p. 304).[12] When contrasted with strongly collectivist positions like that of French, the view put forward represents a somewhat individualist position about what collective responsibility amounts to (for my reservations about putting too much emphasis on the notion of individualism in this context, see chapter six, section 6.1). However, it is not individualist in the same way that Ludwig's account is, as Tuomela and Mäkelä deny that statements about collective agents could be reducible to statements about the individuals.

While group decisions are different in nature to those made by individual agents, does this just make collective decisions and actions different from those of individuals acting in isolation, or does it furthermore mean that collectives are moral agents? I do not want to make deep ontological commitments in this thesis about the nature of collective agents or collective intentionality. For my purposes, the crux of the disagreement between holists and individualists is not whether it makes sense to discuss collective agents and to assign certain beliefs and intentions to these collectives, as most of the authors agree on this. Rather, it is about the further step that we should allow that collective agents can bear *moral* responsibility *independently* of their members.[13] On this issue I side with the individualist camp. I see no reason to muddy the waters of moral agency by trying to make the collective a moral agent, when we have other ways of appreciating the collective context and the constraints that individual member's moral agency operates under.

One consideration to support strongly collectivist views could be a systematic failure of some kind where no individual did anything wrong but the end result was bad (like in a voting paradox). If the system was set up in a way that allowed for this, it would need amending and the collective could be said to be responsible for the outcome.[14] In that sense a collective such as a corporation

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Not all operatives need to be group members (cf. hired lawyers, cleaners, truck drivers, etc. appropriately authorized for their respective tasks)."

[12] Tuomela (2007, p. 251) argues that a group is not literally (ontologically) an agent, but that we are justified in treating it as an agent, as it is capable of acting and having group attitudes.

[13] For example French would agree, while Tuomela and Mäkelä disagree (as do Miller and Mäkelä 2005).

[14] Copp's example is a tenure committee at a university that ends up denying tenure for a candidate that should have received it because the voting system utilised delivers sub-optimal results. Miller (2007) has argued against Copp's view that what is at question is the unacceptability of the procedure that cannot deliver a just outcome, not the individual judgement of any of the three tenure commitment members.

can be thought to be an agent of sorts, responsible for the outcome, but we do have to try to make them human-like agents in granting them *moral* agency.[15] Note that this is not to deny collective moral obligations or moral responsibility, something I will return to shortly.

Kendy Hess (2013) might argue that I am conflating two debates: whether corporations are moral agents and whether they are persons. According to Hess, corporations are moral agents because they can take morally relevant information into account, they are capable of moral action, and they have free will and a first person perspective.[16] However, while corporations are sophisticated rational and moral agents, they are not persons. In the account that she defends, even highly the sophisticated level of moral agency of corporations does not entail personhood. The criteria she (pp. 333-334) sets out for personhood is to be valuable *and* vulnerable: the rational agent paradigm found in much contemporary literature fails to take into account that our vulnerability to certain kinds of mental and bodily experiences is what accounts for protections and rights. "Without the possibility of hunger, humiliation, and hatred, it wouldn't really matter whether a person's property rights were acknowledged, her voice heard, her decisions and bodily integrity respected" (p. 333). She thus concludes that corporations do not have a right to privacy, for example, as it does not need it: it is not vulnerable in the way a person is.

I agree with some elements of this argument: I believe that our vulnerabilities are as important for our rights as our value as rational agents (and the dignity and worth that it implies). I also agree with Hess that giving corporations legal personhood in some jurisdictions is neither here nor there, and that corporations do not need the kind of protections traditionally reserved for humans (although I would like to add that on some issues they do, like the right to property). Where we disagree is on the point of corporations as moral agents, over and above being rational agents. Hess thinks that they are both, I argue that they are at most only rational agents. She allows that corporations cannot experience things and that they "can neither feel nor fear hatred" (Hess 2013, p. 334). What kind of a moral agent would this be? Essentially one that can take moral considerations into account but does not understand (feel) them. To me, that sounds like a psychopath.[17] When a

[15] Furthermore, expecting moral agency from corporations could be thought to be unfair to them. Mäkelä (2007, p. 457) does not deny that certain collectives can qualify as agents, but he denies that it would be fair to hold such collective agents "morally responsible in their own right". While it is true that "collectives opting for collectivized reason may end up with collective judgments that are discontinuous with the individual judgments of their members", these collective agents are always under the control of their individual members, a fact that undermines their autonomy (p. 459). Thus due to their constitution, collective agents are such agents that it necessarily would be unfair to hold them morally responsible in their own right; collective agents do not have the kind of intentional control over their actions that being a morally responsible agent requires (p. 465).

[16] She offers a more detailed defence of corporate moral agency in Hess 2014, where the basic argument is that corporations should take moral reasons into account because they can, and are thus moral agents. She utilises arguments by French and Pettit to support her view to argue that corporations are agents, as their beliefs, commitments, actions etc. are not identical to those of their members.

[17] Legal theorist Joel Bakan (2004) has famously argued that the corporation of the modern world is a pathological institution.

human being is blameworthy, the response we would like to see from them is that of remorse, guilt, shame, apology, maybe compensation etc. When a corporation is blameworthy, we might expect an acceptance of guilt and an apology, maybe compensation, but we do not expect guilt and remorse in the same way we expect them from a blameworthy person. It would make no sense: individuals can feel emotions, corporations cannot.[18] What we would expect instead is that the corporations make changes to their structure, procedures, and/or strategy to try to avoid repeating mistakes and causing more harm.

Maybe we should make a distinction between moral agency and being able to exhibit moral claims through your conduct. Recall the account of blame as a moral protest from chapter one. Angela M. Smith (2013, p. 47) argues that this account "can help us to think more clearly about which capacities are really necessary in order for a creature to qualify as a morally responsible agent":

> To morally blame is to protest a moral claim implicit in the conduct of others, and thus it is appropriately directed only at creatures that have the ability to make such claims through their conduct. And having such an ability is, arguably, both necessary and sufficient for being a morally responsible agent. Though there is deep disagreement over which capacities, in particular, one must possess in order to be capable of making "moral claims" through one's conduct, it should be common ground among the parties to these disagreements that having the ability to make such claims is a, if not the, essential condition of morally responsible agency.

She does not discuss collective agents, but I think it is an interesting idea to see what this account of blame could mean for understanding collective responsibility.

Essentially, I am suggesting that in cases involving collective agents we could distinguish between what one must possess in order to be capable of making moral claims (i.e. moral agency conditions), and what it means to have the ability to exhibit such claims through one's conduct. Only individual moral agents can do the former (as well as being able to do the latter), but I want to argue that also collective agents can do the latter.

I suggest that the moral claims collective agents can exhibit through their conduct is an emergent property of the moral claims that the (key) members of the collective make in their roles, combined with the ethos of the organisation. After all, corporations can show huge disregard for health or security, for example, through their actions. Imagine a European corporation that has

[18] In contrast, Björnsson and Hess (2017, p. 274) argue that collectives are capable of reactive attitudes, and "*if* certain collectives are capable of agency, then they are also capable of *states sufficiently similar to guilt and indignation to satisfy the requirements of moral agency*." What really matters, then, "is not whether corporate agents can be exactly like human agents, but whether they can have the properties required for fully fledged moral agency. [---] Though fully fledged moral agency might well require epistemic and motivational capacities and dispositions associated with reactive attitudes and their phenomenal aspects, we see no reason to think that the purely qualitative aspects of the phenomenology of reactive attitudes matter, or that other things than feelings of guilt and indignation might not serve the requisite epistemic or motivational functions in corporate agents." (p. 288).

outsourced its manufacturing to a country with poor labour laws in order to cut costs and that actively ignores calls from activists to look into its supply chain where dangerous working conditions are the norm. Would this not be a case of a corporation not showing moral respect to the workers manufacturing its products? And would it not be appropriate for the workers to blame the corporation and protest the way it treats their health and safety as unimportant, and them as dispensable? Due to socio-political realities, the protest must for the most part be carried out on their behalf by people in countries where governments grant workers or citizens more rights. Still, it seems to me that corporations and other organisations could be argued to be able to manifest the kind of moral claims implicit or explicit in their ethos, related to climate change harms and other issues.

I should clarify what I think this means for collective responsibility.[19] I have just proposed that although corporations are not capable of making moral claims (and do not meet moral agency conditions), they can nonetheless exhibit moral claims that are implicit or explicit in their ethos through their conduct. This means that the workers are justified in blaming the collective. Furthermore, provided that the blame is indeed justified (and not based on some misunderstanding etc.), the collective has a moral obligation to rectify its conduct accordingly. This obligation starts with the collective and is divided downwards. I will discuss possible options of how a collective obligation can be distributed among its members in the next section, where I will also discuss the effect of hierarchy and roles. Although I disagree with Hess's (2013) ascription of moral agency to corporations, I agree with her that the vulnerabilities of persons are as much constitutive of our personhood as our powers and the root to our entitlement to protection. This is why I agree that corporations can have moral obligations but not moral rights: they do not need them (they can and do of course have legal rights, such as the right to property).

Note that when I am arguing against the moral agency of collective agents, my objection is different from that of the sceptic in Deborah Tollefsen's (2003, pp. 226-228) argument. According to Tollefsen, collectives (collective agents) have a capacity for moral address, that is, they can understand moral demands and guide their action in the light of these. Her argument is, very roughly, that this is because we can engage in dialogue with collective agents: we address them, we can file complaints about them, and take them to court. She writes that a sceptic will say that we engage in discussion with collectives only because it is made up of individuals with the capacity for moral address. Tollefsen's argument is that this "fails to understand the complex nature of social institutions, the ways in which authority structures and roles transform individual actions into collective actions, and the distinct properties that arise at the collective level" (p. 228). My argument,

[19] Thank you to Holly Lawford-Smith for pushing me to say more about this.

in contrast, is that collective agents cannot feel moral arguments, although they can take them into account, and without the pull of moral emotions, an agent cannot be a moral agent. However, I agree with Tollefsen that we can engage in a moral dialogue with corporations, but this is because they can exhibit moral claims. Furthermore, these claims are collective moral claims, i.e. they are not necessarily attributable to any individual members, rather they reflect the collective outcome of individuals' deliberation within their roles and under the influence and within the parameters of the ethos of the collective agent. This is why we can and should discuss collective moral responsibility and the obligations of collective agents.

If we grant collective responsibility, what does it mean for individuals? R.S. Downie (1969, pp. 50-51) argues that the moral responsibility of collectives always boils down to the moral responsibility of their members. Hence, collectives are not moral agents by themselves. The way in which the moral responsibility of a collective stems from the moral decisions of its individual members might be complex, but it can be traced in the following three ways: the rules of the collective have been created and accepted by individuals; individuals have decided to act as a member of a collective and therefore carry the responsibilities of the role they've accepted; and, lastly, individuals always bring in their own moral qualities to the collective they are part of. Collectives do not by themselves make moral choices, but individuals within them do. Therefore, collectives are not moral agents but the individuals within them are. While I agree with this last part, what an account like Downie's fails to appreciate is the degree to which individual actions and intentions are shaped by the collective setting.

What I have in mind is similar to Larry May's (1987) position that is not strictly individualistic or holistic. May (pp. 9-28) believes that an adequate explanation of the actions of collectives cannot be given just by listing all the individual actions involved. However, he disagrees with French that it is the corporations' decision-making processes that make them real moral agents that can act and be held responsible. After all, corporations could not act without individuals acting; rather, they are able to act through linking all the individual actions together into an "incorporating act". May believes that while it is actually individuals that act, corporations can be held responsible for these incorporating acts and their outcomes. This is linked to how individuals think and act differently within collectives than outside them, how collectives can do things that individuals alone could not, and how the structure and traditions of the collective are important in understanding the ways individuals act within them. Still, even though corporations can be held responsible, only individuals are moral agents.

The structure of a group is crucial when it comes to morally appraising its actions and behaviour as it plays such an important role in the actions of the group members (May 1987, pp. 2-3). May (p. 9) argues that we should analyse social groups "as individuals in *relationships*" because individuals in

a group cannot usually be understood as acting in isolation from each other. Corporations consist of people, the relationships between them, and the structures among them. Individual people in corporations are interchangeable with other similarly suited people, individuals are not integral for the corporation. The different relationships in groups affect what individuals within them can do. Relationships enable individuals to act in ways they could not act if alone, thus changing the capacities of individuals. Also, these relationships prevent us from reducing the group's intentions and actions to individual aggregate intentions and actions. (May 1987, pp. 12-17; 180). May thinks that French goes too far, though, when he claims that collective agents have a reality independent of their members. Rather, the relations among the group members have a reality that is different from the individuals; the relationships have a distinct ontological status from the individuals in these relationships. French therefore overstates the case for group morality and confuses the independent reality of relationships with independent group reality. May (p. 23) explains:

> Social relationships have reality in that they structure or unify a group of individual human persons so that these persons can act and have interests in different ways than they could on their own. In this sense social relationships have a reality which is distinct from individual human persons since the relationships are not themselves reducible to psychological, or other, features of individual human persons.

May's argument is that it is individuals who remain the only true moral agents, agents capable of acting. In his view, a collective is not an agent that acts, but rather a process through which actions take place. Actions of individual employees that are within the CID Structure can be said to be corporate actions. The agency of a corporation is thus, according to May, best viewed as event agency. Individual actions and decisions are affected and shaped by the CID Structure in various ways, but the individuals still retain the agency and the ability to change the structure, the course, and the behaviour of the corporation. If enough members agree on a radical change of direction, or a completely new CID Structure, it will happen (within the limits of the law). Corporations cannot ever act without human beings acting, and thus can never be as independent an agent as a human is (who can choose to act alone). Corporate actions are, simply put, very complex arrangements of joint and vicarious actions of individuals. A corporation is thus not a fully-fledged person, its actions are vicarious in nature and its agency greatly restricted. This does not mean that its actions are so restricted that they cannot be assessed in moral terms. A corporation can still be blameworthy of its actions, as it is capable of intentional behaviour. It just means that the corporation is not a moral agent in its own right. (May 1987, pp. 43-45; 65; 87-91).

Although May's own view of corporate agents might be instrumentalist, I do not think that there is anything that prevents one from accepting his key points while viewing collective agents as

real agents, rather than just as useful fictions.[20] In my view, while collective agents do not have a reality independent of their members, their ontological status is distinct from the sum total of their members. It is their ethos especially that sets them apart from the individual role-occupiers. One can adopt this line of argument without making further ontological commitments.

To recap, my view is that certain organised collectives such as nation-states, governments, universities, and corporations should be thought of as collective agents, although I deny that they are moral agents. Moral agency belongs to individuals who can make moral claims through their actions, although collectives can display these attitudes as well. Still, the myriad ways that the collective setting affects the actions and decisions that are taken within, for, and by the collective agent, mean that we should view the responsibility of collective agents not just as an aggregate of individual actions and decisions. In many ways, the individual actions and omissions cannot be separated from the incorporation acts and the collective processes that they are a part of. Therefore collective responsibility is a concept that is different from individual responsibility. The way it distributes (or not) is discussed next.

3.2 Collective obligations and distributing collective responsibility

In this section, I discuss the notion of collective obligations and what this means for individual members, i.e. if and how collective obligations can distribute to members as individual duties. Collective agents such as governments and corporations hold collective obligations regarding climate change mitigation, adaptation, and compensation. I will argue that these *moral* obligations do distribute to their members. However, things are different when it comes to unorganised collectives, but I will turn to this question in the next chapter. In this section, I discuss the obligations of collective agents only and the shared responsibility of members of these collective agents.

Duties and obligations can be moral or nonmoral or both. An obligation of any type "is grounded in the basic issue of what people should be able to rely on" (Williams 1985, p. 185). Obligations represent what we require to be able to live in a society with one another: "Obligation works to secure reliability, a state of affairs in which people can reasonably expect others to behave in some ways and not in others" (p. 187).[21] I do not argue that moral duties automatically trump all

[20] Saying that, I believe that it might also be possible to apply what May says about collective responsibility to accounts such as Ludwig's or Bratman's. Bratman (2017, p. 50-51) argues that there can be a procedure-based group intention even in the absence of a corresponding shared intention on the part of the individual members. Thereby we do not have to reduce judgements about the responsibility of the collective to judgements only about the responsibility of each participant. In other words, the procedure-based group intentions could ground attributions of responsibility to the group. Thank you to Bill Wringe for pushing me to explicate my view on this matter.

[21] An obligation "tries to produce an expectation *that* through an expectation *of*" (Williams 1985, p. 187).

other considerations.[22] Ethical considerations are not exhausted by obligations and duties, with things like virtues and considerations of welfare and justice also mattering (Williams 1985),[23] but I concentrate on them.

Collective obligations are, simply put, the obligations held by a collective. With collective agents, the situation is relatively straightforward in that it seems uncontroversial to talk about them having obligations (although it is far less clear what they mean in practice).[24] Universities have obligations towards their students and staff, the state has an obligation to protect its citizens, governments have obligations to maintain a certain infrastructure in the country, corporations have obligations towards their shareholders and employees, and so on. It is, of course, another issue what kinds of obligations these entities can be said to have and how far they reach. For example, do states have obligations related only to the negative rights of their citizens, or do they also have obligations related to their positive rights (and does the separation make sense in the first place)? There is also a lot of debate about human rights in this context, with an additional question about if humans have rights, does there have to be a corresponding entity that has matching obligations to realise those rights? I do not think that there has to be, but that is a conversation for another occasion. Some obligations, such as not causing harm and assisting those in need, can be attributed to collective agents in a fairly straightforward manner. With other obligations, complications might arise about the identity of the collective over time, such as with rectifying past harms and keeping promises (Collins and Lawford-Smith 2016).[25] What we should note is that while it is not controversial to say that collective agents have obligations, it is a matter of much debate what it means for collectives to have obligations, and what those obligations are, especially in moral matters.

Putting aside the question of the scope of collective moral responsibility for now, collective obligations are not dependent on individuals: they hold even when individual role-occupiers change. The university has an obligation to educate its students regardless of who sits on its board of trustees or whom it employs as academic staff. The collective obligation thus "transcends the identities of individuals" (Isaacs 2011, p. 132). It is, however, not as simple a matter as professors, lecturers, and other staff fulfilling the university's collective obligation by teaching. Collective obligations do not straightforwardly dictate the requirements of individual role-occupiers, and the obligations of individuals within the organisational context are not exhausted by their role-requirements: the

[22] Williams (1985) argues that practical necessity is not peculiar to ethics or to obligations, and furthermore that we should reject the maxim "that only an obligation can beat an obligation" (p. 187).

[23] I therefore utilise the terms "morality" and "moral philosophy" in a different way than Williams does; I do not associate them with only moral obligations and demands about a certain untainted voluntariness of an individual's actions, things that he argues against. Rather, I utilise the terms in a looser way that would more fit his idea of the realm of ethics.

[24] There is a lot of debate on, for example, what is the relation of individual and collective obligation (e.g. Copp 2007 and Miller 2007).

[25] Is it psychological descent, or physical continuity, and so on.

requirements of some roles are more well-defined than others (p. 133). Therefore, while it is relatively clear to list the duties of a university porter, it will be less easy to specify how a dean of a faculty fulfils her duties, role-requirements, dictated by the collective obligation. As Isaacs (p. 134) notes, "[t]he more responsibility one has within the collective, the less obvious the specifics are of what one is required to do and how one is required to do it."[26] Importantly, the roles that come with more latitude and less clarity about the role-related duties, are according to Isaacs (p. 134) also "precisely the roles that are likely to be most directly responsive to the collective's obligations."

> Those in power are in a better position to ensure that the collective acts as it ought. This point is very like the claim [--] that those in positions of power in an organization carry a heavier burden of responsibility as individuals because the structures of the organization expand the range of their powers as individuals. We see a notable asymmetry between the more powerful and less powerful roles within an organized collective. To the extent that the manner in which one is to carry out one's role is less defined and as one's power increases, the scope of personal choice within the role also increases. This increase in latitude at the level of personal choice lends further weight to the claim [--] that persons in positions of power ought to be considered more responsible than those who work in the mailroom when an organization fulfills or fails to fulfill its obligations. In the context of collective obligation, individuals' obligations intensify when they have more power and more room for personal choice with respect to how they fulfill their roles. Collective actions require the actions of individuals, and certain individuals are in a better position than others to direct the actions of the collective and to see that the collective's intentional actions are consistent with its obligations as a collective. This is not to say that people in positions of lesser power cannot interfere in significant ways with the fulfillment of collective obligations. Certainly, someone in the payroll office can wreak havoc. But the nature of their duties is clear, so deviations from them are also clear. (Isaacs 2011, p. 134).

Thereby "rather than disappearing against the background of collective obligation, individual obligation can take on a heightened importance [because] a collective context empowers and authorizes some individuals so that they can achieve outcomes that they could not otherwise achieve" (p. 135). The relationship of collective obligations and individual role-duties is thus not straightforward even in a collective that fits agency conditions.

According to Isaacs, there is also another reason why roles cannot fully capture the relationship between collective and individual obligation: the collective roles could have been set in an amoral way. Isaacs's (p. 136) example is that of a Nazi concentration camp, where the collective context in which actions of individual role-occupiers takes place "increases the range of morally relevant descriptions that apply to an individual's action". She writes that while within the context of their roles the camp worker's may have been doing exactly what was expected of them, but "the collective within which they were functioning in their roles was not just failing to meet its collective moral

[26] This could increasingly be the case as automatisation continues to change the nature of many jobs, with robots performing routine tasks.

obligations, it was positively violating them in a way that even relatively powerless participants could reasonably be expected to know." There is definitely truth in this, but I worry that Isaacs oversimplifies collective obligations by straightforwardly accepting them to encompass moral considerations. While concentration camps were undeniably evil collective structures, and officials attending to them were acting in deeply unethical ways, most cases are nowhere near this obvious. It is not controversial to claim that collective agents have obligations linked to the purpose they were set up for, but how far their moral commitments extend is a more contested issue. In other words, while collective obligations as such are not contested, collective moral obligations are less straightforward. I do not mean to argue that they do not ever exist — they do — but what would be a collective moral obligation of a concentration camp? Such a thing would be an oxymoron and amount to the collective not existing or at least not operating.

My point is that collective obligations can be non-moral or even amoral, and when we encounter amoral collectives the ethical pressure, the collective obligation to stop them, for example, comes not from within that collective, but from outside it. Perhaps a better example could be a government agency that serves to oppress its citizens like in a dictatorship. Even then, this blending of moral and other obligations confuses the debate. Take Isaacs's treatment of whistleblowing. According to her (p. 136), "[w]hen a collective has obligations that are not being met, this failure shapes and alters the obligations of individual members as members of the collective". Therefore whistleblowing or something similar might be required (p. 137):

> When the collective is acting as it ought, individuals who are performing their role-related duties as specified by their job descriptions are doing their part in making sure that the collective meets its moral obligations. Further action is required only when something goes wrong. This may lead some to say that whistle-blowing, or doing anything that takes one beyond the dictates of one's role to ensure that collective moral obligations are fulfilled, is supererogatory. That is, some might claim that actions of this kind are morally laudable, but not required, because they go beyond moral obligation and enter into the realm of the heroic. One reason for not making this claim is that by continuing to do one's job in conditions of collective moral failing, one knowingly contributes to morally wrongful collective action. These contributions themselves are morally wrong. It is morally required, not supererogatory, to cease acting in a morally wrong way. Thus, we may conclude that collective moral obligations sometimes alter the obligations of individual members of organizations beyond the dictates of the members' organizational roles.

The source of the moral obligation might be the collective, but it need not be, as it might be something outside of it as well. Let us say that a whistleblower reveals widespread corruption at an institution. It would sound strange to say that the institution is the source for requiring the whistleblower to do as she does. Rather, the source could be the wider professional peer-group and

their ethical standards (like those of doctors or lawyers), or it could originate from the wider moral community. This is in contrast to what Isaacs argues (p. 138):

> It might seem obvious and facile to say that individuals, qua individuals, are obligated not to participate in morally reprehensible collective goals. My specific claim is that the individual obligation is significantly mediated by the collective obligation not to engage in the collective wrongdoing. This points us back to the earlier discussion about the moral qualities that individual behavior inherits when it is undertaken as part of a collective endeavor. Individuals' actions in these collective undertakings do not have the moral character they have in the absence of the larger collective scheme of which they are a part.

This brings us close to our other question, namely about whether these collective obligations and responsibility distribute to individuals within the collective? This warrants an exploration also, especially in relation to how and in what way they might be distributed.

In organised collectives with clear role definitions executive roles "are defined by their authority to make or contribute to key organizational decisions", whereas employees whose positions are delineated in terms of tasks have less influence as they mostly carry out the daily business of the organisation necessitated by its structures, policies, and the decisions taken by executives (Isaacs 2011, pp. 104-105). The question of whether an individual act can be described as contributing to a collective act will centre on how in line with their role the individual member's act was. If the action or decision taken was in line with the role requirements and demands, then the act can be attributed to the collective as a part of a collective act. If you go rogue, however, you bear individual responsibility, just as I mentioned already in the previous section. These kind of cases that might look like cases of collective responsibility, but are not, should be set aside. The further and more important question is: what is the responsibility of the individual when their act was in line with the role demands? If a corporate act resulted in an oil spill, is an individual employee responsible for an oil spill to some degree at least? In less organised collectives with less institutional features, is collective responsibility the responsibility of all individuals? It is these kinds of questions that this section and the coming chapters seeks to answer.

The notion of collective responsibility is sometimes wrongly lumped together with notions like non-distributability and strict liability. When it comes to non-distributability, H.D. Lewis (1948) famously argued that the whole notion of collective responsibility is barbaric, as it allows one person to be held responsible for the actions of someone else. May's (1987, pp. 82-83) response is that this is a category mistake, as real collective responsibility does not make anyone individually responsible; it makes the group responsible. While judgements of collective moral responsibility might make us want to evaluate the responsibility of individuals for their contributions, individuals *qua* individuals are still not blameworthy for collective actions (Isaacs 2011, p. 60). Those who worry that collective

moral responsibility requires holding people responsible for the actions of others fail to realise that "a collective can be responsible without all of its members being responsible" (p. 61), which brings us to strict liability. Strict liability does not differentiate between group members and it does not take into account their varying contributions to the outcome. Feinberg (1970) argues that collective responsibility is a form of strict liability, as it involves non-distributive responsibility, and the group's responsibility cannot be understood by just understanding its members' individual responsibility. However, May (1987, pp. 82-106) argues that Feinberg fails to see that this lack of reducibility does not render individual contributions unimportant. May admits that Feinberg is right in saying that collective responsibility does weaken the contributory fault in the sense that collective responsibility can be assigned to a group even when not every member is at fault. However, collective responsibility does not automatically translate to individual responsibility for *every* member of the collective, so therefore the fault condition is not significantly weakened. Recall how people have different roles and how they come with different amounts of latitude and power. Isaacs (2011, p. 62) argues that the responsibility of each member could vary:

> [A]n often overlooked fact is that the collective and its members are not responsible for the same act. Whereas a collective is responsible for the collective act, individual members are responsible for their contributions, and the degree of their responsibility will depend, in part, on the extent to which they share in the collective's goals and act with a view to participating in bringing those goals about. Members of goal-oriented collectives, therefore, are much more likely to be morally implicated in collective wrongdoing because, in at least some of these cases, a commitment to the collective goal and action together with others to achieve that goal is a fundamental part of what it means to be a member of the collective at all. This does not hold true for membership in organizations, particularly in large organizations and particularly for people occupying lower level roles in the organizational hierarchy.

Collective responsibility rises out of joint action where members contribute to the actions of others, and there is no reason why specific individual contributions could not be taken into account when assessing responsibility for collective action.

I now turn to more forward-looking cases where the collective agents hold obligations. In these cases, how is responsibility distributed within collective agents? In what follows, I will adopt the useful distinction made by Lawford-Smith (2012, pp. 460-463) about four different ways in which obligations of collective agents distribute to their members, depending on what kind of collective good is at stake:

> *Incremental good*: When a collective has an obligation to φ, every individual member of the collective has an obligation to take a capacity-relative share in fulfilling (pursuing) the obligation.

Joint necessity: When a collective has an obligation to φ, every individual member of the collective has an obligation to take a capacity-relative share in fulfilling the obligation, unless she has the reasonable belief that at least one other member of the collective will not take a capacity-relative share in fulfilling the obligation.

Threshold good: When a collective has an obligation to φ, every individual member of the collective has an obligation to take a capacity-relative share in fulfilling the obligation, unless she has the reasonable belief that sufficiently many other members of the collective will take a capacity-relative share such that the collective obligation will be fulfilled.

Threshold good with harm: When a collective has an obligation to φ, every individual member of the collective has an obligation to take a capacity-relative share in fulfilling the obligation, unless she has the reasonable belief that sufficiently many other members of the collective will take a capacity-relative share in fulfilling the obligation so that her own contribution would be detrimental to the collective obligation being fulfilled.

To flesh these out, I will come up with examples of each. The collective obligation is about an *incremental good* when each contribution by an individual member makes things a little bit better (provided that the collective outcome in question is fixed in scope and each contribution is an incremental advance towards it). Imagine a project initiated by a local school to get each member of the parents' association to donate a book to fill the near-empty school library that is very modest in size. These parents bear a collective obligation to fill the library with books and each book improves the school library. The distribution of burdens is simple: individual members should do their fair share, unrelated to what their beliefs are about others doing theirs, as each individual contribution counts and makes things better and brings the collective obligation (library full of books) closer to being met. *Incremental good* is the only type of situation where the distributed obligation is not conditional on beliefs about what others are doing, as every individual member of the collective has an obligation to take a capacity-relative share in fulfilling the obligation.

In contrast, in cases of *joint necessity*, the collective good can only be attained if every member of the collective does their share. No individual member can realise the collective outcome by herself or make an incremental contribution to it by acting in isolation. It takes a crew to sail a ship. To be precise, in my example it takes 77 officers and crew members to sail a large ship that could rescue a passenger that fell off the ship a while earlier. The passenger was taking a morning walk on the deck and due to a faulty railing fell in the sea while looking at dolphins. No-one saw the accident, and the missing passenger and faulty railing were noticed only a few hours later when the ship had already docked. The passenger is hanging onto a piece of driftwood with some help from his new dolphin buddies, waiting to be rescued. Other ships are too far to reach the scene in time, and no other

potential sailors are available so all 77 company members must sacrifice their free day at the beach to be able to help. If one of the crew members operating the sails believes that none of the other crew members (or even just one other crew member) are willing to give up their day off, then she is unable to do her share in the rescue. In *joint necessity* it is not the case that every little helps: others have to get on board as well. When it comes to the level of the individual, every member of the collective has an obligation to take a capacity-relative share in fulfilling the obligation, unless she has the reasonable belief that at least one other member of the collective will not take a capacity-relative share in fulfilling the obligation. The collective obligation will be either met or not met accordingly.

Threshold good is similar to the above case in that an individual cannot on her own do her share, but now there are more members available than is required in the minimum scenario. To use the same example again, in this version it still takes a minimum of 77 officers and crew members to sail the ship, but 100 company members are at the beach. It is sufficient that 77 forgo their day off to save the drowning man, so there are 23 members who could stay at the beach, but who could also participate in the collective action. Maybe having a full crew would make things easier on the others, as the ship usually sails with all 100, so it would lessen the burden on any individual company member. So maybe the 23 ought to contribute for that reason, but the important thing is meeting the threshold, i.e. that at least 77 contribute so that the collective action necessary to save the drowning man can be realised. Therefore, from the point of view of an individual member thinking about her obligation, she should contribute *unless* she knows that a sufficient number of other members will. Sarah is swimming at the beach, hears about the missing passenger, runs to get her sailing gear on, but upon returning sees that 81 members of her company are already ready and about to board the ship. In this case, she acted according to her duties: she was going to contribute, as every individual member of the collective has an obligation to take a capacity-relative share in fulfilling the obligation (unless she has the reasonable belief that sufficiently many other members of the collective will take a capacity-relative share such that the collective obligation will be fulfilled). The situation altered while she was getting ready, so that it is no longer necessary for her to be part of the rescue effort, as enough crew have already joined. Perhaps she should still join to make it less taxing on the others, but the duty is different.

Finally, in cases involving a *threshold good with harm* there is again a surplus of members who could contribute, but additional contributions would not help the cause, but instead hinder it. Let us make the ship different: it still needs 77 company members to sail, but any additional ones will make the ship sail at a considerably slower pace, so that they might not make it in time for the rescue. In this case, as with *joint necessity* and *threshold good*, the obligation of each individual member is conditional. Namely, in cases of threshold good with harm she should contribute and take a capacity-relative share in fulfilling the obligation, as long as she does not have the reasonable belief that

sufficiently many others are contributing so that her own contribution would cause harm, i.e. push the collective action over the threshold and cause harm.

Note that in all but the first case the way the obligation distributes to individual members of the collective agent depends on what others are doing, or more precisely, what we believe that they are doing. "The reason the obligation has to distribute conditional upon beliefs is that there is no action that every member of the collective must actually perform. Some must act, but others must refrain from acting" (Lawford-Smith 2012, p. 462). This does not mean, however, that we are off the hook as long as we reasonably believe that others are not going to do their part, i.e. that the required collective action will not materialise. Regardless of what other members will or will not do, our individual duty remains to either do our part *or* to reasonably believe that such an action would be futile, as others are not doing theirs. We thus stay alert in a sense. Thereby, unless the collective good is incremental, members of collective agents need to be sensitive to what others will do in order to fulfil the individual obligations that devolve to them (Lawford-Smith 2012, p. 462).

Sean Aas (2015, pp. 4-7) has argued that Lawford-Smith's condition on beliefs is both too strong and too weak to capture member obligation. Instead, the doxastic condition should be relaxed to the *absence* of a belief that others will not do their part, to account for cases where we do not know what others will do (or are likely to do). Additionally, the members should be willing to take action if they become sufficiently certain that other members will do their part, i.e. the members should have the right motivation. I will return to this point in the next chapter with unorganised collectives, as I believe it is more pertinent to questions about their responsibility, rather than that of collective agents. When it comes to collective agents, fulfilling Lawford-Smith's doxastic condition is usually not too taxing, as these collectives are not that diffuse (or at least their parts that the individuals are members of: teams, offices, departments etc.), unlike the collectives that Aas is mostly concerned with. However, I will adopt the amendment that individuals should be willing to act, so the alertness requirement should encompass both being sensitive to what others do *and* being ready and willing to act if necessary.

While Lawford-Smith discusses these categories using examples of small, relatively egalitarian collective agents (the standard subjects in social ontology), I will apply them also to larger and more hierarchical collective agents, such as corporations. With more egalitarian collective agents, such as small businesses, the obligations will distribute along the lines of the original examples. What I suggest is that when the collective agent grows in size and complexity there will be other factors that come into play but that it does not dilute the central idea of, for example, a threshold good (i.e. that a member must act unless enough other members already do). I will return to the complications shortly when I will make a caveat about the content of a collective obligation.

I should also make it clear that my view is that even if all the members would be excused from doing their part (for example, all can reasonably believe that others are not doing their share so action at the individual level is futile), it only excuses the individuals, not the collective agent. In other words, the collective obligation does not disappear. Instead, the collective agent should look into other ways of meeting its obligation, or another occasion if the excuses of individuals were merely temporal (i.e. an accumulation of bad luck from the point of view of the collective).

Stepping away from collective agents for a moment, climate change in its totality presents a case of threshold good, i.e. individual agents cannot on their own do their share, but there are more agents available than is necessary to secure the common good (stable enough climate).[27] This is the overall picture of climate change harm, the all-things-considered viewpoint. The agents who could and should contribute include not just individuals but also collective agents of all kinds. Not everyone has to contribute to respond adequately to climate change (assuming that it is not too late already), but many do. Every individual agent within the collective of humans and the collective agents created by them should try to secure the common good, unless the agent has the reasonable belief that sufficiently many other members of the collective are already taking sufficient action to secure the collective good. Note that I am not arguing that humanity plus the collective agents created by them (let us call this humanity+) forms a collective agent. I am only arguing that humanity+ has a collective good (stable enough climate) at stake that can be saved from destruction only through collective action. The obligation is to save the stable enough climate and to do so, there has to be enough agents willing to take action together. For constituents of unorganised collectives, the relevant individual duties would be interdependent (I will discuss these kinds of duties in chapter five). At the present moment in history, no agent could argue that they can reasonably believe that enough others are already doing their share to mitigate climate change, any more than adapt or compensate. Every agent should thus take a capacity-relative share in securing that goal.

What about the obligations of collective agents then (within humanity+)? What category they fall under depends on the agent and what they have done (or have omitted doing) so far. I will make no attempt to present a detailed account of what obligations different collective agents might have in relation to climate change and how these distribute to individual members, as that would be a thesis in its own right. Instead, I will only suggest that in most cases related to climate change responsibility of a collective agent, we are talking about threshold good at the first instance. This is because if the collective agent is not doing enough, or not doing anything, to respond to the climate change challenge, then it is up to individual members within that collective to get the ball rolling, so

[27] Why climate change is not an incremental harm will be discussed in section 5.1.

to speak. Not everyone has to act, but enough have to take action to make the necessary changes to ways of working.[28] When it comes to nation-states, I also agree with Lawford-Smith (2016a, p. 80) that in order for lasting and stable political change we usually need a bottom-up approach, rather than top-down. That is, governments and politicians usually need strong political support from their voters before they can implement large-scale changes, such as those that are required with climate change. This, once again, brings us back to the individual level and the responsibility we share as members of collectives (in this case, as citizens of nation-states).

A caveat is in order. With threshold goods, every individual member has an obligation to take a capacity-relative share in fulfilling the obligation, but how to define what this share is if the collective agent has not decided on a particular strategy? After all, the outcome of the corporate agent helping to mitigate climate change can be satisfied in multiple ways, such as reducing emissions, investing in offsetting or green energy, and so on.[29]

Let us say that given the position of the corporation, or other collective agent in question, all these options are equally good. That is, they require an equal amount of effort and resources and produce similar enough results. Let us further stipulate that the collective agent is both engaged in significantly non-carbon neutral activities and it has the means to act differently. In a case like this, it is not obvious what course of action should be taken at the collective level, but it is still (relatively) clear that *some* course of mitigation action should be chosen. In a hierarchical collective agent, such as a corporation, there will be key individuals who should set the ball rolling. In most cases, these individuals will be those who hold executive positions. But if these people fail to do what they should, I want to argue that some capacity-relative obligation still falls on the other members.

Recall that with threshold goods, when a collective has an obligation to φ, every individual member of the collective has an obligation to take a capacity-relative share in fulfilling the obligation, unless she has the reasonable belief that sufficiently many other members of the collective will take a capacity-relative share such that the collective obligation will be fulfilled. Now, when the collective has not decided what strategy in particular it will take to address its obligation to help mitigate climate change, it should be quite clear to any member that the collective obligation is unlikely to be

[28] In some very small collectives, like a business consisting of three people, it will be enough if one member takes action to initiate the changes, but in sizeable collective agents, more than one member is needed. It could mean just a handful of members, maybe even just two or three, or it could mean that hundreds or even thousands of people need to get together. It all depends on the actual situation, including the size and type of the collective agent in question (a middle-sized company, a large international organisation, a government, a small university, and so on and so forth). It also depends on the individual members who take the lead: what is their position? What are their personal qualities? How much power do they have within the collective? Etc.

[29] I owe this example to Holly Lawford-Smith, who pushed me to say more about what taking up a capacity-relative share actually might mean in a climate change case and other such "non-obvious cases", i.e. cases not involving small-scale egalitarian group agents.

fulfilled.[30] They could plausibly demand those in charge to set the strategy and if they do not respond, make the issue known inside the collective (possibly outside it as well to add to the pressure). This would, at this stage, be all that could be demanded of the non-executive members, because in large, hierarchical, non-egalitarian collective agents the content of the collective obligation must be settled before individuals can go about filling taking care of their share. Alternatively, it must be obvious enough, and something that can be started incrementally, so that a group of members can initiate action, thereby making it the *de facto* choice. Before the content of the obligation is set, the members can only have an obligation to do what they can to make it so that the content of the obligation is set in a sufficient way and within an adequate timeframe. In addition, depending on exactly how hierarchical the collective is, there might also be some members who are completely excluded from having a capacity-related share, for example, members who are relegated to the margins and have little or no real power in terms of their roles.

If and when a collective agent has a plan of action in place regarding what is feasible and possible for it to do in response to climate change mitigation (or adaptation and compensation), then the collective obligation can take the form of any of the four types introduced above. In these cases we are also less likely to encounter the problem described in the previous paragraph (I am assuming that the collective agent has done the planning properly and particular roles have been delegated to individuals, thus helping to define a member's part). What the obligation is and how it distributes to individual members depends on the kind of action that is required and on what kind of a collective good is at stake, as well as on the hierarchy and roles within the collective agent in question. If, for example, a collective agent has delegated its obligation to take meaningful mitigation action to a particular team, then the only capacity-relative share that remains for the other members outside that team is to keep an eye on things to the extent that they see that progress is being made (it will fall on executives to ensure that *enough* progress is made).

Maybe the only positive thing about the current climate situation is that, because there is so much to do, there is a lot to choose from in trying to meet one's individual duty as a member of a collective. If the situation changes and climate change becomes the priority it should be, the room for individual manoeuvre to meet one's duty narrows. As Isaacs (2011, p. 47) points out, "The closer the group gets toward meeting its goal, the more constrained will be the options to contribute for the individual who intends to participate in the realization of the group's goal."

[30] A further complication would be do the members even know that the collective agent has such an obligation? For the sake of simplicity, I will assume here that the collective agent operates in an environment where it is widely acknowledged that all actors should do what they feasibly can to mitigate climate change, but there are no legal framework or enforcement measures in place.

A harm can occur without anyone acting in the wrong way and this is what Isaacs (pp. 99-100) argues is happening with climate change; climate change is a collective harm resulting from "the cumulative impact of parallel individual actions" but it is not the result of wrongdoing on the part of a collective agent. When a collective agent performs a collective action that violates a moral principle, then that action constitutes a collective wrongdoing, i.e. the wrongdoing of a collective agent. However, she argues that this is not the case with climate change (p. 100):

> [H]umanity's environmental impact on the world is surely harmful. However, it would be a conceptual stretch to claim that it is the work of a collective agent. I draw particular attention to the difference between collective wrongdoing and collective or cumulative harms, because running these together creates confusion when we are attempting to decipher the relationship between individual responsibility and collective wrongdoing. In situations in which collective agency is absent, moral responsibility, if present at all, resides only at the level of individuals. Many cases of cumulative harm have this character—the harm itself occurs only because of the actions of a number of people. Individual contributions to it, taken on their own, might involve no or negligible harm. Environmental harm such as that which has resulted in climate change might be viewed in this way.

She thus allow that climate change is a problem that requires a collective solution (as it is a collective or cumulative harm), but denies that it is a collective wrongdoing (as collective agency is required for a collective wrongdoing). While climate change is for a large part the result of the cumulative impact of parallel individual actions, and there certainly is a lot of harm being created collectively, is it really the case that it is purely a case of cumulative harm? I find this implausible. Collectives such as ExxonMobil have arguably also engaged in collective wrongdoing by lobbying against mitigation policy, as I will discuss in the next section. This kind of wrongdoing has (indirectly at least) contributed to the lack of effective mitigation in the United States, maybe also globally, thus causing very serious harm. Many other corporations have engaged in similar lobbying activities, and the think tanks and research institutions they have done this through are also collective agents.

Furthermore, innumerable collective agents that could have been more active in mitigation by reducing their own emissions have not done so, arguably causing harm as result. At the very least, they have failed to prevent harm. Examples of such collective agents are not limited to corporations, but include all collective agents that have failed to take adequate action, be they universities, governments, sports clubs, or whatever. Still, saying all of this, it is true that climate change harm considered in its (vast) totality cannot be claimed to be a work of collective agents alone or a collective wrongdoing in the sense that Isaacs employs the term. Climate change is thus best described as a blend of collective wrongdoings and cumulative harm.

3.3 Manufacturing doubt

I will round off the discussion on collective agents with a case study regarding their responsibility in relation to climate change. While it is obvious that big corporations will have to come on board if global mitigation efforts are to be successful, it is less obvious that they should have further obligations in addition to being made to co-operate through legislation. Legislation, combined with appropriate enforcement measures, is usually the most effective way when it comes to any large-scale environmental policy change, but my focus is not on this. Granted that many corporations are huge emitters, are we talking only about opportunities for them to become involved in mitigation efforts, or can we also state that they have a responsibility to do so? I am concerned with the content of corporate obligation: what can corporations be held responsible for and what are the limits to their responsibility?

Talking about the responsibility of a corporation to clean up after an oil spill or mining accident, for example, is common, but what exactly is corporate responsibility and does it have a moral aspect? While the accounts given in the business ethics literature do not necessarily differentiate between moral and legal responsibility, and the terminology is used in many ways, it seems that the general idea is to acknowledge that there exists responsibility that the corporation has in addition to simply following the existing rule of law in relation to its actions (Waddock 2004; Werhane 2008, pp. 270-271). This responsibility can include many things depending on the account given, from taking its duties towards shareholders seriously (not taking unnecessary business risks) to how the corporation treats its employees (dealing promptly with bullying at the workplace), or how its products affect the environment. Laws appeals to fundamentally moral notions that cannot be reduced to legal terms. Bowie (2013, p. 3) argues that the law therefore "frequently requires corporate conduct to adhere to broad open-ended standard of morality." It is also worth noting that while the law may assign corporations legal personhood, this is not the same as to treat the corporate entity as a moral agent. Linked to section 3.1, I argue that while corporations can be the appropriate target of blame, the moral agency belongs to individual members of them, whether employees or shareholders.

If we talk about prospective (forward-looking) responsibility, for example, ensuring that the current and future activities of a corporation are as carbon-neutral or climate-friendly as possible, corporate responsibility that includes some mitigation efforts does not seem too controversial an idea (Hormio 2017a, p. 321). Today, climate change is generally accepted as a global threat, certainly at the scientific and the UN level. There, of course, remain lingering doubts about the issue and sceptical views by lobbyists influence the public opinion. It is easier to grab onto any news that refutes the reality of climate change, as we would all want climate change to just go away. Sadly, the

science is close to unanimous at this point: anthropogenic climate change is happening and it is a real threat to us (IPCC, 2014). We should not confuse opinion polls with scientific reality.

Anthropogenic climate change has been conceptualised as human rights issue, threatening, for example, the right to life (Caney 2010). The UN Human Rights Council passed a resolution in 2008 stating that "climate change poses an immediate and far-reaching threat to people and communities around the world and has implications for the full enjoyment of human rights." Based on the scale of the threat that climate change poses to human rights alone, I think it is difficult to argue why corporate responsibility should not encompass climate change mitigation when it comes to planning future corporate activities. It would be very reckless not to do so. With the overwhelming scientific consensus and the severity of the threat, the precautionary principle alone should suffice for climate change mitigation to be incorporated into CSR strategies (Hormio 2017a, p. 321). However, this should still be done within the limits of the wider society. In the absence of a binding international emissions treaty and an effective global system, individual corporations can only do so much and the responsibility for creating these falls on nation-states. Emissions treaties and legislation change the business environment, making it more feasible for corporations to invest in clean technology and other mitigation techniques despite the additional costs.

Naturally there will be big differences between companies and corporations in terms of the resources and capacities they have to go beyond the minimum (Hormio 2017a, p. 322). In this way their abilities will, to some degree, affect their obligations. Obligations should be something that there is a corresponding capability to fulfil. Arguably a successful business can, for example, afford to compensate their employees more than a business that is just getting by. In the same way, if we have a corporation that has the financial ability to go carbon neutral and such a move would not be detrimental to its competitiveness, then arguably it should do so. This is especially so if its core stakeholders support such a move, although even then we have to keep in mind the wider system that it operates within.

My conversation so far has concentrated on what corporations should do from now on; on responsibility to do with the obligation to do something, rather than on responsibility attached to past wrongdoing and making up for that. Can corporations be held morally blameworthy for their past activities and decisions that have contributed to anthropogenic climate change? I believe the answer is in most cases "no" (Hormio 2017a, p. 324). Responsibility to contribute to mitigation efforts based on historical emissions from before the 1970s would either fall within the discretionary category or at least be limited to some degree. First of all, there is the question of adequate knowledge about the issue, about when climate change became general knowledge and the scientific consensus emerged, and the time before the 1970s is well before this time. Second of all, corporations and other businesses before the 1970s were operating in an environment where effectively engaging in

climate change mitigation would have been outside their sphere of influence, although there are naturally big differences between corporations over what steps they have taken towards greener business practices. The technology might not have been there yet, or the necessary knowledge, maybe the businesses could not have responded to the developing scientific consensus quickly enough, or costs would have been prohibitive. What to say about the time period between the 1970s and 2000 is trickier, as the scientific consensus was building up and the threat of climate change was discussed by politicians. What is clear is that the landscape has changed a great deal in the past decade or so, making recent inactivity arguably impermissible, so there should probably be some sort of a sliding scale of retrospective responsibility from the 1970s to the current day.

Even if we had a suitable sliding scale in place, the full responsibility for contributing to emissions does not fall on the corporations who have done the emitting (Hormio 2017a, pp. 324-325). These emissions are part of wider social patterns, such as available infrastructure and technology, political inactivity, international power issues, consumer culture, and so forth. Thereby, while completely ignoring the effects your products and services have on the climate has not been acceptable for a few decades, some limitations always apply to corporate responsibility regarding past emissions. While 63% of worldwide industrial CO2 and methane emissions from 1751 to 2010 can be traced back to just 90 entities, they cannot be held solely accountable for them. Due to the combined failures of nearly all of the actors in the system to act together, the moral blameworthiness for these past emissions cannot fall on the corporations alone: the failure to take sufficient action to curb greenhouse gas emissions is embedded in the system.

I believe that here is an exception to this general rule, however (Hormio 2017a, p. 325). Corporations such as ExxonMobil have been actively engaged in climate change lobbying. Corporate-funded agnotology has played a big part in delaying effective climate change mitigation action, especially in the U.S. where climate change scepticism is still widespread among the public. For example, recent nationwide data (Howe et al., 2015) shows that while a growing majority of Americans (63%) now believe that climate change is real, only 47% believe that it is anthropogenic.[31] This manufacturing of ignorance is the result of effective and organised lobbying campaigns. While in the beginning the focus was on denying the credibility of the science, these days it seems to be on denying the urgency of taking any meaningful mitigation action. The myths debunked many times over keep reappearing in new white papers masked as credible science (Nuccitelli 2016), and 'sceptical' views on green energy policies are sometimes even backed by noteworthy academic

[31] The same study shows that only 42% of Americans believe that the majority of scientists think that global warming is happening. In reality, 97% or more of actively publishing climate scientists agree that global warming over the past century is extremely likely due to human activities. The greater the climate expertise among those surveyed, the higher the consensus on human-caused global warming, going up as far as 100%, see Cook et al. (2016).

institutions that receive a lot of money from the fossil fuel industry in return (Franta and Supran 2017). In the age of the internet, the propaganda of the climate change denialists is easily accessible to anyone online, and impacts negatively on the quality of the debate in other countries as well.

Historians of science, Naomi Oreskes and Erik M. Conway, carefully reconstruct what went on behind the scenes in many lobbyist-generated media storms about science in their 2010 book *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. The book covers misinformation campaigns from acid rain and the ozone hole to tobacco's links to cancer, and spans four decades, during which the same names keep cropping up. The case study that is of most interest here is the one directed against climate change science. Tobacco industry tactics were employed to spread misinformation about climate change and to give the public the impression that a scientific debate was still ongoing. Due to efficient public relations campaigns, the media began to act as if it was a matter of giving equal weight to arguments from both sides, even though one "side" consisted only of a handful of largely industry-funded scientists. This fringe minority group raised concerns against an overwhelming majority of evidence gathered by everyone else. The goal was to manufacture doubt and buy time – and it worked.

It is a common misconception that climate science or even climate policy is something very new. While anthropogenic climate change might not have entered the mainstream public consciousness until the past two to three decades or so, the science dates back to the 19th century and climate change raised interest among politicians in the United States already in the 1960s. President Lyndon Johnson mentioned the effect carbon dioxide and fossil fuels have had on the global atmosphere to Congress in 1965, after having read a report prepared by Roger Revelle. Earlier that year, the President's Science Advisory Committee had asked Revelle, who worked as the director of the Scripps Institution of Oceanography, to write about the impacts that carbon dioxide potentially has on the global climate. (Oreskes and Conway 2010, 170-171). Charles David Keeling, a researcher at Scripps, had been measuring carbon dioxide concentration in the atmosphere continuously since 1958 and he showed that the concentration was rising steadily roughly relative to the amount of fossil fuel burned. The data gathered would later become known as the Keeling Curve. The measurement has been taken at the Mauna Loa Observatory in Hawaii ever since, with Keeling's son Ralph taking over the supervision after his father passed away, providing the longest continuous data on CO_2 concentration.[32]

An example of an influential policy paper that contributed to the political inertia around climate change in the U.S. was the 1983 report *Changing Climate: Report of the Carbon Dioxide Assessment Committee* by the National Research Council. It gave the politicians the feeling that instead of prompt

[32] See scripps.ucsd.edu/programs/keelingcurve/2013/04/03/the-history-of-the-keeling-curve.

action and tough decisions, all they needed to do was to fund more research. It comprised of five chapters written by natural scientists and two by economists. The chapters by the natural scientists concluded that human activities had increased carbon dioxide concentration and this would affect ecosystems, the weather, and agriculture. The rapid accumulation of CO_2 was seen as a problem and trying to control it through mitigation efforts was the solution. The economists, however, had a different message: we should not do much other than wait and see. The assumption in their models was that serious changes were far off enough to be discountable. The synthesis of the report concentrated on the economists' message and largely ignored the natural scientists. (Oreskes and Conway 2010, 174-183). To discount future utility is a standard practice in economics, but it is problematic applied to climate change policies and other very long-term issues, as it makes normative assumptions, such as future generations being considerably better off than us and natural capital being substitutable by other forms of capital (Hormio 2017b, pp. 104-106). The growth optimism inherent in discounting is made especially problematic by the possibility of a runaway climate change scenario. In any case, side-lining the concerns of the natural scientists in the synthesis report used by policymakers was not accidental, but part of a larger, systemic effort to delay action on climate change, backed by the fossil fuel industry and ideological concerns.

As global warming began to gain wider scientific interest and was noticed at the top levels of administration in the U.S. during the latter half of the 1970s, it prompted an increasingly organised and determined response from groups and individuals with either vested interest in the fossil fuel industry, or ideological distaste for any environmental concerns that could bring with them added regulation and government involvement in the market. The fossil fuel industry began concentrated lobbying efforts in the early 1990s. The Global Climate Coalition (GCC) was formed in 1989 to act as a counterforce to IPCC reports, and counted among its members big oil companies, car manufacturers, and industry associations. The GCC spread misleading information about climate change and generally set out to discredit the science and to foster public scepticism about it. This was done to postpone the inevitable (legislation for emission cuts), to protect profits, setting an international treaty back by ten years at least (Union of Concerned Scientists, 2007). Funding climate science sceptics and organising misinformation campaigns were part of the package, along with direct attacks on notable individual climate scientists. The goal was to make it look like a big scientific debate over climate change was ongoing, to fuel controversy where none really existed. Scientific journals and peer-review were sidelined as mainstream media was targeted to spread misinformation and create a feeling of uncertainty and non-urgency around the need to take action on climate change. It worked: while the scientific evidence and consensus grew stronger and stronger, the political momentum on global warming in the U.S. was lost even before the Kyoto Protocol was finalised in 1997. (Oreskes and Conway 2010, pp. 169-215).

The tactics deployed by the climate change deniers were the same that the tobacco industry lobbyists had found useful to buy the industry more time in the face of overwhelming scientific evidence linking tobacco to cancer. Many of the main players were the same too, like two distinguished retired physicists Frederick Seitz and Fred Singer. Public relations experts and industry lawyers gave advice to scientists, who then spoke to media. It did not matter that the scientists were not necessarily experts in the field, what mattered was the impression that science was being fought with science. To achieve this goal, any existing scientific uncertainties were exploited and anomalous details in the research were cherry-picked so doubt would remain. Oreskes and Conway describe it as fighting facts by manufacturing a debate. Appeals to journalistic balance were made towards the media, and giving equal weight trumped giving accurate weight to the different sides. (Oreskes and Conway 2010, pp. 5-19).

Doubt is crucial to science – in the version we call curiosity or healthy scepticism, it drives science forward – but it also makes science vulnerable to misrepresentation, because it is easy to take uncertainties out of context and to create the impression that *everything* is unresolved. This was the tobacco industry's key insight: that you could use *normal* scientific uncertainty to undermine the status of actual scientific knowledge. As in jujitsu, you could use science against itself. "Doubt is our product," ran the infamous memo written by one tobacco industry executive in 1969, "since it is the best means of competing with the 'body of fact' that exits in the minds of the general public." (Oreskes and Conway 2010, p. 34). Climate change deniers cleverly created the appearance of science in their reports. They included charts and graphs and references that made the reports look convincing. However, independent peer-review was missing in the reports by the George C. Marshall Institute and other such think tanks sceptical about climate science, although peer-review is a crucial feature in creating scientifically-approved information in any field to try to cull out misleading or inaccurate data. Furthermore, instead of engaging in standard practices of scientific debate, they engaged in other tactics, such as public petitions, to refute climate change. (Oreskes and Conway 2010, pp. 244-245).

Many of the sceptical arguments around climate change were based on purposefully ignoring the evidence, and the public was deliberately misled by denials of scientific knowledge aimed at distorting the public debate (Oreskes and Conway 2010, p. 241). Misinformation and denials are not the exclusive field of corporations.[33] The important question to ask is who is disadvantaged and who

[33] Agnotology is not only about intentional misinformation campaigns carried out by organisations. In the edited volume *Agnotology: The Making and Unmaking of Ignorance* (Proctor and Schiebinger 2008), different authors describe various instances of agnotology, ranging from corporate cover-ups and military secrets to sidelining knowledge about female orgasms or ignoring indigenous knowledge about fossils. Ignorance is thus not necessarily just about omissions or passive gaps in knowledge, but can also be actively produced as a response to conflicting interests by political structures and systems of oppression (Tuana 2008, pp. 109-110). In addition to withholding new information or spreading misinformation, this can take the form of suppressing what was once common knowledge. Knowledge can

benefits from cultivated and actively sustained ignorance. The different motivations of the academics and public relations agents involved in these campaigns is an interesting question in its own right, but agnotology can also be fostered by nation-states and other institutions. If we stay with the climate change example, many politicians, mainstream and others, have engaged in actions that might not be as systematic as what the GCC was engaged in, but that nevertheless amount to climate change scepticism or denial. Examples can be found easily from political actors in the USA, Australia, and many other countries.[34]

Oreskes and Conway (2010, pp. 246-247) list work done by journalists who have documented the extent of the efforts that ExxonMobil has taken over the years to support disinformation and doubt about climate change science. The corporation has poured millions of dollars to fund think tanks, quasi-journalistic websites, and even a columnist writing for FoxNews.com. These lobbying tactics taken by ExxonMobil against the Kyoto Protocol (as part of the GCC and independently after it disbanded in 2002) were influential in the USA not signing the treaty. This is not about being blinded by one's bias: climate deniers are aware that their information is false and are thus engaged in straightforward deception. Catriona McKinnon (2016) argues that, given the possibility of runaway climate change if aggressive mitigation action is not undertaken urgently, and given that agnotology creates mistrust between scientists and the public in order to delay such action, a case could be made for emergency measures to prohibit industrial climate denial through legal means.

These lobbying efforts are very much ongoing still through various industry-funded think tanks (Boussalis and Coan 2016). The focus seems to have shifted from straightforward climate change denialism to scepticism about the urgency required to take any action. The end result of all the different well-organised agnotology activities is that there are a lot of people who are ignorant of the facts and the state of the scientific evidence in relation to climate change, or at least suspicious of the science despite the overwhelming consensus among climate scientists. These people are therefore partially deprived of the power to decide to act otherwise, to make changes to their

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also be lost and unlearnt due to it being seen as not relevant or valuable anymore in the light of prevailing structures and practices. Tuana also points out that the epistemic tools we use to study knowledge might not be sufficient to study agnotology.

[34] Just as science challenges ignorance, it challenges existing power structures. This is because new scientific knowledge invariably affects the way we view the world. At the minimalist end of the scale, new scientific evidence poses a threat only to the existing way of making science. There is a threat to the funding and egos of the researchers, teachers, and others involved in activities linked to the existing paradigm, even if the practical implication to the rest of the world would be minimal (this applies to philosophy too). At the other end of the scale, new emerging scientific evidence is a threat to existing power structures on a very wide scale, whether political, economic, cultural, or a combination of these. Climate change science arguably falls into this wider end of the scale. It is a threat to such an array of existing power structures that I find it a feat in itself that climate science has managed to gain the foothold it has in the relatively short time span it has existed. Therefore it is no surprise that many strong forces have risen to try to make us conveniently ignorant, or at least confused, again. In any case, agnotology seems the correct term to describe what happened with climate change science and public debate.

collective lifestyles, and not be as complicit in such harms. I will return to this in chapter seven, where I will argue that climate denialism can obstruct our autonomy as moral agents.

By engaging in these lobbying activities and misinformation campaigns, corporations such as ExxonMobil have stepped outside their normal sphere of influence, wielding their power where they should not, i.e. in public policy and international treaties trying to avert a climate catastrophe. With power comes responsibility. It is a well-established fact that mitigation becomes more costly as years go by and climate change effects add up. These corporations benefitted financially from supporting misinformation campaigns, echoes of which still affect public opinion today, putting their profits over all other concerns. It could be argued that they should pay compensation and that they owe money towards mitigation efforts. (Hormio 2017a, p. 326).[35]

The corporations involved in the GCC and similar lobbying efforts have, by their past actions, generated retrospective moral responsibility for themselves (to varying degrees) with regards to anthropogenic climate change. They expanded their sphere of stakeholders and their responsibility through their own voluntary actions. This is why it would be justified to demand these corporations pay compensation for their past actions (Hormio 2017a, p. 326). Through their actions, they have created an obligation for themselves to help mitigate climate change. This obligation distributes to their members, including their shareholders.

My other main arguments in this chapter have been the following. I have suggested that collective agents such as corporations are real agents, but that they are not moral agents. Moral agency belongs to those who can make moral claims through their actions, and for this you need to feel the pull of moral emotions. Despite this, collective agents can exhibit moral claims that are implicit or explicit in their ethos through their conduct. These claims are collective moral claims because they reflect the collective outcome of individuals deliberating within their roles, and under the influence and within the parameters of the ethos of the collective agent. This is why collective obligation is a concept that is different from individual obligation, although it can distribute to members in various ways. Individual members should be both sensitive to what others do and be ready and willing to act if necessary. The collective obligation does not disappear even if all the members would be excused from doing their part. Instead, the collective agent should look into other ways (or an occasion) of meeting its obligation.

So far I have discussed the collective obligations of organised collective agents, regardless of how loose or tight their agency is, as well as the direct duties of individuals as individuals. How and in what way individuals can also be implicated as constituents of unorganised collectives are questions I will turn to next, with the discussion spanning the next two chapters.

[35] Arnold (2016) argues that corporate political activity to defeat climate legislation cannot be ethically justified because theories about the legitimate role of corporations in society cannot provide a basis for such lobbying activities.

Chapter 4 – Unorganised collectives

> In focusing only on what governments can do and on what individuals can do *as individuals* (cutting their own emissions as a matter of justice or lobbying their government as a matter of goodness), there is a danger of neglecting a third possibility. This is what can, and in the climate change case can only, be achieved through collective action at a level at which there is as yet no effective collective agency.
>
> - Elizabeth Cripps (2016, pp. 123-124)

> In reality our problem is not one of working out what our individual duties are in an interdependent world, in order that we can 'live with ourselves' in the midst of devastation. Once we realise that in an interdependent world there is strictly speaking no such thing as an individual duty, because there is no such thing as an individual in *that* sense, our problem becomes one of finding ways to reshape our already collective lives so that we can continue to live with one another.
>
> - Tom Greaves (2016, p. 349)

As a fair collective scheme to deal with climate change is currently lacking, what should an individual do in the face of a collective failure to mitigate climate change? What are her duties? Attempts at creating binding international climate treaties have failed so far, and the hope offered by the Paris Agreement has been dampened by the uncertainty over what the USA will do under their new administration. More egregiously, arguably no state is currently doing as much as they should if we are really to keep the global temperature rise limited to 1.5 degrees Celsius, so we should be interested in what individuals ought to do in the absence of an efficient enough global scheme.

The problem of climate change is overdetermined (in a normative sense that I discussed in the first chapter) not just by the harm that is created, but also by the solution that is required. That is, there are more responsible agents (both people and collective agents) that have obligations to mitigate climate change than is needed for a solution to be reached. It only takes some of the agents who have obligations to act on them to mitigate climate change, or to at least avoid the worst impacts (assuming it is not already too late). How many are required to act, I will not try to guess, but it is safe to say that this is not a situation where absolutely all implicated agents must act to bring about mitigation (although probably all or at least most of the biggest agents must be on board). This simply means that the obligation of agents requires them to do what they can to mitigate climate change unless enough has already been done by others. When you add to this the fact that greenhouse emissions are cumulative, and feedback mechanisms and tipping points not well enough understood, it is safe to say that each agent has obligations for a long time to come. Regrettably, climate change is a problem we are stuck with for quite some time.

This chapter serves as a middle point in the thesis where individual duties meet collective obligations. Whereas the previous chapter concentrated on the collective obligations of collective agents, this chapter discusses the possibility of collective obligations of *putative* collective agents, i.e. unorganised collectives, and what results from their failure to act (omissions). The question is important in climate ethics, as collective omissions lead to unmitigated emissions. The vast majority of our emissions are linked to a collective context of one kind or another, and to change these patterns of emissions we will need to change not just structures, but also certain collective patterns of behaviour. Obligations and duties are about what ought to be done now and in the future, i.e. forward-looking responsibility, whereas failing to meet them can result in retrospective backward-looking responsibility associated with blame (just as meeting your obligations can result in praise).

The account of responsibility that I am after will be able to understand responsibility at both individual and collective levels, and explain how the two are interdependent. A few other people have recently presented such accounts, and I stated in the introduction that I will position my own work in juxtaposition with four recent monographs: Christopher Kutz (2000) *Complicity: Ethics and Law for a Collective Age*, Iris Marion Young (2011) *Responsibility for Justice*, Tracy Isaacs (2011) *Moral Responsibility in Collective Contexts*, and Elizabeth Cripps (2013) *Climate Change and the Moral Agent: Individual Duties in an Interdependent World*. This chapter will concentrate on the accounts by Isaacs and Cripps, while the next two chapters discuss Kutz and Young.

Isaacs (2011, p. 6) develops a two-level theory of moral responsibility, "one that recognizes responsibility at the individual and the collective level".[1] Collective responsibility matters because "the collective context provides an essential framework for an adequate normative analysis of individual contributions" (p. 69). Cripps (2013) is similarly interested in the responsibility of both individuals and collectives. She agrees with Sinnott-Armstrong that our climate change related duties are not about what we can do as isolated individuals. However, while for Sinnott-Armstrong our moral duty as individuals is to get governments to take action on climate change, for Cripps it is to bring about collective action where no effective collective agency yet exists.[2]

I noted in the first chapter how there are three potential sources of individual responsibility when it comes to climate change harms: direct responsibility (individuals *qua* individuals), shared responsibility as members (individuals *qua* members of collective agents), and shared responsibility

[1] In her view, collective moral responsibility operates on a level distinct from individual moral responsibility. Individual moral responsibility is not a function of collective moral responsibility (or vice versa) and claims about the responsibility of collectives do not entail (or erase) claims about the responsibility of individual members.

[2] Peeters et al. (2015, pp. 86-87) criticise Cripps's account for being biased towards individual 'promotional actions' directed at trying to bring about a collective solution: are we really justified in holding such promotional actions to be less 'throw-away' in their character than direct unilateral actions? After all, it is far from obvious that promotional actions really "contribute to a stockpile of impetus for collective change" and are thus more likely "like money put in the bank" rather than "losing bets" (Cripps 2013, p. 148). Peeters et al. argue that this is simply begging the question.

as constituents (individuals *qua* constituents of unorganised collectives). With unorganised collectives that do not qualify as collective agents there can be shared and joint action at the level of the individual constituents. Collective responsibility thus does not need to be based on collective agency: mutual dependency (Cripps) and shared intentions (Kutz, Isaacs, and May) are alternative bases for collective responsibility discussed in this and the next chapter. This chapter will move the debate towards unorganised collectives and the shared responsibility of their constituents.[3]

This chapter proceeds as follows. I begin by explaining why climate change does not follow the logic of the duties of a random collective of individuals (section 4.1). Next, I deny that you can place obligations, putative or actual, on unorganised collectives, although you can hold the constituents of unorganised collectives blameworthy in the backward-looking sense under certain conditions (section 4.2). However, I grant that it can be useful to discuss unorganised collectives in some cases, as it can help us to make better sense of our complicity for collectively caused harms where our participation is marginal. More specifically, it can make us appreciate the different structures and systems that we are part of, and how we are complicit in upholding and recreating these. Cripps (2013) offers an account of the responsibility of unorganised collectives, although she does not base it on complicity like I do. I will go through her account in some detail (section 4.3), as it is the most comprehensive account of the intersection of individual and collective responsibility offered in climate ethics so far, and therefore directly relevant to my own project.

4.1 Not quite a beach rescue

Recall from chapter one how I remarked that the existing literature on responsibility of unorganised collectives has centred on the ability of the individuals to form a group agent capable of undertaking the action that the situation requires. The literature has been inspired by Virginia Held's (1970) argument that a random collection of individuals, such as passengers in a train carriage, can be held morally responsible for failing to help the victim of an assault, as long as the action called for is obvious for a reasonable person. In cases like these, the individuals would have needed to co-operate to prevent the harm and their failure to do so counts as a blameworthy omission. What is common across these kinds of random collectives is that the individuals find themselves in the situation due to nothing more than (bad) luck. The composition of the collection of individuals in these kinds of cases is therefore down purely to matters of geography and timing.

[3] Shared intentions explain collective action that in turn can lead to collective responsibility claims, while mutual dependency aims to explain collectively held duties that can lead to collective responsibility claims. The important difference between them is the role that collective intentions play in the accounts: while Kutz, Isaacs, and May base their accounts around them, Cripps denies that collective intentions are necessary for collective responsibility.

I will discuss cases offered by Isaacs (2011) and Cripps (2013) and discuss their relevance to climate ethics. Although it is a case of luck which particular individuals find themselves in these situations, I agree with Held, Cripps and Isaacs that their acts and omissions become a question of moral responsibility when there is a pressing need and they are in a position to help someone. However, actions that predictably cause harm in aggregation (like the emissions that cause anthropogenic climate change) take place within a system. I will therefore argue that applying the logic of random collectives to climate change does not hold.

Held (1970, p. 476) argues that a random collective can also be held responsible for failing to take the required course of action in cases where the action called for "is obvious to the reasonable person and when the expected outcome of the action is clearly favorable." I will argue in chapter five that certain unorganised collectives (aggregates of individuals) do have responsibilities in relation to climate change, and put forward an account of what the individual duties look like in such cases. As groundwork for that argument, in this section I will explain why the putative groups or unorganised collectives relevant for climate change do not follow the logic of the duties of a random collective of individuals.

Cripps (2013, pp. 49-61) discusses beach rescue scenarios, presenting a continuum of circumstances where individuals who do not necessarily know each other — and have no established decision-making mechanism — regardless should co-operate to prevent children drowning.[4] She argues convincingly that if individuals have a duty to prevent the suffering of others, if she can do so at either minimal or less than significant cost to herself, then it would be implausible to claim that this duty would evaporate just because she would have to act together with others to do so. In other words, in cases where you can save lives at a low cost to yourself it does not make a moral difference if the duty falls on one person or more. Taking her cue from Held and May, she presents the following case (p. 60):

> *Beach rescue*
> A number of unconnected holidaymakers are on a beach when a child starts to drown in the water. Her rescue would require most of them to organize themselves to act together, to drag a lifeboat into the water, row it to her, and to pull her out.

Cripps argues that by parallel reasoning, the people who could take action on climate change have a moral duty to do so (p. 61).[5]

[4] She considers several variations of saving-children-from-drowning -cases where the moral duty bearer becomes increasingly collective with each new version of *Easy rescue*. In doing so, she references the famous puddle-cases by Peter Singer, where a child's life can be easily saved with only a minimal cost to oneself.

[5] The people should act together and form a *should-be collectivity*, namely *The Able*, see section 4.3.

Climate change, however, is fundamentally different from classic beach rescue scenarios: we did not just happen to come across it, we are not some bystanders who should help the drowning victim just because we can. The scenario is more akin to us having thrown the victims into the water and keeping them there as an unintended consequence of something else we have done. Cripps partially recognises this, and in addition discusses cases where too many people use a weak footbridge, putting it in danger of collapsing over the children swimming below (Cripps 2013, pp. 68-74). In such case, the collective result of harm "was reasonably foreseeable by each contributing to it" (p. 71). Cripps (2013, p. 72) notes that climate change is a case where the contribution to harm is not of the all-or-nothing variety, but rather "a matter of doing too much or too little of something". Therefore she offers the following scenario (Cripps 2013, pp. 70-73):[6]

> *Footbridge 9*
> A footbridge is unsafe and children are clearly visible playing in the water below it. There are warning signs on each side of the bridge that it can hold up to four people of an average weight of 70kg. Four people are approaching the bridge and all know this. Each of us can tell by looking at the others that we each have a body-weight around or a little below the average. We all step onto the bridge. However, you, I, and one other person are each carrying 15kg rucksacks and each of us knows this. This pushes our combined weight above the limit. The bridge breaks and the children are harmed.

This example is meant to highlight that although only two 15kg rucksacks were needed to push the combined weight above the safe total, all three with these rucksacks are morally responsible for the preventable and predictable harm that ensued (Cripps 2013, p. 74). She goes on to suggest that this is precisely the way that polluters are responsible for climate change or other such environmental harms.[7] In contrast, I argue that even this case of a random collective is not an allegory to climate change, as it does not share its basic structure as a moral problem.

Let us say that the bridge is the Earth's climate and the excessive amount of greenhouse gases being emitted are represented by the pedestrians on the bridge who are wearing rucksacks (or just too many pedestrians in versions 3-6 of Footbridge). The drowning children are future generations and the young people of today, as well as the poor people that are already affected by climate change. The responsibility is to alert others about the danger and to make people co-operate to avoid harm.

To begin with, the harm created by climate change is not just the risk of harm, or harm that will predictably happen in aggregation, but also actual ongoing harm, as climate change harms are taking place already, especially in poorer countries with more frequent droughts and floods.

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[6] She presents each variation in an abbreviated form that refers to the previous versions, so the actual description of *Footbridge 9* from page 73 reads as follows: "As in *Footbridge 8* except that you, I, and one other person are each carrying 15kg rucksacks." The description that I present here is an amalgamation of the descriptions of the previous cases.

[7] This is the way in which the collective *Polluters* is meant to be *weakly collectively responsible* (Cripps 2013, p. 74). I discuss this in section 4.3.

Therefore, some of the swimmers would have already been harmed, while the risk of harm increases (not steadily, but with various tipping points). The problem has a very long timeframe, so swimmers that enter the scene in future decades and centuries would also be harmed. They would also have no choice but to be in the water, whereas in *Footbridge* you could question why these children are playing under an unsafe bridge in the first place, or why their parents are allowing them to do so. More importantly, *Footbridge* does not address why the people with rucksacks decide to walk on although they are aware of the predictable harm: is it because they do not care, or is it because they feel that they have no choice? Maybe they have tried to warn others of the danger, but to no avail.[8] Or maybe (like Sinnott-Armstrong) they feel that what they do as individuals does not matter, as it is the responsibility of some bridge council (government) to fix the problem and makes sure that such rucksack-carrying behaviour becomes illegal. Also, if the bridge was the climate, no one could say for certain when and in what way the bridge will collapse, although they can say that it will collapse with the likelihood of some percentage, giving an opportunity to the charlatans among the crowd to deny the risk/harm to the swimmers in the first place (also, the bridge could collapse incrementally). Finally, the bridge should be one that allows for vehicles also, as various collective agents (cars and other vehicles) would be on it travelling alongside the pedestrians, contributing to the harm in a significant way.

The objection is not that we should not use such idealised examples to discuss complicated moral issues such as climate change. Many times this kind of approach is helpful; it is a philosopher's equivalent of a scientist's microscope, the closest our messy moral reality can come to laboratory conditions. The objection is not even that *Footbridge* fails to consider all relevant matters (although I do find that it simplifies the structure too much as I argued above).

The objection is that anthropogenic climate change is not akin to cases where unorganised collectives consisting of isolated random individuals must act together to prevent harm that they will predictably cause in aggregate. Rather, the situation is one where patterns of existing joint action, and collective structures and institutions, set the scene for the actions that in aggregate cause the harm. To fix the situation, it is not enough that just at the moment of danger we co-operate to prevent the harm, but we also need to fix the infrastructure that facilitates the harm being created in the first place.

Cripps does acknowledge the need for political action (and possibly creating new collective agents and institutions to meet the climate challenge), but her account cannot explain why the individual agents are in the situation they find themselves in. This is why I think it is unhelpful to

[8] The ones who walk over the bridge even though they are aware of the harm/risk might feel hopeless or at least very upset. Cripps does discuss marring choices elsewhere in her book (pp. 169-196), arguing that we should also consider climate change in terms of what it does to us as moral agents.

compare climate change responsibility to the logic of responsibility of random collectives: it does nothing to open our eyes to how we can be complicit in harms through structures and social systems. Furthermore, I find that it is neither here nor there that in the footbridge case all the three people with bags are to blame, although only two 15kg rucksacks were needed to push the combined weight above the safe total. This example was meant to highlight the way that polluters are responsible for climate change, but it tells us nothing about the kind of marginal participation involved in pollution.

Last but not least, Cripps (2013, p. 61) offers a third allegory for climate change responsibility, that of:

> *Swimming teenagers*
> A number of teenagers, all independently, decide to swim in a small lake. Each jumps in and swims around very flashily. Between them, they cause so much turbulence that a child also (independently) swimming in the lake is put in serious danger of drowning. To rescue her would require cooperation by the teenagers; to avoid putting more children in the same position, turbulence would have to be kept to a lower overall limit.

This, I find, comes close to climate change responsibility. However, this no longer seems to be a case of a completely unorganised collective with random individuals, although the example says that all teenagers do what they do independently. Why do they all swim around so flashily? Is it a trend among the local teenagers, or is it something that they were (wrongly) taught in school perhaps? If so, this would be structural issue (these are discussed in chapter six). If it is not a structural issue and the teenagers all independently decided to swim flashily in the small lake at the same time, then I maintain that it is not reflective of the situation we find ourselves in with climate change for the same reasons that *Footbridge* discussed above was not. Be as it may, my argument remains that the logic of the responsibility of random collectives does not apply to climate change.

What is missing from Cripps's analysis are the structures that contribute to and shape our emissions, and her discussion does not deal with questions like why are the polluters in the situation they currently are in. "Rather than consider abstract 'potential collectivities' [---], we should understand actual and concretely potential collectivity as the basic and fundamental condition of all our agency and receptivity, capacity and incapacity" (Greaves 2014, p. 348).[9] If we approach polluters as a random collection of individuals, we are failing to look into the structural issues that underpin climate harms.

In beach rescue scenarios, my duty to act is down to (bad) luck of circumstances, but this is not the case in climate change: the circumstances prevail because they are systematic and are upheld by structural causes. While in harms caused by unorganised collectives there is no collective intentional

[9] Cripps uses the word 'collectivity', the more common word is 'collective'. I will use them interchangeably.

project as such to cause harm, there can be numerous systematic intentional collective action patterns and collective endeavours that contribute to just that. Therefore the moral responsibility of unorganised collectives stemming from structural and systematic harms is different from the responsibility that stems from moral luck scenarios. In the case of climate change, the problem is with our carbon-intensive patterns of living, social and financial institutions that have not been designed to deal with global problems with delayed impacts across generations, corporate-funded misinformation campaigns, and the various social psychological processes at play, to name just some of the factors. The important point is that our greenhouse gas emitting actions take place in particular enduring contexts. It is not a situation into which we are thrown. If we approach polluters as a random collection of individuals, we are failing to look into the structural issues that underpin climate harms. After all, it is not a matter of pure luck who bears the responsibility.

In my view, the importance of structures is two-fold: the effects of our emissions exacerbate existing injustices (see section 6.3) and our individual emissions partly depend on existing structures. The greenhouse gases that I emit are partly down to personal choices: what I eat, how far from work I live and in what kind of housing, how many flights (if any) I take, how many consumer goods I consume, and so on. However, many of these decisions are already linked to structural constraints: if no public transportation is available, I cannot choose it. If housing is my area is built in a non-energy efficient way, the chances are that I live in a non-energy efficient way. If the electricity in the national grid is produced in large part by burning coal, I contribute to the burning of coal. Furthermore, others make decisions about how the goods I buy are produced. Realistically, I can only ever have partial knowledge of how carbon-efficiently something is manufactured and what other environmental impacts (let alone social) it has. Corporations and companies make these decisions, although they also face structural constraints. The government under which I live makes a lot of decisions on behalf of its constituents regarding infrastructure, including how energy is produced and transport organised, and also regarding purchasing decisions on a large scale (for schools, hospitals, public offices, and so on). These all affect my overall carbon-footprint and my say in them is in most cases indirect and limited (voting for a representative in elections, hoping that they get elected, and if they do, furthermore hope that they make wise choices). Last, but by no means least, our choices are affected by social and cultural norms, and how these are upheld and renegotiated by all of us would be a thesis in its own right. Importantly, all these emissions take place within pre-existing social structures and systems. Circumstances do not just present themselves to us; they are created and upheld by us.

If we include backward-looking assessment of historical injustices and how they have led to certain groups' increased vulnerability to climate change harms, we are more likely to get to the root of the problem, rather than just treating the symptoms. I will return to this at the end of chapter six,

where I argue that conceptualising climate change primarily as a structural injustice allows us to appreciate the complexity of the associated responsibility. But for now, I will keep the discussion on the responsibility of unorganised collectives by looking at putative collectives.

4.2 Putative collectives and the (im)possibility of their obligations

Isaacs (2011, p. 141) also discusses beach rescue scenarios, labelling them *Bystander Cases* as "there is at least one person suffering a harm and at least one person in a position to assist". The person(s) in a position to assist are not responsible in the backward-looking sense for the plight of those in need, so any obligation to assist "does not turn on any prior share in bringing the unfortunate circumstances about." She is aware that they do not map directly to climate change, as we are not bystanders in climate change.[10] Isaacs thus does not suggest that we can apply the logic of the responsibility of random collectives straightforwardly to climate change. Rather, she suggests that discussing the obligations of such groups can help to clarify what individual duties could be when faced with global challenges such as climate change. The reason Isaacs discusses these cases is to offer "a series of examples in which it becomes increasingly difficult to see what the situation demands and of whom" (p. 141), giving credence to her argument that often "there is much more clarity between obligation and circumstance at the collective level than there is between individual obligation and circumstance when the only reasonable course of action is collective" (p. 153).

Isaacs (2011, pp. 142-143) notes how when there is more than one bystander, a particular individual's obligation cannot be directly mapped onto the situation, like when there is more than one person in a position to assist (when only one is required), or when many are suffering a harm and many are in a position to assist. She (p. 143) gives an example:

> Consider the first kind of case in which one person needs assistance, only one assistant is required, and more than one person is available to help. Though it involves more than one bystander, this case does not demand collective action. As described, only one individual is needed to assist, making it a case of an individual obligation that a number of different people could fulfill. Individual obligation maps neatly onto the situation for each, but only conditionally so. The presence of other potential rescuers affects the obligation of each by making it conditional; if another bystander fulfills the moral obligation to save the drowning child, the others are no longer required to act. However, if no one steps forward to save the child, and the child ends up drowning, then each fails to meet an individual moral obligation. As long as the condition is not met, each person's moral obligation is unambiguous: rescue the drowning child unless someone else does.

[10] Isaacs (2011, p. 141) writes: "I'll call these Bystander Cases, even though we may recognize the limits of that idea when we reflect on certain cases, such as global warming, in which some may claim that no one is actually a mere bystander; all are participants."

Note that if one of the bystanders does rescue the drowning child, then it does *not* mean that the others have failed to discharge an individual moral duty to perform the rescue; rather, as the obligation was conditional, it was met (for all). If, on the other hand, no one rescues the child, then each bystander failed to discharge his or her individual moral duty. We could say that that the individual duties are *interdependent* (Miller 2010, p. 134), but this would still not be a case of joint duties and shared responsibility. In contrast, when a group of bystanders need to co-operate to save lives (and there is a course of co-ordinated action available for them to do so), the moral obligation of each bystander is more ambiguous in the absence of a collective agent. If such an agent would exist, there would be "a clear map between the situation, the required course of action and a collective agent." (Isaacs 2011, p. 144). Nevertheless, when no such agent exists, Isaacs suggests that individual obligation no longer neatly maps onto the situation. Her suggested solution is putative collective obligation.

While I allow that it makes sense to discuss the responsibility of putative groups and/or collectives, I reject the notion of obligations of putative groups (potential collectives) put forward by Isaacs, arguing instead that these amount to individual duties *qua* constituents of unorganised collectives.[11] Putative groups, as suggested by Larry May (1992, p. 109), are collectives "in which no formal organization exists, and, as a result, there is no decision-making apparatus". It is a separate issue if a putative group could take action, and this is for the most part linked to if there was enough time and leadership skills available to set up such action, along with existing solidarity and communication opportunities (p. 110). Those who could have developed a structure sufficient to avoid inaction (however loose that structure might be) in time are morally responsible as a group. Thus according to May, the set of individuals who do not step up to the task of co-ordinating their actions in time to prevent harm when they could have done so can be held responsible for their failure. This putative group is *prima facie* collectively responsible for the harm (May 1992, p. 111), and its failure is a case of collective inaction (pp. 116-117).[12] This could easily be applied to positive cases too: the putative group is praiseworthy if it succeeds in taking the appropriate action.

According to Isaacs (2011, p. 131), with harms like climate change, "the daunting task for individuals of knowing what their part as individuals is in ameliorating these seemingly

[11] Other authors who have suggested that unstructured collectives/putative groups/potential collectives could have collective (or shared) obligations include Pinkert (2014) and Wringe (2010).

[12] May (1992, pp. 116-117) gives the following three conditions for (backward-looking) collective responsibility of putative groups (in cases where blame is applicable):

> (a) the members of the group fail to act to prevent a harm, the prevention of which would have required the coordinated actions of (some of) the members of the group;
>
> (b) it is plausible to think that the group could have developed a sufficient structure in time to allow the group to act collectively to prevent the harm; and
>
> (c) it is reasonable to think that the members of the group should have acted to prevent the harm rather than doing anything else, such as preventing other harms which they also could have prevented.

insurmountable harms is made easier when we invoke the idea of a collective obligation." The idea is that while there is no collective agent that can be held responsible, collective obligation can provide order and help to shape individual actions, therefore playing a mediating role, helping "to narrow down the field of possible individual actions, making it more manageable." In short, she (p. 139) argues that the collective framework itself is helpful in this, thus enabling an individual "to take effective action against a daunting and individually insoluble problem." Her aim is to offer an account into "the murky middle ground between collective and individual obligation" (p. 139), stating that she wants "to motivate the possibility of thinking in terms of collective obligation in the absence of an organization or a goal-oriented collective" (p. 131).

Isaacs takes her inspiration for obligations of potential agents, putative collectives, from May and Held. Isaacs (2011, p. 145) writes: "The idea of a putative group suggests that there may be room to establish collective obligation in the absence of collective agency—potential collective agency may provide grounds for collective obligation, either actual or also putative obligation, following May's terminology." She combines this with Held's (1970) idea that the course of action required of a random collective could be clear in some cases to the reasonable person, and that when it is clear, then there is responsibility at the collective level. Isaacs (2011, p. 148) translates this to "they failed as individuals to engage in the requisite action for organizing into an effective agent and fulfilling the collective obligation", and she suggests that the failure lies at two levels: "a failure to meet a collective obligation" and "a failure in each individual to join together with the others". While Isaacs (pp. 148-149) admits to hesitating to attribute actual obligations to potential agents, she thinks that by making also the obligation putative the problem is solved (p. 149):

> Instead of claiming that putative groups can have actual obligations, I maintain that when the clarity condition is met concerning the required course of collective action, the putative group has a putative obligation. I believe further, however, that when the clarity condition is met with respect to the putative collective obligation, it has exactly the same ordering and mediating potential for individual action that an actual collective obligation would. In either case, it is a mechanism through which individual moral possibility becomes clearer.

The first thing to note is that contrary to Isaacs's formulation, Held does not use the terms "obligation" or "duty" anywhere in her article. Instead, she discusses the (retrospective) responsibility of these collectives. While Held and May (as well as Kutz 2000 and Miller 2010) discuss how (constituents of) unorganised groups can share backward-looking moral responsibility for an omission, Isaacs argues that forward-looking obligations can be held by putative groups (unorganised collectives). However, while May discusses holding unorganised collectives (putative groups) morally responsible in the retrospective blameworthy sense, he does not suggest that it is ontologically the group that is responsible, but rather it is *the set of individuals* that bears shared moral

responsibility for failure to organise (how this share might vary between individual constituents in another important question for May).[13] What is important is that the individuals' responsibility should be understood *qua* the unorganised collective (set of individuals) as it was not an individual failure. Held's view, likewise, is that while the judgements about the moral responsibility of the members of a collective "are not logically derivable from judgments about the moral responsibility of a collectivity" (p. 475), the responsibility of a random collection of individuals distributes to its constituents (p. 480):

> A significant difference between the moral responsibility of a random collection as opposed to the moral responsibility of an organized group is that the former seems to be distributive—that is, if random collection *R* is morally responsible for the failure to do *A*, then every member of *R* is morally responsible for the failure to do *A*, although, perhaps, in significantly different proportions. In contrast, if organized group *G* is morally responsible for the failure to do *A* it does not follow that member *M* of *G* is morally responsible for the failure to do *A*. If a random collection *R* can be represented as a set equivalent, say, to *M* & *N* & *Q,* then, if *R* is morally responsible, we would seem to be able to conclude that *M* is morally responsible & *N* is morally responsible & *Q* is morally responsible.

Held notes that saying that the moral responsibility of a random collection is distributive does not necessarily amount to much: we might not be able to apportion responsibility for all the components that doing *A* consists of, so the individuals are not responsible for the failure to do *A*, but instead "for not acting to transform the collection into an organized group" (p. 480). The actual context is decisive here, as elsewhere on Held's account. Furthermore, Held and May do not suggest that these random collectives could hold prospective moral obligations.

While Isaacs and I are in agreement that issues such as climate change require collective solutions, I disagree with her that you can place a putative collective obligation on a putative collective. As King (2011, par. 14) observes, it is often the case that "problems that require a collective solution exist prior to any collective that shares a goal of solving it", and in many cases there is no collective agent who can be said to have an obligation. We might have an individual obligation to form a collective and a certain set of individuals that share this obligation. However, these are still obligations held by individual agents, agents that exist. A group that does not exist

[13] As the responsibility is shared, each individual is only partially morally responsible for the harm, as each agent is only a partial cause of the harm. May (1992, p. 120) argues that this kind of partial responsibility does not normally entail guilt, but rather shame, or moral taint. His claim is that while guilt commonly attaches to explicit behaviour, shame in contrast is related to a person's self-conception. For a related discussion on reasons of character in Kutz, see section 5.2. For a principle about how the share of each individual varies, see May 1992, p. 117. Isaacs (2011) discusses collective guilt at length, devoting her entire third chapter to the topic, and wants to separate the notion of collective guilt from membership guilt, which she argues is just a certain type of personal guilt. She furthermore wishes to separate collective guilt from feelings of guilt and beliefs about being guilty, as these just confuse the concept. Instead, she argues that collective guilt should be understood simply as blameworthy collective moral responsibility.

cannot have obligations, even putative ones, as that would be to "put the normative cart before the metaphysical horse" (par. 15). I find King's criticism to be on point. Any forward-looking obligations in cases where no collective agent yet exists remains at the individual level, although they derive their normative significance from the collective context.

In general, it is implausible to assign obligations to an entity that does not have the capacity to discharge them. For a claim to make sense as an obligation, be it individual or collective, there has to be corresponding capacity. Obligation after all entails both responsibility *and* capacity. Therefore, while blame can be ascribed to aggregates of individual people such as rich polluters, based on counterfactual reasoning of what they could have done as a collective had they organised themselves, we cannot ascribe collective obligation to an entity that does not exist. However, as I will argue in the next chapter, many of us have *interdependent individual duties* to try our best to mitigate climate change that we have *qua* constituents of unorganised collectives. The way to discharge of the duty is to seek a collective solution either through existing structures or through creating new institutions, or most likely both. If we manage to create a collective agent (or agents) that is fit for the purpose, then the set of individual duties can be delegated to this agent, and we can say that it holds a collective obligation. But in its absence, the duties remain those of individual agents. (I should note that this does not exclude the obligations of existing collective agents to do what they can in mitigating climate change. These agents include governments, corporations, intergovernmental organisations, non-governmental organisations, and so forth. Still, none of these collective agents can be assigned collective obligation to mitigate climate change (only to do their best *in* mitigating it). Instead, they are jointly responsible and interdependently obligated.)

To be fair, Isaacs is at pains to underline that the collective obligations are only putative (and not actual) when no collective agent yet exists.[14] Although putative, the collective obligations are supposed to help to clarify and map out "more determinate moral requirements for individuals who are members of the collectives", and once it is clear what the collective action necessary would be, this acts as "a mechanism through which individual moral possibility becomes clearer" (2011, p. 149).[15] However, what is a putative obligation? It is an obligation that can come into existence only

[14] Even though the concept of "putative" plays such an important role in her argument, Isaacs offers no definition of it other than by introducing the way May has used it. I think that providing an independent definition could have been helpful.

[15] "In addition to lending shape to the obligations of individuals, the perspective of the collective obligation, even when putative, furnishes a further normative advantage. For in giving shape to the individual obligations, collective obligation provides a framework for understanding the moral dimensions of individual contributions and individual failures. This point is an extension of the claim, developed earlier, that collective moral responsibility is necessary for an adequate understanding of individual responsibility in collective contexts. Whether the individual contributes to collective action or collective inaction, the moral features of the individual's contribution become salient only against the background of the moral features of the collective action or inaction. For example, although one individual taking a completely individualistic view of a large moral issue such as global warming could abdicate responsibility as an individual by noting that she cannot make a difference, her failure to contribute to a collective effort that would make a difference

if the required capacity appears. But it now sounds like a conditional obligation. Therefore, to talk of putative collective obligations is to talk of duties that *would* exist *if* things were different.[16] As things stand then, there is no collective obligation of unorganised potential collectives to mitigate climate change, just as I am arguing. However, talking of collective putative obligations can distract us from the obligations and duties *that already exist*: namely those of individual people and collective agents to do what they can to try to mitigate climate change. I agree with Isaacs that in many cases thinking about the collective action necessary can help to formulate what the individual should do, but there is no need to muddy the waters with talk about putative collective obligations of putative collective agents. We do not need the latter to do the former, as we can just think along the lines of 'how this situation could be solved by acting together?'

Note that the duty of an individual is interdependent with other individuals' duties, i.e., they can only be achieved if enough people act together. I agree with Isaacs (2011, p. 140) that talking about unorganised collectives can be a useful tool for us to make sense of our responsibility:

> [I]ssues of global poverty, world hunger and disease, and environmental destruction appear so immense from the perspective of the individual that no action within the reach of ordinary moral agents seems likely to make much of a difference. The amount of actual and potential human suffering in these kinds of situations is enormous. As a result, it is difficult not to view them as moral issues. We face a great challenge in attempting to chart the territory of individual obligation in the context of moral issues that are so large that they require collective action solutions. It is tempting to think that the need for a collective action solution suggests that we are in fact dealing with a collective moral obligation that directs and grounds the obligations of individuals. [---] But the idea of a collective obligation without a collective agent who is so obligated appears to be a stretch. [--] when collective action solutions come into focus and potential collective agents with relatively clear identities emerge as the subjects of those actions, then we may understand individual obligations [--] as flowing from collective obligations that those potential agents would have.

Still, talking about putative obligations of putative groups is not only terminologically confusing, it also means that if individual obligations flow from the collective obligation (as Isaacs argues), then individual obligations are also putative in cases like climate change mitigation. In contrast, I want to argue that individual people and existing collective agents have *actual* obligations with regards to climate change mitigation, although the duties take the form of 'doing what you can to mitigate', rather than 'to mitigate'. How demanding these duties turn out to be depends on the agent in question and what is feasible for them. Importantly, it is not only about capacity as such, as climate change is not akin to a bystander case: we are participants, not bystanders. In bystander cases

is not so easily excused. Mediated by a putative collective obligation in which she could participate, her failing is not that she did not solve the problem of global warming—that is something we could never expect her to do. Instead, her failure is that she did not do her part in a collective action that could solve global warming." Isaacs 2011, p. 150.

[16] I am not sure if Isaacs would agree with this or not.

individual obligation flows from the circumstances, from the bad luck of being at the wrong place at the wrong time (or for the good luck of being in a position to help, depending on your preferred outlook). In chapter five I will argue that in collectively caused harms, our shared duties flow from how our participatory or *quasi-participatory* intentions link us to the harm. In climate change mitigation, they flow from both forward-looking and backward-looking sources.[17]

Rather than putative obligations of putative collective agents, Bill Wringe (2010) argues that putative, potential collectives are subjects of actual obligations. Furthermore, the obligations of an "unstructured collection of individuals" are to be addressed to the individuals who make up the collective. He denies that for there to be a collective obligation there also needs to be a collective entity that the obligation is addressed to. Instead, the addressees are the individuals. In other words, Wringe (2010, p. 220) denies that to be the subject of moral obligation one needs to be an agent. According to Wringe (p. 225), the addressee of a moral obligation of a child is the parent/caretaker if the child in question is too young to be anything other than the subject of a moral obligation. While most adults are both the subjects and addressees of moral obligations, in some collective settings the situation changes. What he suggests is that a collection of individuals can be the proper addressee of a collective obligation instead of the collective itself.[18] What, then, makes the obligation collective? It is essentially the content of the obligation: the obligation that falls on the individual is not the same as that which falls on the collective (p. 226). If an unstructured collective has a collective obligation to do X, the individual does not have an obligation to do X, but instead "to do things which are appropriately related to the carrying out of the action whose performance would constitute fulfilment of the collective obligation" (p. 227).

While I agree with Wringe that the collection of individuals is the proper addressee of any duties (obligations) *qua* an unstructured collective, and furthermore that their duty is not to do X but to do what you can do, I do not see how such a collective could have obligations that would not be dependent on the individual ones. To see why, I will discuss the example that Wringe (2016, p. 479) offers of a situation that is supposed to give rise to a collective obligation:

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[17] An alternative distinction to the more-or-less straightforward separation of responsibility into backward-blame and forward-obligation is made by May (1996, pp. 88-98), who argues that the notion of moral responsibility can be understood in two ways: being accountable for what one has done (that comes with duties and obligations), and being responsive for someone in need, taking into account the particular situation. As the latter is contextual and discretionary, he argues that it cannot be encapsulated in a simple algorithm or universal guideline. Instead, the choices are to be made within an existing framework, one that is largely created by the society we live in and the process of socialisation. Note that May associates duties and obligations with essentially backward-looking responsibility that is causally linked to the agent's actions, while the other sense of moral responsibility appeals more to being a responsive moral creature: if someone is in need and you could help them, you should. This seems quite intuitive to me: we can generate obligations and duties from our past actions to either continue to do something, or to rectify past harms or wrongdoings. It seems similarly intuitive to talk about responding to someone in need when there are necessarily no past causal linkages to that person, like responding to the cries of a drowning stranger.

[18] In contrast, Kutz (2000) separates the object of accountability (the collective) from the basis of accountability (the individuals), so his account builds up from the individuals. I will discuss his account in the next chapter.

> *Office*: Two people share an office. Due to bad weather the roof starts to collapse. The person who needs to be informed has to be informed by email. A has the technical expertise necessary to describe the damage to the roof in an informative manner, but doesn't know how to use email. B is a computer wizard who doesn't know the first thing about roofs. Between them, they can pass an informative message to the right person. Individually, neither of them can.

Wringe (p. 479) defends the claim that "A and B fall under a collective obligation to inform a responsible person about the state of the roof before a passer-by is injured." This collective obligation then gives rise to individual obligations (duties) to perform the necessary action so that the collective obligation can be met. Wringe (2014, p. 176) suggests that the relationship between collective obligations and individual duties is that of grounding: the duty of the collective grounds the duties of the individuals within it. He (2016, p. 482) defends the claim that collective obligations are more basic than the individual ones by asking the reader to imagine Office*, where the situation is just as it is in the original example, except that the capacities and limitations of A and B are reversed, meaning that their individual obligations are also reversed. He argues that this is equivalent to saying that the individual obligations of Office do not exist in Office*, while the collective obligation would be the same in both. Hence the collective obligation must be more basic than those of the individuals.

I am not convinced by this argument because you could just as easily flip the argument the other way round: if the individual obligations would not exist, no collective obligation could exist. After all, consider Office** where the roof starts to collapse due to bad weather, but there is no one in the office that can either use email or knows a thing about roofs. Any collective obligation to inform a responsible person about the state of the roof before a passer-by is injured would be empty: it has no content as there is no one who could fulfil it. Wringe could reply that since only potential collective agents can hold obligations, there is no obligation: the occupiers of the office who all lack any relevant know-how cannot constitute a potential collective agent in this situation. I agree, but I think Office** also shows how we need individuals who could play their parts in bringing about a collective solution with their corresponding individual duties to get the ball rolling. Maybe, although they do not have an obligation to inform a responsible person about the roof, one could argue that they share an obligation to alert the passers-by about the danger, for example. Let us stipulate further that for some reason it takes at least two people to do so, one on both sides of the street. They would be an unstructured collective (i.e. unorganised collective in my vocabulary)[19] because they could, if acting together, do something about the situation, and they should, given the imminent

[19] See beginning of section 5.4 for clarification on the terms.

danger. Crucially, what they should do depends on what they as individuals can do. Following the suggestion by Aas (2015) discussed in the previous chapter (section 3.2), these individuals should be motivated enough to take action if they become sufficiently certain that other members will do their part, as well as have the absence of a belief that others will not do their part. In addition, they should be able to take action. However, the actual content of that shared obligation depends on their individual abilities and corresponding duties (e.g. inform a responsible person about the roof or alert passers-by about the danger). Furthermore, it amounts to interdependent individual duties.[20]

To sum up, I have argued that climate change harms do not share the structure of the responsibility of random collectives. I have also denied that you can place obligations, putative or actual, on unorganised collectives, although you can hold constituents of unorganised collectives blameworthy in the backward-looking sense under certain conditions. I will discuss this in section 5.4. Our duties *qua* unorganised collectives are always individual duties, although they are interdependent. While I rejected obligations of unorganised collectives, instead promoting individual forward-looking duties, I agree with Isaacs that in some cases it could be useful to discuss unorganised collectives so that we can make better sense of our individual interdependent duties, although we have to always be very clear about this. The next chapter will argue that structures and our quasi-participatory intentions will play a key role in our responsibility as constituents of unorganised collectives. But before we get to that argument, I want to motivate it by looking at a model that denies the need for (quasi-participatory) intentions in unorganised collectives.

4.3 Identifying relevant collectives

The question that I now turn to is which unorganised collectives we should take into account in climate ethics. The discussion on the responsibility *qua* constituents of unorganised collectives is meant to highlight the collective context and flavour of these interdependent individual duties, in order to underline how these kinds of duties differ from our direct duties (or indeed our duties *qua* members of collective agents). This section concentrates on the account that Cripps (2011a, 2013) gives of unorganised collectives. By discussing the problems her account faces, I motivate the need for the complicity account related to unorganised collectives that I will give in the next chapter (section 5.3).

The central question for Cripps is what is required of individuals when institutions fail to confront the problem of climate change. Her answer is that the responsibility of individuals is to try

[20] Some authors have suggested that these kind of duties are essentially duties to collectivise (Collins 2013, Lawford-Smith 2015), but in my account they are collectivisation duties combined with avoidance of complicity (and/or attainment of virtue, if you like). I return to this when I discuss complicity in the next two chapters.

to bring about collective change; collective action is something that we owe to ourselves. The identification of collective duties allows Cripps to make her three-fold case for collective action that will, in turn, allow her to argue for correlative individual duties. According to her, our (collectively-derived) duty with regards to climate change is to organise ourselves in a way that we can collectively respond to climate change by either mitigation, adaptation, or compensation. She offers three arguments for this duty to act together (weakly collective duty), one for each of the collectives *The Young*, *The Able* and *Polluters*.

The duty is *weakly collective duty* in all three cases because these collectives are not yet collective agents in any strong sense and hitherto not capable of intentional action (Cripps 2013, p. 204). Therefore the moral duty translates as duties for individual constituents of these collectives, or potential collectives, to organise themselves to form a collective agent in order to secure a particular end, be it mitigation, adaptation, compensation, or all of them. Cripps distinguishes between what she terms "strongly" and "weakly" collective duties. A collective entity that is already capable of intentional action (i.e. a collective agent) holds strongly collective duties, while "a set of individuals which is not yet a collective agent in any strong sense" have a weakly collective duty to bring about some result between them (2013, p. 60).

Mutual dependency is a key concept in the account as Cripps (2011a, 2013) denies the need for intentionality. Instead, she identifies collectives through actual mutual dependency that has two meanings. In Cripps's terminology (that does not follow the conventions of the literature on social ontology), a purpose, goal or fundamental interest is *shared* when it is something that each person jointly has, like taking a walk together or taking a trip with a friend. The individuals thus constitute a collective because it is essential to the action that it is done together. Because they share a goal, the individuals are mutually dependent for its satisfaction. The other option is that the purpose, goal or fundamental interest is individual yet *common* in the sense that it can only be secured when the individuals act together, like when they need to co-operate to save their own lives.[21] They might not care at all about each other, but need each other to secure a fundamental interest (or a purpose or a goal). The interest is common because the individuals are mutually dependent for the satisfaction of it, not the other way round. In this model, there is no need for the individuals to acknowledge that they are a member of a collective for them to still count as one. The individual agent can deny the mutual dependency while acknowledging the shared individual goal or purpose. Or in cases of fundamental interests she does not even have to acknowledge it as a selfish goal; she can still be a

[21] There are, of course, other options where my interest can only be satisfied if yours is: I hope it rains, you hope it rains, thus if my hope of rain is satisfied then so is yours. However, these are not cases of mutual dependency as the satisfaction of an interest, goal, or purpose is not linked to us acting together, it is not linked to us doing anything at all; it rains if it rains.

member of a collective without acknowledging the interest even at the individual level as long as the common interest really is fundamental. (Cripps 2013, pp. 32-33). With this Cripps refers to Sen's capabilities approach discussed in chapter two, so the interest at stake cannot be trivial, but instead it needs to be "so central as to count relatively uncontroversially as a prerequisite for a flourishing human life" (Cripps 2013, p. 33). Cripps lists the capability for continued life, bodily integrity, bodily health, affiliation and practical reason as such fundamental interests (adapted from Nussbaum's (2006) list). If the interest is non-fundamental, the interest (goal or purpose) must be shared as described above to qualify for mutual dependency.

I think mutual dependency can be a useful concept for capturing what is important for collectives that are tied together through a fundamental interest that can only be secured together. However, I will argue that it is not sufficient to render a set of individuals such a collective that can bear obligations that are irreducible to members' duties. She formulates the conditions as follows:

> *Cripps's non-intentionalist model*[22]
> A set of individuals constitutes a collectivity if and only if those individuals are mutually dependent for the achievement or satisfaction of some common or shared purpose, goal or fundamental interest, whether or not they acknowledge it themselves. (Cripps 2013, pp. 28-29).

Note that while in this model individuals can form a completely non-intentional collective if they are mutually dependent in the relevant way, it is paramount that they have already adopted the individual goals or purposes. If they have not, they are not yet a collectivity, but instead only a *potential collectivity*: a set of individuals who would be mutually dependent for the achievement of some goal, were they to adopt it (Cripps 2013, p. 59). This applies to individual goals and purposes only, as when it comes to fundamental interests, the individuals rendered mutually dependent through them always form a collective, even if it is a completely non-intentional one.

As I already mentioned, a set of individuals who would be mutually dependent for the achievement of some goal, were they to adopt it, are in Cripps's terms a "potential collectivity" (2013, p. 59). So anytime when we potentially share a goal that can only be attained through co-

[22] Cripps (2011a, 2013) does not deny that there are intentional collectives. In her account, collectives can be fully or partially intentional, or completely non-intentional. Examples of fully intentional collectives are book groups, sport clubs, universities, and corporations. They are what the literature on collective intentionality and collective agency has mostly focussed on. Partially intentional collectives refer to collectives where some of the members are not aware of their membership, while others (most) are. Cripps counts the family or state in this category, due to members such as infants and the intellectually disabled. Completely non-intentional collectives are those where no member considers themselves to be part of a group, there are no joint intentions, no acknowledged common purposes or goals, only mutual dependency. She gives three examples of such collectives, none of which I think work, but that is an argument for another occasion. The mutual dependency can be either in relation to individual goals or purposes, or a fundamental interest. These kind of collectives are both unintentional and involuntary. Aside from the distinctions related to intentionality and voluntariness, Cripps also makes other ones regarding collectives: they can be pre-existing or new, small or large, lasting or ad hoc, passive or active.

operation, we constitute a potential collective. As Cripps herself acknowledges, the array of potential collectives is indefinite and therefore unhelpfully large. What are relevant for moral and political philosophy according to Cripps (2013, pp. 59-60) are those potential collectives "whose members ought (morally) to cooperate to pursue those ends through which they would be mutually dependent." She formulates this in the following way (2013, p. 60):

> *Cripps's should-be collectivity*
> A set of individuals who:
> (i) would, were they to espouse some goal or goals, constitute a collectivity; and
> (ii) have a moral duty to espouse that goal.[23]

The goal could be an individual one that can only be attained through co-operation and each individual has an individual duty to pursue it, like when each parent has made an individual promise to their child of building a playground in the estate, something they can only bring about together. Or it could be a goal that the potential collective has a weakly collective duty to pursue (p. 60).

The Young form a collectivity through mutual dependence for the satisfaction of a fundamental interest. The younger generations of humans across the globe (and possibly also future generations), are a collectivity because climate change poses significant risks to their central human functioning and renders their capabilities insecure. If future generations are included in *The Young*, they would be part of a large, mostly passive collective that has a collective self-interest in climate change mitigation. Just like equal voting rights for women, mitigation (unlike adaptation) is an end that is attained for all members of the collective if any of them achieve it. And just like with suffragettes, an active subset of the passive collective could bring it about, in this case the young alive at the moment. (Cripps 2013, pp. 43-48).

> *Cripps's principle of moralized collective self-interest*
> A set of human beings (moral agents) who are mutually dependent through a common fundamental interest have a weakly collective duty to cooperate to secure that interest, so long as this is possible without those individuals having to sacrifice some other fundamental human interest. (Cripps 2013, p. 48)[24]

The "without sacrifice" clause contained in the principle makes an appeal to the idea that we have a duty to co-operate to prevent serious suffering if we can do so at a minimal cost to each of us (with

[23] This formulation is meant to narrow the field, but still seems wide enough to allow for nonsensical applications. For example (to use an example suggested to me by Arto Laitinen), could one argue that humanity is a should-be collectivity as it has (as a set of individuals) an interest to avoid being tortured? I will not pursue this line of criticism here though.

[24] As mentioned at the beginning of this section, Cripps (2013, p. 204) defines *weakly collective duty* as follows: "A duty requiring some collectivity or potential collectivity, which is not yet set up for collective action, to organize as necessary to secure some particular end."

cost understood not in monetary terms, but it terms of cost to fundamental interests). To yield her principle, Cripps (2013, pp. 51) combines this with the requirement that the individual agents within the relevant set "*can reasonably be expected to be aware of their mutual dependence*" [italics in original]. While the individuals that have the duty to act together might not consider themselves members of a collective, or even accept the fundamental interest at stake as their personal goal, they have to be aware, or at least be expected to be aware, of the mutual dependence. As Cripps (2013, pp. 51-52) puts it, "it would be implausible to assign moral duties in cases where the individuals cannot know there is any mutual dependence. Such duties would be unfulfillable."[25]

When the collective and the scale of the problem are big, as is the case with climate change, the co-operation necessary to secure the fundamental interest demands complex co-ordination. The institutions necessary for enabling this might not even exist. The duty might therefore take the form of organising to act collectively to create new institutions, which can protect fundamental interests, although Cripps leaves it open whether current institutional structures are enough when it comes to responding adequately to climate change. (2013, pp. 50-51; p. 67). The twist in the tale with *The Young* is that they are not only the duty bearers, but also the victims. However, just because the co-operation of a victim is required to save her does not in any way absolve the others of their duty to save her. In addition, as the weakly collective duty to organise is grounded first and foremost in the significant risk to the central human functioning of all of *The Young*, the appeal to anyone's own interests is secondary. Cripps argues through many examples that even the adult members in *The Young* could not plausibly decide to ignore their fundamental interest in mitigation, rather, they should try to organise to secure it. (Cripps 2013, pp. 51-57).

The Able form a should-be collective: their duty is grounded in a collectivised principle of beneficence to co-operate to mitigate and enable adaptation.[26] *The Able* includes the affluent people around the world and all those who could contribute to climate change adaptation and mitigation at less than significant costs to themselves. They are not brought together by mutual dependence, as they might have little or no collective self-interest in mitigation. Some members of *The Able* are unlikely to suffer any serious harm from climate change impacts due to their age: the more serious impacts are projected to emerge after their lifetimes. They might not even care about future generations and what happens once they themselves are gone. This is, of course, not the case with all of the members of *The Able*, as most humans do care for the well-being of those who come after

[25] Although, arguably, the individuals might work to try to secure a fundamental interest while being in denial that it constitutes a mutual dependence.

[26] *Cripps's collectivized moderate principle of beneficence:*
A set of human beings have a duty to cooperate to prevent the serious suffering (deprivation of a fundamental interest) of another human being or human beings if they can do so at less than significant cost to each. (Cripps 2013, p. 50)

them. *The Abl*e could also be *The Young* and there is a lot of overlap between the categories. However, the thing that picks them out as members of *The Able* is that they could contribute to adaptation and mitigation measures at a cost not too high to themselves. Because *The Able* are not mutually dependent in the way that *The Young* are (as some of them are too old for climate change to be a threat to their fundamental interests), the basis for their collective duty is different. Namely, it is based on a collectivised version of a *moderate principle of beneficence:* the moral duty to prevent serious harm to another person(s) as long as the costs are comparatively low to oneself. (Cripps 2013, pp. 58-61).[27] Significant costs could arise in two ways when we are discussing should-be collectives like *The Able*, i.e. potential collectives without real collective agency. These are at the level of the process of bringing about the necessary collective action, i.e. getting organised to act collectively ("the cost of coordination condition"), or at the level of the collective action itself, i.e. the actions that contribute to the collective effort to secure the common end (the cost of action condition). Cripps argues that neither are too high when it comes to climate change action, citing among other things the 1% GDP mitigation costs from The Stern Review (the cost of action), or the already existing global level co-operation against claims that it would be too demanding to interact globally in the sufficient manner (the cost of co-ordination). (Cripps 2013, pp. 64-68).

Polluters are another should-be collective but their duty is grounded negatively: to stop worsening climate change. The *Polluters* emit greenhouse gases at a level that is not sustainable, i.e. "above the level at which, were all emitting at that level, climate change would not be worsened", and their emissions above that level are furthermore "avoidable without the loss to them of some fundamental interest" (2013, p. 59). As is the case with *The Able*, *Polluters* are not a collective through mutual dependence, as again they might have little or no collective self-interest in mitigation due to their age or wealth. They might not care about the future much and the carbon-intensive lifestyle that they might be used to could work well for them. Again, while this is not the case with (hopefully) the majority of the *Polluters*, the point is that it is not moralised collective self-interest that picks them out, but their carbon-intensive lifestyles. Of course, members of the *Polluters* can also overlap with *The Young* (and to a substantial degree with *The Able*), but Cripps has formulated her arguments to be largely independent, although complementary, so the overlap is not an issue, particularly as one global collective scheme could encompass all duties.[28]

[27] *The Able* appeals to the moderate principle of beneficence while *The Young* appeals to a weak version: the difference is that while the weak version stops at *minimal cost* to each individual, the moderate version allows a bit more leeway and draws the line at *less than significant cost to each*. See Cripps 2013, p. 13 for individual versions and p. 50 for the collectivised versions.

[28] Cripps (2013, pp. 77-82) argues that the primary burden on mitigation falls on *Polluters* due to the no-harm principle. They also bear the full weight of complying with the weakly collective duty when it comes to adaptation and compensation. *The Able* come next: their duty is to avert the rest of the harm, or at least compensate for it. They also have a duty to pick up the slack if *Polluters* fail to act. *The Young* are responsible only for mitigation that the *Polluters* are

What makes *Polluters* a should-be collective is the way the individuals are grouped, in the weak sense that their individual goals have a certain predictable aggregative impact. Cripps argues that *Polluters* can be reasonably expected to be aware of the harm that their individual emissions cause between them, and also aware of how there are many others who emit in the same way, i.e. consumption patterns based on luxuries that could be foregone at less than significant cost to the individuals.[29] The duty of *Polluters* is to mitigate and enable adaptation to climate change that the current generations are responsible for based on the no-harm principle. Where neither is possible, *Polluters* also have a duty to compensate, unlike *The Young*. Compensation is to try to make up for the harm that cannot be prevented. With climate change many impacts are already happening and will continue for centuries to come, so some serious harm is already inevitable. Therefore compensation applies. (Cripps 2013, pp. 68-77).

These three collectives each have a weakly collective duty to organise as necessary in order to be able to act on climate change collectively. The duties are to the victims of climate change, to each harmed individual. While the duties arise out of different bases, and are different in scope (mitigation only, or also adaptation and compensation), in each case they translate to a duty to organise as necessary. As the categories partly overlap, most of the global affluent have two or even three grounds to take weakly collective climate duties seriously. Cripps (2013, p. 79) argues that individual duties follow from the collective ones at two levels: "those incurred within a fairly allocated collective scheme to tackle climate change; and those incurred by an individual in the absence of collective action." Currently there is no fairly allocated collective scheme, although there is plenty of discussion on what the fair distribution of burdens between states, for example, should look like. Some other collective actors might also be included in such a scheme, as I argued with regards to corporate responsibility for mitigation in the previous chapter.

> What is missing, and what is urgently required, is a coherent policy framework that provides a contract for shared participation—whether through voluntary measures or, as many campaigners now demand, some form of tax, ration, or dividend—within which personal actions are recognised and rewarded alongside equally important contributions from government, business, and fossil fuel companies. (Marshall 2014, p. 197).

I agree with Cripps that we should seek to bring such a collective-level solution about and that any action towards this end is the best way to try to meet our duties *qua* constituents of unorganised

not responsible for, but it is less clear what the distribution of burdens between them and *The Able* should be. Those members of *The Able* who belong also to *The Young* might be required to bear some additional burden.

[29] *Polluters* thus fulfil Cripps's three-part sufficient condition for weakly collective responsibility, see footnote 11 in chapter five.

collectives. However, I do not find that the picture she offers of how these duties are based is a persuasive one.

A big problem for Cripps, and one that she does not address, is that if we base responsibilities on our collective ability to aid, there will be competing claims, all of which are not possible to achieve simultaneously.[30] It is not clear that *The Able* should put their efforts into mitigating climate change rather than providing universal primary education to all children in poor countries, work to eradicate global poverty and easily avoidable childhood mortality, to give just some examples. How should *The Able* decide what they should collectively do among the competing projects that would all further fundamental interests and prevent harms? This is also what a lot of the actual public policy discussions around spending on mitigation centres around: what public spending reaps the best results (Hormio 2017b). *The Young* could face a similar dilemma, at least those alive already (rather than the passive members of the collective, yet-to-be-born sometime in the future).

This problem could be spelled out in terms of perfect and imperfect duties. While I borrow these from Kant, I will use them simply to refer to things that we should definitely do (perfect duties) and things that we should do, but that have to be balanced out by considerations of other such duties — that thus come with some leeway about how to fulfil them (imperfect duties).[31] At best, Cripps's model can argue that *The Able* and *The Young* have imperfect duties to take action to mitigate climate change, but this is hardly enough and also much less than what she argues the model achieves.[32] She cannot appeal to the fact that since our individual emissions do harm, that is why we should reduce them even when we could be promoting a lot of good with the same resources (like Broome 2012, p. 66 argues), because she explicitly denies that they do harm. While *The Able* are all about co-operating to prevent serious suffering and harm to others at a less than significant cost to themselves, there is nothing to suggest that they could not do so more efficiently in other areas not directly related to climate change.[33] Ideally we would want to argue that they should do both, i.e. to take action on climate change and prevent serious suffering and harm in other ways, but I do not see how we can get there on Cripps's account.

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[30] She allows that an individual, taken in isolation, could do more good by donating her money to Oxfam to save people from extreme poverty, instead of spending her resources to address climate change (2013, p. 120). But this is in the context of 'mimicking' and 'direct' duties and is meant to highlight the difference between individual and collective-level duties.

[31] As Richardson (1994, p. 71) notes, Kant utilises the notion of latitude to explore how the extent and nature of an imperfect duty needs to be further specified: when exactly must we help others and in what way, what kind of sacrifices can be required of us, and so forth. Richardson suggests that our common beliefs about beneficence are *latitudinarian* in a similar way and that norms can be logically non-absolute. We should do "enough", but it is up to us what and when, although it is clear when we have not done anything even close to enough.

[32] In a footnote (fn.46, p. 221) she states that if she would use the terminology, each weakly collective duty would be perfect, but the only reason she gives for this is that they identify both the duty-bearer and the victim. She makes no reference to the possibility of competing (imperfect) duties of collectives based on ability.

[33] To fully address climate change, I find that we must address other global issues of injustice also, first and foremost inequality, but this does not affect the point about competing priorities.

One could argue that given the urgency of climate change, priority should be given to climate related duties, especially since climate change is connected to other problems.[34] I agree at the level of policy and I argue as much in Hormio 2017b, where I discuss climate change as a threat to life-supporting, critical forms of natural capital. However, there is no such discussion in Cripps's account, and more importantly, it is not clear that prioritising climate change over other issues would hold true to all individuals who factor in *The Able*. After all, some of them are likely to make more difference to alleviate suffering (now and in the future) by concentrating on, for example, funding cures for easily treatable and preventable deadly diseases such as diarrhoea.[35] Or maybe, given their unique position, something else suggests itself as their priority duty, such as removing structural barriers that keep people in acute poverty. Although all things considered, climate change is one of the most urgent and biggest threats to humanity (maybe even the most urgent and the biggest), when it comes to the level of an individual person who has the capacity to help, it is not given that that individual should prioritise climate change mitigation and adaptation over other concerns.

We are therefore left with *Polluters*, a category that most climate ethic responsibility models are willing to assign mitigation responsibility to. Cripps is right to do this, but her account lacks the apparatus to really explain why we are responsible despite the apparently marginal nature of our emissions. Recall *Footbridge* from the beginning of this chapter and how Cripps (2013, p. 74) argued that that *Polluters* are weakly collectively responsible "in precisely the same way". I denied this, but allowed that her other example of a should-be collectivity *Swimming teenagers* fares better as an allegory to climate change, depending on a reading, i.e. as long as we allow that the individual actions are interconnected. However, while it is similar enough to the actual climate change scenario in that it appreciates the faulty structures that lead to the unintended consequences (very broadly put), Cripps's model can only show who the too-splashy teenagers are at a given moment in time (say, the year 2017) and what they should do at that moment of crisis. However, it cannot explain why they or someone else should change the underlying structures so that similar threats do not rise again and again. As I argued earlier, climate change does not represent a one-off problem, but rather a long-term, wide-ranging set of issues. To respond to it in an adequate manner, therefore, we need to work on structures and long-term changes.

If high emitters are viewed as atomistic individuals akin to the pedestrians with 15kg rucksacks, or the too-splashy lone swimmers, we lack a persuasive narrative why these people and not the ineffectual Bridge and Small Lake Council (something I made up: no such a thing is included in the

[34] Thank you to Bill Wringe for the suggestion.

[35] Each year a quarter of a million children die from diarrhoea, a condition both easily treatable and preventable. Diarrhoea can be treated with salts and prevented by safe drinking water and adequate sanitation and hygiene. It is the second leading cause of death in children under five: the World Health Organization's latest fact sheet on diarrhoeal disease from April 2013 (www.who.int/mediacentre/factsheets/fs330/en) puts the annual mortality figure at 760,000.

original cases)[36] should take action to repair and rebuild the bridge before it collapses on anyone, or set up rules to keep the turbulence in the lake at a non-dangerous level. I will argue in the next chapter that Kutz's *quasi-participatory intention* can help us to fill this gap, whether we are discussing *Polluters*, or some other such unorganised collective that could be argued to be relevant for climate change, such as consumers.

I am not denying that a lot of what *Polluters* do is just individual parallel action within a structural context (as opposed to genuine joint action), and that this leads to unintended consequence of emissions on the vast scale that we are currently witnessing.[37] But our structures are upheld by the choices we continue to make.[38] Our individual duties related to collective action are therefore not just parallel individual duties. I will return to this in chapter five.

When denying the need for intentions when discussing collective responsibility, Cripps bypasses the literature on collective action.[39] However, her own account of collective action (or individual action in a collective setting) is not spelled out and amounts to not much more than statements like "individuals acting together" or "continued failure to act collectively". Her model makes no separation between individual parallel action and collective action. Furthermore, it makes a jump from individual duty to collective agency and what is between the two is not explained or filled in. This way, it falls prey to the problem that Kutz (2000, p. 177) puts forward when he discusses problematic accountability in unorganised collectives: "[a]lthough there is pressure to regard ourselves as part of the collective that does harm, the ethical links between us as individuals and us as members of the collective dissolve under reflection." The solution he offers is to try to find psychologically feasible motivations that would lead individuals to shun contributing to collective harms.

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[36] With it I mean to give a nod to those arguments that want to place all the responsibility for taking action on climate change to governments and intergovernmental agencies.

[37] Our choice of method of transport (and the fact that many of us nowadays tend to move around so much in the first place, whether for business or pleasure) is individual to a degree, but the framework is given by social structures that limit the options available and give incentives towards certain options. The same goes for housing, food, etc.

[38] Structures are also upheld by collective agents of various form: nation-states, corporations and smaller companies, local and international agencies, and so on.

[39] While I share the motivating concern that Cripps has - that there are collectively caused harms that are not captured by accounts that focus on collective agency - the opposition of her model with the "intentionalists" is unnecessary and leads astray. Cripps argues (2011a, p. 12) that intentionalist models of collectives do not separate between social groups and collectives, treating them essentially as one and the same, even though social groups are just a subset of collectives. She continues that if we instead aim to identify all collectives this "allows us to express new truths about certain situations in which individuals actually find themselves: a set of relations within which individual acts have a peculiarly collective significance and within which there is at least a prudential case for developing a framework for collective action." However, while we need to expand collective responsibility discussions into unorganised collectives, the way we define collective entities depends on the aim of the definition, and therefore there does not exist, and need not exist, any one definition or notion of collectives. By framing the discussion as she does, Cripps is in a danger of creating somewhat of a straw man: she accuses a debate focused on the nature of joint action for failing to answer the problems of unorganised collective harms where no true joint action exists (Hormio 2015).

Moral theories should try to accommodate the conceptions people have of themselves as moral agents: "A theory of individual complicit accountability must be psychologically feasible: it must be generally capable of motivating (or restraining) action, and it must be able to survive individual moral reflection." (Kutz 2000, p. 123). Furthermore, this "rules out purely institutional approaches to the problem, for such approaches fail to accommodate themselves adequately to individuals' own conceptions of themselves and others as moral agents." Skimming over what collective action is makes Cripps's account both psychologically empty and morally not as compelling as it could be. At the end of the day, the solution she offers is purely institutional. I will discuss what I hope is a more compelling alternative in the next chapter.

Chapter 5 – Marginal participation and complicity for collective harms

> As individuals we understandably feel small and powerless when we think about climate change and oppression, for example. But when we reorient ourselves in relation to others and take the broader perspective of collective action, new moral possibilities present themselves, and our contributions, small though they may be, gain greater significance from the collective contexts in which they take place.
>
> - Tracy Isaacs (2011, pp. 19-20)

> Because individuals are the ultimate loci of normative motivation and deliberation, only forms of accountability aimed at and sensitive to what individuals do can succeed in controlling the emergence of collective harms. The oughts of morality and politics must apply to *me*. The trick lies, then, not in modifying the fundamental bearer of accountability, but in expanding the scope of individual accountability by including an assessment of what an individual does with others.
>
> - Christopher Kutz (2000, p. 7)

When we debate climate change responsibility, questions pertaining to both marginal participation and direct responsibility (of individual and collective agents) are relevant. I discussed the direct responsibility of individual agents in chapter two and that of collective agents in chapter three. Now it is time to turn our attention to marginal participation. In chapter four I rejected attempts to account for marginal participation for collectively caused harms by placing collective obligations on unorganised collectives. In this chapter I will discuss an alternative way to conceptualise the responsibility of agents in such situations: *complicity*. The literature on individual complicity for climate change is slim, but in recent years few accounts have emerged (including Attfield 2009, Hormio 2013, and Lawson 2013).[1] These accounts want to place the responsibility on the individual *qua* collectives, not directly on the unorganised collectives.

I will introduce Christopher Kutz's (2000) account of complicity and apply it to climate change. For Kutz, the notion of participation is at the heart of collective action and collective responsibility. "Intentional participation provides a special basis for ascribing individual members' actions to the group as a whole, and to the group members individually. When we act together, we are each accountable for what we all do, because we are each authors of our collective acts." (2000, p. 138). Our authorship is *inclusive* in collective acts, rather than *exclusive* as it is when we act alone. Both make

[1] For an anthropological account of moral complicity regarding climate change, see Hughes 2013. For closely related accounts on consumer complicity, see Lawford-Smith 2017 and Schwartz 2010.

us accountable, but are fundamentally different responsive positions (p. 139). I will discuss how responses of accountability make sense and can exist only "within particular concrete social relationships" (p. 139) that are the key to shared responsibility. I grant that judgements of responsibility must have an individual basis, for if we hold agents responsible on the basis of what others have done, we fail to respond to them as distinct persons.[2] However, as Kutz points out, the object of accountability is analytically distinct from the basis of accountability. While judgements of responsibility must have an individualistic basis, the object of accountability can be collective. I think this is one of his most helpful insights.

Collective action can have unintended consequences, just as individual action can. We saw in chapter two how accounts that concentrate on the quality of the will of an agent cannot assign responsibility for climate change to individuals. I do not intend any harm when I heat up my home in the winter, nor when I use a plastic keyboard that is manufactured using oil to type these words. In Kutz's view, we can be held morally accountable for collectively produced harms, even in situations when our individual effects are negligible. Although he does not discuss climate change, greenhouse gas emissions are a prime example of this. As Isaacs (2011, p. 7) puts it, "we are now experiencing the cumulative impact of individuals living their lives in ways that, until recently, no one had good reason to question." Agents can be accountable for unintended harms also as long as they foreseeably flow from actions that can be reasonably described as part of the shared goal. Kutz (2000, p. 114) offers a slogan for those who like slogans: "No participation without implication", although he recognises that the difficulties and complications of making ethical judgements cannot be captured by slogans.

Unless we can provide a link between the collective harms and their individualistic basis, we fail to understand the nature of collective action: collective acts do not just emerge from parallel individual action where each agent pursues their private ends (Kutz 2000, pp. 137-138).[3] Or as Nefsky (2015) argues, for us to be able to derive normative implications directly from an individual being part of a group we need an explanation of why the membership (participation) has these

[2] Collective responsibility is not the same as collective guilt. Arendt (1948, 1963) distinguishes collective guilt from collective (political) responsibility, arguing that confusing the two obscures the real political issues that need to be dealt with. "Where all are guilty, nobody in the last analysis can be judged." (Arendt 1991[1948], p. 278). Young's (2011, pp. 75-93) argument is that structural, "ordinary" injustices can arise out of multitudinous individual and collective acts that are not unjust by themselves, and therefore guilt would be an inappropriate way to respond to these cases of collective responsibility.

[3] Kutz (2000, pp. 130-131) argues that Parfit fails to show why the relation of an individual act and a set of acts should be morally significant as the relation itself is nonconsequential. While he allows for the object of assessment to be collective (the set of acts), Parfit at the same time forfeits "an intelligible and internalizable link between individual agents and the object of moral assessment"; he simply asserts it, therefore undermining "the capacity of an accountability system to regulate reflective behavior" (p. 137).

normative implications, and for that we need an understanding of what participation consists in.[4] This, I find, is essentially what goes wrong with Cripps's account discussed in the last chapter. Recall *Swimming teenagers* (the allegory supposed to illustrate how *Polluters* are responsible) and how the teenagers all independently arrived at the scene and independently began splashing around in the same way.[5] As Kutz (2000, p. 138) argues, in this kind of view, "collective acts are mysterious emergent effects", and the end result, i.e. the suffering of the victim(s), "seems to be a remarkable coincidence, a result unexplainable in terms of the [participants'] intentions, for no one intends to do harm." None of the teenagers want to put the child in danger of drowning, any more than the current generations aim to put future humans in danger. I will argue that our emitting actions are not this kind of parallel behaviour, but rather co-operative behaviour within a social structure.[6]

This chapter proceeds as follows. To begin with, I will motivate the complicity account by discussing issues of marginal participation in section 5.1. Many individual emission choices fall under this, such as one-off decisions of taking a plane or the train. I will argue in this chapter (following Kutz) that participatory intentions are the key to understanding responsibility in these cases. Participatory intentions, very simply put, are intentions to participate in collective (joint) action. However, before we can get to Kutz's account, I will set the scene by looking at his positional and relational understanding of accountability in section 5.2. This understanding is important for the idea of complicity. In section 5.3 I will introduce Kutz's *Complicity Principle*. I will then introduce the *quasi-participatory* basis of accountability in section 5.4, which applies in systemic harms by unorganised collectives.

5.1 Marginal participation and overdetermination

In this section I discuss why marginal participation is problematic for many theories of moral responsibility. This will motivate the account of complicity that I will present in the later sections of the chapter. Although an individual's emissions can cause harm as I argued in chapter two, climate

[4] Nefsky (2015) distinguishes between Weak Participation (Parfit) and Strong Participation (Kutz) approaches that both reject the implication that just because our individual acts do not make a difference to an outcome, we have no reason to refrain from the act (or to do it). She notes how Weak Participation and Strong Participation both make the claim that while you might not make a difference, you are part of a group that does. However, the difference is that while Weak Participation goes no further than this claim, Strong Participation attempts to explain why participation has normative implications. She does not discuss Cripps but her argument would arguably go under Weak Participation.

[5] I argued in section 4.1 that this is not the structure of climate change harms, i.e. it is not the case that *Polluters* are pursuing their own private ends and unintended consequences aggregate. Instead, I will argue in the next chapter that climate change harm is for a large part a structural injustice.

[6] With polluters taken as an unorganised collective, the relevant hook will be *quasi*-participatory intentions, but in many cases of marginal participation "regular" participatory intentions will suffice. To awaken a sense of responsibility in people who do not yet feel any (in cases where participatory intentions apply) we should reflect on "the way in which jointly acting individuals see themselves as promoting a common end" (Kutz 2000, p. 138).

change as an outcome is *overdetermined*, even though the severity of it is not. I will also argue that climate change represents what I will call a *mixed harm*: a combination of a threshold harm and an overdetermined harm.

In causal terms, *overdetermination* occurs when multiple actual distinct events are symmetrically redundant in the sense that they are causally on a par with respect to causing an event: two rocks shatter a window (Schaffer 2003). One rock would have shattered the window just the same, but two were thrown simultaneously. "An effect is overdetermined if there are more causes present than would be necessary to bring it about" (Cripps 2013, p. 209). In moral terms, the harm (broken window) caused by the two vandals throwing the rocks at the same time was also overdetermined. What does this mean for individual responsibility? Kutz (2000, p. 177) poses the question:

> What is the ethical significance of the fact that an individual's act lies in the causal path of a harm, even though the act is neither necessary nor sufficient for the harm or wrong? An answer to this question ideally will provide agents with reasons to make repair to the victims of the collective harm, and to avoid such actions in the future.

The answer that he gives is complicity. I find that complicity is an important concept when it comes to climate change harms for more than one reason. I argued in chapter two that lifestyle choices can be morally significant, as the cumulative emissions from these are noteworthy even at the level of individual emissions. Even so, many individual emission choices fall under marginal participation, such as a one-off decision to take a plane or a train, and this is where the complicity account becomes useful. Furthermore, our individual actions within particular collective projects (within collective agents) are sometimes normatively overdetermined. Last but not least, with each passing year the average individual's emissions (taken as an individual) will matter less if a collective solution is not found. Complicity will allow us to discuss responsibility in all these cases.

When individual contribution in a collective harm is overdetermined in the normative sense, no individual's action or omission is necessary or sufficient for the normative properties of a collective outcome (Parfit 1986[1984], pp. 82-83, Kutz 2000, Cripps 2013, p. 50). I will argue that this applies to climate change also, even though the actions of certain agents, especially certain collective agents, can affect the severity of the resulting harm and when it will be realised. This is because the fact remains that climate change poses a serious threat to our basic functionings and capabilities, regardless of exactly how severe it turns out to be. In other words, I take it that the normatively relevant property, severe harm, is overdetermined.

When we are dealing with overdetermined harms, it seems that it makes no difference whether or not I act or refrain from taking a certain action. And when acting in a certain way seems to make no difference to an outcome, it is hard to see how we might have a reason to refrain from acting in

such a way. Take a one-off decision to take a plane or a train as an example: a scheduled flight (or a train) will still take off (or leave) even with one (more) empty seat. The emissions of the slightly heavier plane (with one additional individual) are slightly more, but the difference is not normatively significant. In that sense, the emissions resulting from the decision to travel or not (and by plane or by train) are overdetermined: no individual travelling decision taken in isolation affects emissions. This is not to argue that decisions like this do not matter; they do, but the reason why they do has to be spelled out in terms of collective action.

Recall from chapter two how Broome argues that our individual emissions are significant, as every reduction is beneficial (at the present moment in history at least), in addition to our individual emissions causing harm and increasing the risk of harm. In the same chapter I also noted how Cripps (2016, p. 125) has argued against Broome that the harm our individual emissions do is insignificant due to the quantity being so small, as there is "a significant difference between depriving one person of six months of life, and causing the loss of six months of healthy human life spread across so many people that each one loses only the most infinitesimal fraction of a second". Her argument is that as "long as we think only *qua* private individual, there remains the objection that what I do doesn't cause anybody to suffer anything." In response, Broome (2016, p. 162) argued that "[a] harm is significant when it matters", and that "there is an extremely significant difference between a very small number and zero", as adding up many zeros amounts to nothing, but adding up many small numbers can add up to a big number. He compared the situation to a bank that steals a penny from each of its customers, with the millions of pennies amounting to a significant sum that is a serious injustice. Each emitter could therefore be thought of as a bank that steals pennies from future people, amounting to a significant sum. Broome's point is that each person is committing an injustice. Cripps's argument, on the other hand, is that individual pennies make sense as a harm only if we look at the case from the *collective* viewpoint.

I think Cripps's worry is mostly right, although we should be careful not to equate imperceptibility with insignificance. Let us say that I somehow steal a penny from ten million wealthy individuals, thus netting 100,000 pounds in the process. I have not harmed any of the ten million people, as each has lost only a negligible amount of money that makes no difference to their lives, although I have done wrong (committed an injustice), even more so if I am in a position of trust, like the bank would be. However, the wrong I have done cannot be based on the harm I have caused, as I have not caused harm. But if all my fellow five million Finns would do the same, i.e. each would steal a penny from these ten million wealthy people, then each one of our victims stands to lose five million pennies, and 50,000 pounds is no longer an insignificant amount to lose even for a wealthy individual. This latter scenario is closer to the anthropogenic climate change scenario: millions and

millions of us are stealing pennies from future generations. However, while the harm we do *as* individuals *to* any given future individual is negligible, the harm we do together is significant.[7]

If an individual's action has imperceptible effects, and is not performed repeatedly, we are essentially dealing with Parfit's (1986, p. 80) famous case of a mistake in moral mathematics, *The Harmless Torturers*.[8] In Parfit's original example, a thousand torturers press a button that distributes a miniscule pain to a thousand victims, and because there are a thousand torturers, each victim is in severe pain, although no single torturer can be said to have made their pain worse. However, even if each individual torturer harms no one, together they impose great suffering on their thousand victims (p. 81). "Even if an act harms no one, this act may be wrong because it is one of a *set* of acts that *together* harm other people" (p. 70).[9] I will discuss Spiekermann's (2014b, p. 77) one-victim only version of the case:

> A group of n torturers can each push a button to increase the voltage of the electric shock the victim receives by the amount 1,000 volt / n (one "notch"). The pain caused by 1,000 volts is excruciating. It is plausible to assume that there is a number of torturers n so large that the victim cannot distinguish between x torturers and $x + 1$ torturers for any x between 0 and $n - 1$. Suppose the torturers push their button only once. If the harm done is defined as the additional suffering caused, then, it can be argued, none of the single torturers causes any harm. And, unlike the case of carbon emissions, there is no larger individual action pattern that would cause any perceptible effects and could be criticized on the basis of the harm caused, since the torturers will not repeat their action.

Each individual torturer cannot (when taken as an isolated individual) change the excruciating pain felt by the victim given the contributions of all other individual torturers. At the same time, however, several individuals *together* could make a difference to the victim's pain. This is the penny situation. Spiekermann (p. 87) argues that we should consider *minimal perceptible subsets* of the set of all actions. With minimal perceptible subsets he refers to "those sets that contain just enough actions such that together these actions avoid minimal change insensitivity—they can jointly make a perceptible

[7] I want to separate my view from what Frank Jackson (1987) has argued, namely that the morality of an action depends on the difference it makes. He, like me, uses counterfactual reasoning to compare the case where an act was performed with what would be the case if it was not performed. However, unlike me, Jackson argues that the *morality* depends on the relationship between the two, i.e. the difference an action makes. In contrast to such consequentialist-only reasoning, I argue that marginal participation can and does matter morally, but that the wrongness of an act cannot be based on its consequences alone if it does no harm in isolation from the set. Instead, the wrongness is based on complicity in my view. Jackson's argument is that that the group action (understood as aggregation or sum of individual actions, like a thousand bandits stealing a bean each from a thousand villagers) can be described as wrong, but I want to argue that the individual bean stealing is wrong as well, but not due to the difference it makes.

[8] Broome (2016, p. 163) refers to Parfit in refuting that imperceptible harms could not be significant.

[9] The difficulty is how to cash out this intuition: if each torturer causes only miniscule pain (imperceptible by itself), it makes no difference to the pain the victim feels whether 1,000 torturers or 999 participated (or 423 instead of 422 etc.). My own view is that it is disingenuous to do something you would not do otherwise just because you have calculated that under the circumstances your act will not make a difference, and it would make you susceptible to arguments about your character. This would make you complicit in the torture through *reasons of character* (see next section).

difference" (p. 88). In this view, actions that are individually imperceptible can still be wrong because they are expected to bring about harm t*ogether with other actions*. Individual actions within such a set leads to increased expected experienced harm for the victim.[10] So, while I agree with Broome (2016, p. 163) that the imperceptibility of harms can be irrelevant from the point of view of justice (as a set of imperceptible actions are equal to small numbers and not to zeroes; they add up), I agree with Cripps that the reason why they count as harms has to be spelled out in terms of acting together with others, i.e. in terms of collective action.[11] Bringing Spiekermann into the mix, we could say that minimal perceptible subsets of individual emissions cause harm. This applies to climate change harms too (see also Peeters et al 2015, pp. 74-78; Vanderheiden 2008, p. 165).

There are several things going on with climate change harms and individuals. One is the impossibility of linking the harm done to any one future individual to any one current individual's emissions: we cannot do this as counterfactually we make no difference.[12] Another question is do we commit a wrong by stealing pennies (fractions of seconds) from millions of victims: we do, but not by reasons of consequence. Yet another is the peculiar nature of greenhouse gas emissions: some of them stay in the air for centuries or longer. We are already committed to changes in our climate and all emissions increase the likelihood of harmful effects. Climate change harms are *incremental* because greenhouse gases stay in the atmosphere for so long (Peeters et al. 2015, p. 77). My individual lifetime emissions might not do any harm in any single event, but during the centuries

[10] "Even though the action does not *by itself* increase experienced harm, the action is expected to do so in the following sense: The action (to contribute to the voltage) will be part of minimal perceptible subsets of contributions such that the actions of these subsets together can be felt by the victim. And since there is a positive probability that all the actions in the subsets are "not contribute" or "contribute," there is a positive probability that these subsets can make a difference." (Spiekermann 2014b, p. 88).

[11] The solution that Cripps (2013, p. 69) offers to aggregated harms is to formalise the need for action through the notion of a *should-be collective*, where the individuals are grouped in a weak sense of their individual goals having a certain predictable aggregative impact:

> *Cripps's weakly collective responsibility claim*
> A number of individuals who do not yet constitute a collectivity (either formally, with an acknowledged decision-making structure, or informally, with some vaguely defined common interest or goal) can be held collectively morally responsible for serious harm (fundamental interest deprivation) which has been caused by the predictable aggregation of avoidable individual actions.

She (2013, p. 69) supplements the weakly collective responsibility claim with a three-part sufficient condition:

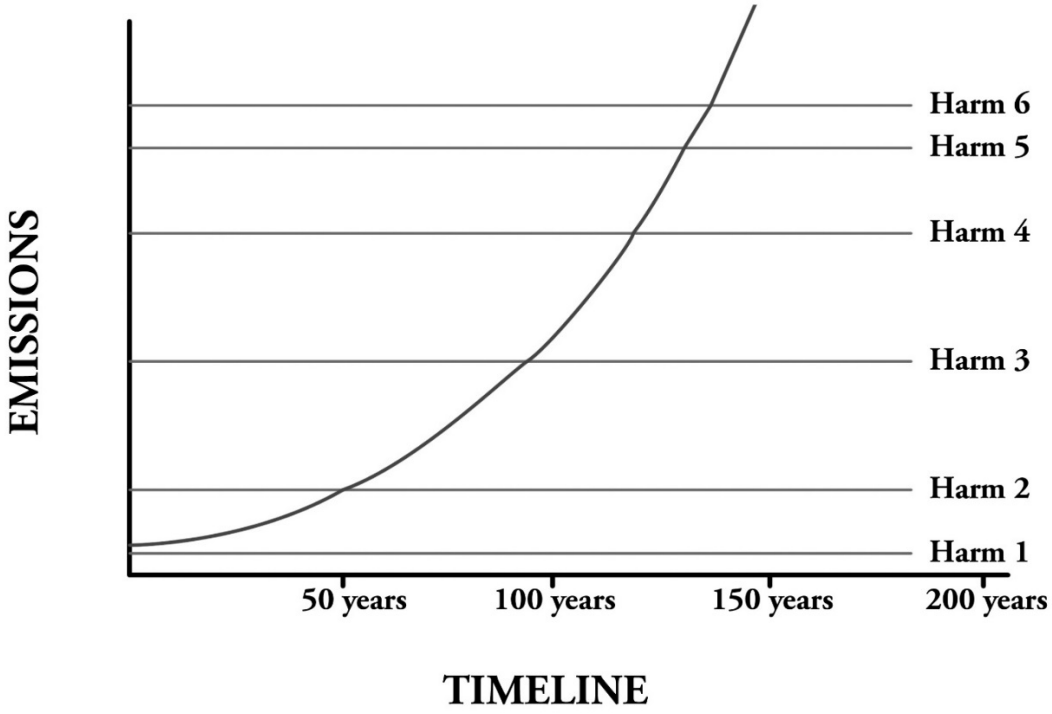
- the individuals acted in ways which, in aggregate, caused harm, and which they were aware (or could reasonably be expected to have foreseen) would, in aggregate, cause harm (although each only intentionally performed his own act);
- they were all aware (or could reasonably be expected to have foreseen) that there were enough others similarly placed (and so similarly motivated to act) for the combined actions to bring about the harm; and
- the contributory actions were avoidable at less than comparable cost to the individuals.

One problem with this approach is that it gives us no tools to differentiate between individuals and the differences between individual participation. Another problem is that it faces the problem of mutual release, see section 6.1.

[12] Perhaps it is not even true that counterfactually our individual emitting acts make no difference; perhaps we currently only lack any way of measuring what such a difference might be. Lawford-Smith (2016a, p. 67) suggests that even though our current technology is not sophisticated enough to measure the effect of a single emitting action on the atmosphere — not even the effect of our yearly or lifetime actions, just estimates of these — there is still no reason to think that in principle those tiny little differences do not add up. Furthermore, the difference might become perceptible with some future technology.

they are in the air they will have the chance of causing harm on innumerable occasions (by being the emission that tips a concentration over some tipping point). As Broome argued in chapter two, it is extraordinarily unlikely that they will do no harm at all. Conversely, reducing our emissions is beneficial, as it could delay certain thresholds from being passed.

What we are left with then is a picture of climate change harms where most of the harms caused by our emissions are overdetermined in that they would have taken place even without us as an individual existing, but the lifetime emissions of each of us have innumerable occasions to contribute to harm during the centuries that they spend in the atmosphere. To illustrate this, consider this very simplified figure where the total emissions emitted by a collective pass various tipping points, resulting in various harms.[13] I make no pretence to portray actual climate science with this figure, it is only meant to illustrate the complexity of marginal participation with mixed harms like climate change where there are several expected thresholds of harms.



Our individual lifetime emissions are but a little microscopic speck on the chart, if even that. When we are under threshold of *Harm 3* (like we are on Year 70 for example), we are only contributing to the risk of *Harm 3* materialising. At the same time our individual (lifetime) emissions are counterfactually not required for *Harm 2* to have taken place: i.e. while in Year 50 we could not have said that *Harm 2* was overdetermined, in Year 70 we can say that it is. By the Year 150 all six harms

[13] Thank you to John Davies for drawing the figure from the sketch in my notebook.

will become overdetermined. Every early emission reduction is thus more significant than later ones, although the later the emission occurs, the more likely it is that it will contribute to several harms (i.e. be among the set of emissions that crosses a certain tipping point).

My view is that even if we grant that individual lifestyle emission can cause harm (which I think we should), this still leaves most of our everyday emissions choices in the context of overdetermination: the train to Tampere will leave with or without me. Uncertainty is a big issue with climate change harms: due to the complexity of the climate system, we do not know where exactly the harm thresholds are (or how many there are), so we cannot know with any certainty if our emissions will cause harms, especially as they can interact with other emissions in various ways. As Lawford-Smith (2016a, p. 76) argues, when we are dealing with so much uncertainty, we have to turn to expectations or probabilities of difference-making. Recall from chapter two that what matters with risk is not just the likelihood of an outcome, but also the expected value of an outcome (Broome 2010). Therefore I suggest that our individual duties have to be based on likelihoods of serious harm: to not to perform actions that in the light of the current science can be reasonably expected to cause harm to basic human functionings and capabilities.

Counterfactual argument is an important tool for consequentialism as it "invites us to [--] consider how the history of the world would have gone had I acted differently", with my act being wrong if the counterfactual history would have been better than what actually took place (Kagan 2011, p. 106).[14] For a consequentialist, climate change is inherently a problematic concept at the level of individual actions unless individual difference can be shown. The argument by Sinnott-Armstrong discussed in the second chapter illustrated that orthodox consequentialist approaches are inadequate in accounting for collective wrongdoing where an individual contribution makes no perceptible difference to the outcome.[15] A view like his fundamentally "fails to acknowledge the interpersonal nature of morality"; that responses of accountability between individuals are essential constituents of relationships that in turn allow people to flourish (Kutz 2000, p. 128).[16] Broome utilises deontology-style duties of justice as counterfactually individual emissions might not make a difference. Note that the discussion here is about an individual: consequentialists do not face these problems with the harm that collective agents cause as those effects are far from marginal. The problem of marginal participation for consequentialists thus lies at the individual level.

[14] Kagan (2011) argues that collective action problems can be solved straightforwardly by consequentialist reasoning, as contrary to appearances, it is not that individual acts make no difference: they *might*. For criticism, see Nefsky (2011) and Lawford-Smith (2016a).

[15] Kutz (2000, pp. 124-125) argues that whenever participation is marginal, direct consequentialism like act-utilitarianism is indifferent to it, so it cannot provide adequate grounds for judging that some individual is accountable. Indirect consequentialist approaches like rule-utilitarianism do not fare much better, according to him, because if nothing is gained from nonparticipation, there is no rational reason to have a rule that would prohibit participation (p. 127).

[16] Consequentialist virtue theories could potentially fare better with marginal participation cases.

Kantians can be just as much in trouble with cases of marginal participation, according to Kutz (pp. 132-135), as he argues that marginal participation can pass the universalisation test. An act is permissible in Kantian deontology if its maxim (the underlying intentions) could be willed to be universal without contradiction in conception, i.e. the agent could act successfully in a world where all other agents would also act upon that maxim. Agents have a *perfect duty* not to act upon a maxim that fails this test. Kutz (p. 134) explains: "Unlike the paradigm Kantian cases of impermissibility, such as making a lying promise, the possibility of making only a marginal contribution is enhanced rather than undermined by universal practice. The more who join in a cooperative scheme, the more negligible the contribution of each."

To illustrate, consider this formulation: "I will continue to emit greenhouse gases by flying out weekly on work trips, in order to not to rock the boat at my workplace, but only because I know the emissions from my flights won't make a difference to anthropogenic climate change occurring." One could formulate countless similar maxims, for example, by replacing flying with eating meat, and referring to extended family and customs instead of the workplace.

Kant also discusses imperfect duties, duties that are general but sometimes defeasible, i.e. they can be overruled in certain situations. While with perfect duties there is a contradiction in the conception of the maxim, imperfect duties are based on the test of contradiction of will. For example, a rational agent cannot will a world where no-one ever cares for others, even if one was willing to forego such care himself, as then no-one would care for others even when it is necessary for survival. Imperfect duties fare better with marginal acts, as the combined outcomes of those acts can result in a world where rational agents cannot pursue their ends. The test does get something important right, as it "fixes appropriately on the marginal participant's identification with the collective act", but it "fails to explain the significance of that connection", as to do so it would have to "incorporate the logic of collective action" (Kutz 2000, p. 136). When an individual act is sufficient to produce a harm, universalising the act universalises the harm, but this automatic connection breaks down in marginal participation. The Kantian test of contradiction in will merely stipulates the collective harm: "an individual marginal effect universalized remains both individual and marginal" (p. 137). Therefore, the contradiction of will test misses the point as "the problem posed by collective action is that it introduces a gap between act and harm" (Kutz 2000, p. 135). To rule such maxims out as flying for weekly work trips, we would have to incorporate the logic of collective action that is not included in the universalisation test itself. To complete the scheme, the logic of collective action must be incorporated into the test in order to account for the harm that these flights cause in aggregate.

While in Kant's deontological view virtuous intentions insulate us from responsibility, Kutz wants to draw attention to the grey zone of producing bad outcomes without intending to do so.

Facts about the will of the agents by themselves do not capture the unique social context of an action. If we, on the other hand, try to draw individual responsibility directly from the outcome in cases of marginal participation, we face the problem of individual agency disappearing, as all symmetrically placed agents can correctly claim that they made no difference to the outcome (p. 122). Kutz claims that we should not make our moral focus overly narrow, because "if we restrict our discussion of accountability to just [-] individualistic objects, we lose sight of an important category of harms and wrongs. We ignore those harms and wrongs that result essentially from collective action, and that could not be the product of any one individual" (Kutz 2000, p. 115). Essentially the argument is that we should put our innumerable relations to each other at the centre of discussions on what we are responsible for.

I will discuss Kutz's proposed solution to assigning responsibility in cases of marginal participation later in this chapter, but first I will look at what those innumerable relations might consists of.

5.2 Positional and relational conception of individual accountability

In this section, I will outline Kutz's conception of accountability that is important to understanding his account of complicity. When our relationships with each other are put at the centre of ethics, it gives us tools to unlock puzzles presented by marginal participation. "Agents are held morally accountable for intentionally threatening or acting indifferently towards morally protected interests, inadvertently causing those interests harm, or symbolically impugning the significance of those interests through their statements, convictions, and associations." (Kutz 2000, p. 26). This section will set out the main arguments for positional and relational individual accountability. I will first summarise Kutz's account on each point and then illustrate their content with examples of my own.

Accountability is "the implicit or explicit expectation that one may be called on to justify one's beliefs, feelings, and actions to others" (Lerner and Tetlock 1999, p. 255). Out of all animal species, human beings are the best at co-operating beyond kinship, and for the large part this is achieved because we have created systems of formal and informal accountability (Haidt 2012, p. 75). In standard desert-based models of accountability, once an action is deemed right or wrong, the agent responsible deserves praise or punishment in proportion to the act. Critical of this approach, Kutz (2000, pp. 18-19) accuses it of conflating the judgement of wrongfulness with the judgement of accountability. Desert-based models are non-positional: the search for a uniquely determined response fails to take the relation of the respondent and the agent into account. In contrast, his concept of accountability is both positional and relational, as we should separate the fact of wrongdoing from the responses it warrants. Kutz (p. 21) points out that social and moral

accountability share a common set of psychological responses, those of reactive attitudes such as indignation, shame, guilt and resentment. We react to violations of social and moral norms with these attitudes in our everyday lives, and the deep structural features of relationality and positional dependence are shared by moral, social and legal accountability. The social and moral strands of our relationships mimic each other and are tangled up to the point of being near inseparable when it comes to the norms they give rise to (p. 25). Accountability therefore needs to be understood as an assortment of relations among agents.

I will discuss a bad friend example to elaborate how relationality and positional dependence affects the kind of responses the breach of confidence warrants. I tell you a secret that I have never told anyone before. It is something that took a lot of courage for me to say and I make it clear that I want you as my best friend to keep it absolutely confidential. A few weeks later the sister of your boyfriend asks me about my health and I realise from the words used that my secret is out. Perhaps there was a slip of the tongue of some kind. I am angry at you for breaking my trust. You feel guilt, but are also annoyed at your boyfriend for gossiping with his sister. You only told your boyfriend about my secret as you thought you could trust him 100% and you felt you needed someone to discuss the shock you felt at my admission. Maybe you wanted a sounding board for your ideas of the best way to support me; maybe you just are not that good at keeping secrets. Your boyfriend might feel annoyed at you for being dragged into a fight that he has no desire to be part of. His sister might feel guilty about having knowledge she should not have had and for unintentionally causing a rift between best friends. She might also feel disappointed that I did not confide in her and angry with me for choosing to confide in you instead (let us say we are friends also). Perhaps she is even jealous of you and secretly glad that we are now on bad terms. This example could go on: our parents happen to be neighbours and they have their own reactions to the situation. The lesson is that there does not exist just one warranted response to the breach of confidence between friends but many, dependent on the agents' position and relations relative to the harm.

An agent thus deserves not just one uniform response, based on facts about her, but instead varied and many responses from different people dependent upon her relations to others (Kutz 2000, p. 22).[17] This much contextualised view on social accountability allows us to explain the array of warranted responses: while I can choose to forgive you, my parents forgiving you on my behalf

[17] Allowing for different warranted responses does not lead to relativism in my account, even though responses will vary depending on the context and culture. Kutz avoids taking sides on the relativism debate and describes subjective and objective as follows (2000, p. 24): "Positional dependence as I have characterized it only holds that the standards governing warranted response depend upon the structure of relationships between respondents and agents. But respondents in different positions may be variously correct or mistaken about what those standards warrant without there being one correct response, just as differently placed listeners might be variously correct or mistaken about the pitch of a moving train whistle without there being one pitch all listeners ought to report. In ethics, as in acoustics, the subjective and objective perspectives are not contraries but complements. The objective perspective is what gives the subjective its normative character, transforming attitudes into claims, and preferences into warrants."

might not be an appropriate response. As Kutz (p. 23) points out, the harm creates new relationships (such as victim and interested party) that overlay the pre-existing relationships. Our former history of reciprocity might warrant me to forgive you, just as our former history of previous breaches of confidence makes me want to never trust you again. The responses of different agents need not be and cannot be univocal: what response is warranted depends on the relation to harm that the agent is in. There is no single unifying verdict of the praiseworthiness or blameworthiness of an action.[18]

For Kutz, an agent can be held accountable for *how* they act (reasons of conduct), *what* they cause (reasons of consequence) and *who* they are (reasons of character). The perspectives relevant for accountability include the second-person response of the victim (or the victor, depending on the act), the third-person response of the onlookers, as well as the first-person response of the agent herself. Kutz (pp. 64-65) wishes to stress the positional dependence of accountability, by which he means "the way that individuals' various perspectives on and relations to harms inflect the responses they give and are warranted in giving".

Reasons of conduct cover the manner in which we act towards other people and the attitudes that our actions manifest. This warrants responses dependent not on the consequences but on the quality of the will of an agent, but this too is relational: the attitudes and expressions of an agent can only be made sense of in the context of the relationship that she has with the respondent. Therefore conduct cannot be judged internally only, independently of external affiliations. What is an appropriate way to behave differs according to specific relations. What is revealed in the course of a normal conversation between friends can seem like oversharing at the workplace, just as what counts as appropriate manners between a student and a teacher would be cold if transported directly into the home environment. Different relationships warrant different responses based on the demands and point of view of that relationship. (Kutz 2000, pp. 26-37).

What about causal linkages to consequences then? When we look at things from the onlooker perspective of a role occupier such as a captain, the content of the will no longer matters, but consequences do. As Kutz (pp. 34-35) puts it: "Hierarchical relations are best sustained by external signs, not internal dispositions, because the ambiguities of intention undermine the possibility of decisive moral judgment." Considerations of reasons of consequence are not limited within the confines of roles, of course. Consequences and an agent's causal linkages to these warrant responses

[18] This multiplicity of individual points-of-view is also central to Scanlon's (1998) contractualism, but in a slightly different way. If we want to reject a moral principle, our reasons for the rejection need to be from the point of view of an individual, not of an aggregation of individuals. Unlike in utilitarianism, we do not need to maximise the good (or human well-being) and try to occupy a position of impartial benevolence. When we compare two courses of action we are not comparing some objective collective viewpoint where individual effects are aggregated. In Scanlon's model we are always comparing individual viewpoints: aggregate little gains of millions do not outweigh the great suffering of one because what we have to reasonably compare are the claims of each of the million individually against the same claim of the one who is suffering.

in many kinds of situations. There is an asymmetry over the importance that causal linkages are given in many first-person responses in comparison to second- or third-person responses, where agents reproach themselves for accidents and faultless conduct that has caused harm (p. 38). To give an example, let us say that on my way to work I stop outside my front door to help a stranger who has fallen on the icy pavement, only to cause my neighbour to fall and break his leg as he trips over the bag that I had to put down in order to assist the fallen pedestrian. I feel guilty even if my neighbour does not blame me. The person I stopped to help probably feels sorry for me, but in any case he would not be warranted to scold me for my actions.

This asymmetry reflects the important role causal relations play in agents' understanding of themselves, how they inform their identities and moral narratives about themselves as agents, while in contrast the people affected "care less about causal relations in the absence of faulty conduct" (p. 38). While I might blame myself for my neighbour's broken leg and feel guilty about it, he probably feels no resentment towards me, as it was an accident. Williams (1993, p. 70) discussed the regret an agent feels over some state of affairs the existence of which involved one's agency: "This is not just a regret about what happened, such as a spectator might have. It is an agent's regret, and it is in the nature of action that such regrets cannot be eliminated, that one's life could not be partitioned into some things that one does intentionally and other things that merely happen to one." This regret is a mixture of guilt and shame, even though the agent is not at fault. The regret is directed at the unlucky causal connection that is formed between the agent and the unwanted consequence, how the harm caused becomes part of the history of the agent (Kutz 2000, p. 39). Those affected do not place this emphasis on causal connections because faulty conduct, manifestations of ill will, is what matters in most relations (pp. 41-42). Causality in isolation does not tell us anything about the previous relations of the agent. We view ourselves differently dependent on who is suffering from the harm we brought about. Still, any gesture of repair is about more than just repairing the relation between the agent and the victim (p. 41):

> When I see myself as accountable for a harm I merely cause, and when repair is possible in part, my gesture of repair is directed at myself as well as at my victim. It is directed at the victim insofar as it attempts to compensate for a burden I have imposed. And it is directed at myself insofar as it provides a way for me to transform my trajectory through the world, eliminating what is unfortunate about what I have done. Here we see a further asymmetry in the responsive positions of the agent and victim, in cases of faultless wrongdoing: While my victim may be indifferent to the source of compensation, I may feel that it must, in symbolic part at least, come from me. And even if neither I nor my victim feels it necessary that I provide compensation, an apology or other gesture of repair may also be called for, and that can come only from me.

That leaves us with the last basis for holding someone accountable. While reasons of conduct and reasons of consequence relied upon "direct causal or attitudinal links between agent, victim, and harm", when an agent is held accountable based on reasons of character "the evaluator associates the harm with the agent because the harm manifests or symbolizes an enduring trait of the agent" (Kutz 2000, p. 43). Out of the three forms discussed, this form of accountability is the most unmistakeably relational, as it expresses directly the importance of the agent's relationships to others. Who an agent chooses to affiliate themselves with and who they identify with (or as, when it comes to collectives) is important when assessing her character. Relationships are therefore at the core of reasons of character. When an agent causes no harm through her actions, she might still be accountable if there is enough reason to think that in other circumstances she might have counterfactually caused harm, or at least endorsed harm. Aside from affiliations and social commitments, an agent's motivations and dispositions are some of the other bases for character-based accountability. Kutz argues that one can feel counterfactual guilt due to the suspicion that one could have acted wrongly based on one's character traits, that one is willing to be associated with compromises that are moral in nature. If you accept a benefit from a tainted source, albeit distant in history, you might feel a pang of guilt over the counterfactual possibility of being complicit when the harm was present. (Kutz 2000, pp. 42-46).

Let us say you inherit a piece of land in a country that has a history of exploiting and marginalising its native inhabitants. Your great-great-grandfather settled the land as part of some larger political movement and built a thriving farm on it. It now passes to you due to your uncle having no offspring. You accept the inheritance, as it pays off your mortgage and allows you to secure further education for your children. Still, you feel more than a pinch of guilt when explaining the origin of your newfound wealth to your friends and associates. This is because you are aware of how coolly realistic your character traits are when it comes to securing the interests of those near to you. While you condemn the treatment of the indigenous people by your great-great-grandfather and his generation, you suspect you might have acted just the same had you been living at the time and under similar circumstances. Your guilt is thus counterfactual. You do not need to have anything like certainty about your counterfactual actions for this kind of guilt to appear, you only need the possibility that you might have acted in a way that you now, as a bystander, condemn.

Accountability linked to reasons of character also arises when we have close relations to the person(s) who brought about the harm. Kutz (p. 44) observes that we can sometimes feel shame when a close friend or a relative acts in a way that is deemed bad. I can also feel shame if someone close to me is humiliated. The strength of this kind of associational shame depends on the society,

and Kutz argues that it has been on the decrease in liberal democracies for a while now.[19] This kind of shame is not about sympathising with the other, it is about imagining yourself in their situation, acting the way they did (or feeling the way they did if they are, for example, humiliated). The agent can posit themselves as a member in a collective that shares the objectionable trait that gives rise to shame (Kutz's example is a tourist hiding his guidebook in shame when another tourist acts brashly at a restaurant).[20]

To give an extreme but obvious example of such accountability, imagine a neo-Nazi who is at home when at the same time, and unbeknownst to her, her friends beat up someone in a racially motivated attack. Because she was not at the scene and did not even know about the planned attack, let alone intend it, she cannot be linked to the harm through reasons of conduct or consequence. However, based on her character it is very plausible to assume that had she known about her friends' plans and been present at the scene, she would have participated in the attack. She is therefore also accountable.[21] Note, though, that being accountable for a harm in this way does not, of course, mean that she is accountable to the same degree as her friends who carried out the attack. An agent can be held accountable based on various reasons and to different degrees. Someone involved in the actual attack would be accountable based on reasons of conduct, consequence, and character all at the same time.

Recall the Sunday driver with the gas-guzzler from chapter two. When concentrating on reasons of conduct, he does not intend to cause any harm as Sinnott-Armstrong pointed out, so perhaps no accountability can be pinned on him. For now, I will settle for this, although complications are introduced in the coming sections. Coming to reasons of consequence, it can be argued that individual emissions do cause harm and this harm is the increased risk. In chapter two, I argued that this is the case at least in relation to our lifestyle emissions. Last, but definitely not least, reasons of character warrant responses of accountability stemming from the motivations, affiliations, and dispositions of the agent. I will argue that these are key to understanding individual accountability for climate change harms in cases like the easily avoidable luxury emissions that enjoyable Sunday rides in high carbon footprint vehicles exemplify. For this we need to better understand the context these emissions are part of, and in effect how we are complicit in upholding and renewing the structures that allow the problem to go on and get worse.

[19] Although social media and other recent developments in communication have arguably given rise to a new kind of associational shame, that of a group association.

[20] Kutz (2000, p. 44) also describes partial accountability, where one feels the need to make amends without any feelings of guilt: "Contemporary Germans, for example, often claim that they accept collective responsibility without collective guilt, by which they mean all Germans, in virtue of their citizenship, owe duties of commemoration and reparation to the victims and survivors of the Holocaust regardless of any actual complicity."

[21] Perhaps to a small degree (or part) she is also responsible for upholding and creating the atmosphere or culture that allows for such attacks, but exploring this option falls outside the scope of this thesis.

5.3 Complicity and participatory intentions

This section explores Kutz's (2000) model of associative accountability, which explains how individuals can be responsible for collectively caused outcomes even when their participation is marginal.[22] I will present his key terms and arguments for them in a relatively detailed manner.

Complicity as understood in Kutz's analysis conflicts with the standard understanding of moral responsibility, whether orthodox ethical theories, or our common-sense understanding of morality (although the situation has changed somewhat since the book was published, with things like Fairtrade, slavery footprint, and carbon footprint gaining mainstream recognition).

More specifically, Kutz (2000, p. 3-4) writes that recognising complicity poses problems for the principles of *Individual Difference*: one is accountable for a harm only if something one did made a difference to it occurring and the same harm would not have occurred regardless; *Control*: one is only accountable for events one has control over and could have prevented; and *Autonomy*: one is not accountable for harms caused by other agents, unless one has induced or forced the other agent to do what they did. We use these principles regularly to allocate responsibility and to make excuses for, and emotionally distance ourselves from, things we argue we have no control over, or what would have happened anyway. Together, these principles define an individualistic conception of moral agency and accountability, in which the subject, object, and basis are all individual as follows. The *subject* is an individual moral agent, not a collective. The *object* of accountability is ascribable to the individual agent alone, i.e. the harm or wrong for which the agent is admonished is ascribable to that subject alone. Finally, the *basis* of accountability (the grounds for holding the agent accountable) is comprised of facts about the individual agent, such as her causal contributions, the content her will, or her intentions. Kutz (2000, p. 4) sums up the orthodox view: "Paradigmatically, individual moral agents are reproached, or reproach themselves, for harms ascribable to them and them alone, on the basis of their intentional actions and causal contributions."[23]

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[22] Kutz (2000, pp. 17-18) distinguishes between an internal and an external sense of responsibility, and terms the external sense accountability. The internal sense refers to the psychological competencies one must have to be able to qualify as a moral agent, so it is about agency conditions for moral responsibility (i.e. the kitten or the industrial robot would not qualify). The external sense (accountability) refers to the normative affiliations and duties of the agent to other surrounding agents. A responsible agent (in the sense of qualifying as a moral agent) is only a suitable *candidate* for accountability, but yet not necessarily accountable. Kutz's example is a bank teller who has to empty the cash drawer while being held at gunpoint: the teller is responsible, but not accountable. Accountability thus is a narrower term than responsibility, and it is fundamentally relational.

[23] Kutz (2000, pp. 4-6) argues that this non-relational understanding of accountability is deeply rooted in the modern consciousness, together with a commitment to a kind of evaluative solipsism, where questions of accountability are resolved without a reference to one's relations to others, with the emphasis on the content and effects of individual wills instead. This concept of accountability drives a wedge between public and private, between local effects and wider collective harms. It also makes the individual's role disappear in collective harms.

Kutz wants to offer an alternative to this. The starting position for Kutz (p. 115) is that accountability literature in philosophy usually confuses two distinct claims: that the *basis* of accountability must be individualistic (i.e. the facts about an agent that warrant holding them accountable for harm or wrong; who they are and what they have done), with the claim that the *object* of accountability must also be individualistic (i.e. an action of an individual, the consequences of the conduct of an individual, or an aspect of character). Kutz upholds the first claim about the individualistic basis of accountability, as without it we would be making unfair claims (p. 115):

> Holding agents morally accountable on the basis of what others have done fails to respond to those agents as distinct persons, with their own characteristics, decisions, and commitments. Just systems of moral accountability serve the purpose of relating agents harmoniously to one another, and protecting the interests that make their lives good. Ignoring individual differences among agents undermines these purposes, for the resulting responses of accountability do not attach to agents in such a way that they can be integrated into an understanding of their position with respect to their victims or bystanders. The relationships that systems of accountability are supposed to foster (and, in part, constitute) instead are sapped by undiscriminating reproach.

The second claim about individualistic object of accountability is rejected by Kutz. He notes how the object and the basis of accountability are analytically distinct from one another (p. 116):

> If I willfully hit you, then I am accountable for that blow and its consequences. I am also accountable for the attitude of hostility I manifest by that action: you will rightfully take my attitude into account in your future dealings with me. My decision to strike you, assuming my capacity to govern myself according to moral norms, warrants you in holding me accountable. By contrast, if I tell my little brother to hit you, then the object of my accountability will be his blow and the harm it does, while the basis of my accountability will still be a fact about me, namely my telling him to hit you. Responses of accountability are always functions of the basis and the object of accountability — as well as of the position of the respondent.

The basis of accountability must always be individualistic so that we are not making unfair claims, but the object of accountability can be collective. The concept of *participatory intention* is what provides this individualistic basis of accountability in collective action and collective harms. Participatory intentions are a certain "way of regarding one's own action", namely one where "individual agents regard their own actions as contributing to a collective outcome" (p. 74).[24] Jointly intentional action is a function of this. Kutz (p. 81) elaborates:

[24] "What makes my behavior participatory is nothing more (and nothing less) than my conception of what I do as related to the group act, whether that conception is explicit in my deliberations, or functionally implicit in my actual or counterfactual behavior. Merely wearing appropriate clothing is not what constitutes my willing participation in IBM's corporate culture, but rather wearing dark suits with the intention of being part of that culture. [---] it must at least be true that my putting on a dark suit is counterfactually sensitive to my acceptance of the norms that structure life in that organization: if I worked at Apple, I'd wear jeans and a tee shirt instead." (Kutz 2000, pp. 82-83).

> [We each conceive the choice] as one in which each intends to do his part in promoting our group act, [without necessarily] any prior agreement or concert on our part. Call this way of conceiving of action a participatory intention: an intention to do my part of a collective act, where my part is defined as the task I ought to perform if we are to be successful in realizing a shared goal. This conception of oneself as contributing to a collective, as manifested in one's deliberation and action, is what lies at the heart of collective action generally, from simple coordination to complex cooperation.

Individual participatory intentions overlap and, according to Kutz, form the common element shared by all types of collective action (p. 75).[25] A participatory intention is constituted through two sets of conditions (representational components), namely *individual role* (the act an individual performs in order to promote a collective end) and *collective end* (the object of a description constituted by the acts of different individuals, the causal product of the individual acts) (pp. 81-82). In other words, "individual participatory action aims at two goals: accomplishment of a primary individual task that contributes to a secondary collective achievement, be it an activity or an outcome" (p. 82), for example, dancing a tango or establishing a new institution.[26] When our participatory intentions overlap (and we are sufficiently aware of this), we share a goal, which then *teleologically* explains our actions both individually and collectively. When individuals intentionally do their parts in a project that they conceive as collective — and when these conceptions sufficiently overlap — then they act collectively. (pp. 138-139).

> While the causal explanation of our actions is intrapersonal, stemming from the beliefs and intentions of each, the teleological explanation is interpersonal. This teleological explanatory link provides the basis for collective action ascription. My buying cheese and your picking out wine can be ascribed to us as a group, in virtue of the explanatory role played by our

[25] Kutz's (2000, pp. 74-75) examples include filing through a narrow door into a theatre, voting absentee in a general election, playing chess, and tangoing. While Tuomela (2007) allows that participatory intention is sufficient for group action in cases involving collective agents, he argues against Kutz that it is not necessary for all collective action as "there need not be even such a participatory intention in the case of all participants" (p. 271) in weaker kinds of collective action. His examples (p. 115) of this kind of group action include operative members who are authorised to act for the group. These operational members jointly intend to perform the action in question, like scoring a goal, while the non-operational members tacitly accept this. The joint action can be attributed to non-operative members also, although they were not directly involved in the production of the action and thus are not required to have the shared we-intention. But participatory intentions need only sufficiently overlap, so the non-operational members' participatory intentions need not refer to scoring that particular goal for them still to count as members of the football team. The members do not have to undertake or intend every single action that is performed toward the collective end to count as members (or for them to understand themselves as acting collectively), but they do need to have the relevant participatory intention. Think of actions of any representative: a sales rep or a diplomat performs her role in order to promote some collective end that other individuals also share and it is this overlap that makes it a collective action. Tuomela (pp. 116-117) also gives examples of I-mode action that is nonetheless collective action, like teenage girls in a town all preferring to wear miniskirts. There is a shared, mutually believed social reason (acting as others do) and "an element of jointness", resulting in parallel collective social action. Depending on the actual scenario, these kinds of cases might come under quasi-participatory intentions (see section 5.4).

[26] This does not rule out unintended collective consequences, as unintended things can happen with any action (individual or collective). It simply means that participatory intentions are directed at a goal that is intended. If the intended collective action A has unintended consequences B, I can be held accountable for B through my participatory intention to A as long as the consequences were foreseeable (see also the wasp example later on in this section).

> shared goal [such as having a picnic]. They are our actions, because they are explained by our shared intention, which is causally efficacious through our individual participatory intentions. (p. 139)

This account has taken inspiration from both Bratman's (1999) meshing subplans and Tuomela's we-intentions, although it is different from both. Kutz's account of joint action is more minimalistic and does not require collective commitment. A similar account is offered by Miller (2001, 2010) who discusses the *layered structure of joint actions*, where a number of joint actions achieve a collective end; some (threshold) set of joint actions are necessary and jointly sufficient for a collective outcome to be achieved. Level one is represented by individual actions that are components of joint action, whereas at level two these joint actions are directed at the collective end.

The example that Kutz discusses to illustrate his account is the Dresden firebombing that took place towards the end of the Second World War in February 1945, where the historic German city was engulfed in flames and about 25,000 civilians were killed through intense heat and asphyxiation, leaving behind a scene of devastation with incinerated, even vaporised, bodies (Taylor 2008; Selwood 2015). At least 1,000 planes and 8,000 Allied soldiers were directly involved in the bombing raids, with each plane's, let alone crewman's, causal contribution "marginal to the point of insignificance" (Kutz 2000, p. 118). Kutz writes (p. 119):

> It is of course only too easy to find examples of fully deliberate mass participation in collective evil, from the increasingly well-documented extent of the complicity of "ordinary" Europeans in Nazi crimes to the massacres in Rwanda in 1994 and in [Srebrenica] in 1995. But the very purity and enormity of the evil involved in those cases obscures underlying moral structures. The wrongfulness of work as a field executioner, concentration camp guard, or a radio announcer urging bloodbath resonates throughout action, intention, and character. Despite the occasional difficulties of tracing causal connections between individuals and atrocity, the moral calculus of accountability nonetheless is overdetermined. By contrast, the Dresden bombing constitutes an evil that was more inhabited than made, where individuals discovered themselves on the verge or in the course of participation in a great wrong through the flow of obedience and circumstance. I concentrate here on inhabited evil, because the philosophical and psychological questions that arise are both less tractable and more pressing. If individuals are accountable in such circumstances, it will have to be by way of a more subtle argument than one that directly links homicidal intent to massive wrong, an argument that attends to the competing pulls of cooperative action and causal insignificance.

It seems that climate change makes us susceptible to *inhabited evil* in relation to future generations, as well as those already vulnerable to climate risks (something that I will return to in section 5.4), even though the effects will be less certain and the devastation likely less swift than in Dresden. The scale of the catastrophe is much vaster though: in the worst case we will make Earth uninhabitable, but only after billions have first suffered and died. But Kutz's Dresden example needs to be looked

at in more detail before we can discuss climate change, as there are significant differences between our case studies in scale, timeframe, and intentionality.

The question with the Dresden case is: were individual crewmen acting wrongly? Each individual contribution made a difference that is imperceptibly marginal to the outcome, but they were done in a collective setting: bombers' interactions were co-operative. Statements and interviews of the men involved showed that while some were indifferent to the devastation and suffering caused, others saw it as a necessary evil, while yet others regretted being part of it. What is similar across the reflections, however, is that the men's "sense of accountability was grounded not in an assessment of the differences they had made as individuals, but in an act they had performed together." (Kutz 2000, p. 121). This reflects the complexity of our ethical lives and moral thinking, where our intuitions can conflict and few things are black and white. Kutz (p. 122) thus offers:

> **The Complicity Principle:** (Basis) I am accountable for what others do when I intentionally participate in the wrong they do or harm they cause. (Object) I am accountable for the harm or wrong we do together; independently of the actual difference I make.

This is what the "no participation without implication" slogan is about. Note that this is about intentional participation: not about being implicated in something those closest to you do without your knowledge, for example. Although the principle is inconsistent with the orthodox moral principles that emphasise individual will and actions, Kutz argues that it is "well-grounded in our intuitions, ethical practices, and psychologies" (p. 122). I think this is right: if a group of drunken friends decide to rob a liquor store, the one who idly stands by laughing as the others throw a rock through the window and grab the bottles is partly accountable for the harm by failing to prevent the harm and by encouraging it.

Kutz wants to explore the moral difference between complicit participation in a collective harm (inclusive accountability) and direct action (exclusive accountability). He does this interpretatively through examples, as he argues that it would be futile to try to find *the* argument that would distinguish between participatory and direct wrongdoing as "there is no single framework for assessing accountability" (p. 148). He does not believe that all is subjective, though; normative can be separated from the descriptive by evaluating particular responses, as "the general test for the warrant of a particular response is whether the respondent would endorse that response under full ethical reflection — that is, reflecting on the intelligibility of the response given the relationship-fostering goals of the accountability system." He elaborates (2000, pp. 148-149):

> In cases of collective action, we can try to engage each responsive position to see whether it would hold up under ethical reflection. The test has two questions. First is the question of whether the response accurately captures the ostensibly complicitous agent's role in the

> collective act, for example, whether the agent must be seen as having intended to participate in something that did harm. Second is the question of whether the response coheres with other responsive positions. If I am disposed to care whether my response is warranted, then I must care that other interested parties can see its ground and its point, whether or not they fully endorse it. Otherwise, it becomes hard for even me to see it as appropriate.[27]

Recall the discussion from chapter two about individual agent's emissions creating or not creating harm. When we ordinarily talk about the causal effects of an act, we tend to assume that at least some of these effects were normatively significant also, i.e. we tend to take it as given that the causal contribution was normatively significant. However, even though metaphysical differences are usually conflated with moral differences, Kutz points out that this is not always appropriate. Even if we could differentiate the causal effects of a particular Dresden bomb and bomber at the level of blast- or flame-paths, this would not make a moral difference as the *normative properties* of the event are still overdetermined.[28] Therefore "the problem of marginal contribution is not primarily a problem of causal overdetermination, for we can stipulate solutions to the relevant metaphysical causal riddles without illuminating the ethical questions at all." (p. 125). He continues (p. 126):

> An event can be normatively overdetermined though not causally overdetermined, insofar as a given individual's action may make no difference to the normative properties of a given event. Among the relevant normative properties of the Dresden firestorm are tens of thousands of deaths and much additional suffering. Even if a given bomber had failed to drop his incendiary bombs, and so a fractionally different pattern of fires and explosions had occurred, the firestorm would still have had these normative properties — indeed, the number of deaths might even have been greater.

By the last comment, I think Kutz means to only refute the view that my participation cannot be held blameworthy if its effects are marginal. His argument is that we should not conflate causal overdetermination with normative overdetermination. Therefore he does not have to hold the implausible view that the number of deaths makes no difference to the normative properties of the event. The argument is only that with Dresden, as it happened, the relevant normative properties were overdetermined.

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[27] This line of reasoning is compatible with what Scanlon (1998) promotes: namely, being responsive to reasons. His contractualism conceptualises moral judgements as claims about what reasons people have to reject moral principles. The objectivity — and therefore normativity — of morality comes from the process, about thinking about the questions in the right way (pp. 354-355).

[28] This point seems to have been missed or misunderstood by a reviewer of Kutz's book in *Ethics* (Gardner 2004), leading him to suggest that Kutz is being inconsistent when it comes to the causal effect of Dresden bombers, when he is not. The same review also accuses Kutz of not giving causality enough attention, arguing that the individual bombers did not merely attempt to participate, but actually participated. This criticism misses Kutz's point entirely: collectively the bombers obviously participated *and* made a causal difference (and caused a great deal of suffering, it was not just an attempt to cause it), but the causal effects cannot be cashed out in terms of the difference any one person's bombing action, taken in isolation, made to the resulting state of affairs. These misunderstandings could be based on how closely the cultural, legal and moral aspects of accountability interlink in Kutz's work.

While traditionally ethical theories have treated collective action as parallel behaviour, it is actually co-operative: jointly acting individuals are promoting a common end (p. 138). Instead of universalising the individual marginal participation, the test should accurately reflect the actual structure of the agent's intentions: we should universalise both the collective act and individual participation in it, i.e. "our bombing by way (in part) of my participation" (p. 142). An example that refers to the Dresden case is offered (p. 142), showing how the logic of collective action can be incorporated into the test:

> An agent who wills participation wills the collective act as well. Since we know a world in which firebombing occurs is a world in which agency cannot be universally exercised, we now can see how each bomber's will contradicts itself. The bomber wills a world in which rational agency is condemned to be ineffectual. The world of universalized firebombing is now treated as the object of the individual agent's will.

Amended like this, we can now rule out such contradictory maxims (i.e. "world of universalized firebombing" and "a world in which agency can be universally exercised" are in contradiction).

The victim's point of view is particularly important when we are dealing with collectively caused harms, as from the victim's point of view questions of individual causal contributions and exact shares in responsibility are not that relevant: the fact of suffering is what dominates the victim's experience (p. 123). The victim's view thus offers the best support to the Complicity Principle.

Apart from the vastness of the timescale and the global reach, there is another big difference between mine and Kutz's case studies. The outcome in Dresden was intended for the most part, if not by individual agents participating, then at least by their superiors. Collective action can, of course, result in outcomes that were completely unintended also, like melting polar ice caps. Holly Smith (1983, p. 551) argues that there is a degree to which we can be held accountable for the consequences of our actions, and this is linked to the outcomes falling within the predictable outcomes for that act, i.e. "where the unwitting wrongful act falls within the known risk of the [-] act".[29] Kutz's approach is somewhat different: while he acknowledges that our accountability for consequences that flow from our actions is in theory infinite and therefore needs to be "normatively delimited", he notes that some response is warranted even when the outcome is unforeseeable (pp. 142-143):

> Though the field of response-worthy events varies with the particular ethical culture, in every culture some unintended consequences warrant some response. By taking responsibility for the consequences of our acts, we demonstrate to others a concern for their projects and interests, and thereby work to ensure their respect for our work. Within this delimited set of consequences, normative questions of individual response arise: whether to apologize, compensate, or repair.

[29] Smith's discussion is about culpable ignorance and cases that fall under it.

Kutz illustrates this point with a wasp that enters the house when he lets the cat out. He did not intend to let the wasp in, but when it stings you badly, he should express sadness at your pain and offer you comfort. He is not at fault and resentment towards him is therefore not warranted. The response to the pain caused by the sting indicates the importance attached to your interests within the community, and any claims for him to respond are rooted in the fact that his agency led to the suffering, however unintended it was. In other words, "accountability for unintended consequences manifest an acknowledgment of the fact that one's projects have interfered with another's interests" (p. 143). This applies also to the unintended consequences of collective action, as we are complicit in the consequences of what we do together. If some harm is a direct consequence of what we do intentionally, even though the harm itself was not intended, we have a duty to acknowledge it in the appropriate way (i.e. apologise, compensate, etc.). Collective responsibility entails individual accountability, participation entails implication. The collective act is an object of individual accountability, so participatory intentions thus are sufficient for accountability and "an agent who participates intentionally in a wrong is accountable in some form for that wrong" (p. 146).[30]

Complicit participation comes in shades of grey. Let us begin with collective action that is wholehearted in the sense that all agents involved in it wholly intend the outcome and are mutually aware of each other's co-operation. So we are talking about paradigm cases of collective action where the participatory intentions of the agents "transmit accountability from all to each" (Kutz 2000, p. 155). Even in these cases there are positional differences based on the roles and tasks people undertake. These positional differences in accountability, warranted by considerations of the aspects of direct and inclusive authorship that make up the collective act, become starker as we move away from the paradigm cases of collective action. As Kutz notes, "our knowledge of what others do when we act together is hazy or distorted" in many cases, and we only have a vague description of what it is that we promote together (p. 155).

Kutz's (pp. 156-157) example is a mid-level engineer working for a large manufacturer of dual-use technology. He helps to design control modules that are used to manufacture consumer products, but he has reason to believe (but he does not know) that the same modules are also used in manufacturing land mines that are sold to poor countries involved in conflicts, resulting in civilian casualties. The engineer does not intentionally promote the sale of the land mines or indeed even know about it, but his participation in the day-to-day operations of the manufacturer is intentional. He performs his acts intentionally as a means to a collective end. This end he can be said to intend under some descriptions, like those that refer to his intentions to do his part in designing the control

[30] Kutz discussed participatory intentions satisfying a *threshold condition* of accountability.

modules, or his part in producing whatever the manufacturer sells. These ends he identifies with and works towards. However, if the collective end was described in terms of referring to designing, manufacturing, and selling the land mines, then he would not subscribe to the collective end. Still, he is inclusively accountable (p. 157) because "so long as the decision to work with the company is voluntary, and information about the company's activities is available, every employee bears an accountable relation to the victims of the land mines." *How* exactly he is accountable is another matter, related to how strong his links are to the collective act, this aspect depending on roles and how deeply his contributions inhabit the collective act. A shipping clerk working at the same company, tasked to send out blenders and landmines alike, shares some inclusive accountability based on the consequences, but his contributions do not inhabit the collective act as deeply as the engineer's. After all, designing something requires skill, thought, and reflection. Still, the engineer is not accountable in the same way as the vice president in charge of selling arms is: her direct intention is to sell the mines. (pp. 157-158).

Note then that not all participants are implicated in a collective harm to the same degree. Participatory intention might be a sufficient condition to ascribing accountability in the sense that participation implicates, but it does not implicate anyone in a black-and-white manner, but rather in all shades of grey. Kant notoriously proposed that you should not lie to a murderer about the whereabouts of your friend, as lying is always wrong. Kutz (p. 153) argues that the reason Kant suggests this is that he fails to take co-operation into account because it complicates the story:

> We are the instruments of one another's wills whenever we act cooperatively, in the sense that each of [us] pursues the goals of another. (This is what it is to share a goal.) This does not exonerate us of culpability for our own actions anymore [sic] than Othello can be exonerated of murdering Desdemona. Accountability is not an all-or-nothing matter, resting entirely with the misguided murderer or entirely with the manipulating liar, wholly on the shoulders of each incendiary bomber or wholly reserved to Bomber Command. Instead it is distributed in both degree and kind and, like any element of the real world, looks different from every angle.

These different angles are the viewpoints of victims, agents, and onlookers discussed in the previous section. In many cases of collective action, the participants might feel alienated from the collective end to which they contribute, whether by wilful ignorance, coercion, or moral qualms (Kutz 2000, p. 102).[31] The question then becomes what can an individual bomber be blamed for, personally? As Margaret Gilbert (2002, p. 181) rightly notes, Kutz does not give a clear answer to this question. She goes on to suggest two different readings (pp. 181-182). On the strong reading, Kutz's answer is that a survivor of the bombing, for example, might reasonably blame any given bomber for the

[31] See fn. 6 in chapter six on the difference of performing an act as a *means to an end* as opposed to *in order to* realize an end.

destruction of the city of Dresden. On the weak reading, a bomber could be blamed for having participated in the destruction of the city. The strong reading would imply a questionable view (p. 182):

> If one assumes that the bombers are collectively *blameworthy* for the destruction of the city, this collective blameworthiness for the destruction cannot, surely, automatically "distribute" to our bomber and each of his fellow bombers personally. No one of them destroyed the city and no one of them can, therefore, be blamed for its destruction.

The weak reading strikes Gilbert (p. 182) as "easy to accept—so easy that it seems not to require any special arguments or careful analyses to back it up." While I agree that what an individual participant is to be blamed for has to be along the lines of the weak reading (as otherwise the individual attribution of blame would be implausible), I disagree with Gilbert that the responsibility claim contained within the weak reading is so obviously true that it requires no arguments or analysis to back it up. What we do need an analysis for becomes apparent in the following paragraph by Gilbert (p. 183):

> Perhaps, as Kutz seems to fear, no single agent is to blame for destroying the city. Perhaps there *is* no collective subject to blame, and no individual whom it is appropriate to blame, in particular, no individual bomber. Why should this be a problem? It does not leave us without grounds for blame and related reactions towards individual bombers. That a person is not to be blamed for one particular thing, does not entail that there is nothing he can be blamed for.

The grounds for blame is exactly what needs analysing. To begin with, Kutz's worry was not that there is no *individual* agent to blame (like Gilbert argues), but that the blame might disappear unless we root it in complicity, as the participation is *marginal*. This worry is not without a basis, as marginal participation is used as an excusing condition in everyday conversations, as well as by some philosophers such as Cullity (2015), Johnson (2003), Sandberg (2011), Sinnott-Armstrong (2005), and Van de Poel et al. (2012) in relation to climate change harms (although they might accept collective obligations in relation to taking climate action). Hypothetically no bomber made an individual difference to the normative properties of the event and had no control over the total outcome, so each could argue that they should not be blamed, as they have not caused the suffering. In cases of overdetermination, "any one individual can correctly claim that [the harm] could have been avoided without her changing her own behaviour, so long as enough others did so" (Cripps 2013, p. 72). The argument is thus counterfactual: if I had not participated the outcome would have been just the same, hence I am not to blame. Kutz (2000, pp. 122-123) argues that we must reconcile the Complicity Principle with the Difference and Control principles in order to avoid such a conclusion. Secondly, and relatedly, Kutz (2000, p. 123) is worried that the two most dominant

moral theories of today, consequentialism and Kantian deontology, are in trouble with cases of marginal participation, as they fail to provide the link between a collective harm (object) and the individualistic basis for holding someone accountable as was discussed in section 5.1.[32] We can be complicit for many collectively produced harms in our modern, interdependent world, from environmental harms to the unethical ways the products we consume are manufactured.

Complicity arises not only when we are inclusive authors through our participatory intentions, but it can also arise when we are complicit in a looser sense. In these cases "the usual basis for applying the Complicity Principle does not obtain" (p. 167). The harm is collective, the outcome is overdetermined in the normative sense, but individuals have no participatory intentions towards some collective goal that causes the harm, either directly or in an unintended way. Here quasi-participatory intentions come in handy. I will turn to these next as I discuss climate change complicity in unorganised collectives.

5.4 Climate change complicity and quasi-participatory intentions

This section discusses systemic collective harms and accountability for the consequences we can unintendedly (but foreseeably) bring about through our participation in unorganised collectives. Kutz (2000, p. 186) calls this a *quasi-participatory basis of accountability*: "'quasi' because there is no specific project to which individuals contribute". He (p. 166) refers to harms that are "the results of a confluence of individual behavior" as "unstructured collective harms", citing environmental damage resulting "from an aggregate of marginal individual contributions" as prominent examples.

I find "unstructured collective harms" a somewhat misleading term. It is meant to bring out the contrast between these collective harms and those harms that are brought about by collective agents and the concerted action of the individual members within them. However, these harms often have systemic reasons behind them that lead to the harm, and they are thus rooted in the collective structures we uphold and create together. Therefore I will label these kinds of harms *systemic harms by unorganised collectives,* as I think that is more fitting. Later on, at the end of the next chapter, I will also refer to them as structural injustices (Young 2011).

Recall that my argument in chapter four was that unorganised collectives cannot have forward-looking responsibility, i.e. obligations. Our duties *qua* unorganised collectives are always individual duties, although they are interdependent. However, sets of constituents of unorganised collectives

[32] Moral philosophy encompasses, of course, other theories than just consequentialism and deontology, like virtue ethics and contractualism, or pluralist intuitionism. The point here is only that the two dominant moral theories do not seem up to the task of dealing with collectively caused harms where participation and individual effects are marginal.

can have backward-looking (or current, present-day) responsibility and this is the topic of this section.

The complicity involved in climate change is in many ways very different from the complicity discussed by Kutz with regard to the Dresden bombings: it is the unintended outcome of intentional participation in our societies, very broadly put. This stretches the telos of the collective action to the point that it might seem unfruitful to apply participatory intentions or collective intentionality to climate ethics at all, just as Cripps (2011a) argues. A similar sentiment is expressed by Lawford-Smith (2016b, p. 135):

> It's not clear that we can make sense of the idea of intentions for unorganized and loosely organized groups, even if we can for highly organized groups; and more importantly even for individuals and highly organized groups it's not clear that the relevant intentions (etc.) would be present in the case of most GHG-emitting actions.

Despite first appearances, I will argue in this section that the concept of participatory intentions (quasi or otherwise) is relevant to climate ethics in two ways. First of all, intentionality is obviously important to understanding the responsibility of collective agents such as corporations and governments, actors who play a big role in shaping our future. Participatory intention offers a simple, yet effective, way of conceptualising organised collective action, and collective action is the driving force behind most of the GHG-emitting actions. It also offers us a way of thinking about our individual responsibility as members of collective agents.

The second way is related to the systemic harms that we can unintentionally bring about through our intentional participation in structures that lead to excessive emissions and the way we jointly uphold them. Here I find that *quasi-participatory intentions* can capture why we should care about the harm we bring about together even when our participation is marginal. Very broadly put, in climate change the object of accountability could be said to be the collective projects and structures that result in high greenhouse gas emissions and the harm that ensues from these unsustainable practices, while the basis of accountability is participating in the projects and social systems that uphold and create these structures (Hormio 2013). Without a proper understanding of responsibility that arises from collective moral complicity, it is easy to consider one's acts and omissions as unimportant and marginal to the outcome.

Instead of trying to apply participatory intentions to systemic harms by unorganised collectives, what we need are quasi-participatory intentions. While there is no specific collective project to which individual agents contribute to, there is "a set of individuals who jointly cause harm, against a background of interdependent activity and shared values" (p. 186). "Shared values" has a loose

meaning here. Take Kutz's example about gun sellers and their blameworthy complicity in crimes that are committed with the guns they sell. He (2000, p. 186) writes that:

> [T]he culpable 'agent' is not the individual merchant, but the set of gun sellers who are routinely indifferent to the violence that flows from their trade. These merchants are unified in part by shared trade networks, lobbying efforts, and manufacturing standards. And they are united by a shared universe of values, here regarding the permissibility of selling such deadly instruments.

So the set of individuals is culpable, i.e. blameworthy. The set of routinely indifferent gun merchants is an unorganised collective, although probably there will be some overlap with members of collective agents (perhaps they are members of the National Rifle Association, or some trading body, for example). Quasi-participation is an appropriate ground of liability and culpability.

Kutz offers two elements that taken together can account for why people are warranted in holding themselves and others accountable for environmental harms and other such systemic harms.[33] The first is that the group that causes the harm is clearly identifiable from the victim's perspective: the polluters, "people engaging in a concrete way of life that generates these harms" (p. 186). When it comes to ozone layer depletion, Kutz (p. 186) suggests that the set of people might be as wide as "the inhabitants of Western nations" as they "depend upon one another for the maintenance of the infrastructure that allows their way of life. More generally, they abide by and reinforce in one another a sense of accountability that treats collective and distant harms as off the moral map, so to speak." The victim's perspective is about the systemic ways a collective harm is brought about, so the fact that a set of people are an unorganised collective is not as important to them as it is to the agents themselves. The agents are thus abstracted from the victim's point of view (p. 186): "Individual agents are, broadly speaking, participants in a shared venture that does harm, and so are inclusively accountable for the unintended consequences of what they do together."

Kutz acknowledges the problem that the victims' point of view might not be motivating for the agents, as the harming activities are generated by self-interested motives, although within a systemic context. Regardless, he (p. 187) argues that "a systemic, collective perspective" can become morally salient for agents if we start reflecting on our interdependent lives: "If we can look to and cultivate the groupings in which agents actually do find themselves to be participants, then perhaps there is material for generating a sense of accountability." Kutz argues that when the harm is caused

[33] With environmental harms, one could easily will a Kantian universal maxim along the lines of "I will continue to pollute for my economic gain, but only as long as my individual actions make no difference". Kutz argues that the universalised world is the one we live in at the moment (p. 176). "Although there is pressure to regard ourselves as part of the collective that does harm, the ethical links between us as individuals and us as members of the collective dissolve under reflection" in the Kantian picture, and this will not do as individual motivations to shun contributing to collective harms "must be internalizable and stable under critical reflection" if they are to be psychologically feasible (p. 177).

by agents who "share an objectively determinate and highly interdependent way of life" this could elicit a "sense of accountability and collective identity" (p. 187-188). This is the situation with the individual emissions that contribute to climate change, as I shall argue soon. When harms are caused by unorganised collectives, we should emphasise "the moral significance of pre-existing networks of collaboration" (pp. 188-189) and use "the regional and institutional arrangements and roles that orient agents in social space" as the "foundations upon which to build structures of accountability" (p. 189).

The second basis is character-based symbolic accountability; who we are, what we tolerate, what we are willing to be linked to. Our actions might have no actual impact, but they symbolise what we value, they are a way of expressing meaning (p. 190):

> In overdetermined contexts, agents can have reason to refrain from participating in a harm, not because of the relation between this choice and an actual outcome, but because of what the choice symbolizes in their characters and commitments. Agents who show no concern for their participation in collective harms in overdetermined contexts make themselves vulnerable to the suspicion they will be indifferent even when they could make a difference. By contrast, agents who distinguish themselves from other participants demonstrate a commitment to the value of the lives of those they harm.

This is not about some high-minded integrity and trying to keep one's hands clean at any cost, it is about acknowledging symbolic reasons and that "acts do have a powerful symbolic dimension of choice" (p. 190). The reluctance of agents to participate is focussed on the harm and is not about the purity of their wills or consciences according to Kutz. While symbolic reasons are not moral demands as such, "it is plausible that some agents may require this of themselves, especially when the individual costs are not great in comparison with the harm that is done" (p. 191). Together with our participation in social structures that quasi-participatory intentions try to capture, the symbolic basis of accountability might cause us to reflect on who we are and foster a sense of accountability for what we do together.[34] This has a lot in common with Williams's (1981) argument from integrity: we should not be fragmented agents, but internally coherent. Our individual actions should be coherent with the values and collective actions that we promote. We might fail, and we sometimes will, but we should aim at things that correspond with what we value.

The idea is that bringing quasi-participatory intentions to moral discussions could foster a sense of accountability even in cases where the outcome is normatively overdetermined. Observing that

[34] Refraining from marginal participation can also have a training aspect to it: by thinking about the demands of complicity, one can get used to doing something in a way that prevents one from being part of the harm-causing unorganised collective by the time one's actions could start mattering, i.e. if and when the overall structure changes (e.g. beginning to recycle before the local council sets up meaningful recycling infrastructure, thank you to Arto Laitinen for the example).

the systemic view rarely coincides with the agent's own perspective of their actions, Kutz (2000, pp. 187-188) suggests:

> One plausible route to eliciting this sense of accountability and collective identity lies in returning to the victims' observation that the agents of their suffering share an objectively determinate and highly interdependent way of life. For the socioeconomic structures noted by the victims are neither self-originating nor self-sustaining. They emerge, rather, from unreflective confluences of habit and sentiment, tacit agreements upon, for example, the value of private transportation. These manifest themselves in myriad public policy choices and private behaviors.

I find that this applies to climate change also. It is not the case that we just have this system in which we live, where things just happen to be set in such a way that excessive greenhouse gas emissions are inevitable. While the previous generations have for the most part created the structures and systems that lead to the emissions, *we* are sustaining and shaping them. Looking at the situation from the victims' perspective could make us see more clearly that our socioeconomic structures are neither self-originating nor self-sustaining, but that they have an individualistic source. I will return to this soon. By introducing complicity of this kind to public debate, the systemic, collective perspective could become morally salient to individuals. We should strive for a sense of collective that is psychologically salient to us and that can impact upon how we act. Kutz (2000, p. 188) writes:

> Indeed, to the extent that the offending socioeconomic structures are social, they must arise from the motivations of individual agents, for all social activity is individual activity. [--] I claim that if collective harms can be ascribed to social and economic structures, then those harms can also be traced to individual motivations. And it is to these individual motivations that we can appeal in constructing a motivating sense of accountability.

Kutz thus grants the individualistic source of social structures (something that Young would agree with). He is very careful about the limits of what he is saying, though, following the above observation with the qualification that most of these motivations remain unconscious. I would also like to add that social structures could also be created by people long since dead, based on the motivations they had while alive, however conscious or unconscious they were at the time. Sometimes social structures change painfully slowly, so some of the structures that we have could be disliked by nearly all, and not be linked to the motivations of any living people, yet still linger with us for one reason or another.

Kutz (p. 188) also notes that individualistic motivations cannot be taken to be "foundational causal explanations of the social structure", as the relationship between social structures and individual motivations is *reciprocal* (as Pierre Bourdieu argued). Dispositions of acting, thinking, and feeling can "unify and individuate members of social groups", and this habitus of a social group "are

both shaped by and shape their social and natural environment" (p.188). Therefore, the values that drivers of luxury cars (to use Kutz's example) have in relation to privacy and personal comfort "are only realizable given cheap fuel and disguised public subsidies of automobile travel", while in a reciprocal manner, "those social conditions themselves reflect valuations by driver-citizens" (p. 188). Therefore the structures that subsidise private transportation are reinforced by the values that drivers of luxury cars hold, and vice versa, i.e. they mutually shape and reinforce each other.

> In general individuals do not and need not to conceive of themselves as either isolated units or as members of humanity writ large. Rather, they inhabit middle-sized, overlapping fields of shared meanings and political identifications. These shared bases of identification can in turn provide the requisite basis of individual accountability. Drivers can come to be aware of the damage done by a way of life that ignores atmospheric effects. Gun sellers can realize that their trade, taken as a whole, occasions a climate of violence. More generally, the regional and institutional arrangements and roles that orient agents in social space can be used as foundations upon which to build structures of accountability. (Kutz 2000, p. 189).

The point is that these pre-existing social identifications and structures can motivate us to act in a non-complicit way in cases of marginal participation or in the absence of intention to cause the collective end (p. 184). In other words, they aid in giving quasi-participatory intention the moral weight it deserves by helping to ground it in existing practices: social structures, identities and roles.

> Individuals must reproach themselves for contributing to collective harms, and must identify affirmatively with efforts at their prevention and repair. More generally, individuals must come to think of themselves as inclusively accountable for what they do together, to see themselves as participants in a group. (Kutz 2000, pp. 184-186)

We could thus claim that the complicity of constituents of unorganised collectives such as consumers, to give but one example, is based on the *quasi-participatory intention to partake in a consumer lifestyle*, a lifestyle that has excessive emissions as an unintended, but foreseeable consequence.

I find that Lawford-Smith's (2017) recent criticism against applying Kutz's schema to consumer complicity misses its target because she does not discuss the quasi-participatory basis of accountability anywhere in her article. She argues that applied to cases like consumer complicity for global labour injustices, Kutz's account either fails to generate complicity, or fails to implicate ordinary consumers. Lawford-Smith (2017, p. 10 of the online-first version) explains:

> We need a collectively cased outcome such as the bombing of Dresden, where individual contributions to this outcome do not make a causal difference sufficient to individual culpability, but where contributions taken together *constitute* the (holistically described) injustice, and where *participation* in the collective action is sufficient to implicate individuals in the outcome. In the case of consumption, that would have to be something like *failing to collectively resist global labour injustice*. Then the question would only be whether we could read

> individuals' purchases as being done with the intention of participating in that collective failure. That seems implausible.

That would indeed be implausible, but it does not represent Kutz's model: instead of participatory intentions, the basis of consumer complicity (and therefore liability) would be *quasi*-participatory. The complicity of polluters or other unorganised collectives such as consumers is thus *not* based on some intention to emit, or intention to participate in climate change harms, or intention to participate in failing to collectively resist excessive luxury emission purchases, etc. Instead, it is based on the quasi-participatory intention to partake in a consumer lifestyle, a lifestyle that has excessive emissions as an unintended, but foreseeable consequence, as I will argue in more detail shortly.

Now, Lawford-Smith could respond that the notion of quasi-participation is only a not-very-successful attempt on Kutz's part to be able to say something about the responsibility of people who are causal parts of unorganised groups.[35] I have some sympathy for this scepticism as the concept of quasi-participatory intention might seem ad hoc at first, but upon closer inspection I think that it is not.

Recall from the previous section how I noted that it seems that climate change makes us susceptible to inhabited evil in relation to future generations, as well as those already vulnerable to climate risks. There I also introduced a quote from Kutz (p. 119) where he discussed how it is "only too easy" for us to think of examples of fully deliberate participation in collective evil where the wrongfulness of the participation "resonates throughout action, intention, and character." He contrasted this with cases where the evil "was more inhabited than made" because the primary reasons for the individuals to participate in a great wrong were obedience and circumstance. He argued that if individuals are to be held accountable under such circumstances, then "it will have to be by way of a more subtle argument than one that directly links homicidal intent to massive wrong, an argument that attends to the competing pulls of cooperative action and causal insignificance." Although Kutz refers to participatory intention with this quote, I find that the point he makes applies to the concept of complicity more broadly, encompassing also cases of quasi-participation. Indeed, I believe that it is even more important to cases of quasi-participation, like those linked to structural injustices (see section 6.3). I say this because in cases like these, our intuition is usually to excuse ourselves exactly due to the lack of intent to harm, or due to the competing pull of our role duties, for example, or arguments about our causal insignificance. Rather than being a way to try to stretch one's account until it snaps in order to save it from objections, for me quasi-participation is more akin to truly appreciating the complexity of the moral realities that individuals often face in collective settings and with collective action. It is about us waking up to the uncomfortable realities of some

[35] As she indeed did in the comments of her pre-examiner report, although not using these exact words.

of the aspects of our increasingly interdependent lives, and what this means for our morality and practices of holding others and ourselves responsible. When it comes to the many pressing global ills of today, instead of intentionally promoting evil, more often than not we are inhabiting evil. In my view, this kind of complicity can be blameworthy or partially blameworthy, perhaps sometimes coming under just the agent-regret discussed in section 5.2.

What, then, can Kutz's account tell us about climate change responsibility? Recall how there are at least three different perspectives relevant for accountability: the agent, the victim (or the beneficiary in cases of praiseworthy action), and the onlooker/bystander. When an individual participates in a wrongful collective act, the outcome of which is overdetermined regarding individual contributions, Kutz (p. 119) argues that "reflective agents might come to understand that they have obligations of disobedience, repair, or prevention; victims must decide whether they can legitimately press their claims; and bystanders must decide whether and on what terms to return the perpetrators to the fold." Applying his schema to climate change, obvious challenges emerge: who are the agents, who are the victims, who are the bystanders? As we are talking about a collectively produced harm that is global, intergenerational, and unintended, these categories will be much harder to define than in most other cases.

Nothing very neat or uncontroversial can be put forward, but some rather obvious candidates still emerge. Let us say that the complicit agents are all the adults that knowingly participate in a way of life that upholds and creates collective structures and projects that result in high greenhouse gas emissions, i.e. emissions above the threshold that the Earth can absorb. In practical terms, this would be close to Cripps's *Polluters* category discussed in section 4.3: people in the Global North plus affluent people in the Global South, basically anyone who is a high emitter. This will be somewhere around the region of one billion people (Chakravarty et al. 2009).[36]

The sheer volume of complicit people makes me imagine a headline in a newspaper about a philosopher solving the problem of climate change responsibility: One billion people are responsible![37] But alas, this is essentially the case, and also a big part of the reason why the problem

[36] Chakravarty et al. (2009, pp. 11887-11888) calculates what would happen if CO2 mitigation assignments were set in terms of individual high polluters within each region. U.S. and China would have the highest mitigation assignments. While India mostly gets a free pass, the high carbon intensity in South Africa and in North African nations with energy industries means that Africa does not (although as a result of its large carbon-poor population, it should get higher emissions allocations in order to develop its economies). Russia and the Middle East also would get sizeable mitigation assignments.

[37] Indeed, *The Onion* (2013) carried a satirical news item with the headline *New Report Finds Climate Change Caused By 7 Billion Key Individuals* in response to the release of the IPCC's Fifth Assessment Report. The article also pointed out how not only do we know the culprits, we also know how they did it: "Researchers have isolated numerous instances of environmentally harmful activity committed by these 7 billion perpetrators in the past few decades alone, identifying practices such as using electric lights, shipping packages, traveling by car, traveling by air, buying clothes, washing clothes, using heat, using air conditioning, buying food, buying water, eating meat, commuting to work, shopping, exercising at the gym, disposing of waste, operating computers, operating televisions, operating other household electronic

has not been solved politically. Depending on the context, this collective can be further divided in innumerable ways. We could talk about the unorganised collective consisting of high emitters within China and Brazil, for example.

Victims include future generations, constructed broadly to include the young alive today, but with a sliding scale of some sort: the impacts will become more severe as time passes (assuming we fail to adequately mitigate and adapt), so people born in 100 years' time could face much harder conditions than the young alive today. The effects are projected to become worse with time, possibly even rapidly in a runaway scenario, so the later you are born, the more you are victimised by the actions of the present generations. Presumably there will also be geographical and socio-political variation in how badly you are affected. Many indigenous peoples are also at a high risk (see section 6.3).[38] Victims should also include people living in vulnerable areas where effects are already felt, but resources for adaptation measures are lacking. Many other species are also suffering and will suffer, so those species that will find it harder to survive or will become extinct due to anthropogenic climate change should also be counted among the victims. Polar bears and other arctic animals that are victims can hardly press their claims upon us, any more than they can adapt to the rapidly changing conditions fast enough. A related problem is that in the climate change scenario — even if we want to include only our own species in the category of victims — most of the victims will never get to have a say when it could have still mattered. The vast majority of the victims in future generations will not even be able to decide if they can press their claims: when they will be born, those alive now will be long gone. A further twist is, of course, that many in the category of victims will also become agents as they grow older and become accountable for their emissions and participation in their societies.

Labelling someone as a victim is not unproblematic. Although it is a common strategy used by campaigning organisations to try to appeal to our emotions by giving a face to a problem, it can take the sense of agency a person has and make them seem passive (Hormio 2013, pp. 113-114). In addition, discussions about victims can take our attention away from the structural inequalities that lead to certain people becoming vulnerable (Cuomo 2011). With climate change, there is also some overlap between the categories of victims and agents. However, as Cripps (2013, pp. 52-57) notes, being both a victim and an agent of climate change is no reason in itself to not to take action. I do

appliances, and showering—alarming activities that experts say show no signs of remitting." Peeters et al. (2015, p. 2) also found the article funny.

[38] Indigenous peoples (also referred as the first nations, native peoples, or aboriginal peoples) view themselves as having a historical existence and identity that is separate and independent of the groups that have settled, invaded or colonised the area. Lands located in a specific geographic area form a central element in their identity and history and play an important role in their contemporary political demands, and questions of self-determination according to their own cultural and political systems within and across the states they live in are central. There are as many as 400 million indigenous peoples alive today. (Arctic Centre 2017, Whyte 2017).

not see why it should not offer even more motivation to act. Of course, identifying oneself as the victim of climate change, rather than as a complicit harming agent, can also act as a political tool or psychological defence-mechanism (Hughes 2013).

The category of onlookers (bystanders) is not simple either. So many of us are implicated that hardly any reader of this text can call themselves *purely* an onlooker. This might seem such an obvious point that it is not worth even stating, but I think it is: anthropogenic climate change is very different from most of the problems discussed in collective responsibility literature. It is psychologically quite easy to accept the responsibility of a motorcycle gang, corrupted government, or an oil company, to give just some examples, as most of us are not members of *those* collectives. Even when we talk about difficult and pressing issues like being implicitly accountable for sweatshop labour in clothes manufacturing, or the suffering of animals in the often brutal conditions of the too-efficient meat and milk industries, alternative options are available (vegan food, fair trade clothes), options that rule us out from the collective of blame for the most part.[39] But trying to become *not* complicit in climate change if you are living in an industrial nation? Near impossible.[40] All agents in climate change are arguably onlookers relative to each other.[41] While I am a polluting agent, I am also a witness to the emissions of all the people around me, so I have a responsibility to prevent them from harming. In this sense, the onlooker category includes those who are both witnesses *and* agents, and those who are just bystanders (and are not agents). After all, one does not get rid of their responsibility as a witness by committing harm oneself.

This is not to say that there are no pure bystanders, because there are: people living in the Global South who have negligible carbon footprints and who might not feel the impacts yet where they live, and old enough not to bear the brunt of the changes, could arguably qualify as bystanders. Among these onlookers, there might be some overlap with the victim category because of the vast inequalities found in our world. The Ecological Footprint (gha per person) of an average American is 8.59, while it is negligible for a subsistence farmer living in a poor country like Eritrea, where the average Ecological Footprint comes to just 0.5 (the Earth's carrying capacity is currently around 1.7 gha per person).[42] I find that the share of carbon within these figures is even more striking: while

[39] It definitely takes more effort (and sometimes more money) to buy fairly produced clothing, shoes and food, but the options are at least out there, at least for those of us who do not have to scrape together a living and work excessive hours to be able to afford the essentials. Similarly, drastically reducing one's consumption of animals can require quite a lot in terms of adjusting one's lifestyle (including the possibility of upsetting those close to you by breaking social norms and customs around meat consumption). Still, it is hardly impossible to succeed in making oneself an onlooker only in relation to these harms.

[40] Offsetting is not the solution (see section 2.5).

[41] Thank you to Arto Laitinen for pointing this out.

[42] The figures are retrieved from the Global Footprint Network's (footprintnetwork.org) latest available data from 2013. The global hectare (gha) is a common measurement unit for quantifying the Ecological Footprint of people or activities. It can also be used to quantify the biocapacity of the earth and its regions, i.e. the ability of an ecosystem to produce useful biological materials and to absorb carbon dioxide emissions. "Global hectare per person" refers to the

for the average American it comes to 6.06, for the Eritrean the carbon figure is a measly 0.04. In addition to these vast inequalities in the usage of resources, most of the very poor people have no way to contribute their perspectives in the global debate: they lack the education and technology necessary to do so. They may also lack knowledge about climate change (Godfrey et al. 2010). Even when they do have the knowledge and contribute to the global debate, like when the representatives of the countries that are most vulnerable to climate change effects speak at UN conferences, it is rare for anything to change because of the way global power is structured. The deeply unequal structures make it less likely that the debates required to make the agents properly reflect on what they should do in terms of disobedience, repair, or prevention, will get off the ground.[43]

The agent category is, of course, far less simple than what I suggested at the beginning, i.e. that it contains polluters, mostly from the Global North, but also the affluent in the Global South. Those agents are not deciding to harm anyone; the harm is an unintended consequence of other actions. Furthermore, polluters are polluting in large part because they are in a particular context that was largely defined by previous generations and the structures they have created. Many of the agents responsible for emissions are already dead and they were ignorant about the facts of anthropogenic climate change. The victims of climate change might not be able to point out faults in the quality of our will, as there is no intention to cause climate change, but the object of their response can be the consequences our emitting actions are having and are projected to have. In addition, our character — the uninterested or avoiding attitude most of us manifest at times — can also be objected to. Looking at reasons of consequence, marginal contributions are wrong only if they cause an increase in expected experienced harm; if they do not make a difference to expected harm they are permissible from a consequentialist viewpoint (Spiekermann 2014b, p. 89). Reasons of character can

amount of biologically productive land and water available per person on the planet. As the Ecological Footprint refers to a continuous demand, and biocapacity refers to a continuous supply, both are correctly reported in global hectares. See www.footprintnetwork.org/faq for more details. The total number of global hectares was approximately 12.2 billion in 2012, averaging about 1.7 global hectares per person (WWF 2016, p. 77). Figures above this are unsustainable overconsumption.

[43] Journalist and author Naomi Klein describes the situation in an interview (Mark 2013): "[There is a] willingness to sacrifice large numbers of people in the way we respond to climate change – we are already showing a brutality in the face of climate change that I find really chilling. [--] we are with full knowledge deciding to allow cultures to die, to allow peoples to disappear. We have the ability to stop and we're choosing not to. So I think the profound immorality and violence of that decision is not reflected in the language that we have. You see that we have these climate conventions where the African delegates are using words like "genocide," and the European and North American delegates get very upset and defensive about this. The truth is that the UN definition of genocide is that it is the deliberate act to disappear and displace people. What the delegates representing the North are saying is that we are not doing this because we want you to disappear; we are doing this because we don't care essentially. We don't care if you disappear if we continue business-as-usual. That's a side effect of collateral damage. Well, to the people that are actually facing the disappearance it doesn't make a difference whether there is malice to it because it still could be prevented. And we're choosing not to prevent it. I feel one of the crises that we're facing is a crisis of language. We are not speaking about this with the language of urgency or mortality that the issue deserves."

catch the latter cases. This is why quasi-participation is an appropriate ground for liability, i.e. complicity.

In systemic harms by unorganised collectives, as in the case of anthropogenic climate change, no individual agent's contribution is causally significant, so the outcome is normatively overdetermined. Unlike with Dresden, the collective outcome is also unintended, i.e. it is not deliberate. This is why the Complicity Principle cannot be applied directly. Note that despite the unintended consequences (climate change harms) the emission-increasing actions, such as culling forests in order to herd more cattle, can still be described as intentional actions that contribute to climate change harms. Intentional action has a broad and a narrow meaning (e.g. Bratman 1987). In the narrow meaning, if I believe that a certain action does not lead to my intended outcome, I will not do it. Therefore we could argue that we would have acted otherwise had we known the outcome, i.e. the emissions are not included in the intentional action. The broader meaning of intentional action, on the other hand, includes the actions and outcomes of what we *knowingly* do, including the ones we did not intend as such. We thus act in the same way regardless of knowing the outcome, although we do not intend the outcome in its totality and we might regret some of it. In this view, the polluting is intentional action, even though it does not result from *an intention to* pollute, but rather from the intention to herd more cattle, and so on.

Kutz's suggestion in cases of systemic harms by unorganised collectives is to ground responses of accountability in the systemic context that the actions take place in, as well as in symbolic considerations of character. He describes these two distinct bases as follows (p. 167):

> The first basis is an expanded notion of individual participation, to include participation in a culture or way of life. I suggest that unstructured harms [systemic harms by unorganised collectives] typically arise in contexts in which deeper, systemic, forms of collective action lie. Responses of accountability can be grounded in these systemic forms of collective action. The second basis of individual accountability [is] accountability for character. Symbolic considerations of character can support the claim that one ought to refrain from participating in even overdetermined wrongs, and can offer individuals reason to do their part in cooperative solutions to these wrongs. When coupled, these two bases of individual accountability avoid the problems inherent in purely instrumental conceptions of accountability.

These "contexts in which deeper, systemic, forms of collective action lie" are discussed by Young in section 6.3. While Kutz does not discuss climate change, he does discuss environmental harms more generally and ozone layer depletion more specifically. The main differences between ozone layer depletion and climate change are that to deal with the ozone layer, only a handful of countries needed to work together, the countries responsible for emissions also felt many of the effects first hand, and the solution was relatively straightforward (although it had the unintended consequence

of contributing to climate change).[44] While none of this applies to climate change, both problems share the essential characteristic of environmental harms (Kutz 2000, p. 171): "Environmental damage is typically the result of the knowing but uncoordinated activity of disparate individuals, each of whose actions contributes only imperceptibly to the resulting harm." With both ozone layer depletion and climate change there was a time when the emitters did not know that they were causing damage, although that time has now passed. Note how Kutz's characterisation of environmental harms makes no reference to knowing or not knowing about the consequences: it simply states that the damage results from uncoordinated human activity. Very few of us intend to pollute the environment in any way, it is almost always the unintended effect of our other activities, and sometimes we understand the mechanisms, sometimes we do not. What ozone layer and climate change polluters do share is that they do not intend the result, nor are they engaged in a "well-defined joint project" with the other emitters of which the environmental damage is an unintended consequence. Therefore, the Complicity Principle does not apply (p. 172), but quasi-participatory intentions do.

To recap, I have argued in this chapter that climate change represents a mixed harm and that complicity can account for moral responsibility even in cases of marginal participation. I also suggested that our individual duties have to be based on likelihoods of serious harm: to not to perform actions that in the light of the current science can be reasonably expected to cause harm to basic human functionings and capabilities. Complicity can arise either through the Complicity Principle or through quasi-participatory intentions. The complicity of unorganised collectives such as consumers is not based on some intention to emit or intention to participate in climate change harms, but on the quasi-participatory intention to partake in a consumer lifestyle, a lifestyle that has excessive emissions as an unintended, but foreseeable consequence. Climate change puts us in a position of high likelihood of inhabited evil in relation to future generations, as well as those already vulnerable to climate risks. While in cases like these, our intuition is usually to excuse ourselves due to the lack of intent to harm or arguments about our causal insignificance, quasi-participation appreciates the complexity of the moral realities that individuals often face in collective settings and with collective action. When it comes to the many pressing global ills of today, instead of intentionally promoting evil, more often than not we are inhabiting evil. This becomes clearer when I examine structural injustices in the next chapter.

Before moving on, I want to clear up a potential misunderstanding. When it comes to collective agents, I grant both collective obligations and responsibility of members-*qua*-collectives (as opposed to unorganised collectives where I only grant the responsibility of constituents-*qua*-collectives). The

[44] See fn. 33 in chapter seven.

collective obligation can distribute to the members (see section 3.2), while the responsibility of members-*qua*-collectives is based on the complicity principle. When it comes to collective agents, I do not propose that we should go with just the participatory intentions of the individuals (some members have both types of responsibility, while others might just have complicity, like in cases where they are non-operational). In contrast, with unorganised collectives I argue that we should go just with the quasi-participatory intention of the individuals (with perhaps collective obligations a useful fiction in some cases, although this will always need to be made very clear).

I categorise only complicity as individual responsibility, because discussing the obligations of collective agents under individual responsibility would be confusing due to the very nature of those obligations. Essentially, while collective obligations can distribute to their members, they remain collective in character. My obligation to do my share is in most cases conditional upon what other members do or fail to do, and can be discharged by others on my behalf (and on the behalf of all the other relevant members). The same cannot be said for complicity. My complicity is always mine alone to discharge.

Chapter 6 – Complicity for climate change as a structural injustice

> People who understand that they share responsibility in relation to injustice and justice call on one another to answer before a public. The political process consists in the constitution of a public in which members raise problems and issues and demand of one another actions to address them.
>
> - Iris Marion Young (2011, p. 122)

> Virtuous circularity results when mutual responses of accountability strengthen social cohesion, which in turns [sic] lends motivational efficacy to those responses. This is what underlies the possibility of noncoercive control of collective harms.
>
> - Christopher Kutz (2000, p. 48)

This chapter responds to recent criticisms of Kutz's account, and more importantly, adds two more pieces to the complicity puzzle while doing so. I discuss the potential of individual actions to help bring about an outcome (or to prevent it). I will argue that this will give us an additional reason to take action in cases of marginal participation.[1] I will also suggest that we should combine Iris Marion Young's (2011) account on structural injustices with Kutz's account to get a full picture of climate change responsibility.[2] Young critically engages with Kutz's arguments in her posthumously published book *Responsibility for Justice*, but both are in broad agreement over many issues regarding the importance of systematic issues that affect our responsibility. I find that together they offer clear signposts towards an account of interdependent responsibility for climate harms.

Conceptualising climate change primarily as a structural injustice allows us to appreciate the complexity of the associated responsibility. After all, even though climate change harm is not attributable to individual fault or to certain unjust policies, it is not a matter of happenstance who the victims are and who are the ones responsible, as I have argued in the earlier chapters. I believe that if we include backward-looking assessment of historical injustices and how they have led to certain groups' increased vulnerability to climate change harms, we are more likely to get to the root of the problem, rather than just treating the symptoms.

There are five lines of criticism related to the complicity account that I respond to in this chapter. The first criticism is that Kutz's model is too individualistic (Cripps 2011b, 2013). The second is that it is too demanding for requiring mutual openness from participants (Seibokaite 2015).

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[1] For us to be able to assess the potential of our actions, we need to have a certain amount of knowledge about the situation, but this will be a topic for the next chapter.

[2] Framing climate change as a structural injustice is in contrast to many dominant discourses in climate policy, for example, how in mainstream economics environmental harms are perceived as negative externalities (Eckersley 2016, p. 346).

The third is that the concept of participatory intention faces "the Superfluity Problem" (Nefsky 2015). The fourth is that we cannot explain why we should take one specific action rather than another (Nefsky 2015). The fifth and final line of criticism that I discuss is that the liability model of responsibility cannot cover structural injustices and thus it remains unsatisfactory (Young 2011). I will discuss each criticism in turn, covering the first three in section 6.1 and the fourth one in section 6.2, with the fifth line of criticism reserved for section 6.3. I will argue that the first three criticisms do not hold, but that Kutz's complicity account should be supplemented from insights from the last two.

6.1 Criticism against Kutz's account

In this section I look at three different criticisms that have recently been levelled against Kutz's account and argue that none of them hold.[3] The first criticism is that Kutz's model is too individualistic (Cripps 2011b, 2013). The second is that it is too demanding for requiring mutual openness from participants (Seibokaite 2015). The third is that the concept of participatory intention faces "the Superfluity Problem" (Nefsky 2015).

The first criticism was that Kutz's model is too individualistic. Cripps argues that by concentrating on participatory intentions, Kutz could be charged with "making demands of individuals, *qua* individuals, on basis of harms which they, as individuals, did not bring about", while in her model individuals are responsible *qua* putative group members (Cripps 2011b, p. 178). However, Kutz's participatory intentions do not make demands on people *qua* individuals, but either *qua* members of collective agents or *qua* constituents of unorganised collectives (when it comes to quasi-participatory intentions), to employ my terms. Recall that one of his starting points is that while judgements of accountability must have an individual basis (if we hold agents accountable based on what others have done we fail to respond to them as distinct persons), the object of accountability can be collective, as the object of accountability is analytically distinct from the basis of accountability. Rather than the exclusive authors of our actions, in collective actions we are inclusive authors; what we tolerate, desire and value links us to the outcome. Cripps is therefore incorrect in claiming that inclusive authorship (especially when it takes the form of quasi-participatory intentions) equals making demands on individuals *qua* individuals. The ground for holding someone accountable is their participation in the collective action that causes harm. In other words, the collective level is there all the time, just as much (if not more) as it is in Cripps's work.

[3] In addition, criticism by Gardner (2004) was discussed in the previous chapter under footnote 28 and criticism by Lawford-Smith (2017) in section 5.4. Criticism by Tuomela (2007) and Gilbert (2002) is discussed in this chapter under footnotes 6 and 7 respectively.

Kutz's account does not fall with the strongly individualistic positions like that of Downie's discussed in chapter three (within the collective intentionality literature of today these kinds of accounts would be hard to find). In most cases, accounts that can be labelled as individualistic within social ontology can appear relatively holistic to philosophers outside the field. Kutz himself states that his account represents a "very weak form of individualism" and "is compatible with many moderate forms of holism" (p. 71). Therefore, while collective action can be explained in terms of the intentions and beliefs of individuals, he does not deny the holistic observation that for the best explanations of social phenomena it is often useful not to reduce the collective level claim to individuals (p. 70). Explanatory adequacy is contingent upon the interests that motivate the explanation, what it is that we are trying to explain. It is individuals who act, but when their acts only make sense as part of the whole, then it is the collective-level phenomena that we should attempt to explain. Kutz clarifies (p. 71): "My claim is only that individual intentional action always implicitly mediates the causal explanation of collective acts and events, not that referring to individual acts always provides the most useful explanation."

Relatedly, Kutz acknowledges that many collectives "cannot be reduced to sets of their members" because they can persist through changes in membership. The group identity is grounded in individual members' "dispositions to identify themselves (and certain others) as members of that group" (p. 72):

> These dispositions include not just inchoate, romantic feelings of group solidarity, but a willingness to assume obligations taken on by other group members, to speak, decide, and act on others' behalf, and to deliberate about how to act so as to further collective plans and intentions. The identity of Exxon is independent of the extensional composition of its membership, for example, because newly arriving insiders understand themselves to be joining the Exxon organization, and outsiders attribute representative authority to self-proclaimed Exxon members.

Participatory intentions are thus individualistic only in the sense that they provide a direct link from an individual to a collectively caused harm, but the account is deeply relational at the end of the day as it is all about individuals interwoven in webs of participation of one kind or another.

Kutz does suggest an alternative approach that would be fully holistic, and thus avoids the difficulty of providing the direct link between individuals and collective harms (i.e. it does not require participatory intentions). This alternative tactic he describes is to "ignore the relations between individual agents and victims, and focus instead upon the unmediated accountability of the collective" (2000, pp. 191-192). This is, I find, essentially what Cripps's account is doing. With a holistic response we would direct our responses of accountability "at collectives as collectives, rather than at individuals as members of collectives" (p. 192). He notes that the victim's point of view takes

a systemic view of the source of the harm, and therefore "victims can claim a holistic response from the people whose way of life harms them" (p. 202). Cripps (2011b, p. 178) complains that although Kutz "touches on the possibility of primarily holistic accountability, his discussion of such accountability focuses on structured collectives and he does not spell out how this would transfer to the unstructured case." It is true that Kutz dedicates most of the pages in that section to structured (agential) collectives, but contrary to Cripps's criticism, he does give a clear example of accountability in the unstructured cases (i.e. systemic harms by unorganised collectives in my vocabulary). The example that Kutz (2000, p. 202) gives is related to ozone depletion and chlorofluorocarbon (CFC) emissions:

> As a CFC car driver, I have no direct or exclusive duty to mend my ways, for my ways do not make a difference to anyone. We CFC drivers, however, together have a duty to mend our ways, for we do harm. Our collective accountability admits of only one response, namely our individually coordinated effort at CFC reduction. And so I have an inclusive duty to comply with the coordination scheme, in virtue of my membership in this group.

This kind of an emergent, holistic obligation is in essence what Cripps suggests. Kutz does not reject this way of approaching collective harms, but he does caution that it might strike some as troubling for either metaphysical or other reasons (p. 202). Motivationally it is also not as strong as it could be because "any theory of collective accountability must be intimately related to a theory of individual accountability" and because to make any theory of accountability operational, it must be accomplished "through the motivations and normative commitments of individual actors." (p. 192). He therefore offers an alternative conception of such holistic obligations, one that he hopes is more palatable to those who are sceptical (p. 202):

> From the perspective of the agent, one may see holistic obligations as inputs to practical and ethical reasoning. They pose deliberative problems for participants, forcing them to think through the significance of their relationship to the collective structure, and to act on the basis of that understanding. Each participant individually, and all participants together, must deliberate about what they owe in virtue of what they have done. From the point of view of victims, the obligations are the source of claims against individuals, but claims whose basis likewise reflects the structure of participation. Responses of accountability, are owed ultimately by and to individuals, but the content of those claims is irreducibly collective. Complicity is a property of agents, linking them to one another and to their victims.

This sounds like what Isaacs was after in chapter four (i.e. collective obligations helping to clarify and map out moral requirements for individuals), without going as far as actually talking about obligations of putative agents. As inputs — as kinds of ethical idealisations or approximations — it can be useful to discuss collective obligations, but this can also get confusing, as I argued in chapter four. While Cripps's model offers details of what such a holistic obligation might contain and entail

with regards to climate change, I would not be comfortable basing claims for action on it alone (i.e. without participatory intentions). First of all, her account faces the problem of mutual release of individual duties on the basis of others' likely inaction (Lawford-Smith 2012, Schwenkenbecher 2013, Cullity 2015), and this problem becomes even more pronounced in cases of unorganised collectives where individual emitters have good reasons for thinking that there will *not* be enough others to make the collective action possible. This is the reason why Simo Kyllönen (2016) criticises Cripps's model as implausible: individual emitters do not have real potential to bring about a new collective capable of taking action. Second of all, I find that Kutz's model offers a far richer and more plausible account of how these holistic idealisations actually can translate into individual motivation for action than that which Cripps's model can offer. I will return to this later on in the chapter.

The second criticism is the worry that Kutz's account cannot be applied to unorganised collectives and the harms that they can bring about, because it requires mutual openness from participants. The common knowledge condition, i.e. to what extent should each member or a participant be aware of the intentions of other members or participants, has been one of the central debates in the literature on collective action. It is also at the core of Cripps's (2011a, 2013) criticism of the existing literature on collectives (criticism that is partly misguided, see Hormio 2015). However, it does not really apply to Kutz, as in contrast to authors such as Gilbert, he (2000, p. 90) offers a *minimalist conception* of joint action: "So long as the members of a group overlap in the conception of the collective end to which they intentionally contribute, they act collectively, or jointly intentionally."[4] He elaborates (pp. 90-91):

> The superior descriptive coverage of the minimalist conception is only part of my reason for favoring it. My principal reason is normative. Ethically complex cases of joint action rarely involve perfect common knowledge, wholly shared conceptions of the joint act, or highly responsive strategic interaction. Indeed, the genius of organized criminality lies precisely in obscuring the interrelations of participants by removing the need for frequent interaction. And the enterprises responsible for significant unintended harms are likewise typically distinguished by the dispersion of task responsibility. [---] If joint action is to have special normative significance in such cases [-] as a basis for holding individuals accountable for the acts of others [--], then an account of joint action must not rely upon high degrees of interaction or mutual knowledge.[5]

Writing about the problems that unorganised collectives can bring about, Seibokaite (2015, p. 125) argues that while Bratman, Gilbert, and Tuomela all require common knowledge, Kutz's account

[4] Or expressed more formally: "A set of individuals jointly G when the members of that set intentionally contribute to G's occurrence by doing their particular parts, and their conceptions of G sufficiently and actually overlap" (Kutz 2000, p. 103).

[5] A similar line of reasoning is offered by May (1987).

replaces this with "a condition of mutual openness, which means that individuals have such attitudes which allow them to reflect others' intentions to cooperate and accept them positively". Thus it cannot account for harms caused by unorganised collectives any more than the accounts that require common knowledge, as the constituents of such collectives have at most only individual knowledge of the aggregated consequences (p. 124). But rejecting Kutz's account along with common knowledge accounts does not hold water. Kutz (2000, p. 96) positions his minimalist conception of joint action directly against group-intention accounts that require common knowledge, as they do not necessarily take into account that collective action often also incorporates contributions from participants who have no intentions regarding what the group as a whole should do.[6] His (p. 90) worry is that because group-intention accounts "attempt to generalize from [-] highly interdependent activities", such as dancing the tango or travelling together, by doing so they "may arrive at an account of collective action that makes very strong demands upon agents' dispositions and expectations of one another."[7] The point is that in order to discuss collective action in all of its

[6] With participatory intentions, individuals do not need to *intend* to achieve a collective end, as it is sufficient that they regard themselves as *contributing to* a collective end (Kutz 2000, p. 96). Tuomela (2007, pp. 271-272, note 29) argues that the concept of participatory intention is not strong enough to explain joint action in cases of many-person joint action where there is no collective agent. In these cases, there must be collective commitment for a joint intentionality, otherwise the account may be "functionally deficient" (p. 272). More precisely, Tuomela argues that the two counterfactual conditions that Kutz discusses are rationality conditions and not conceptual conditions for joint action:

(1) If I did not believe that P was a way of contributing to G in such circumstances, I wouldn't do P but would do P´.

(2) If I did not believe that P was a way of contributing to G's occurrence in such circumstances and I did not believe G could be realized in these circumstances, I wouldn't do P (but would do P´ or might call the whole thing off).

Tuomela (p. 272) argues that in cases of irrational agents (1) might not be satisfied, while counterfactual (2) is too strong as a "rational agent might just hope that P together with the other participants' contributions might lead to G but not really believe it." I do not find this criticism very damning as there is nothing in Kutz's formulation to rule such a reading out: you do not have to believe that G will in fact be achieved. The only thing you *must* believe is that it is within the realm of (real) possibility that P is a way of contributing to G in such circumstances (and possible also the best way). Kutz (2000, p. 101) discusses these counterfactual conditions to illustrate the difference between performing an act *as a means to an end* (intentionally performing an act as a means to a joint end) as opposed to *in order to realize an end* (where group-intention to realise the joint act must also be present) and how these map out to joint action, i.e. they are about the difference between intentional and intended action. Kutz (p. 100) argues that "individuals can intentionally contribute to a collective end even though they do not intend the realization of that end." His example is that of a famous neurologist who lives in a country ruled by a ruthless dictator who has just had a stroke. The neurologist is called in by the dictator's aides to give the appropriate medications. However, unknown to the aides, the neurologist has secret dissident political sympathies. Still, he follows his ethical commitments as a doctor and administers appropriate medical care, while secretly hoping that the drug will not work. He thus does not administer the drug to save the dictator's life, although he does it as a means to an end (namely, the collective endeavour/end to save the dictator). This represents a case of minimal joint action. For full-blown joint action both (1) and (2) must be true, but for minimal joint action the second can be false.

[7] Gilbert (2002, p. 171) has argued in return that Kutz's participatory intentions cannot account for cases of joint action that involve "inherent mutual accountability", like playing chess together, because if one player decides to break the rules, the other is not in "a position to respond in a *demanding* or *rebuking* or *personally offended* way". Gilbert's criticism is therefore that Kutz's account cannot explain the participants' standing to make demands of one another. I think it can, but this is not linked to the account of joint action as such, but rather to the reactive attitudes and positional and relational accountability discussed earlier. If I make a promise to you to play chess or go for a walk, and then break this promise by either dismissing the rules of chess or by staying on my sofa with a cup of tea, we are not engaged in joint action. I have made a false promise in both cases, however, and you would be right to blame me either via reasons of conduct, or character, or consequence.

manifestations we cannot rely only on examples of small-scale and decidedly interdependent, egalitarian cooperation.[8] That is why mutual openness is not a separate necessary condition for joint action, it is only meant to explicate the notion of a participatory intention (p. 93). We can conceive of simple but genuinely joint forms of collective action that require "neither positive belief about others' intentions nor dispositions of responsiveness" (p. 93). An example of the latter, as offered by Kutz (p. 93), is two people agreeing to do their part in watering their friend's plants while she is away: the joint action is fully planned beforehand (one waters the plants on Mondays, while the other does so on Fridays) and the two people do not communicate at all during the execution of the plan, yet it seems plausible to say that they cooperated in tending to their friend's plants (p. 93). An example of the former would be trying to save a picnic when it suddenly begins to rain. Kutz (p. 92) describes the situation:

> I jump up, grab the sandwiches, and head for the car. I intend to do my part of our saving the picnic, hoping you will simultaneously grab the drinks and the blanket. If you do, then it is reasonable to say we will have jointly saved the picnic. [---] if we do both act with participatory intentions, then we will have jointly intentionally saved the picnic though neither had formed an intention to save the picnic in the light of expectations about the other's intentions.

Mutual openness is thus not akin to reflecting on the intentions of others, so Seibokaite's characterisation of it is misleading. "Mutual openness is a much weaker condition that common knowledge of our situation: it can accommodate those cases of joint action that come off despite inchoate expectations about the other's plans or awareness." (Kutz 2000, p. 77). Both the plant-sitting and the picnic examples satisfy the condition of mutual openness that is implicit in participatory intentions even though either positive belief about others' intentions or dispositions of responsiveness are missing in them.[9] What is important is that if our intentions in these cases become common knowledge among us, we will regard our individual intentions as furthered, or at least not hindered, by the fact that they have now become mutually manifest (p. 93).[10] Mutual

[8] Kutz (2000, p. 97) does grant, though, that group-intentions are useful in explaining "the practical reasoning and planning of some members of jointly acting groups", and that "when agents act so as to realize the collective outcome, to the extent of aiding others in their contributions, we should attribute to them the group-intention to achieve that collective end."

[9] Another example that Kutz discusses is the Storming of the Bastille (2000, p. 92).

[10] Kutz (2000, p. 274, note 22) specifies that mutual openness comprises of "dispositions favourable to mutual manifestness". With this he refers to Sperber and Wilson (1995), who argue for relevance as the key to human communication and cognition: we pay attention only to information which seems to us relevant. They developed the idea of mutual manifestness to help to account for the role that the shared cognitive background of speakers has to play in assigning determinate content to their potentially ambiguous utterances. "A fact is mutually manifest to a set of individuals if each individual is capable of representing that fact and accepting it as probably true, and this fact is further manifest to each individual" (Kutz 2000, p. 274).

openness is thus not about each member (or a constituent) of the collective knowing that *p*, and that each knows that each knows that *p*, and so on, but about being open to the possibility of joint action.

Kutz (p. 77) writes that "it seems that for our going to Chicago together to be joint, we each must believe it at least possible the other knows of or will try to predict our choice, and be favorably disposed to the other's knowledge or anticipation of that choice at least in the sense that no one would modify his or her plans in virtue of disclosure."[11] Granted, this description is not fine-grained to the level of being some kind of an absolute criterion, that is to say, it requires interpretation when employed by philosophers. But that, in my view, adds to the strength of Kutz's theory rather than weakens it. Collective phenomena are complicated and come in many forms, so to try to formulate away the need for contextual interpretation is futile and even counterproductive. More importantly, making no discernible distinction between Kutz's account and those with common knowledge conditions becomes even weaker a criticism if the focus is on the quasi-participatory intentions that Kutz argues are at play in unorganised collectives. In systemic harms by unorganised collectives only quasi-participatory intentions apply, and these require no mutual reflection: sometimes they are only unreflective confluences of habit and sentiment. Reflection only comes in if we try to make these people aware of the systemic way in which their actions uphold these structures, thus giving rise to accountability.

The third criticism is that Kutz's account faces what Nefsky (2015) labels "the Superfluity Problem": we need a reason for taking action (or refrain from taking action) that connects appropriately to the collectively produced harms in cases of marginal participation, but if your act makes no difference, then why should it count as part of the group of acts that harms? In other words, if your act makes no difference (and cannot make a difference), then why should we count is as *participation* to begin with? Instead, your individual action seems to play only a superfluous role in bringing about the harm.

Nefsky herself notes that this line of argument could be objected to because the conception of doing one's part seems instrumental, and that we should instead invoke a broader conception, where the relation between an individual act and the collective end is expressive or normative. This seems right: after all, Kutz discusses how our participatory and quasi-participatory intentions express what we tolerate, for example, so they can also express my support or solidarity for the collective outcome or for my fellow participants. Furthermore, I think that for the participatory intention to be functionally implicit in one's actual or counterfactual behaviour, as Kutz (2000, p. 82) argues, my

[11] The mutual dependence condition is meant to exclude cases of adverse strategic interaction, like Kutz's (2000, p. 77) example of Spy and Counterspy who are keeping tabs on the other's movements, but trying to stay hidden at the same time. If these spies end up sitting on the same plane due to this, it would be odd to say that they have gone to Chicago jointly, as for that they should at least be open to the possibility of joint action, which they clearly cannot be.

conception of what I do needs only sufficiently overlap with the conceptions of others, as I have argued earlier.

However, this leads to a further worry: on this broader conception of doing one's part we can no longer explain why we should take one specific action rather than another (Nefsky 2015). This objection, I find, is more pertinent to Kutz's account and I will turn to it next.

6.2 The potential of an individual act

The concern raised at the end of the last section was, that the broad conception of doing one's part, Kutz's account can no longer explain why we should take one specific form of action rather than another (Nefsky 2015). If my action is meant to be mostly symbolic (and express support and solidarity) and is not expected to make an actual difference to the outcome, then why not do something symbolic only, like wear a t-shirt with a slogan about how emissions should be curbed? The problem, of course, is that if everyone thought like this in marginal participation cases, nothing significant would ever get done about the problem.

I noted in chapter two how Nefsky (2016) has also recently argued that even if my act makes no difference with respect to some outcome, it can still play a significant and non-trivial role in bringing that outcome about. She rejects the assumption that helping to bring about an outcome requires making a difference. Her argument, which might strike one initially as being counterintuitive, is inspired by another one of Parfit's (1986) cases of mistakes in moral mathematics, *The Drops of Water*.

> A large number of wounded men lie out in the desert, suffering from intense thirst. We are an equally large number of altruists, each of whom has a pint of water. We could pour these pints into a water-cart. This would be driven into the desert, and our water would be shared equally between all these many wounded men. By adding his pint, each of us would enable each wounded man to drink slightly more water—perhaps only an extra drop. Even to a very thirsty man, each of these extra drops would be a very small benefit. The effect on each man might even be imperceptible. (Parfit 1986, p. 76).

Nefsky (2016) asks us to imagine that there are ten thousand such men and an equal number of potential helpers. If each individual contribution only enables each man to drink one drop, i.e. an extra ten thousandth of a pint of water with imperceptible effect to their suffering, it is unclear why anyone should add their pints, as it will not make a difference. She suggests that there are many real-world cases that share this structure, citing climate change as one example. Nefsky labels such cases *collective impact cases* and she asks what reason there could be to act in the relevant way if the individual act makes no difference with respect to the morally significant outcome. According to her, to be

able to answer the no-difference challenge successfully we need to be able to show that an individual's act in collective impact cases is not instrumentally superfluous. She contrasts her account with participation views such as Kutz's where the challenge is to show that even if one's act cannot do anything significant toward changing an outcome (in relation to its normative properties), one still has other reason(s) to refrain from the act (or to do it) based on the act's participatory character.[12] Therefore, Nefsky (2015) argues that Kutz's account cannot explain why we should add our pint to the cart, rather than just wear a t-shirt showing that we support the cause. Nefsky's claim, on the other hand, is that one's individual act can play a *significant* role towards bringing about an outcome, even if it cannot by itself make a *difference* with respect to the outcome, i.e. she challenges the claim of causal insignificance (superfluousness) in these cases. Namely, it could *help to bring about* a good outcome or prevent a bad outcome, even if it cannot make a difference.[13]

Note that we are now discussing marginal participation cases where the outcome is still undecided, so in effect what is under the microscope is *forward-looking* responsibility. A claim that an act, which in retrospect made no difference to some outcome, still played a significant role in bringing it about would be a different claim altogether and one that would seem metaphysically puzzling. So, in essence Nefsky's argument evolves around the epistemic aspects of responsibility. The potential of an individual act to help bring about or prevent an outcome is the central and most important reason for taking action (or refraining from acting) in collective impact cases. So when no such potential exists, in Nefsky's account, no reason exists (this is in contrast to Kutz's account where reasons of character could still apply).

What is meant by superfluous should be clarified first. If at the time of your action the outcome is already guaranteed, then your act would be superfluous to it, even if it was causally involved in it. As an example Nefsky (2016) offers driving to the desert with your own supply of ten thousand pints of water when ten thousand people have already donated a pint each and the water-cart is at maximum capacity. When the cart is about to be driven into the desert, you come along with your own cart, take a power hose, lower it into the other water-cart, and turn it on full blast. The water that was already in the cart overflows onto the ground and is replaced by the new water. The cart is driven out into the desert, the water gets distributed, and the men's suffering is alleviated. Your act was causally involved in the alleviation of the suffering, but it was completely superfluous (not to mention wasteful). This example is meant to illustrate a distinction between actually *helping* and merely *being part of the cause*: wielding one's power hose was merely part of the cause but it did not

[12] She argues that in participation views the presence of others who will (or might) act in the relevant way is built into the reason itself, i.e. the reason for taking action (or refraining from it) is that by doing so one would be a participant in a collective that could make a difference.

[13] Nefsky uses 'helping' to refer to making a non-superfluous causal contribution, not in the sense of participation.

help. In contrast, each donated pint of water was actually helping while being part of the cause (at least until the power hose came along). Importantly, we must take it for granted that individual acts of the relevant type can be causally involved (even if they make no difference) in order to set up the problem of collective impact. Therefore the challenge Nefsky sets for herself is not to come up with an account of causal involvement that can handle these cases (i.e. to show that an act can be part of the cause of an outcome even when it makes no counterfactual difference to it), but to explain how one's act could be a helpful (i.e. non-superfluous) causal component even if it makes no difference to the outcome.

For an act to help to bring about an outcome, in contrast to merely being part of the cause, at the time of the act the outcome cannot already be guaranteed, i.e. it must still be an open possibility that the outcome will fail to come about.[14] Otherwise your act would be purely superfluous with respect to the outcome. Acting when there is no guarantee about an outcome could make a causal contribution towards bringing about the outcome. In other words, when it is still uncertain whether an outcome will obtain, there is a real possibility, however small, that what could stand in the way of it obtaining is exactly not enough such individual contributions as your own (think of a close vote in a national election, for example).[15] Possibility has a wider extension than likelihood: unlikely things can still be within the realm of possibility. Possibility is thus a weaker condition. To claim that something is likely is therefore stronger as a claim than to say that it is possible. Nefsky distinguishes between threshold cases and non-threshold cases of harm. In threshold cases, for each outcome there is some precise number of acts needed to bring it about. If a threshold is hit exactly, then each act can make a difference (like in a close vote), but this is very rare. In non-threshold cases of harm there is no precise number of acts of the relevant kind needed for the outcome, so no sharp boundary between enough of acts of a certain type and not enough can be drawn (The Drops of Water is an example of this latter kind). Therefore, in non-threshold cases one individual act will never make a difference by itself, without its set (as there is no precise number of acts of the relevant kind needed for the outcome).

Let's say that you add your pint of water to the cart in The Drops of Water well before the cart is close to its capacity. At the time of your act it is therefore still possible that the men's suffering will not be relieved. Furthermore, it is possible that it will not be relieved due to not enough people adding their individual pints of water to the cart. Now, while it is still true that your pint cannot by

[14] I would like to add that counterfactual robustness may also matter in some cases; in an army of 10,000 soldiers against an army of only 300, even those soldiers who do not engage in the battle, but who would have engaged if the first ones would have died, may be significant in adding robustness. I owe the example to Arto Laitinen.

[15] In this respect Nefsky's view is like the expected utility approach by Kagan (2011) where zero chance of making a difference would mean no reason to withhold the act or to do it. However, while in Kagan's account the collective impact cases have to include a threshold for the individual action to count, Nefsky's account applies across threshold and non-threshold cases of harms. For criticism of Kagan, see Nefsky (2011).

itself make a big enough difference to alleviate their suffering (i.e. it is still uncertain whether the good outcome will come about or not), your individual act of adding water is non-superfluous as it is potentially helpful. Nefsky (2016) thus proposes:

> Suppose your act of *X*-ing could be part of what causes outcome *Y*.
> In this case, your act of *X*-ing is non-superfluous and so could help to bring about *Y if and only if*, at the time at which you *X*,
> (*) It is possible that *Y* will fail to come about due, at least in part, to a lack of *X*-ing.[16]

When these conditions hold and when the outcome in question is normatively significant (good or bad), then one has as a reason to act in the relevant way, as it could make a causal contribution towards bringing about the outcome when it is uncertain whether that outcome will obtain. Furthermore, in this view there is no need to settle the question of whether we are dealing with a threshold case of harm or for you to be able to know that your individual action is not just a superfluous thing to do, but rather that you have a good reason to do it (so there is no need to know if a precise number of drops of water, or certain tons of emissions, are needed for a given level of suffering relief or climate harm threshold). All the reason we should require to pour our individual pints in is that there is a real risk that the need will not be met otherwise.[17]

Note that this proposal does not rest on the potential of your actions influencing others. For example, Anne Schwenkenbecher (2014) has argued that our individual actions could influence others to make a contribution towards climate change mitigation, and therefore we cannot say in advance that our individual acts are insignificant; instead, they may set a positive example to others, raise public awareness of the issue, and even trigger collective action. Whether or not our individual acts can be significant in this way is a separate issue from what is discussed in this section. What is at stake here, in Nefsky's account, is only that when an outcome is not certain, we should not decide in advance that our individual action is insignificant just because it will make no difference to the outcome; it might be, at least in part, up to us what ultimately happens. It is thus closer to what Spiekermann (2014b, p. 89) has argued, namely that individuals contributing to a harm do wrong not simply because they are part of a harming group, but because "they ignore the risk that their action, even though it cannot be perceived while holding all other actions fixed, may well be perceived with others if we do not hold everything else fixed."[18] The individual's action therefore

[16] Nefsky (2016) notes that three conditions are contained in this account: (1) it is possible that *Y* will occur, (2) it is possible that *Y* will fail to occur, and (3) it is possible that *Y* will fail to occur at least partly as a result of there not having been enough acts of *X*-ing. I would like to add that in some cases (like the army example in footnote 14) the *Y* will need to be defined or set up in a contrastive manner, for example "the victory of our army" or "the victory of our army with *N* casualties at most".

[17] In the next chapter I will explore some of the ways in which *we might not know* that we have a reason to do something, although we do have a reason.

[18] The "perceived" here refers to the impact of the action being perceivable in a set of such actions.

increases the chance that a harm comes about, and in order to avoid this, individuals must take a forward-looking view and think about the effect their contributions might have in the end result.

I suggest that in cases of marginal participation, Kutz's account of complicity should be supplemented with Nefsky's proposal. *Thus all the reason we need to do what we can to mitigate climate change is that there is a real risk that the need will not be met otherwise.* But how are we to evaluate the strength of the reason that we get from this? Nefsky (2016) suggests that there are some obvious points to consider, like that the more serious the outcome in question, the stronger the reason (i.e. severe suffering gives us stronger reasons than moderate suffering), or that it is plausible that the larger the potential causal role of your act, again the stronger the reason. But how to weigh these considerations against all our other duties and commitments? The different considerations that could go into answering that would be a topic in its own right and it is a question that I will not attempt to answer in this thesis. My aim has been to show that despite the complexity of the situation, individuals can have climate change responsibility, and that there are three potential sources for this responsibility: direct responsibility, shared responsibility *qua* members of collective agents, and shared responsibility *qua* constituents of unorganised collectives.

Furthermore, I do not believe that it is a question that a philosopher could even answer fully: each of us should look at our position and relations, lifestyles and roles, and make those assessments for ourselves.[19] Public debate is of course needed at the general level to question some of our prevalent norms and to renegotiate these, but at the end of the day, in most cases there is no one better placed than you yourself to answer how to run your life all things considered (although, perhaps, with the help of other people close to you). Public debate done well can be great at bringing

[19] Reasoning towards a truth of a proposition is the standard reasoning in philosophy, but according to Anscombe (1963, §33), this view misses what is characteristic about practical reasoning. Aristotle's practical syllogism is often seen as the classic example of a principle for action. You have a general premise in the style of "Europeans should reduce their carbon-footprint by taking less flights", and another premise "I am a European", leading to a conclusion "I should take less flights". Anscombe argues that the true nature of Aristotle's practical syllogism is not this kind of "ordinary reasoning" that my example represents, leading to a conclusion in the form of "I should do such-and-such", as "[t]here is a difference of form between reasoning leading to action and reasoning for the truth of a conclusion". In other words, the reasoning does not *necessitate* a conclusion: it is not inconsistent if I accept the premises but fail to act on the order that is given as the conclusion, even if there are no impediments (nothing prevents or intervenes). Anscombe can see a dress in a shop window, decide upon how it looks (its colour, cut etc.), that it would suit her, but not be inconsistent when she does not buy the dress, despite having enough money with her. It would be insane to universalise a premise that every time you see a dress that would suit you, you should buy it (as long as you have enough cash etc.). The same would apply to a premise such as "Do everything conducive to not having a car crash", as "there are usually a hundred different and incompatible things conducive to not having a car crash" (Anscombe gives an example in her typical dry sense of humour: drive your car immediately into the private gateway on your left/right and abandon your car there). She concludes:

> Thus though general considerations, like 'Vitamin C is good for people' (which of course is a matter of medical fact) may easily occur to someone who is considering what he is going to eat, considerations of the form 'Doing such-and-such quite specific things in such-and-such circumstances is always suitable' are never, if taken strictly, possible at all for a sane person, outside special arts.

What Anscombe is saying is that we should be careful about what inferences we can draw from our premises when it comes to a course of action. In general, she cautions that "should" comes rarely with an "ought" attached: it "is a rather light word with unlimited contexts of application" (§35).

up new considerations and reasons for taking some course of action. We need each other for fresh viewpoints and previously unheard arguments, new evidence and illuminating data. In short, we need others to challenge our thinking if we want to change our habits and reassess our norms and set new parameters. But what actions you personally should take to do your part in mitigating climate change is something for you to decide (within the parameters set by the public debate).

Saying that, if we think of our role within a collective agent, it will be relatively more straightforward to assess the risk that mitigation action will not be met without your individual act. At the workplace, for example, it will be much clearer that certain people especially run the risk of forfeiting meaningful mitigation action on the part of that particular collective agent if they do not contribute to the effort. An example could be a middle-manager at a retail store chain where internal debate has just begun on the need to switch to a greener energy supplier. Her actions, although potentially superfluous, could also be a deciding factor in what the collective agent decides to do. Assessing the risk that mitigation outcome will not be achieved without her actions is even clearer in her role as a coach in her kids' sports club, where the debate is about the necessary number of training trips abroad. In any case, her role and the power structures within that collective agent affect these odds. So in many (most) cases our actions as members of collective agents are less likely to be superfluous than our actions as constituents of unorganised collectives. Correspondingly, the strength of the reason that we get from this should be stronger than the reason we get as constituents of unorganised collectives.

To recap, I have suggested that in cases of marginal participation, especially regarding harms by unorganised collectives where only quasi-participatory intentions apply, Nefsky's account can provide us with yet more reasons to take action.[20] Note, however, that to be able to assess the potential of your act to help bring about or prevent an outcome, you need to have a certain amount of knowledge about the situation. I will argue in the next and final chapter that with climate change harms there are several obstacles for us assessing the situation in an objective manner. These are to do with the powerful interests that are at stake (resulting in agnotology), the complexity of the situation and of climate science, and also our psychological defence mechanisms. But before that, I will round off this chapter by looking at Young's criticism and I will suggest that the complicity account and the structural injustices account should be combined.

[20] Nefsky (2016) herself acknowledges that her view is consistent with holding that there are additional reasons for action flowing from the participatory character of your act, i.e. that your membership or constituency in a collective can be normatively significant (although she does not endorse such a view). She has also argued that accounts based on participation like Kutz's cannot actually work unless we can say that individual acts of some relevant type can do something causally significant in these cases, but that her account solves this problem for participation views by providing that causal significance.

6.3 Climate change as a structural injustice

The fifth, and perhaps the most interesting, line of criticism is that the liability model of responsibility cannot cover structural injustices. The reason this is important for my thesis is that I argue that climate change is for a large part a structural injustice. Structural injustices do not come about through individual interaction and they are not attributable to specific actions or policies (Young 2011, p. 45). Therefore the harm caused by them, the injustice, is not attributable to individual fault or some specifically unjust policies (p. 47). Rather, these injustices are consequences of social-structural processes that "put large groups of persons under systematic threat of domination or deprivation of the means to develop and exercise their capacities" (p. 52). Young explains (p. 52):

> Structural injustice is a kind of moral wrong distinct from the wrongful action of an individual agent or the repressive policies of a state. Structural injustice occurs as a consequence of many individuals and institutions acting to pursue their particular goals and interests, for the most part within the limits of accepted rules and norms.

The beginning of this section is spent on describing Young's social connection model and her criticism of Kutz. I will argue that the criticism does not hold and that combining the two models of responsibility allows us to get the best out of both.

Young (2011, p. 101) contends that while Kutz's account offers "the best effort I know of" to try to extend "the liability model of responsibility" to cover structural injustices, it remains unsatisfactory. In the liability model, the concept of responsibility evolves around the question if an agent is an appropriate target for blame for a harmful outcome. Assigning blame can only be done when the voluntary actions of agents are causally connected to the circumstances and the agents are not excused through ignorance. She (p. 96) argues that the problem with structural injustices is that a person's deeds cannot be connected linearly to a harm, and while we can identify the agents who contribute to structural processes, we cannot "identify how the actions of one particular individual, or even one particular collective agent, such as a firm, has directly produced harm to other specific individuals." She proposes an alternative model of responsibility, the social connection model of responsibility, which is primarily forward-looking, according to which someone who is responsible "has an obligation to join with others who share that responsibility in order to transform the structural processes to make their outcomes less unjust." Her argument is that while the liability model works for many cases of responsibility, the social connection model should be used in cases of structural injustices.

The primary structural injustice with climate change is that the worst impacts will be felt by many of the poorest communities, despite them contributing to the problem the least, as Robyn Eckersley (2016) argues. The marginal social structural position of these communities in the economy and in the state system exposes them to most of the risks that are generated by the social structures, with only few of the benefits. She concludes that the added injustice is that this "also places them in a particularly weak position to orchestrate their transformation in ways that will reduce their vulnerability" (p. 347). I would like to add future generations into this picture: their position is particularly vulnerable in relation to us. As Lisa Herzog (2016, p. 4)[21] puts it, employing the notion of a structural injustice locates the focus on the "social *positions* that individuals can end up in, emphasizing that these should neither be understood as the result of personal failure nor as caused by unhappy circumstances for which no one is responsible."

Unlike with the liability model, the primary purpose of assigning responsibility in the social connection model is not associated with punishment, sanctions, or getting compensation or redress, as the model is not backward-looking (Young 2011, p. 98). Instead of concentrating on finding something faulty in the motives and intentions of the agents, Young (p. 99) argues that the key to understanding structural injustices is to see that they "result primarily from a complex combination of actions and policies by individual, corporate, and government agents—actions and policies that most people consider normal and acceptable, or even necessary and good." The example she discusses is lack of decent affordable housing (pp. 99-100):

> Vast numbers of actors contribute to the processes that produce this outcome, many of them with little awareness of how their actions contribute. Landlords jump at a lucrative offer to sell the buildings they have had difficulty maintaining. Cities cultivate the developers who want to renovate them because they want to attract business investment and upgrade their image with bond investors. Young affluent professionals move back to the center of the city to be close to work and entertainment. Lower-income renters compete for units, contributing to patterns of housing demand that rebound on all of them in the form of higher rents. Each agent moves on their own interests within the existing legal and social norms, and their actions together contribute to the outcome that some people are displaced and have difficulty finding decent affordable housing. None ought to be *blamed* for that outcome, I am suggesting, because the specific actions of each cannot be causally disentangled from structural processes to trace a specific aspect of the outcome. Presumably none intended the outcome, moreover, and many regret it. On my view, this means not that they should not be found responsible, but that they ought to be held responsible in a different sense.

This sense is the forward-looking sense of obligation that "refers to agents' carrying out activities in a morally appropriate way and seeing to it that certain outcomes obtain" (p. 104).[22] So the argument

[21] Page number refers to the online first version (section one, end of paragraph one).
[22] Young refers to Henry S. Richardson in appealing to this meaning of responsibility.

is that rather than referring to backward-looking fault or liability, we should appeal to the responsibilities we have in virtue of our social roles and positions. Young writes that her model relies on this second usage of the term 'responsibility', but it shares with the liability usage "a reference to causes of wrongs in the form of structural processes that produce injustice" (p. 105). She offers a model of shared responsibility that is inspired by Larry May's notion, but she extends his model to cases of structural injustices where there are necessarily no guilty perpetrators (p. 111):

> As I understand it, a shared responsibility is a responsibility I *personally* bear, but I do not bear it alone. I bear it in the awareness that others bear it with me; acknowledgement of my responsibility is also acknowledgement of the inchoate collective of which I am a part, which together produces injustice. The ground of my responsibility lies in the fact that I participate in the structural processes that have unjust outcomes. These processes are ongoing and ought to be transformed so that they are less unjust. Thus I share with others the responsibility to transform these processes to reduce and eliminate the injustice they cause. My responsibility is essentially shared with others because the harms are produced by many of us acting together within accepted institutions and practices, and because it is not possible for any of us to identify just what in our own actions results in which aspects of the injustice that particular individuals suffer.

The social connection model evaluates background conditions and does not isolate perpetrators; responsibility is shared and can only be discharged through collective action (p. 105). It thus shares the basic motivation of Cripps's model, without facing the problems of talking about the collective obligations of groups that are non-intentional and passive, or the putative obligations of putative groups as in Isaacs's model.

> The social connection model of responsibility says that individuals bear responsibility for structural injustice because they contribute by their actions to the processes that produce unjust outcomes. Our responsibility derives from belonging together with others in a system of interdependent processes of cooperation and competition through which we seek benefits and aim to realize projects. Within these processes, each of us expects justice toward ourselves, and others can legitimately make claims of justice on us. All who dwell within the structures must take responsibility for remedying injustices they cause, though none is specifically liable for the harm in a legal sense. Responsibility in relation to injustice thus derives [--] from participating in the diverse institutional processes that produce structural injustice. (Young 2011, p. 105).

Note the reference to *participating* in processes as a basis for responsibility and how it sounds very much like Kutz. Let us go back a bit. Young (p. 100) argues that the liability model is inappropriate for discussing structural injustices:

> The primary reason that the liability model does not apply to issues of structural injustice is that structures are produced and reproduced by large numbers of people acting according to normally accepted rules and practices, and it is in the nature of such structural processes that their potentially harmful effects cannot be traced directly to any particular contributors to the process.

Not being able to trace effects directly to participants sounds, of course, very similar to what Kutz is arguing, just as referring to participation as a basis for responsibility brings to mind his complicity model. Young is not convinced, as she argues that the liability model could not be extended or modified to cover structural injustices. While she judges Kutz to offer "an excellent account of complicity in an endeavor where many people participate and coordinate their actions to bring about determinate results" (p. 102), she argues that his extension of his account to systemic harms by unorganised collectives does not work.[23] She (p. 103) agrees with Kutz that "structural processes arise from the actions of individuals" and that this serves "as a basis for connecting individual responsibility to structural harms", but what she objects to is the idea that conceptualising responsibility this way is continuous with the theory of complicity that Kutz offers. The argument she gives is this (p. 103):

> I interpret his theory of complicity as coming under a liability model of responsibility. Those who are complicit with a harm are blameworthy in the same sense as those who have planned and directed it, though perhaps not to the same degree. Their participating in the enactment of the harm by virtue of things that they do is a necessary but, as I understand it, insufficient condition of finding that they are blameworthy. They are culpable because they understand the collective enterprise to which their actions contribute and have internalized that collective end as the end of their individual actions. On Kutz's own account, precisely these conditions are lacking in cases of collective harms produced by socioeconomic structures but without direct coordinated action. In the absence of an *intent* to produce the outcome, surely those who participate should not be found *guilty* in the same way that those who participate in a war crime are.

Essentially, what Young (p. 104) argues is that Kutz fails to distinguish between difference *in kind* of responsibility, rather than *in degree*: "At the point when we consider issues of responsibility in relation to structural injustice, quantitative difference becomes qualitative difference. What we should seek is not a variation on a weaker form of liability, but rather a different conception of responsibility altogether." These different conceptions are forward-looking guilt-free obligation responsibility and backward-looking blame-based responsibility as liability.

In standard desert-based models of accountability, once an action is deemed right or wrong, the agent responsible deserves praise or punishment in proportion to the act. Critical of this approach, Kutz (2000, pp. 18-19) accuses it of conflating the judgement of wrongfulness with the judgement of accountability. Desert-based models are non-positional: the search for a uniquely determined response fails to take the relation of the respondent and the agent into account. In

[23] Young (p. 102) also notes what I discussed earlier (in the beginning of section 5.4) that Kutz's terminology might sound confusing here as *structural* injustices would come under *unstructured* collective harms, due to them not being a result of a coordinated project, but instead aggregated effects of individual actions.

contrast, his concept of accountability is both positional and relational (see section 5.2), as we should separate the fact of wrongdoing from the responses it warrants.

I think that Young's critique of Kutz misses this. As quoted above, she (2011, p. 103) writes that the people "who are complicit with a harm are blameworthy in the same sense as those who have planned and directed it, though perhaps not to the same degree." But this is wrong. Recall from chapter one that complicity does not necessarily imply blameworthiness, as it is akin to liability, not culpability. So when one is complicit, it is a separate question if they are also blameworthy. In general, I find that including blameworthiness in "a liability model of responsibility" is somewhat confusing, as in the standard usage of the terms blameworthiness (culpability) and liability come apart (see section 1.2). While Young uses liability very broadly to refer to the reasoning that leads to finding guilt or fault for a harm, I would like to keep liability and blameworthiness separate.

I already noted in chapter one that I disagree that prospective responsibility can be neatly cut off from retrospective responsibility in practice (although on a purely conceptual level it can). I now want to argue further that it is more powerful *not* to concentrate on just prospective responsibility even in cases of structural injustice, which a lot of climate change harm falls under (thereby I will advocate for an account that combines Kutz and Young). While Young argues that focussing on blame can be distracting and counterproductive, I want to argue that we should not aim to push blame aside, but instead *blame better*. By that I mean that we should cast a wider target for blame to avoid scapegoating, but also while doing so not to overstate the case. It is a tricky line to walk, for sure, but I am in agreement with Martha Nussbaum (2011) in that Young's arguments against blame are not entirely convincing. I will use Nussbaum's criticism to structure my own, as we seem to think along the same lines on this issue. Where we differ, though, is that while Nussbaum (p. xxii) questions the conceptual distinction itself, I do not want to question the separation of prospective and retrospective responsibility at a conceptual level. Instead, as I noted, I want to question a sharp distinction in practice and will argue that when the concepts are applied, the senses can blur into one another.[24] For us to be able to blame better, we need to separate the senses on a conceptual level and then show how both senses are relevant when applied to real-life cases (I will give an example of this at the end of this section, one that is linked to indigenous communities).

To begin with, Nussbaum (2011, p. xxi) notes that if an agent has responsibility for some social ill (in the forward-looking sense of an obligation), and she fails to take it up, then she is blameworthy after the relevant time passes for not shouldering her responsibility.[25] Time indeed marches on and

[24] Thank you to Pekka Mäkelä for pressing me to clarify my stand on this.

[25] Nussbaum (2011, p. xxi) writes: "Let us stipulate that at time *t*, agent A bears responsibility R for social ill S. Time passes, and she shirks her responsibility. What should we say next? I think it can't be right to say, well, looking back on it, she did nothing wrong at *t*, and we should now forget about *t* and focus exclusively on what lies ahead of her at *t* + 1. If we take that line, preserving the clean distinction between retrospective guilt (which we're not supposed to

unfulfilled prospective obligations can morph into retrospective blame.[26] Nussbaum's (p. xxi) second point is that while an agent that participates in creating or upholding a structural injustice need not to have any harmful or malicious intent, she might still be negligent: "if it is a general moral truth that citizens ought to monitor the institutions in which they live and be vigilant lest structural injustice occur within them, then I think it follows that they are culpably negligent if they do not shoulder that burden." To this I would like to add: "if they can", i.e. what Nussbaum argues seems to hold at least in countries and within structures where people have enough power, i.e. they are not uneducated people struggling for survival under a dictator, for example. Of course, even in well-off democratic societies (with adequate equality) agnotology and other tactics that create ignorance might be employed, creating complications to vigilance and monitoring, but I return to these issues in the next chapter. The third point is that "we don't blame an agent for not shouldering the entirety of the social task all by herself, but we blame her for not shouldering the part that she ought to have shouldered, and thus we blame her for her contribution to the bad outcome" (p. xxii), therefore we do not have to say that guilt is individualistic while responsibility is often shared.

Young also offers pragmatic arguments for why we should focus on the future rather than the past. In offering a response to these, Nussbaum (2011, p. xxii) argues that focusing on blame does not necessarily distract us from future tasks, as it has a forward-looking sense too; namely as a deterrent. Ascriptions of blame can serve "as a powerful deterrent toward committing future blameworthy acts", and praising and blaming for past actions help child and adult alike to "learn how to perceive new situations in the future, and supply her with powerful incentives to seek good actions in the future and to avoid the bad" (p. xxii).[27] By learning what we did wrong we can get

be assigning to participants in structural injustice) and prospective responsibility (which we are supposed to be assigning to them), well, then people get a free pass indefinitely, since no task they have failed to shoulder ever goes onto the debit or guilt side of their ledger, and the new task always lies ahead of them." Nussbaum characterises this as a conceptual point, but I would describe this as a practical point.

[26] Think of a leader who has been brought in to save a drowning institution. She is not to blame in any way for the current dire situation the institution is in (she was previously an outsider in relation to the institution), but by accepting the role she now has an obligation to at least try to improve things due to her new position. If she succeeds, she is worthy of praise (to some degree). If she fails to implement necessary changes, she is blameworthy to some degree (depending on how badly she failed, did she genuinely try, what others did, how much power she had, were her hands tied and so on and so on). She might be both praiseworthy and blameworthy, for example, if she improves certain things considerably while neglecting others. It all depends on the context and the actual situation. However, her responsibility was always different in terms of its quality from a leader who has the same obligation to try to improve things but who is implicated in the past failings. The second leader has an obligation that is a mixture of a neutral obligation based on his role of making things better, blended with an obligation arising from the past failures and harms created, based on his blameworthy agency.

[27] Nussbaum (2011, pp. xxii-xxiii) gives an example about raising children where blame should be combined with guidance about a better way of conducting oneself in the future. "Surely, as Young says, the accent should always lie in the future, which can be changed, rather than the past, which cannot be. However, it is a little hard to see how we ever get to the future without a critique of the past: praise and blame for good and bad actions that have already happened help a child learn how to perceive new situations in the future, and supply her with powerful incentives to seek good actions in the future and to avoid the bad. Suppose every time the child does something selfish the parent says simply, 'From now on, treat others fairly.' Not 'From now on, do things *differently*,' which implies that the child did something substandard just now, and certainly not 'You just treated Johnny very unfairly, and next time I really expect you to try

better at spotting similar situations in the future and avoid repeating our mistakes, furthermore giving us an additional motivation to do so.[28] She (p. xxiii) gives an example of how this applies to climate change:

> If we just say to people, "From now on conserve energy," without showing in detail how the wasteful lifestyle of Americans contributes to global harms, little learning takes place, and moral incentives are not created. By contrast, when we say, "Look how large your carbon footprint is," learning is promoted and motivation is strengthened by a confrontation with one's own obviously quite harmful acts.

When it comes to Young's other pragmatic arguments, Nussbaum (p. xxiii) notes that while it is possible that when focusing on blame we often tend "to pin fault on a small number of culprits while making most of us feel exonerated", this is not necessarily so, and a careful causal analysis can "show us all the collective task that we have mostly all been shirking." I think Kutz's complicity account is a perfect example of this. Similarly, focusing on blame does not need to distract us from background conditions and a good analysis or ascription of blame takes these into account. Blame might make people feel defensive and evasive and thus be counterproductive for your cause, but as Nussbaum (p. xxiv) notes, guilt can also be "a powerful incentive to make reparations", so it all depends on the situation and how the message is delivered and also by whom. After all, we are more likely to listen to criticism from those that we share a good relationship with (Haidt 2012). In any case, when guilt is administered in the right way and in correct dosage, combining it with future-directed advice and hope can be motivational.[29] Lastly, while guilt can make people turn inwards and focus on themselves, rather than on others, Nussbaum (2011, p. xxv) points out how self-examination can be an important ingredient in turning outwards, and that "if we turn outward prematurely, before we conduct an honest critique of our own inner world, our dedication to ameliorative action may prove shallow or short-lived." It therefore seems that the pragmatic arguments against assigning retrospective responsibility for structural harms works at most to warn us against focusing solely on blame.

We thus do not need to concentrate on just forward-looking or backward-looking responsibility when discussing climate change harms, but instead should utilise both, as it is a context in which we need both.

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hard to be fair,' which tethers responsibility to guilt. No, this parent says simply, 'From now on, treat others fairly.' This sends an unhelpfully confusing message to the child. She really doesn't learn about fairness, since she doesn't learn what she did unfairly just now. Indeed, she doesn't even learn *that* she has done something unfair just now. So to that extent her ability to identify future fair acts is not enhanced, and her motivation to do so is not strengthened."

[28] Kutz (2000, p. 177) discusses conceptions of wrongdoing and accountability as reasons that ground our motivations. Young (2011, p. 182) also allows that when we acknowledge "that current structural injustices have some roots in past injustice", it "provides additional weight to moral arguments for remedying these current injustices".

[29] Nussbaum's example is Martin Luther King Jr. delivering his famous "I Have a Dream" speech in 1963.

Although Isaacs (2014) also makes a rather sharp distinction between prospective and retrospective responsibility,[30] she also argues that when we discuss collective obligations we often need both. Isaacs associates forward-looking sense with *having a responsibility* and the backward-looking with *being responsible*. She (p. 43) writes: "Blameworthiness and praiseworthiness are assessments of agents. They are qualities or evaluations we might attribute to agents based on actions they have taken. Thus, they have a retrospective quality to them that does not translate neatly into a future-oriented concept." In contrast, "to be prospectively responsible is simply to have a responsibility to perform some action in the future." While retrospective responsibility is evaluative, collective obligation has a primarily prescriptive function (p. 44). Nonetheless, both matter for collective obligations, as "agents who are collectively responsible for a wrong or harm have a stronger collective obligation to address it than they might have in the absence of collective responsibility" (p. 49).

While I agree with Isaacs's assessment for the most part, I do not find that there is anything that prevents blame as assessment from translating "neatly into a future-oriented concept". After all, we do not blame just to punish or to voice our disapproval, but also to deter, to try to prevent such things taking place in the future, or to try to motivate someone to take action.

Think of a patient that has been badly treated by the accident and emergency (A&E) department of his local hospital: they forgot to run some important tests; maybe the staff was rude when concerned relatives wanted to know why no treatment seemed forthcoming, and so on. After several hours of ineffectual care, a young doctor just starting her shift locates the problem and administers the right care. The patient recovers and gets to go home. He was never in any life-threatening situation, but the delay caused him considerable pain and considerable anguish for his relatives. They decide to write a letter of complaint to the hospital board. It is stern but fair in its description of the night's events. They are protesting how they were treated, but just as strong a motivation for the letter is the hope that they could help prevent such things happening in the future. There are clear problems at the A&E: the night was not especially busy, yet staff seemed stressed and overwhelmed. As a result, many mistakes were made. On another night and with another patient similar mistakes might prove fatal. The man and his family want someone to take preventive action to make such a situation less likely, so they write the letter of complaint. Such an act of blaming is especially suited for situations where it is not clear to the victim who within some collective are responsible for remedying the situation. It is not difficult to come up with similar examples where a forward-looking sense seems to be built into the act of blaming.

[30] Isaacs (2014, p. 43) writes: "Because both senses of responsibility have normative dimensions to them, they are easy to conflate. I maintain that they are fundamentally different from each other." On a conceptual level I agree.

The same goes for climate change. Take indigenous people as an example. Their voices are among the most audible in the global climate justice social movement, and over 200 delegates from these communities attended the 2015 Conference of the Parties (COP) in Paris (Whyte 2017).[31] Indigenous people often have lived in ways that are in tune with the weather patterns and groups like Inuit contribute almost nothing to global carbon emissions, yet they are suffering already. Indigenous voices have lately become louder and louder (Arctic Council, Idle No More, Conversations with the Earth (Land is Life), to give just few examples).

Indigenous people's lobby groups are protesting what is happening to their livelihoods and habitats due to the effects of the emissions of others, but this kind of blame is not primed exclusively, or even for the most part, to make the emitters feel bad and to apologise. Instead, it aims for them to open their eyes to their responsibility so that they would make the necessary changes and to finally begin effective mitigation efforts. It is arguably mainly forward-looking: it is about how things should be done from now on to prevent (or reduce) such harms that are already taking place. However, it also has a strong backward-looking sense, as the message is often not only that indigenous information should be respected and taken into use, but also that climate change harms are linked to previous harms and is exacerbated by these for many communities. After all, it is not the case that indigenous peoples are more at risk simply by choosing to live in certain places and in certain ways. Instead, Kyle Powys Whyte (2017) argues that the indigenous climate justice movement points out how ongoing, cyclical colonialism is a major reason for the current vulnerability of these communities. Legacies of colonialism include multi-faceted problems such as marginalisation and poverty, and the resulting socio-economic conditions are far from ideal for absorbing and withstanding climate change impacts. Climate change impacts are, however, not a new problem that exacerbates the old problems. Rather, the problems are related and form a continuum: climate injustice is catalysed by industrialisation and the capitalistic economic system, both of which are linked to colonialism. In this way, the injustice of the vulnerability is two-fold: the same institutions that facilitate carbon-intensive economic activities at the same time interfere with indigenous peoples' capacity to adapt to the adverse climate impacts.[32] If we do not include backward-looking assessment of historical injustices and how they have led to increased vulnerability to climate change harms, the reason that indigenous peoples can be seen as facing greater risks seems only a matter of happenstance (a position labelled by Whyte as "The Bad Luck View"). If, on the other hand, we do

[31] COP is the supreme decision-making body of the United Nations Framework Convention on Climate Change.

[32] For example, indigenous communities can be forced to settle in locations that are marginal and exposed to risks (e.g. flood prone areas) due to the lack of input into choices concerning them (procedural injustice). This containment and sedentarisation brought on by the building of infrastructure in these areas spells the end of high mobility for these communities. The community thus no longer can utilise high mobility as an adaptive strategy as they have throughout their history, making them more vulnerable. (Marino 2012, Whyte 2017).

include these historical reasons and their legacy to the overall picture of climate harms, i.e. we include retrospective blame to prospective arguments, we get to the root of the problem and are more likely to come up with something that actually could work.

By supplementing the social connection model with the complicity principle, we can see clearly why we as individuals can be held responsible for collectively caused structural harms like climate change. The responsibility of those who participate in the practices and norms that uphold the structural injustices, or create the institutions that place others in a vulnerable positions, is to critically evaluate them together and to try to seek solutions to address the injustices (Kahn 2012, p. 50). Creating public debate on these issues is crucial for this process, and the same applies to climate change: we should seek to critically evaluate the practices, norms, and institutions that have created the issue and also put certain groups in particularly vulnerable positions in predictable and avoidable ways.

Climate change really is an uncomfortable truth: to adequately mitigate and adapt to it, we need to fix the structures that led and lead to it. In structurally caused harms and injustices, where "many people contribute to producing and reproducing structures that cause injustice, and often many people are privileged in these structures", the responsibility derives "from being positioned in the structures in relation to others and acting within these positions" (Young 2011, p. 180). This kind of responsibility is shared and the obligation is to act to improve the situation. In the view that I suggest, if the structural injustice has just come to light, the responsibility is neutral in terms of moral assessment of the individual or collective agents relevantly positioned within these structures. To put it in simpler terms, the moral assessment amounts to only recognising the obligation. Once the relevant time passes and no action or insufficient action has been taken towards making the structure more just, the situation changes: you still have the same obligation, but it is now combined with some degree of blame.

There is thus no need to reject Kutz's model just because it focuses on prospective responsibility. I believe that if we combine the two discussions, this makes the case for structural injustices stronger, as in that way we can cover both prospective and retrospective sources of responsibility. Young's treatment of collectively caused harms is more convincing than Cripps's or Isaacs's, as it does not have to refer to fuzzy collective obligations of agents who do not exist. Young and Kutz both place moral responsibility and obligations on individuals, so they do not get into metaphysical muddles. Most of our emissions take place within certain arrangements, so individual responsibility cannot be discussed isolated from the social systems and collective settings that we are all embedded in. I have argued that our greenhouse gas emissions take place within pre-existing social structures and systems and that the resulting harms can reinforce existing injustices. Conceptualising climate change harms as structural injustices can help us to look past questions of

unintended consequences and appreciate how deeply embedded the problem is in our existing way of life. If we are to adequately mitigate and adapt to climate change, and to offer compensation where appropriate, concerns of justice will force us to look at the system in a deeper way.

Chapter 7 – Knowledge, ignorance, and climate change responsibility

> As people who live—in a broad sense—together, we cannot escape the thought that the terrible occurrences that we see around us are quintessentially our problems. They are our responsibility—whether or not they are also anyone else's.
>
> - Amartya Sen (1999, p. 282)

> There are too many good reasons why we humans resist the many sad facts of climate disruption [--]. It finally boils down to the question, Why bother? That one question reveals a simple fact: The most fundamental obstacles to averting dangerous climate disruption are not mainly physical or technological or even institutional; they have to do with how we align our thinking and doing with our being. This missing alignment shows clearly in the current lack of courage, determination, and imagination to carry through the necessary actions. But these human capacities are, luckily, as renewable as the wind and the sunshine are.
>
> - Per Espen Stoknes (2015, p. 227)

In the last two chapters I defended the view that individuals can be complicit in climate change harms, either as members of collective agents (e.g. as citizens of states or employees of a corporation) or as constituents of unorganised collectives (e.g. as consumers or polluters). With collective agents the link between the individual and the collective outcome is a participatory intention, and in unorganised collectives it is a quasi-participatory intention. I supplemented Kutz's account with Young's analysis of structural injustices, arguing that anthropogenic climate change is mostly a by-product of the modern way of living, its wastefulness and inequalities. Young (2011, p. 150) argues that for structural injustices to end, we need to make special efforts to first create a break in harmful social processes, and to do so we must engage in public discussions that bring the injustices to light, criticising the powerful agents that allow or encourage such injustices. This, however, requires knowledge about the harms and the systems and processes that uphold them, as well as the collective (and individual) agents relevant in their upkeep. In this final chapter I will discuss complications for assigning responsibility related to knowledge, ignorance, and psychological mechanisms, both at the individual and the collective level.

Ignorance is usually seen as an excuse for blame as it undermines the voluntariness required for moral responsibility. If one does not know what one is involved in, and cannot be reasonably expected to know either, then one cannot be praiseworthy or blameworthy for doing that thing (although you can be praiseworthy in how you deal with ignorance). The standard line of thinking is that our responsibility as moral agents is limited by the information available, but as Steve

Vanderheiden (2016, p. 298) observes, our world is characterised by an abundance of information rather than a scarcity of it. This applies at least to citizens of the nations in the Global North, where large quantities of information are accessible at a relatively low acquisition cost to many persons. The problem, though, is that its totality exceeds our cognitive capacities to acquire and process information. "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" (Vanderheiden (2016, p. 298). The question then becomes how to set the relevant threshold between excusable and culpable ignorance? It is not easy to decide what is included in "reasonably expected knowledge" when a situation is collective or structural.

Ignorance is traditionally defined as an absence: lack of knowledge[1], the state of not knowing about something. More recently, ignorance has also been conceptualised as lack of true belief (Peels 2010).[2] It usually has a negative connotation: "ignorant" or "ignoramus" are labels one does not wish for. If knowledge is power, then ignorance is the opposite (or bliss, depending on who you ask). However, the role of ignorance in society is not just passive and negative: ignorance is also an indispensable element in many social relations and structures (Moore and Tumin 1949). Often ignorance is simply unavoidable, or neutral. Not everyone can know everything, and not all information is relevant for all. Ignorance is not a static state of affairs. In the course of time, unknowns are transformed into new knowledge, while at the institutional level some old knowledge is forgotten and replaced with ignorance (Roberts 2013, p. 218). Science challenges the existing body of knowledge and is at the centre of most of our efforts of turning unknowns and ignorance into knowledge. It is a way of looking at the world and scientific attitude, in the sense of wonder about how things work, is a human characteristic. Lately, though, there has been a lot of talk about scepticism and even hostility towards science. The deliberately manufactured ignorance around climate change discussed in chapters one and three has fed into this. While there has been growing interest in ignorance and epistemic conditions for responsibility (Peels 2016, Smith 1983, Zimmerman 2008), literature on collective ignorance and its links to responsibility have so far been quite thin on the ground.[3] Are there different standards of culpability for collective agents and individuals? How do institutional practices affect the knowledge we should have about the causes

[1] Some writers differentiate knowledge of facts (propositional knowledge) from practical and experiential knowledge, like knowing how to play guitar or having met Susan. I will follow Rik Peels (2010) in concentrating here only on propositional knowledge, referring to it as simply 'knowledge'. Similarly I do not differentiate between propositional ignorance, practical ignorance, or experiential ignorance. This is so that I do not to get drawn into debates about the relation of propositional knowledge to possible other types of knowledge.

[2] Peels (2010, pp. 59-61) argues that a true proposition that is arrived at in an unwarranted way, in the sense that it is does not qualify as a justified true belief (see footnote 4 on justified true beliefs), might not count as knowledge, but failing to know is not ignorance either. Ignorance, thus, is a lack of true belief rather than a lack of knowledge.

[3] Miller (2016) is one such exception. For recent work on collective epistemology, see Lackey (2014). Isaacs (2011) discusses ignorance at a collective level and if it excuses individuals from blame, but her concern is on ignorance of wrongful discriminatory social practices.

and effects of our actions? Furthermore, how does the complexity of climate science (and the problem of climate change itself) affect our right to have enough information on issues that have a direct impact on us so that we can make informed decisions? With this I refer to the idea of an autonomous agent that I will discuss soon.

This chapter will look at questions of ignorance and responsibility in relation to individuals and collectives, arguing that institutional collective agents have a lower threshold for culpable ignorance than individual agents. By this I mean that those collective agents with the capacity to process a lot of information have greater obligations to know about climate change than individuals do. I will argue that when it comes to climate change, there are several obstacles for us assessing the situation in an objective manner. I will discuss types of ignorance in section 7.1, psychological factors in section 7.2, and institutional factors in section 7.3. As the chapter is also the final chapter of my thesis, I will round the discussion off by summarising the thesis' main arguments in section 7.4 and present my full narrative of individual responsibility for climate change.

7.1 Responsibility and ignorance

After arguing that control, freedom, and autonomy are not the only aspects that need to be taken into account when debating moral responsibility, i.e. that we should also take into account our complicity in collective harms, I will complicate the picture further by exploring the epistemic dimensions of responsibility. Note that my concern here is not with *epistemic responsibility,* i.e. questions regarding what you ought or ought not to believe. My concern is with the epistemic condition of responsibility, of acting under ignorance, and how agnotology and scientific uncertainty might complicate responsibility issues for climate change. I will first distinguish between different types of ignorance: disbelieving ignorance, conditional disbelieving ignorance, suspending ignorance, conditional suspending ignorance, and deep ignorance. In distinguishing between the different types, I utilise Rik Peels's (2010) recent work on ignorance and expand upon that. I will then link this debate to agnotology, which was already discussed in chapters one and three.

We have knowledge only if the proposition *p* is true and the belief is justified.[4] I believe that human activities are the main (perhaps even the sole) cause of global warming over the past 60 years,

[4] In the orthodox view in epistemology, true justified belief involves three things: that *p* is in fact true, that *S* believes that *p*, and finally that *S* is justified in believing that *p*. If we were simply to identify knowledge with true belief, and leave out the justification part, it would be implausible. Say that a contestant chooses their answers randomly in a multiple choice quiz, firmly believing that destiny will give him the correct answers. When he answers a question (*What is the name of Radiohead's drummer?*) correctly because he happened to choose the right option (*b: Phil Selway*), the true belief in this case does not translate as knowledge due to the way it was arrived at. Arriving at something randomly and purely by luck is not a justified means of obtaining knowledge. Therefore the contestant does not *know* that Phil Selway is the drummer of Radiohead (at least until some further time when the results are revealed by the quiz master, but that is a

and my belief is justified, as I have arrived at it after reading the latest IPCC report that summarises the existing scientific evidence.[5] When it comes to ignorance, there are more options. Take the other two doxastic attitudes: if *p* is true we can distinguish between *disbelieving ignorance* (*S* disbelieves *p*, while *p* is true) and *suspending ignorance* (*S* suspends judgement on *p*, while *p* is true), as well as *conditional* versions of both, referring to cases where one has not ever considered the true proposition *p*, but would either disbelieve or suspend judgment on *p* upon considering it (Peels 2010).

To apply this to the agnotology case on climate change science, the lobbying efforts were aimed at creating suspending ignorance at the public debate level. Many people, of course, do not only suspend their judgement about the reliability of the science, but disbelieve the fact that anthropogenic climate change is taking place. Instead of human activity, the underlying causes for the changes are believed to be something else, like sunspots. This would be an example of disbelieving ignorance. One could also disbelieve that any climate change is underway at all, regardless of the causes. This could come about either because you disbelieve that climate change is underway (disbelieving ignorance), or because you have not even considered that climate change is underway, but would disbelieve it if you were to consider it (conditional disbelieving ignorance). An example of the latter would be a young teenager that has not yet heard anything about anthropogenic climate change, but would not believe in it if he did. If the teenager — upon hearing about climate change for the first time – would decide to suspend his judgment, it would be a case of conditional suspending ignorance.[6]

If you are in a position where you lack adequate access to relevant knowledge about *p*, you are also in a state of *deep ignorance* about it (Peels 2010, p. 62). To give an example related to global justice, although contributing minimally to global emissions, not only will many people living in Africa be among the most affected by climate change, they are also the least informed about its causes and consequences (Godfrey et al. 2010). There exist wide global asymmetries in the amount of research

different story). What counts as justification is a matter of ongoing philosophical debate. In the famous Gettier (1963) cases, individuals can have justified true belief of a claim, but still they have failed to know it.

[5] "It is extremely likely that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in greenhouse gas concentrations and other anthropogenic forcings together. The best estimate of the human-induced contribution to warming is similar to the observed warming over this period." (IPCC 2013, p. 17).

[6] The above applies to cases where the proposition *p* is true. But what about if it is false? If *p* is false and you have a false belief that *p*, you cannot have knowledge. In other words, you are ignorant about *p* being false. If you believe *p* 'Ranveer Singh made his Bollywood debut in *Bajirao Mastani*', you are ignorant about the fact of him starring in *Band Baaja Baaraat* five years earlier. While you cannot be ignorant about falsehoods, you can be ignorant that some proposition is false. Therefore we can say that you lack knowledge about the first movie that Ranveer Singh acted in, but we could not say that you are ignorant of *Bajirao Mastani* being his debut movie as it is in fact *not* his debut movie. But it makes sense to say that you are ignorant that *p* is false. (For a discussion along these lines, see Peels 2010). This kind of ignorance usually results from errors and misunderstandings.

done and information available on climate change.[7] While climate change can still feel abstract to many citizens of the Global North, many people in Africa are already dealing with its consequences in their everyday lives. Despite this, there exists widespread deep ignorance about anthropogenic climate change in Africa. Not only is there a shortage of relevant and local information about climate change for African audiences, the majority of Africans do not have access to the internet, for example.[8] A lack of knowledge about climate facts deprives many Africans of the ability to act as a knower.[9] Crucially, it deprives the subsistence farmers of the knowledge required to adapt their farming practices to the changing climate. It also deprives them of the possibility to add their voices to the international climate debate. The important point to note is that if you are ignorant about something in this deep sense, your ignorance always excuses you. Deeply ignorant people are thus never subject to blame.[10]

Nevertheless, there is a possibility to keep someone deeply ignorant: not allowing them the access to relevant knowledge. Keeping someone deeply ignorant in itself can be morally neutral, praiseworthy, or blameworthy. Imagine that there is a relative that has recently died, perhaps a grandparent, and while going through their belongings after the funeral a sibling of the deceased finds something incriminating. Maybe they should not tell the other relatives about the discovery: perhaps it would be morally praiseworthy or at least neutral to keep the others deeply ignorant about this aspect of the deceased's life, depending on the circumstances. If the discriminating evidence is linked to events and people long gone and would not have any impact on those alive other than making them think badly about their otherwise deeply beloved grandparent, it might be merciful to not to share it. However, keeping someone deeply ignorant about facts that affect their choices for the worse is blameworthy, in the sense that had they known the relevant fact(s), they would have

[7] Information poverty in general is a problem for development and affects the efficient and equal dissemination of academic research in developing countries. For an overview on the promise and challenges of the internet as a way of distributing global scientific knowledge in a more equitable manner, see Chan and Costa 2005.

[8] According to the latest statistics by Internet World Stats (www.internetworldstats.com) on Africa from 30 June 2017, internet penetration in Africa was 31.2% of the population, while the world average stands at 51.7% (for comparison, North America's figure was 88.1% and Europe's 80.2%). It should be noted, however, that these rates are increasing rapidly. For example, in 31 March 2017, internet penetration in Africa was still only 27.7% of the population. In fact, the growth between 2000 and 2017 has been a massive 8,503.1%, while the figures are 527.6% growth in Europe and 196.1% in North America over the same period of time.

[9] This is not limited to just the knowledge we need in our daily lives, but also to the production of knowledge. It is very unequal in global terms who is producing knowledge, as a disproportionate number of scientists come from the Global North. This is a problem also for climate justice: "In the field of climate justice, expertise from researchers in developing countries is much needed, and efforts to strengthen local capacities and voices should be a priority of international research and assistance" (Roser et al. 2015, p. 357).

[10] If you cannot grasp a proposition, then you cannot have beliefs about it either. Even the smartest two-year-old could not form a belief about the soundness of climate change science, because at that age a human's cognitive capacities are not at that level yet. They are thus deeply ignorant about it also, due to (temporary) cognitive limitations.

(more/most likely or definitely) chosen an alternative course of action that would have counterfactually been superior to the one they chose under deep ignorance.[11]

Coming back to the earlier distinctions, I would argue that for you to be in a state of disbelieving ignorance or suspending ignorance, you cannot be at the same time deeply ignorant. In other words, you must have access to relevant information about *p* in order to either disbelieve it or to suspend your judgement on it. However, the conditional versions of both might apply to someone who is deeply ignorant, as they only state that one has not considered the true proposition *p*, but would either disbelieve or suspend judgment on *p* upon considering it.

Now, it is a complicated question if disbelieving ignorance or suspending ignorance are culpable. In some cases they might be, but in many they would not be. In order to assess such things we need to be aware of the collective context. Consider someone who has received basic education only, education that has been poorly planned and executed by mostly incompetent teachers. Let us further say that no one at home has been able to make up for the deficiencies in her education. This person has never been taught a thing about media literacy, for example, and has been taught to never question those in power. It would be hard to argue that this person would be in any way culpable for her ignorance about anthropogenic climate change if she encounters the lies and misleading facts about climate change propagated by the deniers. It seems clear that any blame would lie at the level of the deceiver, for example, the organised lobby groups discussed in chapter three. In many ways these kinds of agnotology campaigns misuse positions of power and exploit existing power imbalances and structures.

Culpable ignorance can, therefore, in many cases be linked to the collective level where the blame also lies. There is a lot of scepticism towards science in public discourse. The internet is a source of not only information, but also of misinformation. Climate change denialists have created a wide array of websites that aim to discredit the science behind the IPCC's projections. Climate science denialism is but one example of the growing scepticism towards science, scepticism that is partially based on misunderstanding what scientific evidence is: it is not proof that something is right, but instead *support* for a claim, a proposal, a hypothesis, a theory, a mechanistic explanation, and so on. One of the main drivers of scepticism is the increasing complexity of science and how the latest results cannot be comprehended by the vast majority of people outside a given field. Climate science is especially susceptible to this because it is inconvenient for our current way of living, we would like it not to be so, and inconvenient truths are the easiest truths to label as false. Also, major business interests are at stake, giving agnotology incentives, as we saw in chapter three.

[11] There is debate in bioethics around the right to know: could my lack of knowledge about a genetic disease hurt my relatives for example?

There seems to be general confusion about what science is. If and when a scientific hypothesis is proven to be incorrect, the science does not collapse, it *advances*. Utilising a very simplistic model of science, we can argue that it is a mixture of inductive and deductive logic. Logic can tell us which arguments are valid. Arguments consist of premises and conclusions, i.e. the reasons for believing a statement. In a valid argument the conclusion follows from the premises, its premises entail its conclusion, meaning that the argument does not suffer from a logical fallacy of some kind. However, a valid argument is not necessarily sound, as it can be utter nonsense if the premises are false. "All bachelors are birds of prey, Alan is a bachelor, therefore Alan is a bird of prey" is logically valid, but obviously nonsense. In deductive arguments the conclusion is necessarily true as long as the premises are true. Replace "birds of prey" with "unmarried men" in the above sentence and you have a deductive argument with a true conclusion (as long as we continue to call unmarried men bachelors). In inductive logic arguments are based on inferences and can only give us conclusions that are at best probably true. One cannot break any new scientific ground without hypotheses and theories that rely on generalisations, in other words without inductive logic (deductive logic can then be used to help test the theory or hypothesis). This is not meant to be some sophisticated story about how science works, my claim and ambition here is much smaller: to explain why science still advances even when a scientific hypothesis is proven to be incorrect.

News about scientific advances can easily be distorted if the above is not widely understood, because new or conflicting information might seem to discredit earlier research. Climate science is especially susceptible to this, as you really do need to be an expert to be able to properly assess the science.[12] But that is part of the reason why the IPCC was created: to pull together best available evidence and help policymakers and the general public form their opinions based on climate science.[13] The question then becomes, with the easy availability of such high-quality, internationally produced, and carefully compiled information (the IPCC distributes all its materials on its website for free), can any able, relatively well-off adult (in the Global North at least) claim ignorance as an excuse for not taking climate change as a serious problem? The question is interesting, as there is still very widespread ignorance (and/or denial) about climate change amongst the citizens of the Global North (I will turn to denial when I discuss psychological factors in the next section).

[12] In addition, climate change is such a multi-faceted problem that interdisciplinary research is a necessity, but this is no simple matter as disciplines have their own different vocabularies and standards of research. In order to reach better interdisciplinary results it would be necessary to have researchers from different fields conduct more joint research and write joint publications, not just to engage with each other's arguments (Roser et al. 2015). We must therefore trust each other and each other's expertise.

[13] In interdisciplinary research it is possible that there are big differences in opinion between representatives of different branches of science regarding what exactly is the best available evidence, and if findings from some branch should have more weight than others, for example. This is yet another complication for climate science and climate policy alike.

According to Hiller (2011, p. 353), "to the extent to which ignorance does exculpate some individuals, the onus is on those who are aware of the dangers of [anthropogenic climate change] to ensure that no one can avoid culpability simply by lacking knowledge." But who are these agents who have this obligation to ensure knowledge about climate change? Bell (2011), Caney (2010, p. 209) and Singer (2002, p. 34) have all argued that ever since sometime in the 1990s, individuals cannot be excused by ignorance for not taking action on climate change, as that is when it became widely known that greenhouse gases cause climate change. But as Vanderheiden (2016, p. 307) argues, this is to commit a kind of category mistake, as it conflates "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." I agree: we cannot argue that climate change became widely known as the threat it is among the general public based on when it became known as such for climate scientists, politicians, and policymakers. I find it more feasible to argue that climate change properly broke into the public consciousness only around the time that *An Inconvenient Truth* was released in 2006. While the Oscar-winning documentary in question is a prime example of how the efforts of a few influential individuals can make a big impact sometimes, I do not mean to argue that it was the sole cause or even the primary cause for the shift in public debate and media coverage.[14] My point is simply that it is more feasible to place the time somewhere in that decade, rather than the 1990s. Furthermore, the wider understanding of the problem has been met with even more aggressive agnotology efforts from the carbon lobby. Far from giving up, the activities of the climate denial organisations are on the increase (Boussalis and Coan 2016).

It seems clear that those collective agents with the capacity to process a lot of information have greater obligations to know about climate change than individuals. The capacity here is linked to the kind of collective agent we are discussing: a state or a government (or a large corporation, or an international NGO, etc.) have a much greater ability to process information, while smaller-scale collective agents (like a three-person company, for example) might not. Additionally, the role that collective agents like states play in our societies demands they take climate change science seriously. As Vanderheiden (2016, p. 306) puts it:

> 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

[14] A further disclaimer: just because an issue enters the public consciousness and some documentary (or a book or an event or a person) is influential in bringing this about, it does not mean that it has reached all and sundry. While climate change is at the present time an issue that most adult people in the Global North are aware of, it is most likely that a huge number of those people have never even heard of *An Inconvenient Truth*, let alone seen it.

> 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 [--] 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.

Institutions and other large organisations have the resources necessary to call upon the expertise of individuals. If the required expertise cannot be found among their existing members, they can hire new staff or employ consultants. They can set aside money to fund research into a suitable course of action for them in light of the latest science. Institutional collective agents can afford to have the expert or a group of experts dedicate their working hours to thinking through issues to do with climate change from their point of view, in the same way they can and should do with any issue that affects their operating environment and future operations. Some institutional collective agents, such as states, have an obligation to know how climate change threatens their members, i.e. how it affects their citizens, based on the ethos of the collective, the reason for the continued existence of the collective.

Collective agents arguably also have an obligation not to deceive us based on what they know, but as we saw in chapter three, some of them do so regardless. Don Fallis (2016) argues that intentionally making people ignorant is equivalent in moral terms to deceiving them. He describes this kind of deliberate manufacturing of doubt as pushing someone into a state of *suspending ignorance*. This means that when people obtain conflicting evidence, they often suspend their judgement on the issue. Someone is thus kept ignorant by increasing the degree of her belief in a falsehood. Creating misleading debate about climate science arguably produces false beliefs. Included in the idea of autonomy is that you are able to make choices about your life, so therefore creating false beliefs for someone is a way of manipulating your autonomy (Fallis 2016, p. 124). When the actions of climate science denialists result in people being either in a state of disbelieving ignorance or suspending ignorance about the facts related to anthropogenic climate change, their autonomy is undermined.

I want to suggest something stronger than this: not only does the agnotology related to climate change science manipulate the autonomy of agents, it also makes these agents complicit in the harm

created collectively without them even being fully aware of it. This kind of complicity does not necessarily warrant any blame, rather it falls closer to the agent-regret discussed in chapter five, and being deliberately misled surely reduces the culpability of one's ignorance. However, what clearly does warrant blame is making someone inclusively accountable for a harm by disguising the true nature of the co-operation (or participation in a system) that they are involved in. Agnotology makes the deceiving agent accountable in a new way and is thus an additional reason for holding the organised lobby of climate denialists accountable. The partly-deceived agent (or agents) that was made complicit in a harm, if she find out about the deception, is right to demand a response from the agent(s) who got her involved. Their complicity by itself becomes "an object of accountability, a basis of resentment, repair, and even revenge" (Kutz 2000, p. 156).

Kutz's example is Emilia from *Othello*, who has unwittingly been made an instrument in the tragedy by stealing Desdemona's handkerchief for Iago, who then uses it to convince Othello that Desdemona is unfaithful to him, resulting in Othello murdering his wife. Emilia is warranted in her anger towards her scheming husband Iago, and she can hold him accountable for making her accountable in her mistress's death. Emilia was aware that something shady might have been going on, but the true nature and the intention was hidden from her (counterfactually she would not have participated had she known the full details). Kutz (p. 156) suggests that we can compare the situation Emilia finds herself in "with that of a mid-level engineer for a large manufacturer, who has reason to believe but does not know that the control modules he is helping to design, which are used by the company in manufacturing consumer products, are also used in manufacturing land mines" that will be sold to poor countries in the Global South.

The agents who have become complicit in a harm at least partly because of being deceived about the true nature of what they were participating in, are warranted to hold those agents that misled them (or concealed information from them) as accountable for their complicity in the harm. Thus the people who believe climate denialist through the organised agnotology campaigns can arguably hold their deceivers accountable for their (suspended or deep) ignorance about the impacts of their actions and choices (like voting decisions) on the climate. While there might be no blame for the individuals who are ignorant about the facts, it is often much clearer to assign blame for the ignorance of individuals to collective agents. This applies not only to the agents who have been active in spreading misinformation, but also to those collective agents with the capacity to process a lot of information that have been suspending their judgement on anthropogenic climate change, or indeed whose ethos has come to encompass disbelieving ignorance about the true nature of the climate problem.

7.2 Psychological factors

For the most part the cause for inaction with climate change or other global problems it is not that we are deeply ignorant about the state of affairs in the world. It is not even that we have suspended our judgement on the issue. Instead, climate change, inequality, and the dangers of the financial markets' economic irresponsibility, to give just some examples, are facts known to most of us, at least to some degree. Hannah Arendt (1968, p. viii) observed in *Men in Dark Times* that unpleasant societal facts are often not veiled in secrecy but are instead darkened by "the highly efficient talk and double-talk of nearly all official representatives, who, without interruption and in many ingenious variations, explained away unpleasant facts and justified concerns."[15]Al Gore famously branded climate change as an inconvenient truth, and the ongoing political mumble around the topic is an example of the darkness that makes inconvenient facts invisible. Perhaps we could also argue, as Peeters et al. (2015, p. 110) do, that "the complex convergence of problems" that is involved in climate change presents us "with a *convenient opportunity for moral disengagement*".[16]

Gardiner (2011, pp. 193-195) argues that part of the explanation for political inertia lies in human psychology.[17] He bases his claim on research done by Elke Weber (2006), who shows that in cases that involve risk and uncertainty, our affective processing system dominates our analytical one. Abstract arguments based on statistics fail to evoke strong emotions in us. Because the affective system tends to rely on personal experience, low-probability events generate less concern than their probability would warrant. "Single action bias" affects us also: we are likely to take some readily available single action to alleviate our worry, but leave things at that, even if the action we have taken is far from the most effective one we could have taken.[18] We also have a "finite pool of worry", meaning that we only have a limited capacity for worry of the kind that motivates action (Linville and Fischer 1991). George Marshall (2014, pp. 81-90) argues that the issue goes even deeper than this: psychological denial mechanisms and general anxiety about the issue have led to a socially

[15] I believe that the double-talk is only partially intended in the case of many structural injustices: the problem has more to do with institutional frameworks that limit the scope of the role-occupier's concern and can give them unhealthy motives, see section 7.3.

[16] Peeters et al. (2015, p. 122) suggest a number of strategies for tackling moral disengagement, including emphasising the effects of individual choices (luxury emissions), and linking behavioural change to feelings of competence and pride.

[17] Daniel Kahneman (in Marshall 2014, pp. 56-57) shares the view that our cognitive biases work against taking the climate change threat seriously. First of all, it does not adequately mobilise our sense of threat, as it lacks salience: it is not a concrete and immediate threat, but remains abstract and distant. Second of all, it is hard for us to accept short-term costs to mitigate uncertain losses in the future. Thirdly, as long as information about climate change appears to be contested, people set it aside as an allegedly contested issue.

[18] Weber (2006, p. 103) suggests that we should find ways to evoke visceral reactions towards climate change risks, "perhaps by simulations of its concrete future consequences for people's home or other regions they visit or value. Increased concern about global warming needs to solicited carefully, however, to prevent a decrease in concern about other relevant risks. The generation of worry or concern about global warming may be a necessary but not sufficient condition for desirable or appropriate protective or mitigating behavior on part of the general public."

constructed silence around climate change, as things that cannot be assimilated get repressed. Socially constructed silence is a circulation system of complex feedbacks, which has seen climate change as a topic fall out of favour with the media and politicians in the past ten years, and it has an even harder time finding a place in regular conversations among acquaintances or loved ones.

While some commentators argue that if the general public were better able to understand climate science (and industrial climate deniers would not be adding fuel to the fire), progress on mitigation would be more likely (McKinnon 2016), others are not as optimistic. While the apparent public apathy over climate change often gets attributed to lack of knowledge or deficiencies in comprehending the science, research shows that members of the public with the highest degrees of science literacy and technical reasoning capacity were among the groups with the most diverged views on climate change (Kahan et al. 2012, p. 732):

> This result suggests that public divisions over climate change stem not from the public's incomprehension of science but from a distinctive conflict of interest: between the personal interest individuals have in forming beliefs in line with those held by others with whom they share close ties and the collective one they all share in making use of the best available science to promote common welfare.

The study thus supports the research that people are very good at cherry-picking the evidence available to fit their biases and existing worldview, and thus they choose their side on issues such as climate change based on the social groups to which they belong.[19] To give an example, research done in the US suggests that dissemination of scientific information increases concern about climate change only among Democrats, while Republicans do not appear to be persuaded (Carmichael et al. 2017).

Climate change inaction on the part of individuals has mostly been presented as a motivational issue, but T.J. Kasperbauer (2016) argues (following Gardiner) that this is misleading because what is really the problem is that we fail to grasp the seriousness of the threat and the ethical challenge, and that there is a set of psychological processes that prevent us from adequately responding to climate change. The strongest one that he identifies is the human tendency to conform: "people only adopt proenvironmental behaviours to the extent that others they see as sufficiently similar to themselves (usually according to socioeconomic criteria) have also adopted those behaviours" (p. 359). He also notes that people tend to modify their consumption according to prevailing norms. This is the reason most people fail to see their carbon-intensive lifestyles as anything to be concerned

[19] The researchers (p. 734) go on to suggest that to promote constructive and informed public deliberations around the need to take action on climate change, "communicators should endeavor to create a deliberative climate in which accepting the best available science does not threaten any group's values. Effective strategies include use of culturally diverse communicators, whose affinity with different communities enhances their credibility, and information-framing techniques that invest policy solutions with resonances congenial to diverse groups."

about. To me, the human tendency to conform highlights the importance of those social norms that uphold the idea that over-consumption is normal, permissible, and even aspirational. Such norms should be questioned publicly, and it could be argued that influential individuals and collective agents that can play their part in this have a duty to do so.[20] Dave Elder-Vass (2010) argues that people do not spontaneously start to act in similar ways, but that our practices are products of a process in which people act under cultural influences or are influenced by social structures (or both). Individuals are thus influenced by social groups to follow certain practices. "Norm circles" are the primary causal power behind our evolving practices. The way we all subtly uphold and renegotiate norms daily is therefore something that arguably could come under complicity: what norms are we complicit in supporting in our daily lives?

Kasperbauer also raises a different worry in addition to the psychological defence mechanisms, citing Jonathan Haidt's (2012) research on the foundations of human morality. Haidt (together with Craig Joseph and other researchers) posits that there are at least six psychological systems, universal foundations of morality, all evolved as responses to some adaptive challenge: care/harm, fairness/cheating, liberty/oppression, loyalty/betrayal, authority/subversion, and sanctity/degradation (see Appendix). Kasperbauer (2016, pp. 361-364) argues that not only will a harm-based ethical theory fail to resonate with people with certain psychological profiles, those who ground their morality in dominance hierarchies (see authority/subversion in Appendix) are likely to resist efforts to curb emissions, as they see emissions cuts taking away resources that would provide local benefits. Things are only somewhat better at the collective level, as the different combinations of moral foundations found across cultures and nations mean that in international negotiations incompatible values get pitted against each other.

While I agree that our psychologies to some extent limit what it is feasible to ask of us in relation to climate change, I want to say two things against this pessimistic picture. First of all, unlike what Kasperbauer seems to be suggesting, we cannot get to *incompatible values* merely from the observation that people and cultures draw from different moral foundations (on the contrary, one could argue that searching for universal foundations is a first step towards finding common ground). Gaertner et al. (2010, p. 94) argue that "the presence of a behavioral difference per se is not evidence contrary to a universalist argument. The necessary consideration is whether the observed difference is

[20] The example that Kasperbauer (p. 359) utilises seems to show that conformity is relatively easy to manipulate: all it takes is some smiley faces on flyers about how well you do in your energy consumption in comparison to the people around you to change people's behaviour. In reality, I doubt it is this easy, especially with the moral licensing effect: doing something that is perceived as morally good helps to strengthen our positive self-image as a good person, thereby making us less worried about the consequences of our behaviour and paradoxically more likely to make "bad" subsequent choices.

produced by a process or function common across societies."[21] This line of argument is similar to what James Rachels (1998, pp. 411-419) has discussed: while the conception of right and wrong differs between cultures and is based on the customs of that society, this does not mean that there are no universal truths in ethics and that all standards of right and wrong are relative to culture and time.[22] All societies have some moral rules in common, as those rules are necessary for societies to exist. If lying was widespread, communication would become pointless as nothing could be trusted. If murder was accepted, people would avoid each other in fear of getting killed. Under such circumstances, society and markets could not function, as everyone would need to be as self-sufficient as possible. If babies were not protected and cared for, no human would survive their first few days and the species would die out. There is a general agreement about these necessary features of society among cultures, and only what can be considered as a legitimate exception varies from culture to culture.[23]

My second point against Kasperbauer is that we can draw few normative claims from the moral foundations theory, as there is a real ambiguity in Haidt's theory about what is the merit of the values that people hold.[24] The fact that people have come to hold different thick values based on the same

[21] Note, however, that Sachdeva et al. (2011) argue that because moral systems might play different roles in different cultures, the processes that underlie moral cognition may not be universal in any simple sense.

[22] What — at a first glance — can seem to be big differences in values, like Hindus refusing to kill cows and Europeans eating them, or Eskimos killing infants who are perfectly healthy (especially girls), might not be such a dramatic difference on closer inspection (Rachels 1998, pp. 415-416). I already used this example in my Master's thesis, but will utilise it again, as I think it is illuminating. Hindus do not eat cows, as they believe in reincarnation, and eating a cow could mean eating a dead relative. Europeans do not usually believe in reincarnation, so eating a cow does not equal possibly eating a dead relative. The beliefs vary, but both cultures share the same value of not eating relatives. Religious and factual beliefs are as important as values when the customs of a society are produced. The physical realities and circumstances are important too. The Eskimos live in a very harsh environment where food is often in short supply. Infants are nursed until they are about four, and carried along in the mother's parka as part of the nomadic lifestyle in search of food. One mother cannot have many small children at the same time. On average, Eskimo men die more prematurely than the women, as they are involved in hunting. If the Eskimos would not allow more male babies than females to survive, the women in the Eskimo society would far outnumber the men. Infanticide is considered the last option and childless Eskimo couples often adopt babies from the more fertile couples. Killing babies is therefore not a sign of a fundamentally different attitude towards human life and children. It is rather recognition of the very drastic measures sometimes needed to ensure human survival in the conditions that the Eskimos face.

[23] Kutz (2000, pp. 13-14) does not take sides on the relativism debate, but argues that worries about relativism are often misguided. His reasoning is that we must be able to defend the plurality in social and ethical practices, and the fact of conventional variance is compatible with assessing cultural practices objectively. He concentrates on structural features of complex normative systems that are similar across different systems. Kutz (p. 14) writes that "nothing in the interpretive approach precludes the possibility that many substantive elements in our practices are, in fact, universal, for example functions of basic human needs and wants for security and community."

[24] Take crime as an example. Haidt (2012, p. 183) writes that it is self-evident for conservatives that responses to crime should be proportional, but that liberals are uncomfortable with retribution. Even if this is the case, it does not give us any answers as to what kind of criminal justice system we *should* have. What we need is more public debate. With this I mean genuine debate, based not only on statistical facts and evidence, but also including testimonies from people who have been impacted by the current system one way or another. The current political atmosphere might be hostile to any kind of real discussion at the moment, but this just means we need it more than ever. Only when we look at our values together, emphasising the common ground but also trying to see the views of others, to understand them, can we hope to gain any meaningful understanding of a way forward. All sides might have good points. Maybe some laws are too lax (for example, sentences for financial fraud are often much more lenient than those for violent crime) and maybe some murderers and rapists should be locked up for life. Even if this were the case, radical reforms in the way we treat prisoners might still be needed and locking people up would still not be the best way to prevent most crimes.

thin foundations serves only as the background to morality, it does not in any way take away the need to form value judgements and to debate these. People have a plurality of values, but this does not *by itself* lead to relativism.

I think it is important to separate two lines of debate here. What could be the shared foundations of morality is one question, and Haidt and his colleagues seek answers to this. However, which of the values and virtues should we actually try to endorse, here and now, out of the myriad ones that the shared foundations of morality give rise to, is another question entirely and to that they do not seem to give answers to (and rightly so). In other words, what kinds of moral matrixes should we collectively seek to build, especially in light of the looming danger of climate change? There have never been so many of us and we have never been so interdependent on such a vast scale. Surely this presents an adaptive challenge to the human species. What kinds of values help us to live together? As we now have tools to communicate like never before, they will play a role in our response to this adaptive challenge. Haidt (2012, pp. 216) himself notes how evolution can be fast: while new mental modules cannot be created from scratch even in several thousands of years, existing features can be tweaked by evolution. Cultural change can be very fast and can change the moral matrix constructed upon the six foundations radically within just a few generations. If the new moral matrix remains somewhat steady for "a few dozen generations", additional gene-culture coevolution might take place due to new selection pressures. We could learn to value the future more. Like psychologist and economist Per Espen Stoknes (2015), I believe that humans can and will take action to secure long-term benefits if and when conducive social conditions for climate action are in place.[25]

I am not saying that human nature needs to be nudged by institutional design to become somehow better. Rather, I am arguing that the way some of our institutions are currently designed could well bring out the worst in us and we should dismantle the kinds of incentives that misalign our behaviour, and block our feelings of empathy or belonging to a group, for example. We are at each other's mercy. Therefore we must learn to live together as a global collective.[26] Our rationality can get muddled by various psychological mechanisms.[27] To combat these tendencies we need to reason together:

Some crimes like drug-related offences have complex socio-economic causes, so instead of treating the symptoms we should treat the disease.

[25] Not everyone needs to get motivated to take action, but many are needed in any case. When being virtuous in relation to climate change has been made easier through structures and institutions, it will not be demanding for an individual to go carbon-neutral, but before that trailblazers will be required (Hormio 2014).

[26] And if it is too late already and we have set off feedback mechanisms too great to adapt to, we still need each other to try to survive in the new world we have brought about.

[27] Findings in moral psychology suggest that (just like with other thinking) we make intuitive judgements first and strategic thinking comes only after. We are good at finding evidence that supports the position that we have already taken on intuitive grounds, and we are also very good at coming up with justifications for our chosen position (Haidt 2012, pp. 72-92). The psychological phenomenon linked to this includes confirmation bias (Wason 1960, Kuhn 1989,

> We should not expect individuals to produce good, open-minded, truth-seeking reasoning, particularly when self-interest or reputational concerns are in play. But if you put individuals together in the right way, such that some individuals can use their reasoning powers to disconfirm the claims of others, and all individuals feel some common bond or shared fate that allows them to interact civilly, you can create a group that ends up producing good reasoning as an emergent property of the social system. (Haidt 2012, p. 90).

As Haidt (p. 85) notes, the internet has made it much easier for us to find evidence that support what we already think, so if you want to keep denying climate change science, there is plenty of material available for you to support your conclusion. But if we instead try to design institutions in which humans are "put together in the right way" based on the best available evidence in social sciences, and forced to reason in a productive manner, there is hope.[28] Institutional design is unfortunately often riddled with incentives to do just the opposite, as we will see next.

7.3 Knowledge and misinformation in an institutional setting

As we saw, ignorance can arise from the suppression of knowledge, either by refusing to recognise it or by unconsciously suppressing it. This is not limited to individual psychology: drawing from Joanne Roberts's (2013) work on institutional ignorance, I will introduce types of institutional ignorance that can arise from the suppression of knowledge. *Taboos* are socially constructed bans on certain types of knowledge deemed to be polluting. They can also be actively cultivated within organisations to influence the way its members behave, like a taboo about discussing bullying in the workplace. When knowledge is too painful to acknowledge, or it does not fit with one's worldview, it can be repressed or ignored, resulting in *denials*. Organisational denials can lead to ignoring evidence that contradicts the group decision for the sake of unanimity. This can be especially dangerous when encouraged by those in charge, as toleration for recklessness and dishonesty in practices has a tendency to spread. Denials can also be used strategically, like when a company

Shaw 1996), our tendency to interpret evidence to confirm what we already think, and the effect that having plausible deniability has on our decision (Bersoff 1999). Furthermore, when we reason, we are often most concerned about how we come across to others (Lerner and Tetlock 2003). How other people see us matters to us and we are affected by what others think of us (Leary 2005), so we seek to keep our reputations by making sure that we can justify our actions to others. Reasoning has evolved to help us win arguments and persuade others (Mercier and Sperber 2011). Information that threatens our existing beliefs activates areas in our brain that are linked to negative emotions, while what we believe in the first place is affected by the social groups we belong to and their interests (Haidt 2012, pp. 85-88). The last point is particularly important. As a philosopher, I am not in a position to assess the accuracy of any of this research; I leave those debates for others. My point here is only to list some of the psychological factors that *might* be involved in the refusal to accept climate change science.

[28] After all, the right kind of conflict can breed moral reflexivity: we are trying to judge our own arguments, to view them through the eyes of others. If we are sympathetic to the person we are disagreeing with, we are more likely to listen to what they have to say, we are more open to taking their criticism on board. If we can expand our sphere of sympathy, we could open up our perception to new viewpoints, which could give us reasons to renegotiate some of our values and norms.

encourages ignorance in their customers through misinformation campaigns (for example, the carbon lobby). We talk of *secrecy* when knowledge is consciously suppressed by individuals or collectives. Pockets of ignorance can be deliberately created for power purposes. Some secrecy is essential (keeping trade secrets, for example) but there has to be a balance and an understanding of how much secrecy the stakeholders are willing to tolerate. *Privacy* is socially sanctioned secrecy and the right to privacy is enshrined in many laws and declarations. To build trust between an organisation and its members and stakeholders, it is important to recognise and protect privacy, for example, the customer data registry of a company. (Roberts 2013, p. 218-226).[29]

It seems clear that ignorance arising from the suppression of knowledge can be amenable to blameworthiness. Holly M. Smith (1983, pp. 544-547) presents three types of situation where ignorance does not excuse, i.e. it is culpable because the person should have realised what they were doing. While Smith discusses the culpability of individual people, I will apply her account to Roberts's categories. *Deficient investigation* is the first type, either through failing to investigate properly, or failing to investigate at all. While it is a contested issue how much knowledge citizens should possess (Bell 2011, Caney 2010, Vanderheiden 2016, Young 2011), it is arguably our civic responsibility to acquire at least the basic knowledge on climate change at this point (as long as it is feasible given our circumstances). *Preventing subsequent discovery* presents the second case: a person has either failed to remove or introduced a condition, which made it impossible for him to acquire true belief of *x*'s wrongness. Finally, culpable ignorance could arise from *deficient inference*: had the agent made the inference warranted by his background beliefs, he would have correctly believed the act to be wrong.[30]

Depending on how they are used and how justified their usage is in the first place, denials, secrecy and taboos do not excuse everyone in an organisation, as they are usually instruments of power. They fall under preventing subsequent discovery at the managerial level, or whatever level engages in the behaviour, while they can result in either excusing ignorance at the bottom level, or lead to conditions where it is all too easy to fall into the deficient inference trap. Think of some corporation that is involved in practices that are questionable in the light of climate science, but is not communicating this to its employees or other stakeholders. The organisation has introduced a

[29] Privacy in Roberts's (2013, p. 225-226) typology refers to the privacy of the institutions' employees or customers. It is often about trust, the disability of an employee need not become common knowledge within the workplace, and not keeping customer data safe can by itself be a morally blameworthy act that can lead to the loss of those customers, or even to harm for those customers, depending on your line of business. The former US military policy of "Don't ask don't tell" related to the sexual orientation of personnel also falls under this category, so organisational ignorance always has power dimensions and the potential to be political in nature.

[30] According to Smith (2016), while the agent is not blameworthy for the act that was done in culpable ignorance, they are to blame for the earlier failure to obtain the information that would have led to her not being ignorant in the relevant manner. The agent has performed an act that is morally inferior to the counterfactual act she would have performed had she obtained all the necessary information. The ignorance is thus traceable to past epistemic negligence.

condition (through denial, secrecy, privacy or taboo) – or failed to remove it – which made it difficult for employees to acquire true belief about the wrongness of being involved in some particular collective action. Depending on the actual circumstances, the employees' ignorance could be culpable if it is due to deficient inference, or excusable if the institutional barrier for acquiring the knowledge is too high.

Withholding some important information, or the tendency to only communicate the positive news, is common among corporations and other large modern institutions. Although we live in the information age, secrecy is still a very prevalent component of our societies. For example, Peter Galison (2008, p. 38) describes how "we are living in a climate of augmented secrecy" today, with the number of classified document pages outnumbering the amount of open literature entering the public libraries and archives each year in the U.S.[31] Naturally not everyone can know everything, and not all information is even relevant for all. Ignorance is often neutral in moral terms, as I argued at the beginning of this chapter. Yet it is hard to draw a clear line on what information should be available to whom. Elizabeth Wolgast (1992, p. 88) argues that "[l]ack of information and lack of responsibility go hand in hand, and both are built into the organizational structure." In even broader terms, whenever we act together, Kutz (2000, p. 156) argues that there are "agency costs" involved; as members of a collective venture "we must expect that the group act may have aspects we do not know about but with which we will have to reckon." Working together might allow us to expand our powers and rewards, but it also "entails the risk that the resulting act will not align with our moral interests" at the personal level.

> Frequently, our knowledge of what others do when we act together is hazy or distorted. Often we do not know the specific character of what we intentionally promote together, but only recognize it under a vague description. Vagueness about the collective end sustains a compartmentalized attitude towards one's own participation; agents regard only the immediate tasks before them. This compartmentalization generates the "just doing my job" explanations of one's role in a nasty business. (Kutz 2000, p. 155)

Institutions sometimes deprive individuals of their capacity to make moral judgements by fragmenting available information. To give an example, bureaucracy breaks work and knowledge into pieces, and bureaucratic compartmentalisation and the secrecy that often comes with it prevents information passing on from one department to another. This fragmentation of consciousness provides rationales for not knowing about problems, and for not trying to find out. Rational bureaucracy can, in this sense, stimulate irrationality (Jackall 1988, p. 194). Bureaucratisation is therefore never a purely technical matter, just a system of organisation, but a power system with

[31] Galison (2008, pp. 37-39) attributes this rise of modern censorship mainly to the infrastructure created after the Second World War around nuclear science and intelligence services.

privileges and domination. Max Weber already was worried about the implications of bureaucratisation for individuals' freedom and control, although he was supportive of bureaucracies as rational and efficient ways of humans to organise themselves. Unlike Weber, Arendt (1970, pp. 38-39) was very critical of bureaucracies and described them as "rule by Nobody". Bureaucracies can compartmentalise work to such a degree that individual human action is reduced to mere behaviour. If division of labour goes too far, people no longer know what their role is in the larger organisation, what their work is linked to, what the results are. Responsibility is impossible to locate anymore and becomes so diffused that the people working in the bureaucracy can come to view their actions to be outside the normal human realm where they would be responsible for what they do. Expanding on Arendt's thoughts, May (1996, pp. 71-76) similarly argues that institutional socialisation in bureaucracies can make people see themselves as the anonymous cogs of a machine, who do not have the need to develop a sense of responsibility in relation to what they do. Bureaucratic anonymity grows from the usual lack of face-to-face confrontation and not being directly linked to the consequences of one's actions. Some bureaucracies also socialise their members to feel that decisions should be made by the "experts" only, those members more experienced and knowledgeable. May (1996, p. 70) writes that "bureaucratic institutions socialize people to see themselves not as actors but as those acted upon. The ensuing feelings of powerlessness can give rise to the acceptance of, and even participation in, harms these people [-] would never have found acceptable outside of the bureaucratic institution."

Psychological compartmentalisation worries Kutz also, as he (2000, p. 155) describes how we often act together under only a vague description of what we intentionally promote together. However, while knowledge can implicate a participant, ignorance can still never fully exculpate one as a participant in a collective venture (p. 157); there are always agency costs to consider. Returning to the landmine engineer example, responses are again positional (p. 158):

> He may say to himself or others, "Look, I'm only making tiny improvements in little black boxes." He is then vulnerable to the response by someone else who cares — a partner, a victim, a campaigner against land mines — that 50 hours of his week are invested in making these tiny improvements, and in fact the black boxes he improves end up in the killing fields. Alternatively, once ethical reflection is sparked within him, his accountability may resonate in his own mind far more strongly than in the minds of others, who see him as merely a part of an ethically irresponsible system of international arms sales. The respondents' particular depth of focus, personal or political, will make different responses apt.

In addition to fragmentation of information, institutional frameworks also affect the way we think. Our minds both organise and censor our experiences through conceptual schemes. Patricia H. Werhane (1999, pp. 85-95) describes how all of our activities are framed by mental models – our perspectives on things – and embedded in conceptual schemes. Our mental models are influenced

by socialisation, culture, education, our upbringing, art, media, the place we work in.[32] Thus corporate employees, for example, are trained to see things through the viewpoint of their employer, affecting the kinds of things they take into consideration when making decisions. If we choose any one perspective often, it gets reinforced in our minds. This is not to say that we have one-track minds, as most of us have several mental models to choose from so we can adapt to a given situation. Importantly, our perspectives can be altered if we choose to try to look at things from someone else's perspective.

Thinking of the above, it is not hard to see why our responsibility as members of collective agents with regards to climate change can often get blurred by priorities of the collective we work for and the role demands this puts on us. This will be the case for most of us: how many of us have really considered what they could do in their work role, for example, to try to steer their workplace towards a more carbon-neutral future? We have many other things to consider, more pressing concerns, and it is easy to think that it is someone else's task. Even when we look at collective agents like ExxonMobil who really have gotten their hands dirty with regards to climate change, there need not be any ill-will among the members, i.e. we need not look for an intention to harm others. I doubt we would find such motivations. What we are more likely to find are narrow fields of concern, mental models that are influenced by a sceptical view of anything to do with "green" issues, concern for profits, genuine excitement seeing one's corporation succeed, perhaps cynical calculation of how far inevitable changes can be postponed, general thoughtlessness, and so on and so forth. Here I am referring to the people who hold some power within the corporation, the core agents, not some peripheral employee who might have only a participatory intention that is very loosely tied to the corporation's goals (like to do his job so he can get paid). It is doubtful that a peripheral employee spends a lot of time thinking about the future challenges of the energy industry and his employer's role in it.

We might also not want to know, actively avoid finding out about the consequences of our actions and choices. While I was working with an NGO that campaigned on global supply chain management issues, like the use of child labour and poor working conditions, an acquaintance once told me to never tell her anything bad about the large corporation she was working for, as she wanted to continue working for them. Although it was meant partly as a joke, this kind of attitude is typical of wilful ignorance, where there "is a self-interested reason for evading moral knowledge that might

[32] Our interests, desires, biases, intentions, and points of view operate as selective filters that restrict what we see in the world. Through the models, we make sense of our experiences, and interpret and clarify events to ourselves. This is often done retrospectively with events given a reframed focus and importance. We therefore do not observe the world objectively, but rather project our own perceptions on it and explain our experiences so that they fit our subjective point of view. We also tend to ignore data that does not fit our scheme. It is as if we are editing a movie and leave some of the scenes on the cutting room floor.

require one to rethink one's way of life" (Isaacs 2011, p. 162). Many times collective agents such as corporations with market shares to protect actively play into this, and thus we get meat packages with pictures of happy farm animals grazing on a green pasture, instead of pictures about the often bleak and even gory conditions under which these animals are kept and slaughtered. People who want to bring attention to the less pleasant aspects of something are rarely applauded at first. Instead, the more usual scenario involves a bunch of activists who start to push a certain point into the consciousness of the mainstream, and this process can meet with a lot of resistance. This is even more so the case when the new knowledge threatens powerful interests or the interests of the majority.

Our politics are also impacted by mental models and too often the solutions discussed lack imagination. By this I do not refer to technological daydreaming, like a belief that geoengineering alone could save us.[33] What I mean is that when presented with new problems like climate change, our governments should invest heavily in research and development. If we do not, we effectively bind ourselves to existing technologies. The question should not be whether to choose solar panels or nuclear energy. We should not limit our options like this, as human curiosity and creativity is surely our best chance of replacing what does not work with something better. Humans are great at innovation and there are new technologies based on solid science that could potentially be scaled up quickly. To give an example, high altitude wind energy is a very promising resource for producing electricity sustainably (Cherubini et al. 2015). In contrast to traditional wind turbines, Airborne Wind

[33] While scientists are generally happy to acknowledge how much we still do not know, there is much unwarranted optimism that is often brought up in climate change debates. That is the technological optimism: engineers will surely find a way to fix things, be it with artificial carbon sinks or other geoengineering measures. Some politicians and many business leaders like this line of thinking, but it is just a belief, and an unwarranted one. The technology for geoengineering is just not there and will not be, at least not in the timeframe and on the scale required (Tavoni et al 2012, p. 221):

> Invoking the possibility of realizing 1,000 Gt CO2 of negative emissions and changing no other assumptions, the chance of avoiding a 2 °C temperature rise exceeds 95%. A larger fraction of the targets are accessible and stricter ECPC rules are allowed under this technology scenario, though the exact consequences for fairness depend on how negative emissions are assigned. However, achieving 1,000 Gt CO2 of negative emissions via engineered sinks will require a combination of monumental investment and extraordinary innovation. At present there is no reason to expect cheap, environmentally attractive, and scalable versions of these technologies to make a timely entrance into the space of options. As a consequence, counting on these technologies to provide the path to the simultaneous realization of safety and fairness is unwise.

People who are technological optimists tend to also overlook the unintended consequences that nearly always crop up with new technology (O'Neill 2014). Take ozone layer depletion: to fix the problem, fluorinated compounds such as hydrofluorocarbons (HFCs) were introduced to replace the chlorofluorocarbons (CFCs) used as refrigerants and propellants in spray cans. This was implemented on a global scale after the Montreal Protocol [on Substances that Deplete the Ozone Layer] was agreed on 1987 and came into effect two years later, and it helped with the issue: the ozone hole in Antarctica is now slowly recovering. However, it also introduced a new potent greenhouse gas into the atmosphere: HFCs have a long-term global warming potential up to 4,000 times more powerful than carbon. This is "an unintended negative side effect" of the measures taken to fix ozone depletion (Velders et al. 2012, p. 922) and a very good example of why we should stay humble about our knowledge of the actual consequences when we are replacing one technology with another: often things do not get thought through or we just do not know enough about what we are playing with. These issues get ignored or underplayed in the grand visions of those who think we can always engineer our way out of problems. A deal to phase out HFCs was agreed in 2016.

Energy Systems (AWESs), such as power kites, reach winds blowing at higher atmosphere layers that are inaccessible for traditional technology. Average wind speed increases as altitude increases and furthermore the winds are more constant, meaning that power is generated at a steadier pace. What's more, there is enough power in Earth's winds to cover all our electricity needs many times over and for it to be a realistic primary source of near-zero-emission electric power (Marvel et al. 2013), even in the near-future. So far, this technology has been developed mainly with private money by big companies involved in the energy market, and the money spent on research and development has been relatively low considering the real potential of the technology (Cherubini et al. 2015). Public investments could speed up the progress considerably.

In general, to combat climate change we need to get creative not just with technology, but also with our institutions and economies. Mitigation is often presented by politicians and policy-makers as an economic issue: can we afford it, what does it do to our economies, and so on. The problem with this framing is that it looks like the whole issue is just an optimisation puzzle waiting to be solved, albeit a very complex one, and that all that is required are the best technocratic solutions. With any large-scale problems that need a lot of individual and collective agents to work together, it is doubtful that purely technocratic solutions can be successful without ethical arguments to motivate the required change (just as ethical arguments are unlikely to be successful if they neglect the considerations and the constraints that arise in political, legal and economic debates).[34] Furthermore, the economic feasibility of some form of renewable technology as a viable alternative to replace fossil fuels becomes an empirical issue only after certain political decisions have already been taken, as government incentives affect what energy sources it makes economic sense to invest in (Hormio 2017b, p. 113). Therefore technocratic solutions that rely on, for example, comparing relative prices that are set by market mechanisms are akin to working within the normative parameters already set by political action or inaction.

With climate change, the problem has been framed unsuccessfully since the beginning. Marshall (2014, pp. 162-167) describes how decision-makers and policy strategists drew on what they saw as precedents (including the successful efforts to create a binding international treaty to deal with ozone depletion) and made assumptions based on perceived similarities, that on a closer inspection did not hold. This "cognitive error on a vast scale" resulted in "ever-more-energetic confirmation bias" that ensured the same mistakes were repeated over and over again, and "created an optimistic narrative

[34] Caney (2012b) separates between "isolationist" and "integrationist" approaches to climate ethics. Isolationist approaches consider the implications of climate change only, whereas integrationist approaches consider climate change together with existing global structural problems such as poverty. Isolationist climate ethics could give implausible answers to policy questions such as burden sharing between nations, so plausible climate ethics needs to take an integrated approach at looking at the problem and possible solutions.

of resolution and renewal that was entirely inappropriate for the irreversible and open-ended problem of climate change" (p. 166). He continues (pp. 166-167):

> Frames do not just focus the attention: they define the areas for *disattention*. These precedents bound climate change to a limited set of meanings that actively excluded other approaches. They defined climate change as an environmental issue and therefore not a resource, an energy, an economic, a health, or a social rights issue. They determined that it would be best managed through emissions trading, and therefore not through regulation, taxation, and rationing. And the U.N., glowing from the success of its process to prevent ozone depletion, determined that climate change would be best controlled through international protocol rather than regional or multilateral agreements.

The Nobel-prize winning economist Thomas Schelling argues that the way to simplify the "awfully complicated hodgepodge" of our current climate change policies would be "to put the cap on the fossil fuels, not on different industries—a cap on oil and gas at the wellhead, a cap on coal at the minehead" (Marshall 2014, p. 170). In other words, rather than concentrate on regulating greenhouse gases (and creating ill-advised emissions trading systems), the most efficient and enforceable system would be to tax the fossil fuels that produce them, or to constrain the development of new sources of fossil fuels. Yet, this has never been debated at policy level, and the IPCC does not produce data on fossil fuel production, only on greenhouse gas emissions (pp. 170-171). The decision to concentrate our efforts on tailpipe emissions, rather than at the wellhead, has not even been successfully lobbied by the fossil fuel industry: they did not generate the dominant approach (although they have since been involved in upholding it), somewhat puzzlingly the debate to question the tailpipe-approach just has never taken place.[35] Rather, the framing seems to have just happened. Why? Marshall (2014, p. 173) suggests that we should understand it primarily "as an extreme error of judgment resulting from cognitive error and false categorization", namely that

> Scientists categorized climate change as a tailpipe issue because production was considered a political issue that was outside of their domain. Policy makers then categorized climate change as a tailpipe problem because they drew on recent available experience that suggested viable solutions to tailpipe problems. Confirmation bias and a socially constructed norm of disattention finished off the job.

Putting controls on the production of fossil fuels thus is not discussed in national or international politics because questions concerning the wellhead do not exist within the dominant debate. This allows most Western governments to have simultaneously enacted programs to subsidise renewable energy production, while at the same time continuing to encourage and subsidise ever-larger investments into developing new sources of fossil fuels (p. 173). Needless to say, the latter far

[35] Marshall (2014, p. 171) writes that "there were no fights, no struggles, no backroom deals. There did not need to be because it was never discussed." He bases this claim on interviews with people involved in climate negotiations.

exceeds the former: in 2012, renewable energy investments reached $244 billion, while exploration and development into new oil and gas reserves received over $1 trillion (p. 174). As the key players involved seem to be too embedded in their institutional frameworks to see the dissonance of this approach, the thinking must be challenged from the outside.

7.4 Summary and concluding remarks

Although the basic mechanism is simple — we burn too much fossil fuels — the result, climate change, is a very complex phenomenon. The science is complex, the implications are complex, and the number of agents involved in creating the harm is simply vast. Most of our emissions take place within certain structures. Individual responsibility cannot be discussed in isolation from the social systems and collective settings that we are all embedded in. The timescale spans thousands of years and the reach is global. The effects are potentially catastrophic. This is not a harm or an injustice akin to those that our moral theories are used to grappling with.[36] It also presents a challenge to our moral psychology and information processing capacities. Institutional collective agents with the capacity to process a lot of information have greater obligations to know about climate change than individuals.

My aim throughout the thesis has been to show that despite the complexity of the situation, individuals can have climate change responsibility, and that there are three potential sources for this: direct responsibility, shared responsibility *qua* members of collective agents, and shared responsibility *qua* constituents of unorganised collectives. I have not attempted to answer questions concerning the best way to allocate responsibility to solve the climate change problem, or to provide some precise formula to determine the responsibility of each agent. Rather, my aim has been to provide well-argued answers to the various responsibility questions raised by climate change. In doing so, I have hoped to make it at least a lot harder for a relatively wealthy individual to argue that they as individuals have no responsibilities regarding climate change.

Accounts that deny individual responsibility for climate change fail to either take our interdependent reality seriously or fail to understand marginal participation (or in the case of lifestyle emissions and direct responsibility, fail to appreciate the nature of the climate change phenomenon). We should not place all the responsibility on collective agents such as states and governments. On

[36] The possibility of a nuclear war comes close, and philosophers have, of course, grappled with the ethics of nuclear technology since it was invented. The difference is that with anthropogenic climate change we are not discussing only a risk, but something that is ongoing already. Furthermore, to start a nuclear war certain people must intend to start it, at least to some degree (negligence etc.), while with climate change no one intended it at all: it is a by-product. The incremental and cumulative nature of the harm, combined with various tipping points, also offers other reasons for disanalogy.

the other hand, accounts that want to place responsibility directly on unorganised collectives face several problems: putative agents cannot have obligations (instead, they fall on the individual *qua* the unorganised collective), the comparison to random collectives does not hold (climate change is a structural and systematic harm), and they fail to provide the link between the collective and the individual agents.

I have argued in this thesis that what we need instead are accounts that centre on complicity and structural injustices, as these shed light on the relational and positional webs of participation that result in many global harms. Individuals can be complicit in climate change harms, either as members of collective agents (e.g. as citizens of states or employees of a corporation) or as constituents of unorganised collectives (e.g. as consumers or polluters). With collective agents the link between the individual and the collective outcome is a participatory intention, and in unorganised collectives it is a quasi-participatory intention. The potential of individual actions to help bring about an outcome gives an additional reason to take action in cases of marginal participation.

Individual direct responsibility is limited to relatively wealthy individuals and their luxury emissions. This individual direct responsibility or duty is to not to increase the probable risk of serious harm – deprivation of fundamental capabilities – to other people, at least as long as we can do so at a less than significant cost to ourselves. I have also argued that offsetting is not a reliable way to meet this duty, but rather we need to look at the emissions from our lifestyle choices (within the available infrastructure), in contrast to questioning each individual purchase and consumer choice. There are at least three obvious such lifestyle choices that have large combined effects even at the level of individual emissions. These are how spaciously you choose to live, how you organise your travel in your everyday life, and what the main protein source is in your diet. With lifestyle choices, you make a decision that either leads to many little decisions taken daily, most of them taken without reflection, or you lock yourself into a certain emission path. Our lifestyle choices affect our overall emissions to a much greater extent than a one-off decision of where to take a rare holiday. They can also signal what norms we are willing to support.

However, individual direct duties related to avoiding climate change harms are not prior to our shared duties, i.e. the duties we have as members or constituents of collectives. Solutions aimed purely at the individual level will be both insufficient and inefficient. Climate change cannot be solved without collective entities stepping up to their obligations, and collective entities will not do so unless enough of their members push for it. Shared responsibility *qua* members of collective agents is thus the key individual responsibility, and it presses especially on those occupying key positions within key collective agents. Saying that, our shared responsibility *qua* constituents of unorganised collectives has the potential to be decisive in whether some action is taken or not, either

through a set of actions that can signal certain acceptance or support, or as a form of political support from the grass roots.

I am also not denying the obligations of collective agents. At the present moment in history, no agent could argue that they can reasonably believe that enough others are already doing their share to mitigate climate change, any more than adapt or compensate. Every agent should thus take a capacity-relative share in securing that goal. Nation states and governments are not the only relevant institutional collective agents for discussing climate change obligations. The corporations involved in GCC and similar lobbying efforts have by their past actions generated retrospective moral responsibility for themselves (to varying degrees) with regards to anthropogenic climate change. It is justified to demand that these corporations compensate for their actions and most importantly, to stop them from spreading misinformation immediately. Still, the ethical claims can only be understood by individual members of these collective agents because only they can feel the pull of moral claims.

So far I have not said anything about how strong the reasons we get from these three potential sources (direct responsibility, shared responsibility *qua* members of collective agents, shared responsibility *qua* constituents of unorganised collectives) are compared to one another. That is because it depends on who you are.

Conceptually shared responsibility is prior to direct responsibility due to the strength of the potential of individual actions multiplying when we act together. Climate change must be defeated by institutional collective agents, including both political and commercial actors, although it does not have to happen through international treaties. So the people who are members of these institutional collective agents have the strongest claim on them to take positive action towards finding a solution now. The closer to the core of the collective agent the individual member is, the stronger the reason they get from their participatory intention. Core agents will always have stronger responsibility *qua* members of collective agents than the peripheral agents. Core agents that can play key roles in taking meaningful climate change action include politicians, policymakers, corporate executives, financiers, and so on.

While shared responsibility conceptually is prior to direct responsibility in the case of climate change, there will be some individuals who should concentrate on their direct responsibility first and foremost. These are what I call *super-polluters*: people whose lifestyles result in emissions many time over the carrying capacity of the Earth. I suggest that these comprise of High Net Worth Individuals (HNWIs), i.e. people with at least US$1 million in investable wealth, excluding their primary residence and other personal items.[37] There are currently 15.4 million people in the world that have

[37] Capgemini Financial Services who compiles the World Wealth Report excludes primary residence, collectibles, consumables, and consumer durables from the investible assets, see www.worldwealthreport.com. They project that

this much investable wealth according to the latest available data from 2015 (World Wealth Report 2016).[38] However, despite lifestyles that include regular use of private jets, there is very little research into the consumption patterns or ecological footprints of the HNWI (Kenner 2015). For my purposes it is safe to assume that while some people within this group might live frugally despite their wealth, there are plenty of people who have lifestyles that lead to emissions on a scale that qualifies them as super-polluters and makes their direct duties their primary duties. This is yet another reason why individual lifestyle emissions should not be discarded from responsibility discussions.

Note, though, that even if your lifestyle emissions are excessive, it does not automatically mean that your direct duties will be your primary duties. Many among the HNWI will belong among the powerful individuals and their shared responsibility as members of collective agents might well be their most important responsibility. Think of the current US administration that consists mostly, if not exclusively, of HNWIs: their primary responsibility is dictated by their political role. In a similar way, many of the HNWIs hold top executive positions in collective agents and their membership in these is their primary source of responsibility.[39]

Many of our institutions and public systems have not kept up with the rapid changes initiated by technological innovations. We must urgently start updating them to better represent our interconnected lives and our evolving morality. When the vast majority of the human potential goes untapped or is severely underutilised, as is the case in our deeply unequal world, we are lowering our chances of flourishing. We are even diminishing our chances of survival as a species. It is far easier to devise a fair system than decides upon a fair outcome (the same idea lies behind democracy and the juror system, to give but two examples). When designing these better systems, we do not need to know the what, but the how: not *what* is the answer, but *how* can we increase our chances of getting to the solutions (with climate change and other issues), to reach them and to implement them. The process needs more of us to become creative and active and – crucially – more of us to be allowed and empowered to have our voices heard.[40]

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global HNWI wealth will nearly triple in size from 2006-2025 and surpass US$100 trillion by 2025, propelled by strong growth in the Asia-Pacific region.

[38] The data shows that 61.2% of the global HNWI population resides in either the United States, Japan, Germany, or China (the United Kingdom, France, and Switzerland come next in the chart of largest HNWI populations). HNWIs are separated into three wealth bands: "millionaires next door" (US$1 million to US$5 million in investable wealth), "mid-tier millionaires" (US$5 million to US$30 million), and "ultra-HNWIs" (US$30 million or more).

[39] They have the potential to influence things not just through the membership roles they occupy, though, but also through their investments. Research by Oxfam (2015) has found that between the Copenhagen (2009) and Paris (2015) climate conferences, "the number of billionaires on the Forbes list with interests in fossil fuel activities has risen from 54 in 2010 to 88 in 2015, while the size of their combined personal fortunes has expanded by around 50% from over $200bn to more than $300bn." There are thus very powerful personal interests at stake in fossil fuels.

[40] With climate change, any effective institutional solution must address the vast inequalities in our world, because inequality is the driving force between many of the structures that result in excessive emissions. Examples include the exploitative use of natural resources that is made possible by the very unequal access to these resources, externalisation

I posited in chapter one that the Socratic question of how one should live is a good starting point for ethics. How should we live then, with climate change snapping at our heels? Like Williams, I do not think that moral philosophy can offer an answer to this, but like him I believe that it can help us to better understand the issues that are involved in answering such a question. My contribution to this end has been to try to clarify the ways in which individuals can have climate change responsibility despite the complexity of the situation. We should acknowledge the relational and positional nature of moral responses, and give up the chase for one-model-fits-all –type solutions because context always matters. We are in this together and we are inherently social as a species, so all plausible theorising must start from this. Individual action and intention has been put on a pedestal for too long and we can no longer afford to pretend that things we do together do not bear on us: *we* are responsible for what *we* do.

When we come together, we can do things that are impossible to do alone. While many people might feel hopelessness and apathy when they think about the magnitude of the climate change challenge, if we begin to openly discuss our fears and our complicity, we can find new ways forward. Recognising our complicity need not be a source for pointless guilt and the need for more denial mechanisms to kick in. Rather, it could act as a conversation starter: what should we do? What could I do? We should recognise the collective agents and the powerful individuals that need to take action now and hold them accountable. In addition, when we understand the potential of our own marginal participation, we can create new groups and networks that ensure that the potential in our actions turns into actual positive change. It is good for the human psyche to feel part of something bigger. We are in this together and what happens next is up to us. If there is no enfolding narrative that inescapably unfolds for the human race — or for the world — set out by a higher being or laws of nature, then we are responsible for our destinies. Luck and coincidence will always play significant roles in our lives, meaning that we will not be able to write our narratives with precision. But we can write them to some degree of certainty through the kinds of policies we create, the kinds of politics we support, the kinds of interaction we practice, the choices we make about how we live together. In this sense we are truly responsible.

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of costs to distant others, and lack of balance in the voices that dominate the climate change debate. "What is clear is that climate change and economic inequality are inextricably linked. It is a crisis driven by the 'haves', which hits the 'have-nots' the hardest" (Oxfam 2015, p. 6). According to Oxfam (2015), around 50% of global GHG emissions can be attributed to the richest 10% of people. The world's richest 10% of people have average carbon footprints 11 times as high as the poorest half of the population, and 60 times as high as the poorest 10%. These figures are not surprising, given that over half of the world's wealth is in the hands of 1% of the richest people (Hardoon et al. 2016). The average footprint of the richest 1% of people globally could be as much as 175 times that of the poorest 10% (Oxfam 2015). That is striking in itself, but there are vast differences in income within that group itself. Runaway inequality, driven by tax avoidance, has resulted in a world where eight men own the same amount of wealth as the bottom 50% of the world's population, 3.6 billion people (Hardoon 2017). That means that each of these individual billionaires, on average, holds the same amount of wealth than 450 million people combined.

Appendix - The six foundations of morality

The table below is a modified version of figure 6.2 from Haidt (2012, p. 125), combined with discussion of liberty/oppression from pages 170-183 from the same book.[1]

	Care/ harm	**Fairness/ cheating**	**Liberty/ oppression**	**Loyalty/ betrayal**	**Authority/ subversion**	**Sanctity/ degradation**
Adaptive challenge	Protect and care for children	Reap benefits of partnerships	Banding together to rein in and punish would-be dominators	Form cohesive coalitions	Forge beneficial relation-ships within hierarchies	Avoid contami-nants
Original triggers	Suffering, distress, or neediness expressed by one's child	Cheating, cooperation, deception	Bullying alpha male, aggressive behaviour	Threat or challenge to group	Signs of dominance and submission	Waste products, diseased people
Characteris tic emotions	Compassion	Anger, gratitude, guilt	Reactance, resentment	Group pride, rage at traitors	Respect, fear	Disgust
Relevant virtues	Caring, kindness	Fairness, justice, trustworthi-ness	Freedom, solidarity	Loyalty, patriotism, self-sacrifice	Obedience, deference	Temperance, chastity, piety, cleanliness

These six systems seem to be akin to thin concepts, and the way different cultures and groups of people construct their moral matrices from them represent the thick concepts. The original triggers

[1] The moral foundations theory is based on previous research done together with Joseph and others (Haidt and Joseph 2011). For more, see www.moralfoundations.org.

explain why an adaptive trait has been favoured, but the set of current triggers is larger than this and is influenced by culture. Our brains might be prewired by nature, but they are not hardwired. In other words, our brains are flexible and subject to change. Neuroscientist Gary Marcus has suggested an analogy to a book, of which genes write the first draft only. (Haidt 2012, p. 130). Because rules and virtues vary across cultures, we should not try to find universality in the finished books. However, "if you look for links between evolutionary theory and anthropological observations, you can take some educated guesses about what was in the universal first draft of human nature." (p. 153).

The first of the six foundations of morality, care, has developed along the lines described earlier: to meet the adaptive challenge of protecting and caring for children. While reptiles usually leave their babies to fend for themselves once they hatch, mammals suckle their offspring. The cost of motherhood is thus raised and a lot more time and effort is placed on each child, putting the effort in the quality of the care, rather than the sheer number of offspring. This is even more the case with humans as our babies cannot even walk until they are roughly one year old, let alone fend for themselves for many years to come, thus requiring a collaborate effort in keeping the child safe and alive. Therefore an adaptive challenge is not just presented for the mothers, but for the species. Babies and cute animals alike trigger our instincts to care, protect, nurture, and interact. We are sensitive to signs of suffering and need, and therefore tend to despise cruelty. Arguments about protecting the geographically distant victims of some calamity fall under care and are more common to people on the left of the political spectrum (Haidt 2012, pp. 131-134).

Fairness has an original trigger in human cooperation. While we are usually nice to people we meet for the first time, we tend to cooperate only with those who have been nice to us and have not taken advantage of us. Our interactions are "tit for tat" in that sense: we chose mutually beneficial cooperation whenever we can, and thus engage in reciprocal altruism. Feelings of friendship, pleasure, and liking emerge when people reciprocate and show signs that they can be trusted to do so, while we react with anger and contempt to someone cheating us or taking advantage of us. Culturally and politically many things to do with reciprocity and cheating have gotten linked to fairness. Some of the current triggers are associated with proportionality of the contribution, for example, to do with taxation and welfare system. The underlying idea is to protect communities from free-riders and slackers, because if this would be allowed to go on unchallenged, cooperation would stop. (Haidt 2012, pp. 136-138; pp. 180-181). This proportional notion of fairness could be summed up as "People should get what they deserve, based on what they have done" (p. 169). So in that sense fairness as proportionality is akin to laws of karma. While people across the political spectrum care about fairness as proportionality, conservatives are far more concerned with making

sure that people do not get what they don't deserve (hence campaign slogans about benefit frauds), while liberals feel more ambivalent about this. (p. 183).

Liberty also means different things politically. It evolved as a response to reigning in bullying alpha males by a larger set who cooperate to take them down altogether (or at least down a peg or two). As early humans developed better weapons, physical strength no longer decided alone who won fights, so the balance of power shifted. The development of language allowed our ancestors to gossip about those who violated their powers and allowed moral communities to shame, punish, and ostracize those who behaved in a threatening manner towards the rest of the group (or simply annoyed them). Reputation became important. Liberty foundation is in tension with authority foundation, so while we recognise some authority legitimate in a given context, we are sensitive to what we perceive to be abuses of power. All people regardless of political orientation share a hatred of oppression. While liberals tend to view liberty as lack of oppression towards certain vulnerable groups, something that government has a major role in bringing about, conservatives (and libertarians especially) view liberty mainly as the right to be left alone, free from government interference. Any perceived signs of oppression towards one's groups is not tolerated: don't tread on me (high taxes, nanny state), on my business (regulations), or on my nation's sovereignty (international treaties, United Nations). In contrast, liberty for the left support much more universal ideals of social justice and equality, and when combined with care it amounts to solidarity. (Haidt 2012, pp. 170-176; 182-183, see also Iyer et al 2012).

Loyalty is linked to our tribal roots. It evolved to allow us to form and maintain coalitions, so those deemed not to be team players are punished. Current inter-group competitions can be found in national and international politics alike, with conservatives often placing more weight to loyalty towards one's own nation or religion. (Haidt 2012, pp. 140-141). Authority includes many social relationships like the ones of a parent and child, or a village elder and younger members, based on perceptions of legitimate symmetry, beneficial relationships within social hierarchies: cultivating the protection of superiors and the allegiance of subordinates, protecting order and fending off chaos (pp. 143-144). Finally, sanctity is based on us being omnivores (and being subject to pathogens and parasites). As omnivores, we do not have sensory systems that are structured to guide us to certain foods (like koala bears to eucalyptus leaves): our eating habits are flexible and we can easily adapt to new environments and new food sources. The disadvantage is that some new foods can be poisonous or otherwise not good for us, and this gives rise to neophobia (a fear of new things), that has to be balanced with neophilia (an attraction to new things) that allows us to source new food in the first place. Those individuals with best calibrated sense of disgust were able to balance consuming enough calories with avoiding dangerous microbes. In similar vein, signs of infection or disease in other people triggers disgust in us, evolved to prevent infection. The current triggers of

sanctity vary widely (and are also linked to xenophobia and xenophilia, as new diseases are usually brought in by foreigners, but so are also new ideas, technologies, and goods). Conservatives tend to score higher on neophobia, preferring to stick to tried and tested foods, people, ideas, and others, thus valuing traditions over new ideas and experiences. Without a sense of the disgust we might not have a sense of the sacred either, something that helps to bind us into moral communities through things like flags, saints, principles, and certain sacred places. The value that some environmentalist place on the purity of nature could also be read as coming under sanctity, as well as many bioethical issues. (pp. 147-152).

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